

Vietnam Oil & Gas

Time to switch to downstream opportunities

Neutral sector rating but opportunities to add stocks offering secular growth

We initiate coverage on Vietnam's oil & gas sector with a Neutral rating due to the extended period of weak oil prices that may not fully recover until 2021E. We recommend investors use this opportunity of depressed oil prices to build positions in companies that offer secular growth vs cyclical recovery. Initiations: Our top pick is PV Gas (GAS) as the main beneficiary of growing LNG demand that should also perform alongside the slow recovery in oil prices. We also view Petrolimex (PLX), PV Transportation (PVT) and Binh Son Refining (BSR) positively given Vietnam's greater need for imports and growing consumer energy demand.

Time to shift to downstream companies offering more secular growth

We initiate coverage on PV Technical Services (PVS) and PV Drilling & Well Services (PVD) with Hold ratings given the weaker outlook for the upstream segments of Vietnam's oil & gas sector. Upstream production is not only more exposed to current weakness in global oil prices but Vietnam's production output has already moved past peak and entered a sunset era. Bright spots for Vietnam's oil & gas sector remain growing industrial and consumer demand in the downstream segments.

Weak 2Q earnings expected as they still reflect the worst of the pandemic

Upcoming 2Q earnings season will likely see better but still weak results as they still reflect the pandemic-induced fall in product demand, Vietnam's nationwide lockdown and project delays for the upstream companies. The outlook for 2H is more promising even factoring in more modest recovery in oil prices. Rebounding oil prices have already allowed reversals of inventory provisions and retail gasoline and diesel prices have moved up by 30% since April. GAS and PLX are likely the best candidates to gain early traction on 2H recovery, while PVS and PVD should continue to lag as oil prices trade below breakeven levels and PVD delays some Malaysian drilling contracts in 3Q. BSR and PVT will likely see another weak quarter due to BSR's August maintenance overhaul – that should also reduce PVT's crude oil shipments to BSR – but both should join the recovery trend thereafter.

Risks: delayed privatizations & gas project approvals

Free floats are low for most stocks in Vietnam's oil & gas sector due to delayed privatizations, while approvals for the country's large gas fields are several years behind schedule. Moreover, gas projects approvals also put at risk Vietnam's huge LNG infrastructure investments due to the potential size of production from the new fields that could tip the local market into oversupply.

Oil & Gas & Chemicals

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Neutral

initiate

Recommendations

PV Gas (GAS)	Buy
Current Price	VND64,000
Target Price	VND89,200

Petrolimex (PLX)	Buy
Current Price	VND42,250
Target Price	VND57,800

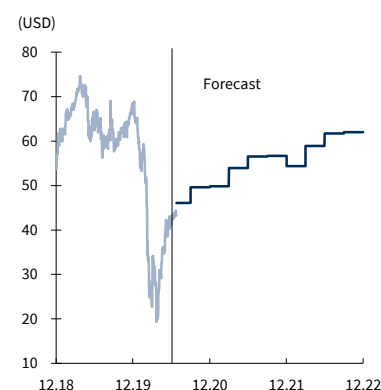
PV Transportation (PVT)	Buy
Current Price	VND8,930
Target Price	VND17,300

Binh Son Refinery (BSR)	Buy
Current Price	VND5,900
Target Price	VND8,100

PV Technical Services (PVS)	Hold
Current Price	VND10,800
Target Price	VND11,000

PV Drilling & Well Services (PVD)	Hold
Current Price	VND9,030
Target Price	VND9,600

KBSV – Brent crude oil price forecasts



Source: Bloomberg, KB Securities Vietnam

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I. Executive Summary

Momentum in oil prices has stalled and we recommend switching to downstream stocks offering secular growth and reducing upstream stocks more heavily reliant on a rebound in crude oil prices

We believe the rebound in crude oil prices have largely run their course and the trajectory of recovery will likely flatten from here. With oil prices threatening to remain at depressed levels and still below Vietnam's USD55.00 breakeven level, we recommend investors wind down positions in upstream stocks that are more closely linked to the bounce back in oil prices. Underlying fundamentals for the upstream stocks will need further momentum in oil prices above USD55.00 breakeven to bring new oil drilling projects back to profitability and restore drilling and well service contracts. Given our expectations for weak oil pricing to continue for the remainder of 2020E – and not fully recover until 2021E – earnings performance for the upstream stocks should remain lackluster, in our view. We initiate coverage of PV Technical Services (PVS) and PV Drilling & Well Services with Hold ratings.

Downstream stocks offer more secular growth and can also benefit from the slow recovery in oil prices

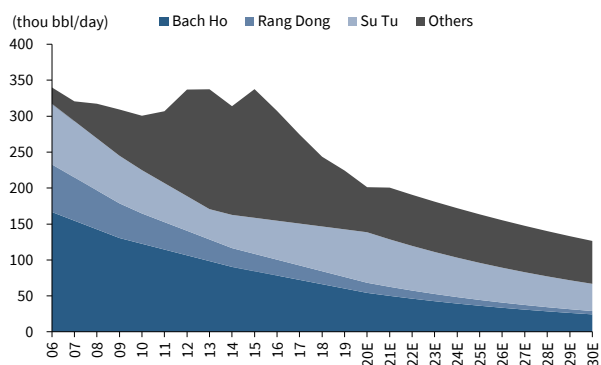
Vietnam's domestic energy demand should continue to rise and the country is already facing electricity shortages due to the lack of adequate energy supplies. This continues to be the central secular growth story for Vietnam and we focus on downstream companies that are best positioned to capture this growth. Moreover, Vietnam's crude oil and natural gas production output has been slowing since 2015 for crude oil and 2018 for natural gas, which will require the rapidly-growing country to import more of its energy needs. Given this situation, areas we view as the most promising include LNG, energy transportation and retail distribution. Liquefied natural gas or LNG will play an important role in meeting the country's energy requirements, especially for the power generation sector. Energy transportation should register attractive growth as Vietnam increasingly relies on more crude oil and LNG imports. Retail distribution should also benefit from growing consumer energy demand and motorization of the economy. We initiate coverage of PV Gas (GAS), Petrolimex (PLX), PV Transportation (PVT) and Binh Son Refining (BSR) with BUY ratings.

GAS & PLX likely to post sequential recovery in 3Q, followed by PVT & BSR from 4Q

Product repricing formulas that are more closely linked to oil prices at GAS and PLX should still allow both companies to record sequential quarterly gains in 3Q despite slower recovery in global energy markets. Earnings momentum is also likely to come on track for BSR and PVT from 4Q after both see another weak quarter in 3Q due to August's maintenance overhaul that should drop BSR's utilization to 45% and reduce PVT's feedstock shipments to the refiner during the quarter. That said, oil prices remaining below Vietnam's USD55.00 breakeven should continue project delays for PVS and PVD and keep earnings weak for the foreseeable future, with PVD already announcing the delay of some of its Malaysian drilling contracts from 3Q.

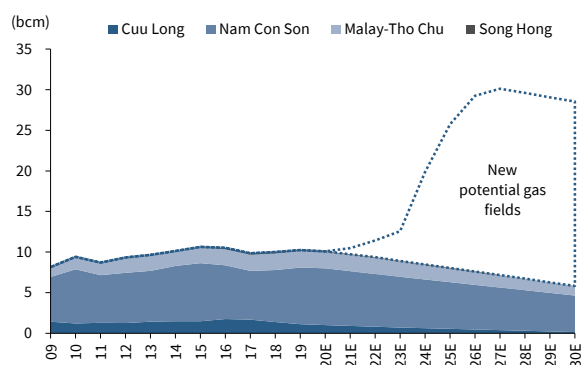
II. Focus Charts

Vietnam – Crude oil production forecasts by field, 2006–2030E (thous bbl/day)



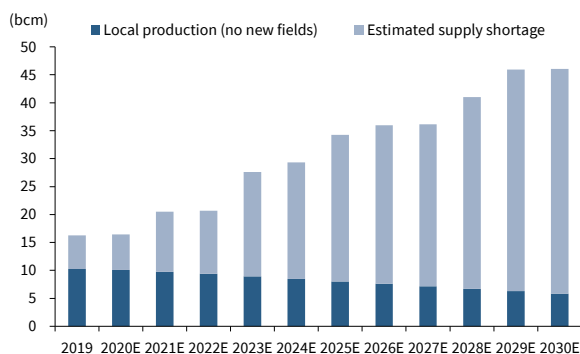
Source: EIA, General Statistics Office Vietnam, KB Securities Vietnam

Vietnam – Natural gas production forecasts by basin, 2009–2030E (billion cubic metres)



Source: PV Gas, General Statistics Office Vietnam, KB Securities Vietnam

Vietnam – Natural gas local production & supply shortage estimates, 2019–2030E (billion cubic metres)



Source: KB Securities Vietnam

- Vietnam's crude oil production output peaked in 2015
- Dwindling oil reserves have slowed upstream exploration & production (E&P) activities
- We are cautious of upstream operators given little chance of finding any new large crude oil fields

- Natural gas offers more potential for new sizable fields
- But natural gas projects are notorious for delays amid offshore tensions
- Without the approvals of new gas fields Vietnam's natural gas production volume should keep falling

- Vietnam's energy consumption has outstripped local production, especially in the power generation sector
- Assuming no new gas fields Vietnam's supply shortage for natural gas should grow continuously
- Completion of regasification facilities at new LNG terminals in 2021E/2022E will allow Vietnam to start importing cheaper liquefied natural gas (LNG) to meet demand shortfalls

III. Recommendation & Valuation

Sector rating: NEUTRAL

GAS: BUY, TP VND89,200

PLX: BUY, TP VND57,800

PVT: BUY, TP VND17,300

BSR: BUY, TP VND8,100

PVS: HOLD, TP VND11,000

PVD: HOLD, TP VND9,600

We initiate coverage of Vietnam's oil & gas sector with a NEUTRAL rating to reflect our more cautious outlook for recovery in Brent crude oil prices. Oil prices are likely to remain at depressed levels for the remainder of the year and not fully recover until 2020E. We prefer oil & gas stocks in the downstream segment offering more attractive secular growth and initiate coverage of PV Gas (GAS, BUY, TP VND89,200) as our top sector pick, Petrolimex (PLX, BUY, TP VND57,800), PV Transportation (PVT, BUY, TP VND17,300) and Binh Son Refinery (BSR, BUY, TP VND8,100). We are more cautious on the downstream operators and initiate coverage on PV Technical Services (PVS, HOLD, TP VND11,000) and PV Drilling & Well Services (PVD, HOLD, TP VND9,600).

Table 1. Vietnam oil & gas – KBSV universe, recommendations & target prices (VND, %)

Company	Ticker	Price (VND)	Rating	Valuation method	Target price (VND)	Dividend (VND)	Upside (%)
Upstream							
PV Drilling & Well Services	PVD	9,030	HOLD	DCF	9,600	0	6.3%
PV Technical Services	PVS	10,800	HOLD	DDM	11,000	700	8.3%
Midstream							
PV Gas	GAS	64,000	BUY	DDM	89,200	3,000	44.1%
PV Transportation	PVT	8,930	BUY	DDM	17,300	1,000	104.9%
Downstream							
Petrolimex	PLX	42,250	BUY	DDM	57,800	1,500	40.4%
Binh Son Refinery	BSR	5,900	BUY	DDM	8,100	0	37.3%

Source: Company reports, KB Securities Vietnam

Most 12-month target prices set to mid-cycle price objectives vs fully-growth loaded valuations

Our valuations are based on three-stage dividend discount models (DDM) that utilize the capital asset pricing model (CAPM) to determine an appropriate discount rate for projected cash dividends/stock buybacks for individual stocks (with the exception of PVD where we use a discounted cash flow model or DCF due to the lack of a dividend policy). We consider valuations generated from the DDM as fully-growth loaded assessments of value. Additionally, we estimate the ex-growth price-to-book multiple by modifying the Gordon Growth model $[(ROE-g)/(COE-g)]$ to assume zero growth or simply the company's sustainable return on equity (ROE) divided by the cost of equity (COE). Our mid-cycle target prices are then based the average of the fully-growth loaded value of the company and the ex-growth estimate.

Table 2. KBSV – Valuation methodology

Gordon growth model			
Justified P/B multiple	=	$\frac{(ROE - g)}{(COE - g)}$	
Ex-growth model			
Ex-growth P/B multiple	=	$\frac{ROE}{COE}$	
Mid-cycle model			
Mid-cycle P/B multiple	=	Average of: [DDM valuation & Ex-growth valuation]	

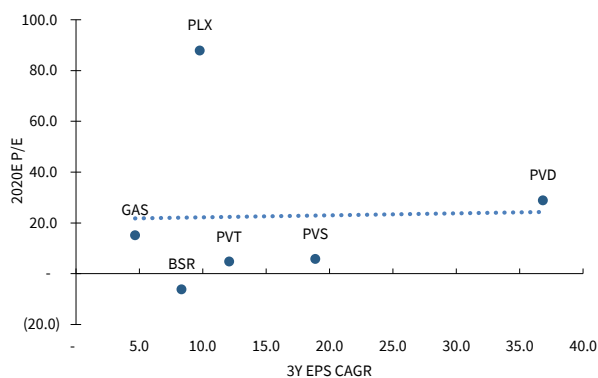
Source: KB Securities Vietnam

Table 3. Vietnam oil & gas – Valuations

Company	Price (VND)	Mkt cap (USDmn)	3M avg vol (USDmn)	PE (x)			PB (x)			Div yield (%)			ROE (%)		
				2020E	2021E	2022E	2020E	2021E	2022E	2020E	2021E	2022E	2020E	2021E	2022E
Upstream															
PVD	9,030	164.2	2.2	28.8	23.1	8.1	0.3	0.3	0.3	0.0	0.0	0.0	0.9	1.1	3.2
PVS	10,800	222.7	2.4	5.7	4.3	3.6	0.4	0.4	0.3	6.5	7.4	9.3	6.9	8.7	9.7
Midstream															
GAS	64,000	5,284.4	2.1	15.0	10.6	9.0	2.4	2.2	2.1	4.7	6.9	8.1	16.1	21.6	23.8
PVT	8,930	108.4	0.7	4.7	3.6	2.6	0.4	0.4	0.3	11.2	13.4	15.7	9.1	11.0	13.9
Downstream															
PLX	42,250	2,358.3	2.1	87.8	13.3	9.9	2.3	2.2	2.0	3.6	6.6	8.5	2.5	16.8	20.9
BSR	5,900	789.2	1.3	-6.2	5.5	4.9	0.6	0.5	0.5	0.0	2.7	6.8	-9.1	10.4	10.6

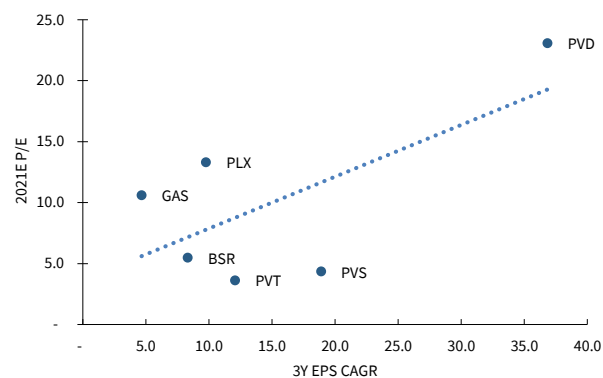
Source: Company reports, KB Securities Vietnam

Fig 1. Vietnam oil & gas – 2020E P/E to 3Y EPS CAGR (x)



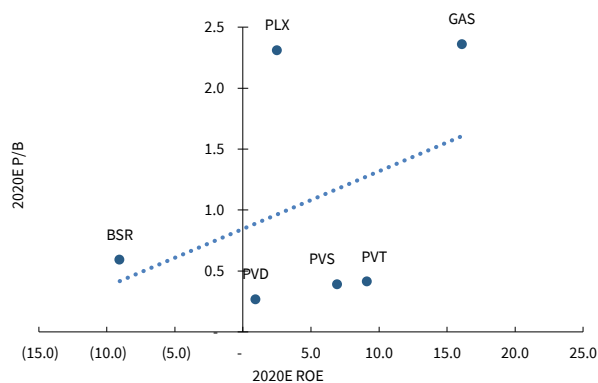
Source: Bloomberg, KB Securities Vietnam

Fig 2. Vietnam oil & gas – 2021E P/E to 3Y EPS CAGR (x)



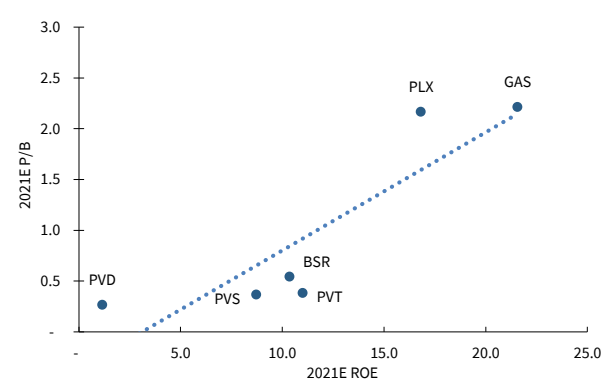
Source: Bloomberg, KB Securities Vietnam

Fig 3. Vietnam oil & gas – 2020E P/B to 2020E ROE (x, %)



Source: Bloomberg, KB Securities Vietnam

Fig 4. Vietnam oil & gas – 2021E P/B to 2021E ROE (x, %)



Source: Bloomberg, KB Securities Vietnam

PV Gas (GAS):
Sector top pick as LNG beneficiary
that should also track recovery in
oil prices

We initiate our coverage of GAS with a BUY rating and a target price of VND89,200. Our target price is based on a mid-cycle P/B multiple derived from our three-stage dividend discount model. We apply a mid-cycle valuation for our target price to reflect our view for more modest recovery in HSFO (High Sulphur Fuel Oil) prices amid an extended period of weak oil prices.

GAS is our top pick for Vietnam's oil & gas sector as the main beneficiary of growing LNG demand that should also perform alongside our expectations for a slower recovery in oil prices. Supply shortages for the power generation sector and delayed approvals of new gas fields underscore the need for the *Thi Vai* LNG regasification facilities currently under construction. Moreover, Vietnam's new-found ability to import LNG should also provide the feedstock for downstream refiners preparing to start local petrochemical production.

We expect an earnings CAGR of 16.4% over our 2020E–2025E forecast period. Our estimates include: 1) *Phase 1* of the *Thi Vai* terminal will start up on time in 2022E and *Phase 2* will add another 3 MTPA the following year in 2023E; and 2) the new *Sao Vang-Dai Nguyet*, *White Lion 2* & *Nam Du U Minh* gas fields will begin to produce in 2022E or 2023E. We have not yet included output from the *Blue Whale* & *Block B* mega projects due to protracted delays and uncertainty of any potential startup date.

Table 4. PV Gas (GAS) – Valuation (DDM) & target price (VND, %)

Line item	Notation		Notes
Cost of equity	k_E	10.50%	$r_f + (\beta_E * m)$
Re-levered beta	β_E	0.840	$\beta_A(1 + ((1 - t) * D/E))$
Unlevered beta	β_A	0.600	Weighted-average sector unlevered beta
Terminal assumptions			
Sustainable ROE	ROE	20.0%	Long-term ROE
Div payout ratio	p	80.0%	Long-term payout ratio
Sustainable growth	g	4.0%	$ROE * (1 - p)$
Assumptions			
Target gearing	D/E	50.00%	Long-term debt/equity ratio
Statutory tax rate	t	20.00%	Marginal corporate tax rate
Market risk premium	m	8.90%	10-year expected market return – risk free rate
Risk free rate	r_f	3.00%	10-year government bond
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Terminal value as % of firm value		82.2%	
PV of future dividends (VNDbn)		43,270	
PV of terminal value (VNDbn)		199,490	
PV of Firm (VNDbn)		242,760	
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Total return		44.1%	
Target price (VND)		89,200	
Dividend per share (VND)		3,000	

Source: KB Securities Vietnam

Petrolimex (PLX):
Dominant market position in the
rapidly growing retail energy
market

We initiate our coverage of PLX with a BUY rating and a target price of VND57,800. Our target price is based on a mid-cycle P/B multiple derived from our three-stage dividend discount model. We apply a mid-cycle valuation for our target price to reflect our view for more modest recovery in retail pump prices amid an extended period of weak oil prices.

Retail pump prices have bounced back by 30% and have returned to levels that should restore profitability. The company plans to reverse about 90% of 1Q's inventory provision in 2Q results. Management expects sequential earnings recovery for the remainder of the year and a return to positive earnings in 3Q.

We expect a strong rebound in earnings for 2021E at VND4,115 billion or 448% YoY growth but largely due to low base effect after operations normalize. Longer-term growth should be at about 16.4% CAGR between 2021E and 2025E and our forecasts assume: 1) continued strategic expansion of the COCO station channel; and 2) re-focus on the energy-related business as they exit financial services. We have not reflected the *Nam Van Phong* LNG terminal into our current outlook until we are provided additional details and we have greater clarity on the approvals of the large mega gas projects that could force cancellation of this project.

Table 5. Petrolimex (PLX) – Valuation (DDM) & target price (VND, %)

Line item	Notation		Notes
Cost of equity	k_E	11.2%	$r_f + (\beta_E * m)$
Re-levered beta	β_E	0.926	$\beta_A(1 + ((1-t)*D/E))$
Unlevered beta	β_A	0.747	PLX unlevered beta
Terminal assumptions			
Sustainable ROE	ROE	20.0%	Long-term ROE
Div payout ratio	p	80.0%	Long-term payout ratio
Sustainable growth	g	4.0%	$ROE * (1 - p)$
Assumptions			
Target gearing	D/E	30.00%	Long-term debt/equity ratio
Statutory tax rate	t	20.00%	Marginal corporate tax rate
Market risk premium	m	8.90%	10-year expected market return – risk free rate
Risk free rate	r_f	3.00%	10-year government bond
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Terminal value as % of firm value		85.0%	
PV of future dividends (VNDbn)		16,156	
PV of terminal value (VNDbn)		91,236	
PV of Firm (VNDbn)		107,392	
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Total return		40.4%	
Target price (VND)		57,800	
Dividend per share (VND)		1,500	

Source: KB Securities Vietnam

**PV Transportation (PVT):
Preparing to serve the lucrative
LNG transportation segment for
the upcoming LNG import boom**

We initiate our coverage of PVT with a BUY rating and a target price of VND17,300. Our target price is based on a mid-cycle P/B multiple derived from our three-stage dividend discount model. We apply a mid-cycle valuation for our target price to reflect our view for more modest recovery in freight rates amid an extended period of weak oil prices.

Vietnam's growing energy demand has already outstripped local supplies and shortages will require more energy imports. PVT is the most likely candidate to win these lucrative transportation contracts for Vietnam's coming energy import boom. Currently, PVT mainly focuses on LPG (Liquefied Petroleum Gas) and crude oil imports – and clearly shown in the company's current fleet expansion plan – but management will now need to prepare for 2022E's opening of the *Thi Vai* LNG terminal scheduled to go online in 2022E.

Our 19.6% CAGR for 2020E–2025E could prove to be overly conservative given new opportunities in LNG terminals and petrochemicals. Management has only released its fleet expansion plans up to 2022E and we still await details on potential LNG carriers, chemical tankers or product tankers. Currently, the company has budgeted USD300 million in capital expenditure for 14–16 ships but we believe management will need to expand this plan to include purchasing or leasing LNG tankers for the startup of the *Thi Vai* LNG terminal in 2022E. Any new plan may need to reflect Vietnam's construction of 9 LNG terminals over the next 15 years as well as management's preparations to transport chemical products for the new *Long Son* Petrochemicals plant.

Table 6. PV Transportation (PVT) – Valuation (DDM) & target price (VND, %)

Line item	Notation		Notes
Cost of equity	k_E	8.9%	$r_f + (\beta_E * m)$
Re-levered beta	β_E	1.142	$\beta_A(1 + ((1-t)*D/E))$
Unlevered beta	β_A	0.635	PVT unlevered beta
Terminal assumptions			
Sustainable ROE	ROE	7.0%	Long-term ROE
Div payout ratio	p	70.0%	Long-term payout ratio
Sustainable growth	g	2.1%	$ROE * (1 - p)$
Assumptions			
Target gearing	D/E	100.0%	Long-term debt/equity ratio
Statutory tax rate	t	20.0%	Marginal corporate tax rate
Market risk premium	m	8.9%	10-year expected market return – risk free rate
Risk free rate	r_f	3.0%	10-year government bond
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Terminal value as % of firm value		71.4%	
PV of future dividends (VNDbn)		1,698	
PV of terminal value (VNDbn)		4,247	
PV of Firm (VNDbn)		5,944	
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Total return		104.9%	
Target price (VND)		17,300	
Dividend per share (VND)		1,000	

Source: KB Securities Vietnam

Binh Son Refinery (BSR): 4Q turnaround and entering petrochemical market

We initiate our coverage of BSR with a BUY rating and a target price of VND8,100. Our target price is based on a mid-cycle P/B multiple derived from our three-stage dividend discount model. We apply a mid-cycle valuation for our target price to reflect our view for more modest recovery in domestic gasoline prices amid an extended period of weak oil prices.

Local ex-factory gasoline and diesel prices have bounced back by 48% and should allow steady recovery in margins despite our outlook for a flatter trajectory in oil price recovery. BSR returned to profitability in June and volumes have come back to set the stage for an earnings turnaround for 4Q after August's two-month scheduled maintenance shutdown. BSR is also currently upgrading facilities to enter into the petrochemical market. We strongly believe this initial step is significant and marks the beginning of a much more substantial push into petrochemicals, especially in the context of Vietnam's sizable LNG capacity expansion.

We estimate CAGR at 17.5% between 2021E and 2025E. Earnings performance should be better for 2021E at VND3,335 billion due to: 1) refinery product prices back at pre-pandemic and profitable levels; and 2) utilization ratios back to normal levels at 110%. We also assume on-time completion of the USD1.8 billion upgrading and expansion plan in 2023E despite current financing difficulties. The upgrade/expansion should: 1) boost total capacity by 30%; 2) upgrade facilities to complex refining from simple refining and diversify feedstock to both sour and sweet crude oil; and 3) increase the percentage of higher-margin petrochemical products.

Table 7. Binh Son Refinery (BSR) – Valuation (DDM) & target price (VND, %)

Line item	Notation		Notes
Cost of equity	k_E	15.6%	$r_f + (\beta_E * m)$
Re-levered beta	β_E	1.417	$\beta_A(1 + ((1 - t) * D/E))$
Unlevered beta	β_A	1.221	BSR unlevered beta
Terminal assumptions			
Sustainable ROE	ROE	8.0%	Long-term ROE
Div payout ratio	p	60.0%	Long-term payout ratio
Sustainable growth	g	3.2%	$ROE * (1 - p)$
Assumptions			
Target gearing	D/E	20.0%	Long-term debt/equity ratio
Statutory tax rate	t	20.0%	Marginal corporate tax rate
Market risk premium	m	8.9%	10-year expected market return – risk free rate
Risk free rate	r_f	3.0%	10-year government bond
Terminal value as % of firm value			
PV of future dividends (VNDbn)		4,231	
PV of terminal value (VNDbn)		30,078	
PV of Firm (VNDbn)		34,309	
Total return			
Target price (VND)		8,100	
Dividend per share (VND)		0	

Source: KB Securities Vietnam

PV Technical Services (PVS):
Most exposed to weak crude oil
prices as production cuts lead to
project delays & cancellations

We initiate our coverage of PVS with a HOLD rating and a target price of VND11,100. Our target price is based on a mid-cycle P/B multiple derived from our three-stage dividend discount model. We apply a mid-cycle valuation for our target price to reflect our view for more modest recovery in FPSO day rates (Floating, Production, Storage & Offloading) amid an extended period of weak oil prices.

Project delays include the *Sao Vang-Dai Nguyet* and *Gallaf* gas fields and although they may restart in mid 3Q both projects are in the finishing phase (albeit offering higher margins in the short term during this phase). Backlogs are still under pressure as competition squeezes margins at the upcoming *Su Tu Trang* and *Thi Vai* LNG projects. Vietnam's mature oil and gas fields also exacerbate the situation for upstream operators as higher extraction costs translate into quicker production cutbacks on any fall in oil prices.

Our 13.6% earnings CAGR between 2021E and 2025E assumes PVS will win EPC contracts (Engineering, Procurement & Construction) for major gas projects, including *White Lion Phase 2* and *Nam Du-U Minh*. We have excluded the mega gas projects – *Blue Whale* and *Block B* – given the complexity of the approval process and our expectations for extended delays. Notwithstanding, the operating environment for Vietnam's upstream operators should be characterized by industry decline, intensifying competition and weak oil prices that should continue to squeeze margins and exacerbate any delays from offshore tensions and complications in the approval process.

Table 8. PV Technical Services (PVS) – Valuation (DDM) & target price (VND, %)

Line item	Notation		Notes
Cost of equity	k_E	16.6%	$r_f + (\beta_E * m)$
Re-levered beta	β_E	1.527	$\beta_A(1 + ((1-t)*D/E))$
Unlevered beta	β_A	1.414	PVS unlevered beta
Terminal assumptions			
Sustainable ROE	ROE	3.5%	Long-term ROE
Div payout ratio	p	60.0%	Long-term payout ratio
Sustainable growth	g	1.4%	$ROE * (1 - p)$
Assumptions			
Target gearing	D/E	10.0%	Long-term debt/equity ratio
Statutory tax rate	t	20.0%	Marginal corporate tax rate
Market risk premium	m	8.9%	10-year expected market return – risk free rate
Risk free rate	r_f	3.0%	10-year government bond
<hr/>			
Terminal value as % of firm value		73.4%	
PV of future dividends (VNDbn)		2,061	
PV of terminal value (VNDbn)		5,867	
PV of Firm (VNDbn)		7,749	
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Total return		8.3%	
Target price (VND)		11,000	
Dividend per share (VND)		700	

Source: KB Securities Vietnam

PV Drilling & Well Services (PVD):
Also exposed to weak oil prices

We initiate our coverage of PVD with a HOLD rating and a target price of VND9,600. Our target price is based on a discounted cash flow model that reflects weaker cash generating capabilities following the sharp slowdown in Vietnam's upstream E&P activities.

Jackup day rates should remain flat at USD65,000 for 2020E and into 2021E due to: 1) cuts to capital expenditure budgets amid weak oil prices; and 2) fewer contracts from Malaysia after the country agreed to May's OPEC+ production cuts. We expect Malaysian project delays to drop jackup utilization rates to 77% in 2020E and only move up to 85% in 2021E.

Our forecasts generate a CAGR of 36.7% between 2020E to 2025E. We expect PVD's average jackup drilling day rates to remain flat at about USD65,000 into 2021E as depressed oil prices force many E&P companies to cut capital expenditure budgets. Jobs from Malaysian operators – some of PVD's largest clients – are down after the country agreed to May's extension of OPEC+ production cuts. Moreover, PVD will need to find new drilling contracts for the jackup rigs as most contracts will end by the 2H of 2021E even after factoring in projects that have been pushed back to 2021E. The company may need to rely on the 6-year contract (4-year contract plus 2-year option) with Brunei Shell Petroleum for the TAD rig (Tender-Assisted Drilling) until new drilling contracts are announced.

Table 9. PV Drilling & Well Services (PVD) – Valuation (DCF) & target price (VND, %)

Line item	Notation	Notes	
WACC	W	16.0%	$(E/(E+D)) * k_E + ((D/(E+D)) * k_D * (1-t))$
Cost of equity	k_E	18.1%	$r_f + (\beta_E * m)$
Re-levered beta	β_E	1.693	$\beta_A(1 + ((1-t)*D/E))$
Unlevered beta	β_A	1.459	PVD unlevered beta
Cost of debt	k_D	7.0%	$r_f + (\beta_D * m)$
Debt beta	β_D	0.449	d / m
Assumptions			
Target gearing	D/E	20.0%	Long-term debt/equity ratio
Statutory tax rate	t	20.0%	Marginal corporate tax rate
Debt premium	d	4.0%	Estimated investment grade spread
Market risk premium	m	8.9%	Expected market return – risk free rate
Risk free rate	r_f	3.0%	10-year government bond
<hr/>			
Terminal value as % of firm value		53.7%	
PV of future cash flows (VNDbn)		3,120	
PV of terminal value (VNDbn)		3,616	
PV of Firm (VNDbn)		6,736	
<hr/>			
Total return		6.3%	
Target price (VND)		9,600	
Dividend per share (VND)		0	

Source: KB Securities Vietnam

RISK: Delayed privatizations to increase the free floats of several oil & gas stocks

As state-owned companies and Vietnam in the early stage of privatizing its oil & gas sector, delayed stake sales could keep free floats tight for many stocks. The free float for GAS remains tiny at only 4.2% of shares outstanding, which prevents Vietnam's largest oil & gas stock from being included in any global indices. Although the government remains committed to privatizing the sector, delays persist.

Table 10. Vietnam oil & gas – Petrovietnam Group privatization schedule, 2019–2020E (%)

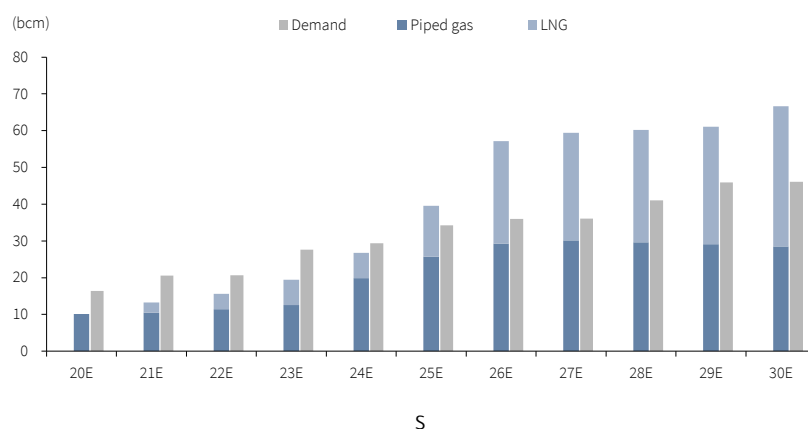
Company	Ticker	Current ownership (%)	Govt-approved ownership (%)	PVN's target ownership (%)	Privatization stake (%)	Planned timeline	Extended timeline
PV Gas	GAS	95.8%	65.0%	65.0%	30.8%	2020	Reduce stake below 51% by 2025
Phu My Fertilizers	DPM	59.6%	51.0%	36.0%	23.6%	2019–2020	
PV Transport	PVT	51.0%	36.0%	36.0%	15.0%	2019–2020	Reduce stake below 31% by 2025
PV Drilling & Well Services	PVD	50.5%	50.5%	36.0%	14.5%	2020	
PV Technical Services	PVS	51.0%	51.0%	30.0%	21.0%	2025	
PV Oil	OIL	80.0%	35.1%	35.1%	44.9%	2019–2020	
Binh Son Refinery	BSR	93.0%	43.0%	43.0%	49.0%	2020	
PV Power	POW	80.0%	51.0%	51.0%	29.0%	2020	

Source: Company reports, KB Securities Vietnam

RISK: Approvals for the new gas fields the larger risk

Delayed approvals for the new gas fields poses the biggest risk to the oil & gas sector. The potential production output from these large fields is substantial but the timing of these projects remains unknown. Original approval dates reach as far back as 2005, with no developments as of yet due to offshore tensions. Given Vietnam's current LNG rollout plan, the startup of all the new gas fields risks tipping the local gas market into oversupply. That said, we still believe that Vietnam will pursue its strategy to import LNG as a way to lower fuel costs for the country's power generators (and also the reason why we believe the regulator may adopt a pooled pricing system for LNG imports discussed in the next section).

Fig 5. Vietnam oil & gas – Natural gas local production (assuming new fields) & LNG imports vs consumption estimates, 2020E–2030E (billion cubic metres)



Source: Company reports, KB Securities Vietnam

IV. Unwinding the cyclical trade

Upstream and downstream earnings performance to diverge after 2Q earnings

We launch our quarterly earnings forecasts for Vietnam's oil & gas sector that reflect our expectations for diverging earnings performance between upstream and downstream oil & gas stocks after the 2Q earnings season. Sustainable earnings recovery for upstream operators PVS and PVD should be continually challenged by production cuts and project delays. Consequently, we do not expect full earnings recovery until 2021E when Brent prices move above Vietnam's USD55.00 breakeven. The outlook is more promising for downstream operators like GAS and PLX as oil prices have recovered sufficiently to allow sequential earnings at both companies to benefit from pricing formulas indexed to oil product prices. BSR and PVT will likely see one more quarter of weakness from August's maintenance shutdown but we expect sustainable earnings recovery from 4Q.

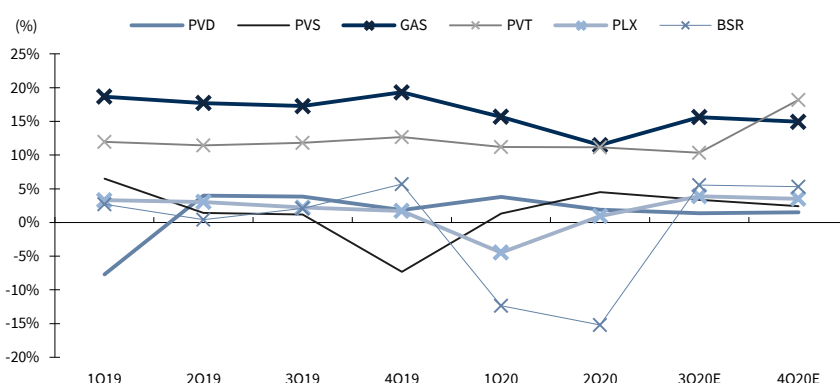
Table 11. Vietnam oil & gas – KBSV quarterly net attributable profit forecasts, 1Q19–4Q20E (VNDbn, %)

Company	2019A				% QoQ				2020E				% QoQ			
	1QA	2QA	3QA	4QA	1QA	2QA	3QA	4QA	1QA	2QE	3QE	4QE	1QA	2QE	3QE	4QE
Upstream																
PVD	-87	109	27	136	-122	-225	-75	401	24	50	31	27	-82	107	-39	-14
PVS	369	218	62	200	10	-41	-71	221	111	248	260	283	-44	123	5	9
Midstream																
GAS	3,029	3,020	2,884	2,969	18	0	-5	3	2,333	1,714	2,157	1,964	-21	-27	26	-9
PVT	147	205	139	198	-37	40	-32	42	67	131	97	242	-66	95	-26	150
Downstream																
PLX	1,201	1,181	960	816	39	-2	-19	-15	-1,893	333	1,101	1,082	-332	-118	231	-2
BSR	608	119	598	1,590	na	-81	404	166	-2,330	-1,894	602	680	-247	-19	-132	13

Note: GAS, BSR and PVS 2Q20 data based on actuals.

Source: Company reports, KB Securities Vietnam

Fig 6. Vietnam oil & gas – Quarterly EBIT margins, 1Q19–4Q20E (%)



EBIT: Operating profit before financial income & expenses and gains from joint ventures.

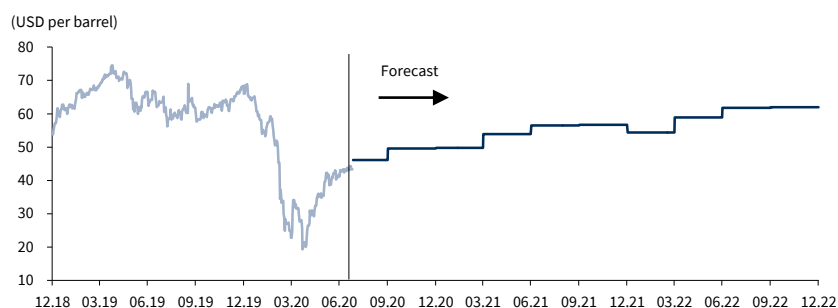
Note: GAS, BSR and PVS 2Q20 data based on actuals.

Source: Company reports, KB Securities Vietnam

Bounce back in Brent crude prices largely over and we recommend unwinding trades in the upstream operators PVS & PVD

Our global commodities team at KB Securities in Korea expects a slower recovery trend for crude oil prices for the remainder of 2020E. WTI crude oil prices are likely to average USD40.10 in 3Q and USD43.60 in 4Q vs 2Q's lows of USD28.00. In Brent terms – the more relevant benchmark oil price for Vietnam – these prices would equate to average quarterly prices of USD46.10 for 3Q and USD49.60 for 4Q compared to 2Q's USD33.39. Our house forecasts imply a sharp slowdown in momentum, with recovery at only 7.6% in 4Q compared to the 38.1% rebound between 2Q and 3Q average prices. Moreover, growing signs of a second wave of coronavirus outbreaks in many large economies may put our house view on oil prices at risk of downgrades in the coming weeks.

Fig 7. Oil – Brent crude oil prices & forecasts, Jan 19–Dec 22E (USD per barrel)

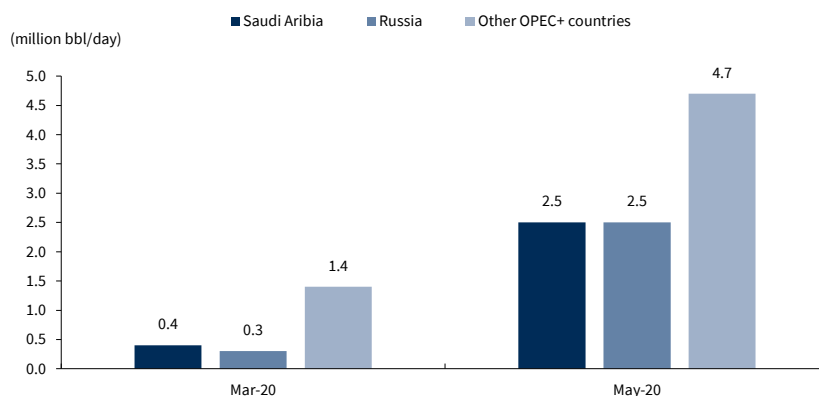


Source: Bloomberg, KB Securities Vietnam

OPEC+ countries unlikely to add to existing production cuts

The OPEC+ countries agreed to a second round of deeper production cuts in May but may be less willing to add to these. May's new production cuts began at a higher level than the original March agreement but are scheduled to be gradually lowered until April 2022. Cuts began at 9.7 million barrels a day for May and June and should fall to 7.7 million barrels per day from July to December; and then 5.8 million barrels a day for the remaining sixteen months of the agreement.

Fig 8. OPEC+ – Agreed production cuts, Mar 2020 & May 2020 (million bbl/day)

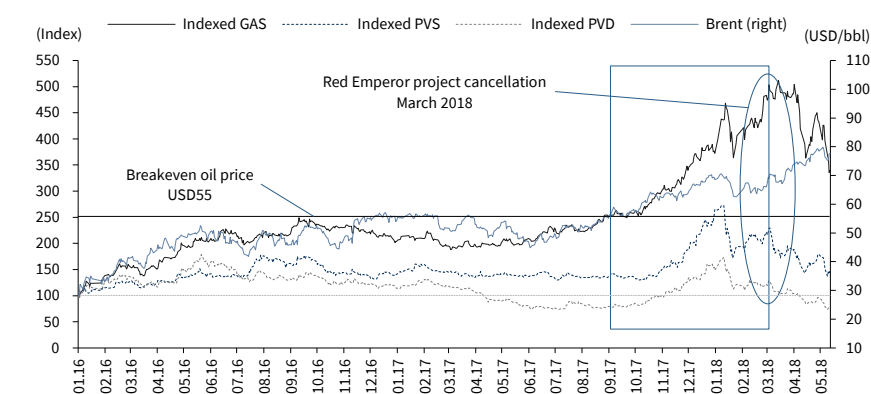


Source: KB Securities Vietnam

Investors should not abandon the oil & gas sector completely as performance only peaks after Brent oil prices recover the USD55.00 breakeven level

We would not recommend that investors abandon all investments in Vietnam's oil & gas sector despite the growing likelihood of a more muted recovery for oil prices. Looking to the most recent downturn in oil prices in 2015–2016 shows that performance for Vietnam's oil & gas stocks only peak after Brent prices move above the USD55.00 level. With Vietnam's oil production becoming profitable above USD55.00, a sustained move above this level usually signals the return of profitability for the sector and provision reversals to boost results further. Strong correlations to Brent usually only last during the initial rebound in oil prices after a severe drop. Historically, PV Gas (GAS) has shown the best ability to fully-track the recovery in oil prices, while PV Technical Services (PVS) and PV Drilling & Well Services (PVD) underperformed against Brent prices. The last cycle for Vietnam's oil & gas stocks began in January 2016 when Brent prices bottomed out at USD28 and ended with the cancellation of the *Red Emperor* project in March 2018 during which oil prices recovered to US\$70.00

Fig 9. Vietnam oil & gas – Indexed share prices vs Brent, 2016–2017 (USD/bbl)



Source: Bloomberg, KB Securities Vietnam

Early correlations to oil prices break down after the initial recovery bounce in oil prices; switch out of PVS & PVD into GAS

But we do recommend that investors unwind positions in PVS and PVD and switch holdings into GAS. Only GAS has shown the ability to fully track the recovery in oil prices, while PVS and PVD as upstream operators actually deviated quite substantially from oil prices and significantly underperformed the rebound in oil prices. Correlations to oil prices do not last over the entire recovery of oil prices and the short duration of this interaction is clearly seen in previous trading history. Oil & gas stocks have only been able to closely track recovery in Brent prices during the initial recovery bounce that came directly after the steep drop.

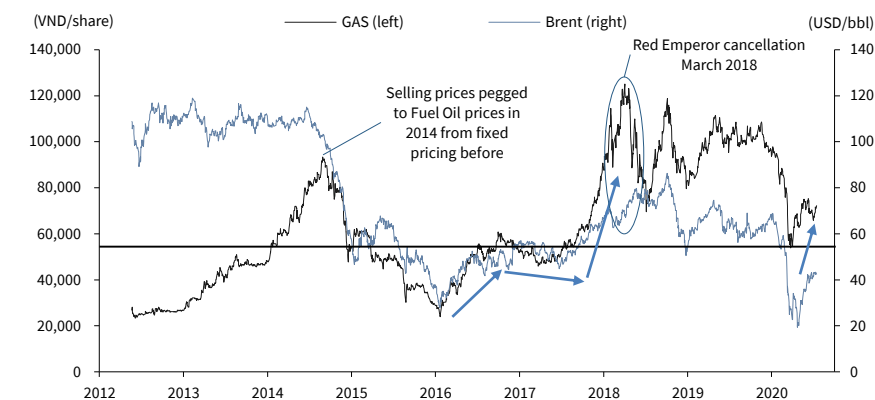
GAS exhibits the most enduring correlation with oil prices during the recovery period

Share performance at GAS is the most closely related to underlying Brent prices largely due to the floating price system adopted in 2014. Product prices are pegged to High Sulphur Fuel Oil (HSFO) prices based on the following formula:

$$\text{Selling price} = \text{Max [46\% HSFO price, wellhead price]} + \text{transportation \& tariffs (including markup)}$$

This pricing formula gives GAS the most direct relationship to Brent oil prices among the oil & gas stocks, with the direction of earnings determined by HSFO prices helping to sustain the close relationship between the share prices and the recovery in oil prices.

Fig 10. Vietnam oil & gas – GAS vs Brent, 2012–2020 (VND, USD/bbl)

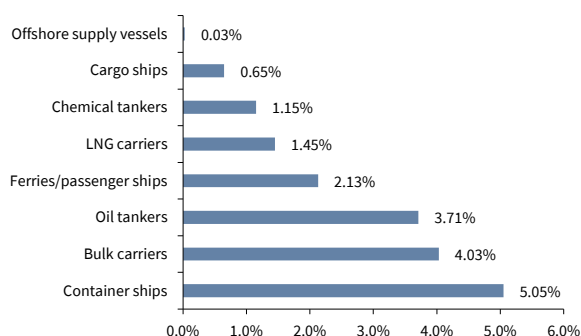


Source: Bloomberg, KB Securities Vietnam

We also believe HSFO prices have bottomed

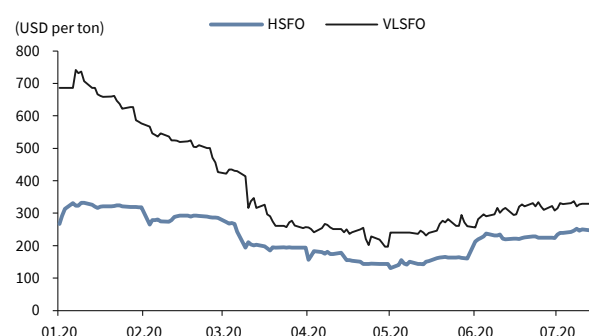
HSFO prices should recover from lows seen with the introduction of IMO2020 (International Maritime Organization 2020) in January that forced vessels to lower sulfur emissions. This pressured earnings at GAS as falling HSFO prices also lowered domestic dry gas selling prices. Scrubber installations should also increase as higher-priced Very Low Sulphur Fuel Oil (VLSFO) encourage shipping companies to add the devices to lower sulphur emissions and allow the use of HSFO for bunkering. Currently, about 4,000 vessels or 6% of the global fleet are equipped with scrubbers.

Fig 11. Global shipping – Scrubber installations by vessel type, 2019 (% of global fleet)



Source: Statistics, KB Securities Vietnam

Fig 12. Global commodities – HSFO & VLSFO prices, Jan 2020 – Jul 2020 (USD per ton)



Source: Bloomberg, KB Securities Vietnam

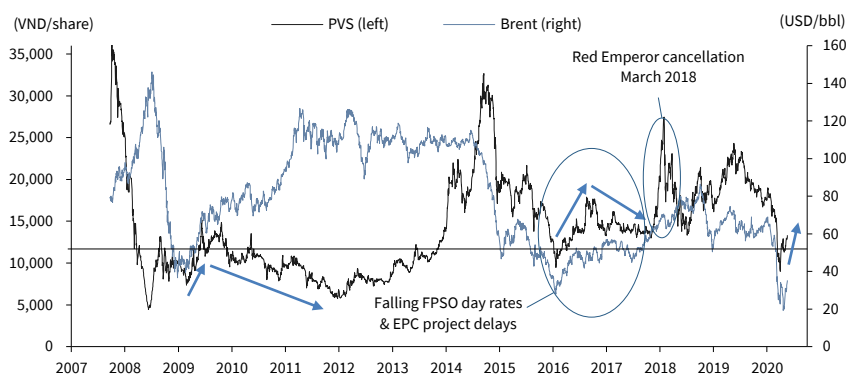
PVS & PVD share prices impacted more by upstream day rates and prevented both stocks from fully tracking the recovery in Brent prices in the past

Falling FPSO day rates and weak pricing on EPC contracts for new oil projects could see PVS underperform oil prices again

Share prices and earnings at PVS and PVD are more influenced by day rates in the upstream market. Moreover, pricing mechanisms for day rates are complex and usually require that oil prices remain above extraction costs to boost rig utilization before recovery can be realized. This was seen during the previous two oil recessions, when lackluster day rates from plunging oil prices led to weak earnings at PVS and PVD and prevented both from keeping pace with the recovery in Brent prices.

Specifically, day rates for FPSO (Floating Production Storage & Offloading) services are the most relevant for PVS. This means the current weakness in FPSO day rates could see PVS repeat the disappointing performance of past. PVS already took provisions in 1Q against the growing likelihood of lower day rates on its FPSOs after operations were hit with lower production output from production cutbacks; the sharp drop off in demand; and storage facilities at full capacity. Moreover, prices for EPC (Engineering, Procurement & Construction) contracts on new oil development projects also play an important role for earnings, exposing share prices to event risk in the case of project delays or cancellations. With EPC contracts already in a downturn for the past five years, extended periods of oil prices trading below breakeven threatens additional project delays or cancellations.

Fig 13. Vietnam oil & gas – PVS vs Brent, 2007–2020 (VND, USD/bbl)

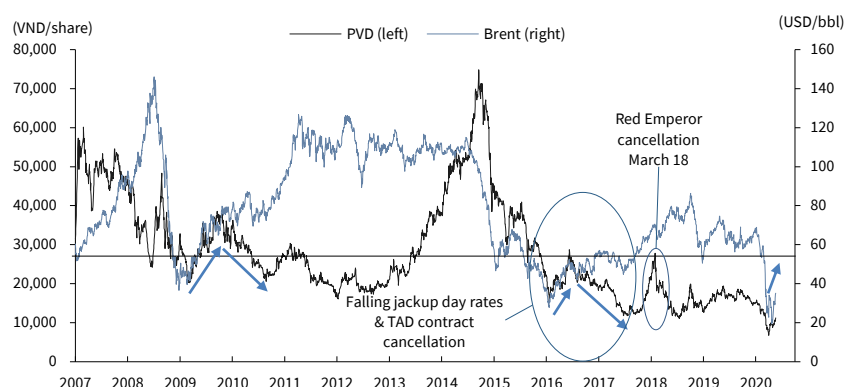


FPSO: Floating Production, Storage & Offloading. EPC: Engineering, Procurement & Construction
Source: Bloomberg, KB Securities Vietnam

Lackluster day rates on jackup rigs are the biggest risk to share price performance and has often plagued PVD in the past

Day rates for jackup rigs usually play the largest role in determining earnings and share prices for PVD. At present, day rates for jack-up rigs have not only been negatively impacted by the crash in oil prices but the coronavirus has also led to another round of production cuts from the OPEC+ countries. This should not only limit the ability of day rates to rebound alongside recovering oil prices but also make it harder for PVD to match the gains in oil prices. Similar occurrences happened during the previous downturns as Brent prices below breakeven led to production cutbacks and new project cancellations. Moreover, the bulk of PVD's drilling contracts end in 2020E and the company will need to sign new job contracts in the coming months.

Fig 14. Vietnam oil & gas- PVD vs Brent, 2007-2020 (VND, USD/bbl)



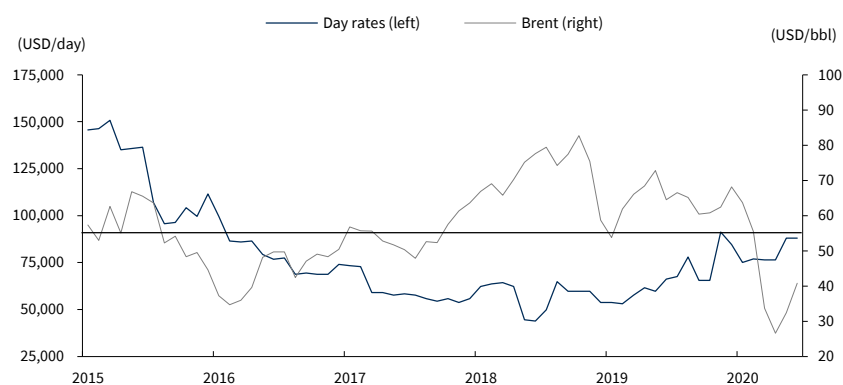
TAD: Tender-Assisted Drilling for deepwater projects.

Source: Bloomberg, KB Securities Vietnam

Renewed and deeper OPEC+ production cuts may reverse the shallow recovery in jackup day rates

Vietnam's oil & gas markets could be facing a similar situation to past oil price downturns where weak upstream day rates put PVS and PVD at risk of weakening the correlation with oil price recovery. Early signs of recovery in day rates for jackup rigs ahead of expectations for the original March expiry of OPEC+ production cuts have been cut short by the sharp drop off in production demand and the new round of production cuts announced in April due to the coronavirus. Moreover, major global oil companies have already reduced capex budgets for E&P projects this year which should negatively impact the outlook for production output.

Fig 15. Vietnam oil & gas - Day rates for jackup rigs, 2015- 2019 (USD/day, USD/bbl)



Source: IHS Markit, KB Securities Vietnam

V. LNG the secular growth opportunity

GAS & PVT to benefit most from LNG imports

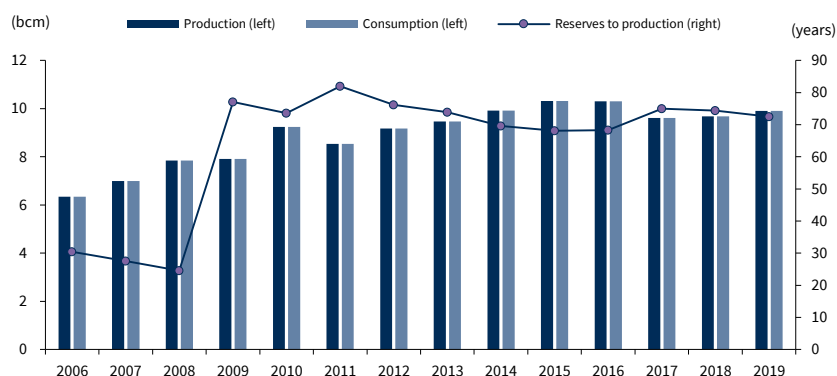
GAS and PVT should benefit most from the start of LNG imports in 2021E/2022E with the startup of Vietnam's first regasification facilities. Imports will need to make up for increasing shortfalls arising from what we expect will be slowing production volumes at Vietnam's existing gas fields (our forecasts assume extended delays but eventual start up of the new large gas fields).

According to Vietnam's long-term LNG road map, PV Gas will own seven out of nine LNG terminals that are scheduled for construction over the next fifteen years. PVT is also the leading candidate to win the transportation contracts for these new facilities in the lucrative transportation segment and is already preparing plans to purchase or charter a fleet of LNG carriers.

Gas consumption held back by lack of LNG importing infrastructure

Currently, GAS is Vietnam's sole provider of natural gas transported by pipelines from offshore gas fields and we estimate existing production may only satisfy about 79% of real demand from gas-fired power plants in 2020E. Natural gas consumption has equaled production for more than a decade as consumption is limited to locally-available gas supplies due to Vietnam's lack of regasification facilities that prohibits the import of LNG. Moreover, natural gas shortages have been exacerbated by slowing production output from Vietnam's mature gas fields.

Fig 16. Vietnam oil & gas – Natural gas historical production, consumption & reserves to production ratios, 2008–2019 (billion cubic metres, years)

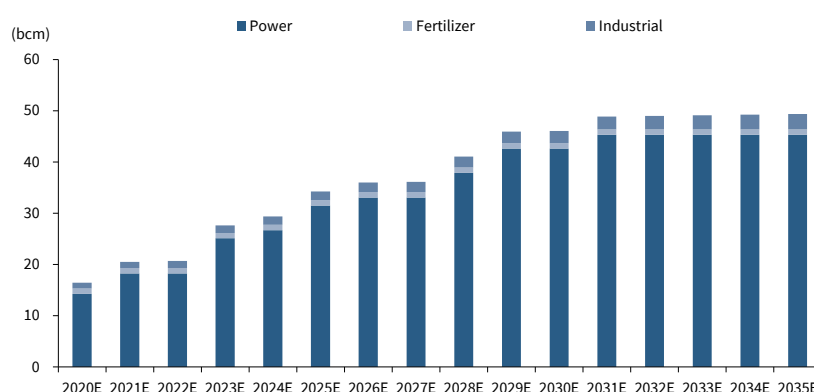


Source: General Statistics Office Vietnam, KB Securities Vietnam

We estimate gas demand from power clients will triple in next 15 years

We estimate that expansion of Vietnam Electricity's (EVN) power grid alone could triple natural gas demand by 2035E given the construction plan for new gas-fired power plants. Most of this demand will need to be met by LNG imports as Vietnam's natural gas production from existing fields is likely to contract by 12.2% annually without the exploitation of new fields.

Fig 17. Vietnam oil & gas – Natural gas demand forecasts by industry, 2020E–2035E (billion cubic metres)



Source: General Statistics Office Vietnam, KB Securities Vietnam

Table 12. Vietnam power generation sector – Vietnam Electric (EVN) new power plant construction plans, 2022E–2028E (megawatts)

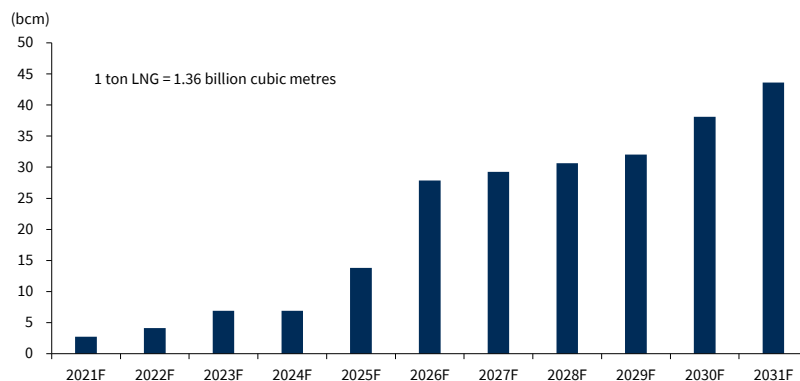
Power plants	Owner	Capacity	Start up year
<i>Nhon Trach 3</i>	PVN	750 MW	2022
<i>Nhon Trach 4</i>		750 MW	2022
<i>Son My 2.1</i>	AES Corporation, PV GAS	750 MW	2023
<i>Son My 2.2</i>		750 MW	2024
<i>Son My 2.3</i>		750 MW	2025
<i>Son My 1.1</i>	EDF, Kyushu, Sojitz, PAC	750 MW	2026
<i>Son My 1.2</i>		750 MW	2027
<i>Son My 1.3</i>		750 MW	2028
<i>O Mon 3</i>	EVN (ODA)	750 MW	2020
<i>O Mon 4</i>	EVN	750 MW	2021
<i>O Mon 2</i>	None	750 MW	2026
<i>Kien Giang 1</i>	PVN	750 MW	2021
<i>Kien Giang 2</i>		750 MW	2022
<i>Mien Trung 1</i>	PVN	750 MW	2023
<i>Mien Trung 2</i>		750 MW	2024
<i>Dung Quat 1</i>	EVN	750 MW	2023
<i>Dung Quat 2</i>	BOT	750 MW	2024
<i>Dung Quat 3</i>	EVN	750 MW	2025
Total Capacity		13,500 MW	

Source: Company reports, KB Securities Vietnam

GAS will lead the facilities investment for LNG terminals needed to close the demand gap

GAS will invest in seven of nine LNG terminals scheduled for completion between 2022E and 2035E. If construction goes to plan, we estimate maximum import capacity at 25 MTPA (million tons per annum) or 150% of natural gas demand by 2035E. The *Hai Linh* terminal owned by Hai Linh Limited will be Vietnam's first LNG terminal and is scheduled for startup in 2021E but should be quickly followed up by the *Thi Vai* terminal owned by PV Gas with commercial operations in 2022E. Moreover, PV Gas has already opened bidding for feasibility studies for *Thi Vai* Phase 2 to accelerate expansion to 2023E.

Fig 18. Vietnam oil & gas – LNG output from new terminals, 2021E–2031E (billion cubic metres)



Source: Vietnam Gas Master Plan, KB Securities Vietnam

Table 13. Vietnam oil & gas – Upcoming LNG terminals, 2021E–2035E (million tons per year)

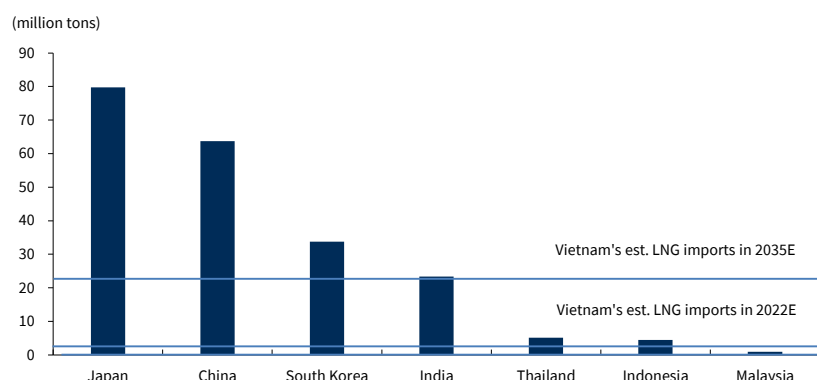
LNG import terminal	Startup year	Main investor	Capacity (MTPA)
<i>Thi Vai (Ba Ria Vung Tau)</i>	2022		1–3 MT
<i>Hon Khoai (Ca Mau)</i>	2022–25 (phase 1) 2025 – (phase 2)		1MT (phase 1) 2MT (phase 2)
<i>Tien Giang (Tien Giang)</i>	2022–25		4–6 MT
<i>Son My (Binh Thuan)</i>	2023–25 (phase 1) 2027–30 (phase 2) 2031–35 (phase 3)	PV Gas (GAS)	1–3 MT (phase 1), 3 MT (phase 2) & 3 MT (phase 3)
<i>Thai Binh FSRU</i>	2026–30		0.2–0.5 MT
<i>My Giang (Khanh Hoa)</i>	2030–35		3 MT
<i>Cat Hai (Hai Phong)</i>	2030–35		1–3 MT
<i>Nam Van Phong (Khanh Hoa)</i>	2025	Petrolimex (PLX)	1 MT
<i>Hai Linh LNG (Vung Tau)</i>	2021 (phase 1) 2023–25 (phase 2)	Hai Linh Limited (unlisted)	2–3 MT (phase 1) 6 MT (phase 2)

Source: Vietnam Gas Master Plan, KB Securities Vietnam

Vietnam would join the club of LNG importers as Asia’s 8th-largest LNG customer

By 2022E, Hai Linh’s 2 MTPA capacity at the *Hai Linh* terminal scheduled for startup in 2021E and GAS’s 1 MTPA capacity at the *Thi Vai* terminal scheduled for commercial operations in 2022E would initially rank Vietnam as Asia’s 8-largest LNG importer by 2022E. Over our forecast period, Vietnam’s LNG imports will likely reach similar levels to Thailand and Indonesia.

Fig 19. Asia LNG – LNG import by country, 2019 (million tons)

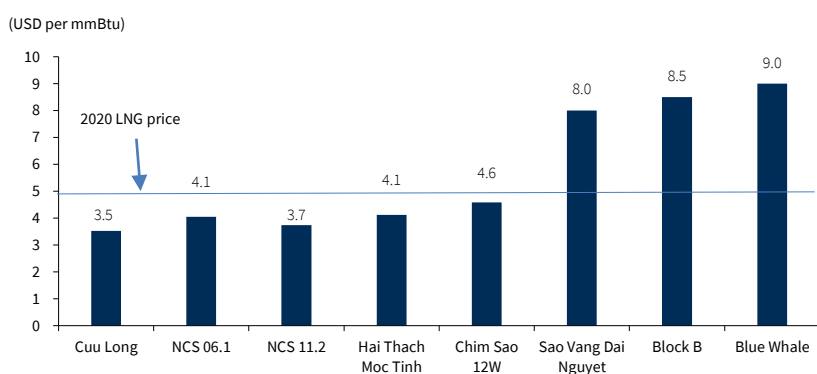


Source: Bloomberg, KB Securities Vietnam

LNG import prices should be low enough to compete favorably with the wellhead prices of Vietnam's new gas fields

Prices for US & Russian LNG exports currently trade at around USD5.00 per mmBtu (million British thermal units) and should remain competitively-priced against industry estimates for the wellhead prices (or wholesale prices at the source of production) of Vietnam's major upcoming gas projects. Vietnam's major new gas fields include *Sao Vang-Dai Nguyet* located in the *Nam Con* basin and *White Lion* in the *Cuu Long* basin both located off the southern coast and the two largest fields of *Block B* located in the *Malay-Tho Chu* basin off the southwest coast and *Blue Whale* located in the *Song Hong* basin off the northeastern coast. Industry estimates put wellhead prices at USD8.00 per mmBtu for *Sao Vang-Dai Nguyet*, USD9.00 per mmBtu for *Blue Whale* and USD8.50 per mmBtu for *Block B* (no available estimates for *White Lion*). After adding a 30% estimate for transportation & regasification costs, we expect LNG import prices to be competitive against locally-produced natural gas for power generation companies.

Fig 20. Vietnam oil & gas – Wellhead prices of current & future gas fields (USD per million British thermal unit)



Source: PV Gas, Bloomberg, KB Securities Vietnam

Vietnam's current gas pricing and cost regime is complex

Vietnam's pricing and cost regime for natural gas is complex. Selling prices for all of Vietnam's energy products are based on government pricing formulas (including electricity tariffs), while the cost of gas is set according to a mix of fixed and floating prices depending on the gas field. Some of this has since changed due to the elimination of the *Take or pay* (ToP) segment of the market. Natural gas has been sold to power plants under two pricing schemes: 1) legacy *Take or pay* (ToP) agreements for power plants located in the southeast region; and 2) *Above ToP* prices for gas volumes sold above any existing ToP agreements or gas sold to power plants outside of the southeastern region.

ToP agreements: ToP agreements have since been eliminated but were agreements based on an annual selling prices set at the start of each year using a 2015 base year price of USD5.57 per mmBtu and adding a 2% inflator each year. About 35% of annual volumes at GAS were sold under ToP agreements. GAS recently ended ToP agreements in March 2019 and rolled over to the *Above ToP* pricing formula but uncertainties still exist as to whether GAS will transfer gains from this transition to the government or not.

***Above ToP* prices:** *Above ToP* prices are pegged to Singaporean High Sulphur Fuel Oil (HSFO) prices according to the following formula:

$$\text{Selling price} = \text{Max [46\% HSFO price, wellhead price]} \\ + \text{transportation \& tariffs (including markup)}$$

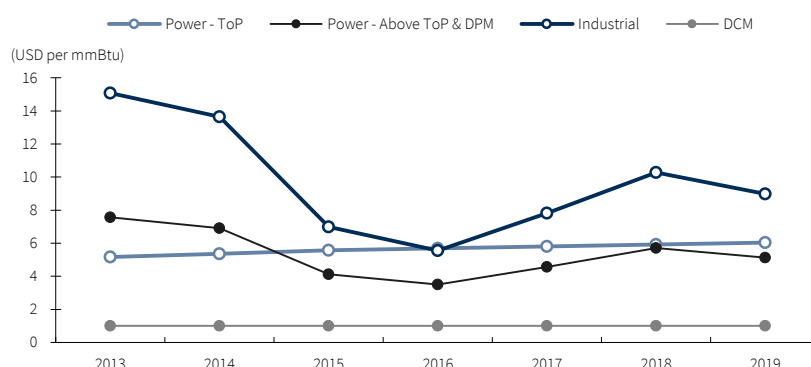
Selling prices are either 46% of the HSFO price or the wellhead price including transportation costs and tariffs to ensure GAS breaks even for all gas sold and earns its mark up even if HSFO prices fall sharply. Transportation costs are determined by the pipeline used to deliver the gas.

Industrial prices: Prices for natural gas sold to industrial customers are negotiated at the start of the year or based on the following formula:

$$\text{Selling price} = \text{Max [100\% HSFO price, wellhead price]} \\ + \text{transportation \& tariffs (including markup)}$$

Fertilizer companies: Vietnam's two fertilizer companies are also major buyers of natural gas, with both Phu My Fertilizer (DPM) and Ca Mau Fertilizer (DCM) now applying *Above ToP* prices for gas purchases since 2019. Prior to this, DCM received preferential pricing by only paying for the transportation & tariffs for gas purchased from the *PM3-CAA* gas field as part of a subsidy to ensure the company achieved its mandated minimum ROE of 12%. The *PM3-CAA* gas field is a joint-venture between Malaysia and Vietnam located in the Gulf of Thailand.

Fig 21. PV Gas – Domestic natural gas selling prices, 2013–2019 (USD per mmBtu)



Source: PV Gas, Bloomberg, KB Securities Vietnam

Cost prices for GAS depend on the field supplying the natural gas

The pricing mechanism for the cost of gas differs by gas field in a mix of fixed and floating cost structures. Fixed cost pricing is set according to wellhead prices adjusted up by 2% per year, while floating cost pricing is used to create a markup system based on the *Above ToP* pricing mechanism:

$$\text{Cost price} = \text{Max} [46\% \text{ HSFO price, wellhead price}]$$

Vietnam's main gas producing fields are located in the *Nam Con Son* basin off the southern coast, the *Cuu Long* basin due south of the Mekong Delta, the *PM3-CAA* gas field located in the *Malay-Tho Chu* basin off the southwest coast and the *Ham Rong-Thai Binh* gas fields located in the *Song Hong* basin off the northeast coast. The *Nam Con Son* basin primarily produces natural gas and is Vietnam's largest producer, fields in the *Cuu Long* basin are a mix of oil & gas and the *PM3-CAA* and *Ham Rong-Thai Binh* are smaller gas fields.

Nam Con Son & Cuu Long: As Vietnam's largest gas producing basin, gas fields in *Nam Con Son* mostly use fixed prices to supply ToP agreements. *Cuu Long* also has older gas fields that primarily use fixed pricing for customers on the *Above ToP* pricing scheme. Continued use of fixed pricing for the older gas fields has allowed GAS to realize additional gains with the elimination of ToP agreements.

Ham Rong-Thai Binh: Costs from these fields are mostly based on floating prices, with supply mainly used for industrial clients in *Thai Binh* located southwest from Hai Phong in the northern part of Vietnam.

PM3-CAA: Jointly-owned by Vietnam and Malaysia, this smaller field is sole supplier to Ca Mau Fertilizer (DCM) under a special pricing scheme that previously sold gas for only the transportation cost and tariff before moving to the *Above ToP* system in 2019. Gas to other customers is sold on floating prices.

Table 14. Vietnam oil & gas – Natural gas cost & selling price methods by basin (USD per million British thermal units, billion cubic metres, %)

Natural gas basin	Cost price type	Cost price calculation	Selling price type	Selling price calculation	Customers
<i>Cuu Long</i>	Fixed	USD3.53 per mmBtu in 2019 & 2% per annum increase	Floating	MAX (46% HSFO; Wellhead price) + transportation & tariffs	<i>Above ToP</i> power customers Phu My Fertilizers (DPM)
<i>Nam Con Son</i>	Fixed	USD3.53 per mmBtu in 2019 & 2% per annum increase	Fixed	USD5.81 per mmBtu in 2019 & 2% per annum increase	ToP power customers (up to 3.55 bcm): EVN Genco 3, Phu My 3, Phu My 2.2 BOT
	Floating	MAX (46% HSFO; Wellhead price) + transportation & tariffs	Floating	MAX (46% HSFO; Wellhead price) + transportation & tariffs	<i>Above ToP</i> power customers Phu My Fertilizers (DPM)
<i>Malay Tho Chu</i>	Floating	MAX (46% HSFO; Wellhead price) + transportation & tariffs	Floating	MAX (46% HSFO; Wellhead price) + transportation & tariffs	Cau Mau Power Cau Mau Fertilizer (DCM)
<i>Ham Rong-Thai Binh</i>	Floating	MAX (46% HSFO; Wellhead price) + transportation & tariffs	Floating	100% HSFO price or annual negotiated price + transportation & tariffs	Hiep Phuoc industrial zone Other industrial zones

BCM = Billion Cubic Metres

Source: PV Gas, KB Securities Vietnam

One remaining bogey is the pricing formula for LNG imports and the government has yet to release any details on a pricing regime

Vietnam's government has yet to announce any details on the potential pricing mechanism for LNG imports. But after examining LNG import pricing formulas in Thailand, Malaysia and Indonesia, we believe Vietnam will ultimately adopt a regime similar to Thailand's pooling structure. Both markets have similar characteristics, in that, PTT Exploration & Production (PTTEP) plays a similar role to GAS in its home market as a state-owned company that is the sole purchaser, transporter and distributor of natural gas in Thailand. A likely scenario for Vietnam includes using a pooling system to set the selling price for natural gas to power companies as a blended price of domestic wellhead prices and lower LNG import prices. This would effectively allow power companies to use both sources of natural gas to lower its average fuel costs, while allowing LNG importers to sell supply at market prices. Whether this system would also eliminate the current pricing formula pegged to fuel oil prices for locally-sourced natural gas is uncertain but GAS has already indicated its desire to move away from the pricing system indexed to fuel oil prices. Importantly, we expect Vietnam to create a pricing regime that would allow a fair return for LNG infrastructure investments given the importance of LNG imports in meeting the country's energy shortfalls.

Thailand: Natural gas pricing divided into two pools (pool 1 is dedicated to the gas separation industry and pool 2 mainly focused on power generation):

Pool 1 selling price = wholesale price (wellhead price indexed to fuel oil, exchange rate & CPI/PPI)
+ marketing margin, transmission tariff & distribution tariff)

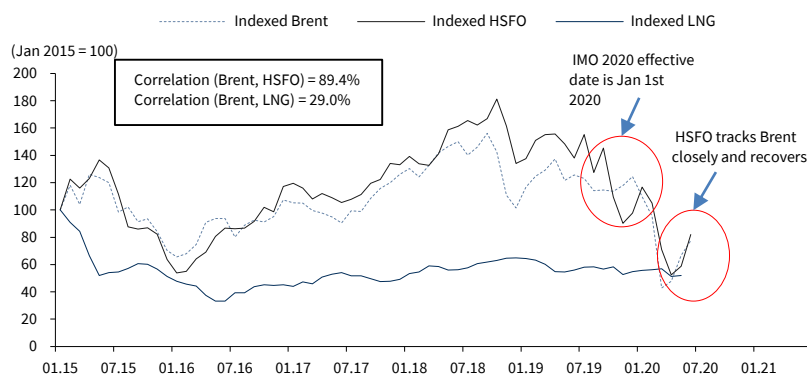
Pool 2 selling price = average (wellhead price, Myanmar import price, LNG import price)
+ marketing margin, transmission tariff & distribution tariff

Malaysia: Imports LNG at market prices but sold to power plants at a discount:

LNG selling price = LNG FOB * (1 - discount rate)
* discount rate = 15% for power companies
& 10% for non-power clients

Indonesia: LNG import prices based on market prices but power sector receives a sizable 50% subsidy directly from the government.

Fig 22. Indexed commodity prices – Brent, HSFO & LNG, Jan 2015 –Jun 2020 (index points)



Source: Bloomberg, KB Securities Vietnam

PVT the most promising candidate to win lucrative LNG transport contracts

PVT and GAS have aligned strategic objectives to expand into LNG importing operations but have yet to provide specific details, timing and exact number of new LNG carriers. PVT's current fleet expansion for 2020E–2021E is comprised of 14–16 new ships for investments totaling USD300 million but will focus primarily on crude tankers, product carriers, bulkers and LPG carriers. GAS has already asked PVT to begin the process of expanding its fleet further to include LNG carriers and we expect detailed plans to be released in 2021E for new ships added from 2022E onwards. Given the experience during the early stages of crude oil shipments to NSR, we believe PVT will initially rely on charters and purchase LNG carriers during the ramp up phase of GAS's LNG terminal expansion.

Table 15. PVT – Fleet expansion plans, 2020E–2021E (vessels, dry weight tons in thousands)

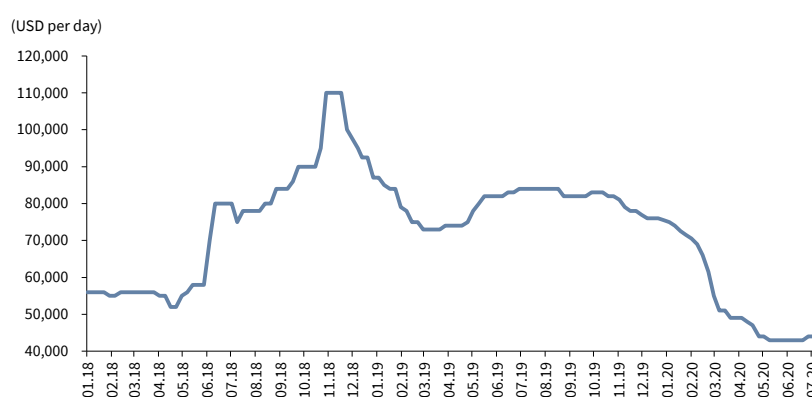
Type	Current fleet		New tonnage		Expected fleet size	
	Quantity	DWT (thous)	Quantity	DWT (thous)	Quantity	DWT (thous)
Crude oil tanker	4	418	3	560	7	978
Product carrier	11	190	7	133	18	323
LPG carrier	14	47	2	170	16	217
Bulk carrier	2	83	1	15	3	98
FPSO/FSO	2	199	0	0	2	199
Total	33	938	13	878	46	1,816

Source: Company reports, KB Securities Vietnam

Expanding spot tonnage should provide PVT with flexible options for LNG shipments

PVT's fleet expansion for LNG carriers will be a moving target for now but we believe management will have sufficient room to use charters to deliver shipments given the availability of more spot tonnage. LNG shipping has moved beyond the long 20–25 year shipping contracts and the purpose-built fleets for specific projects with the availability of more spot tonnage. This has allowed day rates for LNG carriers to fall to more reasonable levels at around USD44,000.

Fig 23. LNG – US LNG tanker day rates, Jan 2018–Jul 2020 (USD)

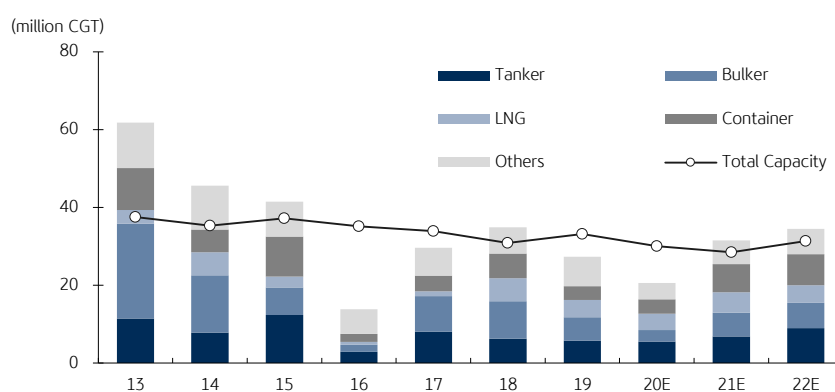


Source: Bloomberg, KB Securities Vietnam

**Ordering of “speculative” tonnage
has also returned & promises more
LNG carriers in the coming years**

Korea’s shipyards have also seen the rise in “speculative” ordering of new LNG tonnage. This may not only promote a more active spot market but should also lead to more stable long-term shipping rates. New orders for LNG carriers have increased sharply since 2018 and our Korea shipbuilding team expects this trend to continue well into 2022E.

**Fig 24. Korea shipbuilding – New ship order by type & total capacity, 2013–2022E
(million compensated gross tons)**



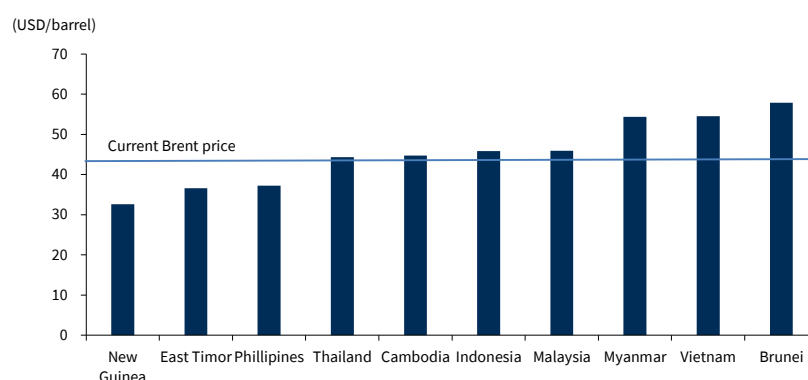
Source: KB Securities Korea

VI. Upstream vs downstream

Upstream companies hit harder as oil prices below breakeven lead to project delays and more production cuts

We expect oil prices at below Vietnam's USD55.00 breakeven to impact upstream companies more severely than downstream companies. Vietnam's production output already peaked for crude oil in 2015 and natural gas in 2018 and project delays are likely to continue as high extraction costs from Vietnam's mature oil and gas fields lead to additional production cuts. Weak oil prices are also delaying drilling and service contracts at major upstream customers in neighboring countries.

Fig 25. Southeast Asia oil & gas – Breakeven crude oil prices, 2019 (USD per barrel)



Source: Petrovietnam Group (PVN), KB Securities Vietnam

We expect crude oil and natural gas production to fall continuously but the outlook for gas improves dramatically if mega projects are approved

We expect oil production to continue its downward trend and fall by about 5% per year throughout our forecast period due to: 1) harder to extract reserves; 2) less promising outlook for new field discoveries; and 3) ongoing offshore tensions that make any restart of the *Red Emperor* project unlikely in the foreseeable future. Moreover, the stalled recovery in oil prices should extend production cuts for the remaining part of the year. Production volumes are also falling from existing natural gas fields but the approval of a few mega projects could trigger a multi-year boom for natural gas. Our natural gas production forecasts assume these new fields will face delays but inevitably come online.

Table 16. Vietnam oil & gas – Crude oil production & consumption forecasts, 2019–2030E (thousands of barrels per day, billion barrels, years)

Metrics/Year	19	20E	21E	22E	23E	24E	25E	26E	27E	28E	29E	30E
Production (thousand bbl/day)	224	201	201	191	181	172	163	155	147	140	133	126
Consumption (thousand bbl/day)	308	307	377	343	356	398	343	356	398	343	398	343
Proven reserves (billion barrels)	4.3	4.2	4.1	4.1	4.0	4.0	3.9	3.8	3.8	3.7	3.7	3.6
Reserves to production (years)	53	55	57	59	61	63	65	68	70	73	76	79

Source: ENI, KB Securities Vietnam

Table 17. Vietnam oil & gas – Natural gas production & consumption forecasts, 2019–2030E (billion cubic metres, years)

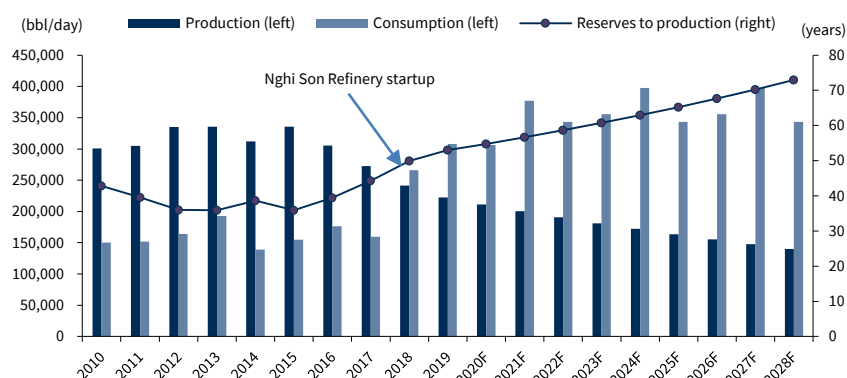
Metrics/Year	19	20E	21E	22E	23E	24E	25E	26E	27E	28E	29E	30E
Production (bcm)	10.3	10.1	10.5	11.4	12.6	19.9	25.8	29.3	30.1	29.6	29.1	28.5
Consumption (bcm)	10.3	10.1	14.3	18.3	19.5	26.8	39.6	57.1	59.4	60.2	61.1	66.6
Proven reserves (bcm)	718.0	707.9	697.4	686.0	673.4	653.5	627.8	598.5	568.4	538.8	509.7	481.2
Reserves to production (years)	70.0	70.2	66.5	60.0	53.5	32.9	24.4	20.5	18.9	18.2	17.5	16.9

Source: ENI, KB Securities Vietnam

Oil production at Vietnam's major oil fields peaked in 2015

Vietnam's major oil fields have reached maturity and production output has fallen continuously since 2015. The last big new oil discovery was the *Red Emperor* project in the *Nam Con Son* basin located off the southern shore that potentially offered 30 thousand barrels of crude oil per day and 0.62 billion cubic metres of gas per year. Drilling originally began in 2017 but was cancelled in March 2018 due to offshore tensions. This led to a sharp slowdown in exploration & production (E&P) activities and pushed Vietnam's upstream segment into a sunset era. Moreover, Vietnam's older fields have proven harder to extract reserves, which has led to a continual rise in the reserves to production over the past several years.

Fig 26. Vietnam oil & gas – Production, consumption & reserves to production forecasts, 2010–2028E (barrels per day, years)



Note: Historical consumption (2010–2019) = Production (P) + Import (M) – Export (X)
Source: General Statistics Office Vietnam, KB Securities Vietnam

Production output at existing fields to fall continuously

Bach Ho: Once Vietnam's largest and now only producing about 54.2 thousand barrels per day or 27% of Vietnam's total output. At its peak proven reserves were 3.7 billion barrels of crude oil and this field entered lower production from 2006 after 30 years of production. *Bach Ho* (White Tiger) is located in the *Cuu Long* basin located due south of the Mekong Delta and is operated by VietsovPetro (a joint venture between Vietnam and Russia).

Rang Dong: A smaller field that produces 12–15 thousand barrels per day or 6% of total crude oil output. Output was as high as 140,000 barrels per day when the field first started production over 20 years ago. The field is also located in the *Cuu Long* basin on *Block 15-2* and is operated by JX Nippon Oil & Energy Corporation at 46.5% ownership.

Su Tu: Now Vietnam's largest producer at 70.3 thousand barrels per day or 35% of total crude oil output. The cluster of fields is located in *Block 15-1* in the *Cuu Long* basin and operated by Cuu Long JOC. Major fields include *Su Tu Den* (Black Lion), *Su Tu Vang* (Yellow Lion), *Su Tu Trang* (White Lion) and *Su Tu Nau* (Brown Lion) with the entire area possessing 2 billion barrels of proven reserves.

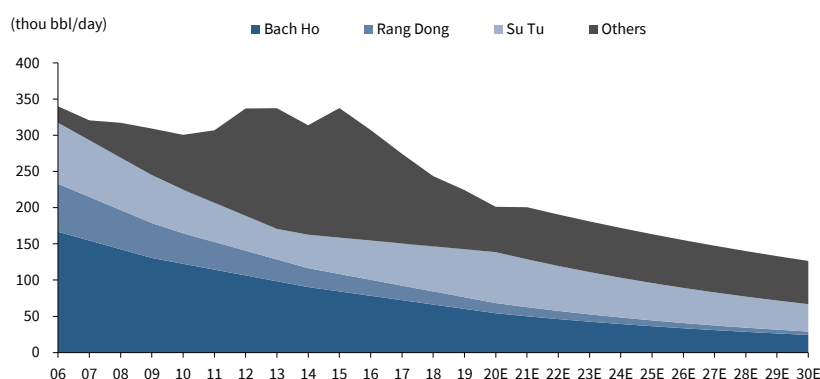
Other fields: Vietnam's other major fields generate about 62.7 thousand barrels per day or 31% of total output. Major fields include *Dai Hung*, *Hong Ngoc* (Ruby) and *Te Giac Trang* (White Rhino) that have been producing for more than 20 years. *Dai Hung* is located in the *Nam Con Son* basin off the southern shore and operated by PetroVietnam Exploration Production (PVEP), while *Te Giac Trang* is located in *Block 16-1* in the *Cuu Long* basin and operated by Hoang Long JOC.

Table 18. Vietnam oil & gas – Crude oil production by field, 2019–2030E (thousand barrels per day)

Field/year (thou bbl/day)	19	20E	21E	22E	23E	24E	25E	26E	27E	28E	29E	30E
Bach Ho	167	155	143	131	123	114	106	98	90	84	78	72
Rang Dong	66	60	54	48	42	38	34	30	26	24	22	20
Su Tu	84	78	72	66	60	54	48	42	46	50	54	58
Others	23	27	48	64	76	100	148	167	151	179	153	124
Total crude output	340	321	317	309	301	307	337	337	314	338	307	274

Source: KB Securities Vietnam

Fig 27. Vietnam oil & gas – Production output by field, 2006–2030E (thousands barrels per day)

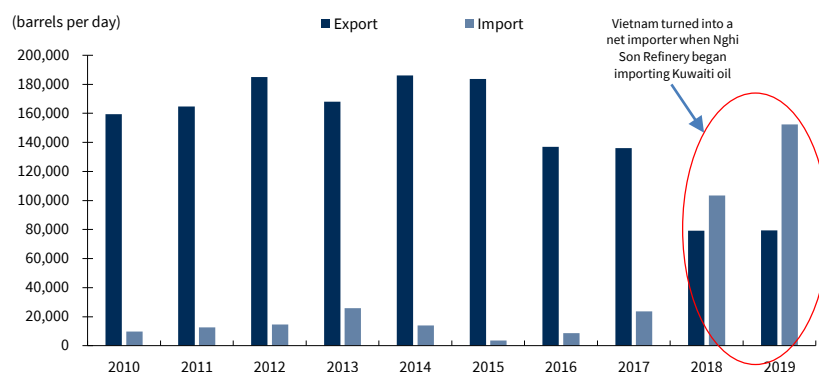


Source: ENI, General Statistics Office Vietnam, KB Securities Vietnam estimates

Vietnam inevitably turning to more oil imports

Vietnam has inevitably turned to imports and became a net importer of oil in 2018 when the Nghi Son Refinery (NSR) entered commercial production using Kuwaiti oil feedstock. Unlike Binh Son Refinery's *Dung Quat* refinery that primarily uses locally-produced oil from the Bach Ho field, the Nghi Son Refinery exclusively uses imported Kuwaiti crude oil. The *Dung Quat* refinery has also started to diversify its feedstock this year and has also started use imported crude oil due to dwindling local reserves.

Fig 28. Vietnam oil & gas – Crude oil exports & imports, 2010–2019 (barrels per day)



Source: General Statistics Office Vietnam, KB Securities Vietnam

Natural gas fields also witnessing falling output

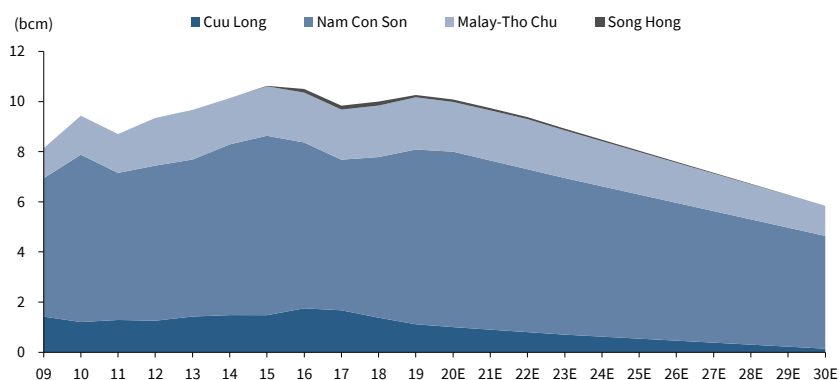
Vietnam's existing gas fields are also witnessing a similar situation of falling production volumes after peaking in 2018. We estimate that Vietnam's gas output could drop by almost half to 5.8 billion cubic metres from 10.1 billion cubic metres now by 2030E if no new major gas fields come online. Growing nationwide electricity demand – and adverse weather conditions in the southern regions that reduced reserves at hydroelectric power plants – forced Vietnam to increase natural gas output over the past several years to boost supply to gas-fired power plants. This led to overproduction at most gas fields that is now slowing production volumes at existing gas fields.

Table 19. Vietnam oil & gas – Gas production by basin (assuming no new fields), 2019–2030E (billion cubic metres)

Basins/years (bcm)	19	20E	21E	22E	23E	24E	25E	26E	27E	28E	29E	30E
Cuu Long	1.1	1.0	0.9	0.8	0.7	0.6	0.5	0.5	0.4	0.3	0.2	0.1
Nam Con Son	7.0	7.0	6.8	6.5	6.3	6.0	5.8	5.5	5.3	5.0	4.8	4.5
Malay-Tho Chu	2.1	2.0	2.0	2.0	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2
Song Hong	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Total gas output	10.3	10.1	9.7	9.4	8.9	8.5	8.0	7.6	7.2	6.7	6.3	5.8

Source: KB Securities Vietnam

Fig 29. Vietnam oil & gas – Natural gas production by basis (assuming no new fields), 2019–2030E (billions of cubic metres)



Source: PV Gas, General Statistic Office Vietnam, KB Securities Vietnam

But the situation changes dramatically if the mega projects are approved

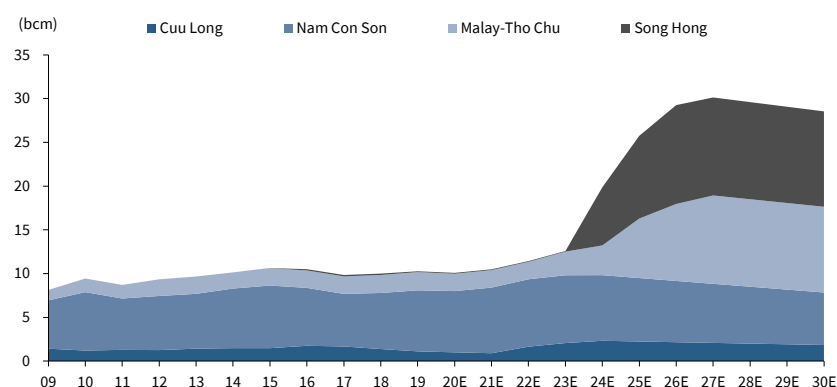
The *Ca Voi Xanh (Blue Whale)* & *Block B* mega projects are pending approval and the addition of these fields could almost triple natural gas production volumes to 28.5 billion cubic metres by the end of our forecast period in 2030E. The potential size of these projects are massive and could start another multi-year boom for natural gas.

Table 20. Vietnam oil & gas – Gas production by basin (assuming new fields), 2019–2030E (billion cubic metres)

Basins/years (bcm)	19	20E	21E	22E	23E	24E	25E	26E	27E	28E	29E	30E
Cuu Long	1.1	1.0	0.9	1.7	2.1	2.3	2.2	2.2	2.1	2.0	1.9	1.8
Nam Con Son	7.0	7.0	7.5	7.7	7.8	7.5	7.3	7.0	6.8	6.5	6.3	6.0
Malay-Tho Chu	2.1	2.0	2.0	2.0	2.7	3.4	6.8	8.8	10.1	10.0	9.9	9.8
Song Hong	0.1	0.1	0.1	0.1	0.1	6.7	9.5	11.3	11.2	11.1	11.0	10.9
Total gas output	10.3	10.1	10.5	11.4	12.6	19.9	25.8	29.3	30.1	29.6	29.1	28.5

Source: KB Securities Vietnam

Fig 30. Vietnam oil & gas – Natural gas production by basis (assuming new fields), 2019–2030E (billions of cubic metres)



Source: PV Gas, General Statistics Office, KB Securities Vietnam

The exact timing of these new mega fields remain uncertain due to repeated delays

Original applications were submitted as far back as 2015 with no results and we expect all of the new gas fields will experience delays. The projects should ultimately be approved given supply shortages for Vietnam power generation sector but only after at least one or two years of delays.

Blue Whale: The larger of the two mega projects is scheduled to begin operations in 2023E but we believe a 2024E startup is a more realistic time frame. The colossal field possesses around 150 billion cubic metres in proven reserves that could generate 9.7 billion cubic metres of natural gas per year. *Blue Whale* is located in the *Song Hong* basin off the north eastern shore and Exxon Mobil will act as the main investor and operator of the project.

Block B: This second mega project located in the *Malay-Tho Chu* basin off the southwest coast and may be able to startup operations by 2025E or two years behind schedule. The site has 176 billion in proven reserves but may only produce 7 billion cubic metres of natural gas per year. This will primarily be a local project managed by PetroVietnam Group (42.9% ownership), PVEP (26.8%), Moeco (22.5%) and PTTEP (7.7%).

Sao Vang–Dai Nguyet: Of the two fields, *Dai Nguyet* is scheduled for startup in 4Q20 and we expect *Sao Vang* may begin operations on time in 2022E. The fields have proven reserves of 16 billion cubic metres that could produce 1.5 billion cubic metres of gas per year. *Sao Vang–Dai Nguyet* is located in the Nam Con Son basin off the southern coast and is operated by Idemitsu Kosan (Japan).

Su Tu Trang Phase 2: *Su Tu Trang Phase 2* located in the *Cuu Long* basin should still begin operations at the end of 2021E or beginning of 2022E despite current delays arising from the coronavirus. Phase 2 will target 1.7 billion cubic metres of gas output per year.

Nam Du U Minh: *Nam Du U Minh* located in the *Malay Tho Chu* basin remains on track to produce 1.6 billion cubic metres of gas per year when it starts up in 2023E. This field is operated by Mitra Energy, a subsidiary of Jadestone Energy.

Mega projects could rejuvenate the upstream segment for PVS and PVD but too early to make this leap of faith

Launch of the gas mega projects would mark a major turnaround for upstream E&P operators like PVS and PVD but it may be premature to be overly optimistic at this time. The issues are complex and the approvals are also entangled in offshore tensions. In the meantime, fierce competition and low oil prices will likely continue to squeeze the margins at PVS and PVD. Potential deal flow may be limited to the smaller gas projects like *Sao Vang–Dai Nguyet*, *White Lion Phase 2* and *Nam Du U Minh*. But the *Blue Whale* and *Block B* mega projects continue to show risks of delay and are unlikely to start up on schedule. Project launches are likely to be limited to: October's 1.5 billion cubic metres of annual output from the *Dai Nguyet* project followed by 2021E's 0.6 billion cubic metres of output from the *White Lion Phase 2* project.

Table 21. Vietnam oil & gas – Natural gas E&P projects, 2018–2025E (USD)

Projects	2018	2019	2020E	2021E	2022E	2023E	2024E	2025E
<i>Sao Vang Dai Nguyet</i>	EPC + FSO + JUs (USD600 mn)							
<i>White Lion Phase 2</i>			EPC + FSO (USD500 mn)					
<i>Nam Du – U Minh</i>			EPC + FSO (USD850 mn)					
<i>Blue Whale</i>			(Estimated investment value = USD10 billion)					
<i>Block B – O Mon</i>					EPC + FSO + 1 tender barge + 1 JUs (USD1.2 bn)			
<i>Red Emperor</i>	Suspended							

EPC = Engineering, Procurement & Construction; FSO = Floating, Storage & Offloading; JU = Jackup rigs

Note: Red Emperor (*Ca Rong Do*) suspended due to offshore tensions.

Source: Company reports, KB Securities Vietnam

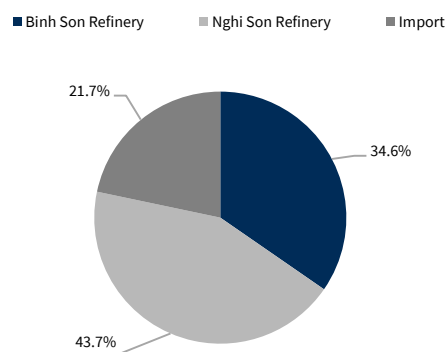
Downstream segments remain the bright spots in Vietnam's oil & gas industry

We believe the bright spots for Vietnam's oil & gas sector continue to be growing industrial and consumer demand in the downstream segments. But markets are young and data sparse. Importantly, major downstream players have dominant positions in key markets. BSR and NSR should benefit from growing consumer demand for gasoline and commercial demand for diesel. Both are also poised to capture growing industrial demand as Vietnam begins to localize petrochemical production. PLX has a dominant market position in retail distribution, with Vietnam's largest directly-owned gas station network. Its nationwide coverage is well positioned to capture the growth in consumer gasoline usage as the country narrows the gap in annual per-capita consumption against peers like Thailand and Indonesia.

BSR & NSR essentially share Vietnam's entire refining market with imports

BSR has 35% market share compared to NSR's 44% and the 22% of imports. Local capacity was stagnant before NSR began operations on May 2018 to become Vietnam's second refiner. BSR primarily focuses on refining products including liquefied petroleum gas (LPG), gasoline, diesel, kerosene/jet, fuel oil and a small amount of polypropylene. NSR's refining products include liquefied petroleum gas (LPG), gasoline, diesel, kerosene/jet fuel and fuel oil, while its petrochemical products include polypropylene, paraxylene and benzene.

Fig 31. Vietnam oil & gas – Refinery market share, 2020E (%)

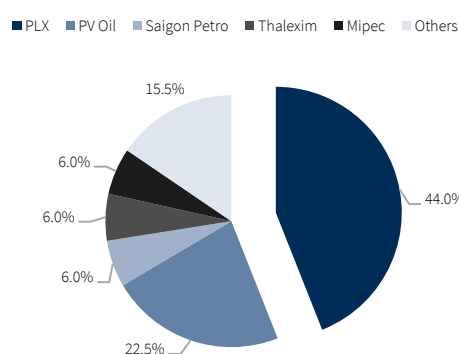


Source: Company reports, KB Securities Vietnam

PLX controls Vietnam's largest gas station network

PLX controls 44% of Vietnam's retail gasoline market with the country's largest nationwide gas station network. PV Oil ranks second at 23% and is the only other operator offering nationwide coverage. Regional players include Saigon Petro focusing on the south-central coast and south-western areas; Thalexim operating in the *Binh Duong* province just north of Ho Chi Minh City containing an extremely important road network comprised of several of the country's major highways; and Mipec the military gas station network operating in the northern region.

Fig 32. Vietnam oil & gas – Retail gasoline market share, 2020E (%)

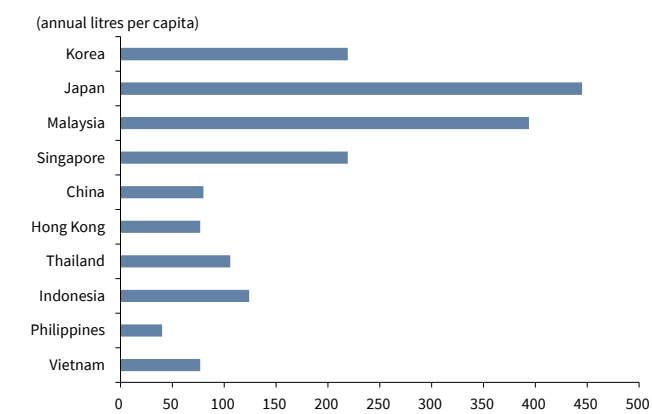


Source: Company reports, KB Securities Vietnam

Vietnam's annual per-capita consumption of gasoline has plenty of room to grow

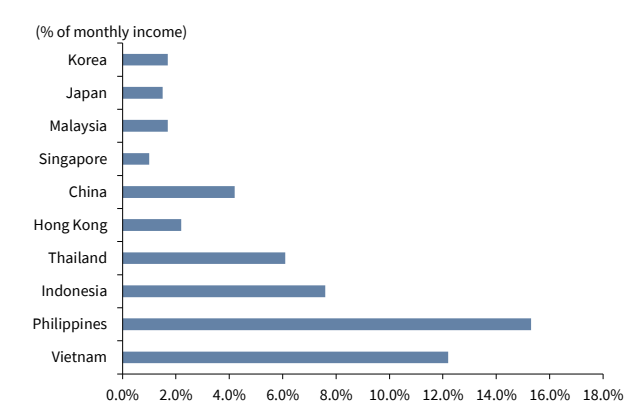
Vietnam's annual per-capita consumption of gasoline was only 77 litres in 2019 compared to Thailand's 106 litres and Indonesia's 124 litres. Part of this disparity can be explained by respective fuel costs between countries, with Vietnam requiring 12% of monthly pay to fill a 40-litre tank of gasoline vs Thailand's 6% and Indonesia's 8%. This implies Vietnam's growing income levels could narrow the gap in gasoline consumption to Southeast Asian peers.

Fig 33. Asia oil & gas – Annual per-capita gasoline consumption by country, 2019 (annual litres per capita)



Source: Global Petrol Prices, KB Securities Vietnam

Fig 34. Asia oil & gas – Percent of monthly income to fill 40-litre tank of gasoline, 2019 (%)

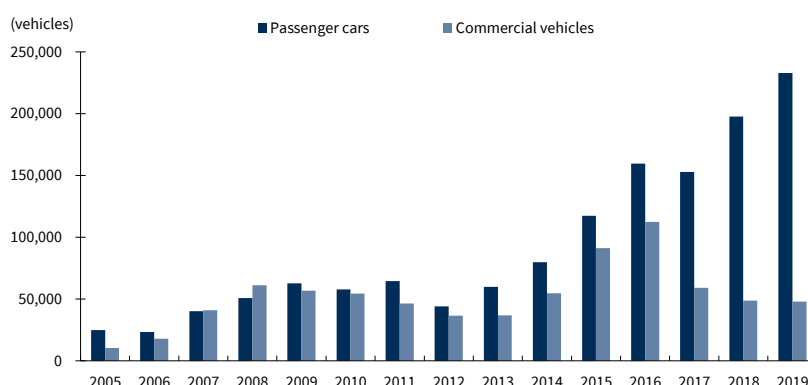


Source: Global Petrol Prices, KB Securities Vietnam

Vietnam's further motorization should also sustain growth for refiners and gas station operators

Vietnam is not a large market for automobile sales at just over 200,000 vehicles a year. But annual sales have been increasing for most years and could benefit more from August's start of the EU-Vietnam Free Trade Agreement (EVFTA) that will gradually reduce the 70% tariff on vehicles from the EU and make all car imports duty free after 10 years. No roadmap has been provided by the government yet as to whether the reduction in tariff will be reduced in increments of 7%–9% per year or whether the cut will occur in 2–3 year cycles for larger 15%–30% percentage-point cuts. Lower tariffs could have a similar impact to the pickup in annual sales witnessed after Vietnam reduced the import tariff by 10 percentage points to 50% from 60% in 2015 and to 40% in 2016 for cars imported from Southeast Asia as part of the Common Effective Preferential Tariff (CEPT) scheme for the ASEAN Free Trade Area (AFTA).

Fig 35. Vietnam automobiles – Passenger & commercial vehicles sales, 2005–2019 (number of vehicles sold)



Source: Vietnam Automobile Manufacturers' Association, KB Securities Vietnam

Vietnam will embark on local production of petrochemical products from 2023E

Vietnam will begin local production of petrochemical products when the Long Son Petrochemical plant completes construction in 2023E. Imports are still largely used to meet local demand and expanding production into petrochemicals opens a new market for Vietnam's refiners. The Long Son Petrochemical plant will primarily focus on polypropylene, ethylene production and is owned by Thailand's Siam Cement Group.

Table 22. Vietnam oil & gas – Refinery construction plans, 2009–2023E (barrels per day)

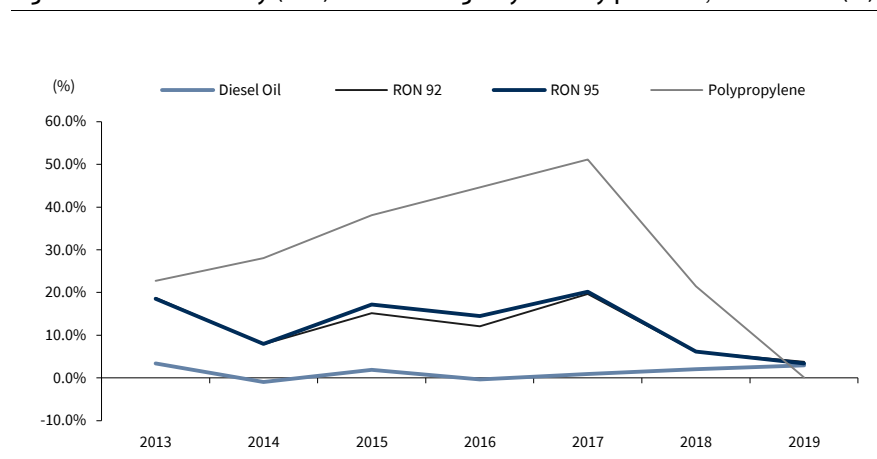
Location	Refinery name	Capacity (bbl/day)	Status	Startup date	Main owner	Note
Quang Ngai	Dung Quat	148,000	Active	2009	PetroVietnam (PVN)	Seeking expansion financing
Thanh Hoa	Nghi Son	200,000	Active	2018	PetroVietnam, Kuwait Petroleum, Idemitsu Kosan, Mitsui	
Ba Ria-Vung Tau	Long Son	na	Under construction	2023	Siam Cement Group	Mainly petrochemicals
Khanh Hoa	Nam Van Phong	200,000	Cancelled		Petrolimex	Switched to LNG Terminal
Phu Yen	Vung Ro	160,000	Cancelled		Vung Ro Petroleum Limited	
Binh Dinh	Nhon Hoi	400,000	Cancelled		PTT, Audi Aramco	

Source: Company reports, KB Securities Vietnam

BSR also beginning to divert investments into petrochemicals

New facilities are scheduled to start commercial operations in 2023E and boost BSR's modest polypropylene output by 30%. We strongly believe this initial step is significant and marks the beginning of a much more substantial push into petrochemicals alongside the country's sizable investments into LNG. Despite polypropylene representing a marginal 2.5% of total output, the contribution of petrochemicals has averaged about 16% of BSR's gross profit between 2018 and 2019. Superior margins to refining products has also provided higher contributions in the past.

Fig 36. Binh Son Refinery (BSR) – Gross margin by refinery products, 2013–2019 (%)

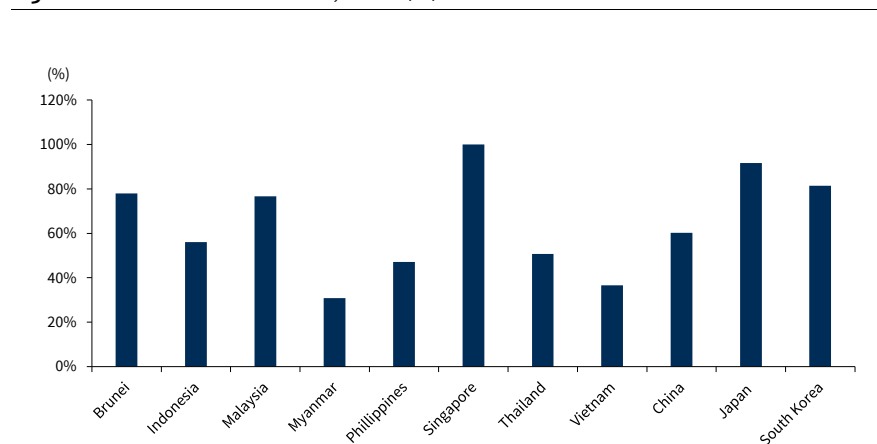


Source: Company reports, KB Securities Vietnam

Vietnam's low urbanization should drive multi-decade demand for petrochemicals

Low urbanization underscores the need for domestic petrochemical producers to satisfy construction demand to consumer demand. Currently, Vietnam imports almost all of its petrochemical needs. Importantly, Vietnam's emerging ability to import LNG will provide an important feedstock needed to build local petrochemical facilities.

Fig 37. Asia – Urbanization rate, 2019 (%)



Source: World Bank



Companies

PV Gas (GAS)

Petrolimex (PLX)

PV Transportation (PVT)

Binh Son Refinery (BSR)

PV Tech Services (PVS)

PV Drilling (PVD)

PV Gas (GAS)

On track for sequential recovery

July 27, 2020

Nguyen Vinh Analyst / Oil & Gas & Chemicals
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Initiate coverage with BUY rating and target price of VND89,200

We initiate our coverage of GAS with a BUY rating and a target price of VND89,200. Our target price is based on a mid-cycle P/B multiple derived from our three-stage dividend discount model. We apply a mid-cycle valuation for our target price to reflect our view for more modest recovery in HSFO prices amid an extended period of weak oil prices.

TOP PICK: Beneficiary of growing LNG demand & should perform alongside slower recovery in oil prices

GAS is our top pick for Vietnam's oil & gas sector as the main beneficiary of growing LNG demand that should also perform alongside our expectations for a slower recovery in oil prices. Supply shortages for the power generation sector and delayed approvals of new gas fields underscore the need for the *Thi Vai* LNG regasification facilities currently under construction. Moreover, Vietnam's new-found ability to import LNG should also provide the feedstock for downstream refiners preparing to start local petrochemical production.

Outsized benefits to HSFO prices from OPEC+ production cuts

Deeper production cuts by Middle East producers – that usually yield a higher percentage of fuel oil – have curtailed fuel oil supply and provided outsized gains to HSFO prices from the OPEC+ production cuts. This – and the installation of more scrubbers by ship owners to improve longer-term sentiment on fuel oil in the aftermath of IMO2020 – make us more confident that HSFO prices have bottomed. With gas selling prices indexed to HSFO prices, we believe GAS is now set to deliver sequential earnings improvement.

BUY initiate

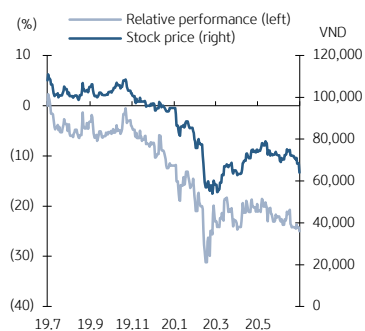
Target Price	VND89,200
Total return (%)	44.1%
Current price (Jul 27)	VND64,000
Consensus target price	VND71,000
Mkt capitalization (USDbn)	USD5,284mn

Trading data	
Free float (%)	4.2%
Avg trading value (3M)	USD2.13mn
Foreign available (%)	45.7%
Major shareholders (%)	PetroVietnam (95.8%)

Share price performance				
(%)	1M	3M	6M	12M
Absolute	-11.4	-0.3	-32.6	-40.7
Relative	-3.8	-2.1	-14.8	-25.0

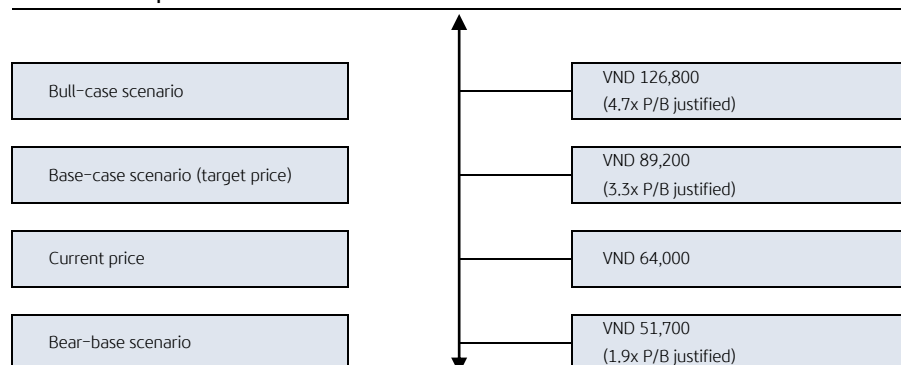
Forecast earnings & valuation

Fiscal year-end	2019A	2020E	2021E	2022E
Revenue (VNDbn)	75,005	64,521	74,860	89,831
EBIT	13,649	9,334	14,125	16,798
NP attributable to parent	11,902	8,168	11,569	13,651
EPS (VND)	6,219	4,268	6,044	7,132
EPS growth (%)	3.9	(31.4)	41.6	18.0
P/E (x)	10.3	15.0	10.6	9.0
EV/EBITDA (x)	7.0	9.6	7.1	6.1
P/B (x)	2.5	2.4	2.2	2.1
ROE (%)	24.7	16.1	21.6	23.8
Div yield (%)	6.8	4.7	6.9	8.1



Source: Bloomberg, KB Securities Vietnam

Investment opinion & risks



Base-case scenario: catalysts

- 1) Brent prices above USD55 in 2021E
- 2) LNG terminal construction underway
- 3) HSFO continued recovery

Bull-case scenario: upside risk

- 1) Brent prices above USD55 in 2020E
- 2) New mega gas field approvals
- 3) LNG terminal ahead of schedule

Bear-case scenario: downside risk

- 1) Coronavirus second wave
- 2) Delays on new LNG terminal
- 3) Further delays on new gas fields

Revised earnings estimates

(VNDbn, %)	Revised		Previous		Change	
	2020E	2021E	2020E	2021E	2020E	2021E
Revenue						
EBIT						
OP						
NP after MI						

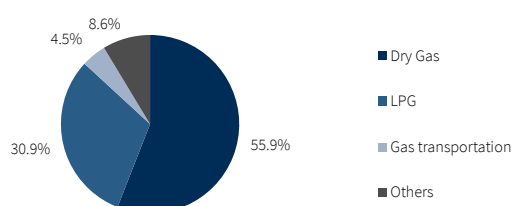
Source: Bloomberg, KB Securities Vietnam

KBSV estimate vs consensus

(VNDbn, %)	KBSV estimates		Consensus		Difference	
	2020E	2021E	2020E	2021E	2020E	2021E
Revenue	64,521	74,860	61,317	71,891	5.2	4.1
EBIT	9,334	14,125	9,312	12,231	0.2	15.5
OP	10,426	14,896	8,814	11,881	18.3	25.4
NP after MI	8,168	11,569	7,776	9,750	5.0	18.7

Source: Bloomberg, KB Securities Vietnam

Revenue composition (2019)



Source: Company reports, KB Securities Vietnam

Peer group comparison

(USDbn, x, %)	Mkt Cap	12m fwd P/E	3y EPS CAGR	12m fwd ROE	12m fwd P/B
GAS VN	5.3	14.3	-5.7	17.6	2.4
PGAS IJ	2.0	9.3	-7.0	4.4	0.8
GAIL IN	5.9	8.4	-4.1	9.9	0.9
PLNG IN	4.8	10.8	14.2	24.1	2.7
9531 JP	11.3	14.3	-5.6	6.8	1.0
9532 JP	8.5	12.6	22.5	6.7	0.8

Source: Bloomberg, KB Securities Vietnam

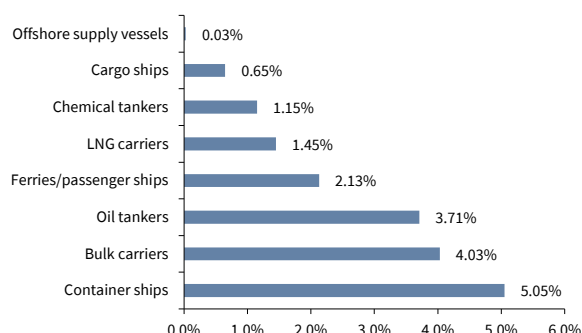
2Q down 43.9% YoY due to lower HSFO prices as expected

Earnings for 2Q were down sharply to VND 1,712 billion (down 43.9%YoY) on revenue of VND 15,627 billion (down by 23.3% YoY) due to the: 1) 55.4% YoY fall in average 2Q High Sulfur Fuel Oil (HSFO) prices to USD179.4 per ton that are used to price the company's gas prices; and 2) 8.6% YoY drop in 2Q gas output to 2.46 billion cubic metres. Year-to-date earnings for 1H were down 33.8% YoY to VND4,063 billion but have already met 61.3% of management's low-balled 2020E guidance.

Bottoming of HSFO prices should support sequential earnings improvements from 3Q onwards

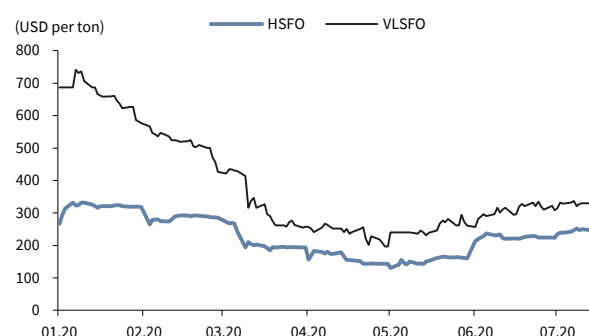
Better HSFO pricing should allow GAS to post sequential earnings improvements. We estimate 3Q earnings of VND2,212 billion or up 26% QoQ (albeit still down 25% YoY) and a seasonal drop in 4Q earnings to VND2,013 billion or down 9% QoQ (down 33% YoY) but well within seasonal norms. Gas volumes are usually lower in 4Q. That said, annual gas volume may fall modestly by 3% YoY to 10.1 billion as the new *Dai Nguyet* gas field will only ramp up at the end of 4Q and more likely help volumes into 2021E.

Fig 1. PV Gas (GAS) – Global shipping scrubber installations by vessel type, 2019 (% of global fleet)



Source: Statistics, KB Securities Vietnam

Fig 2. PV Gas (GAS) – HSFO & VLSFO prices, Jan 20–Jul 20 (USD per ton)

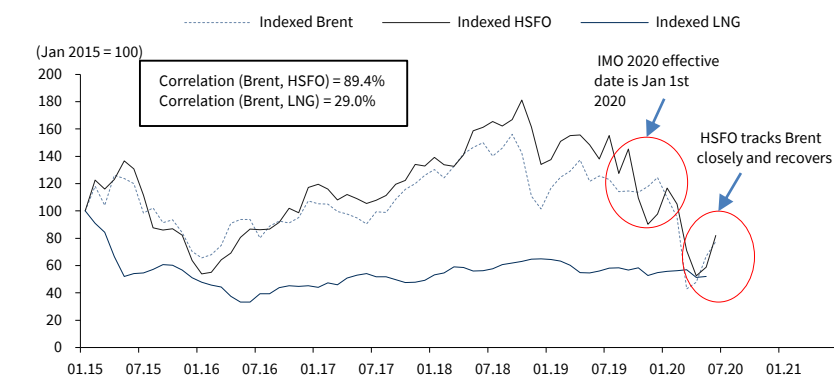


HSFO = High Sulphur Fuel Oil; VLSFO = Very Low Sulphur Fuel Oil
Source: Bloomberg, KB Securities Vietnam

Attractive 16.4% earnings CAGR between 2020E to 2025E

We expect an earnings CAGR of 16.4% over our 2020E–2025E forecast period. Our estimates include: 1) *Phase 1* of the *Thi Vai* terminal will start up on time in 2022E and *Phase 2* will add another 3 MTPA the following year in 2023E; and 2) the new *Sao Vang–Dai Nguyet*, *White Lion 2* & *Nam Du U Minh* gas fields will begin to produce in 2022E or 2023E. We have not yet included output from the *Blue Whale* & *Block B* mega projects due to protracted delays and uncertainty of any potential startup date.

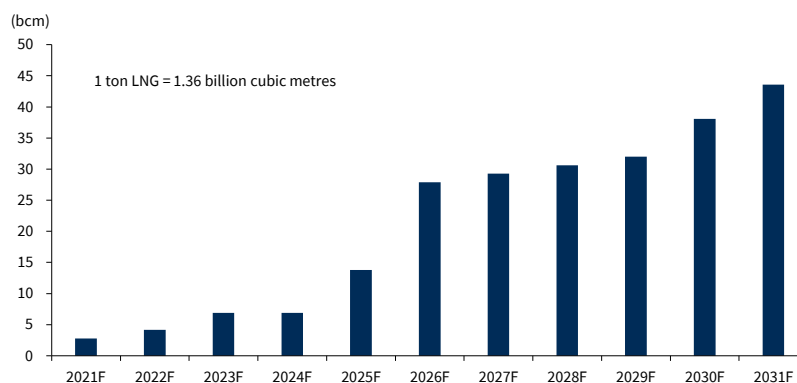
**Fig 3. PV Gas (GAS) – Brent, HSFO & LNG price index, Jan 2015 – Jun 2020
(Jan 2015 = 100)**



HSFO = High Sulphur Fuel Oil; LNG = Liquefied Natural Gas

Source: Bloomberg, KB Securities Vietnam

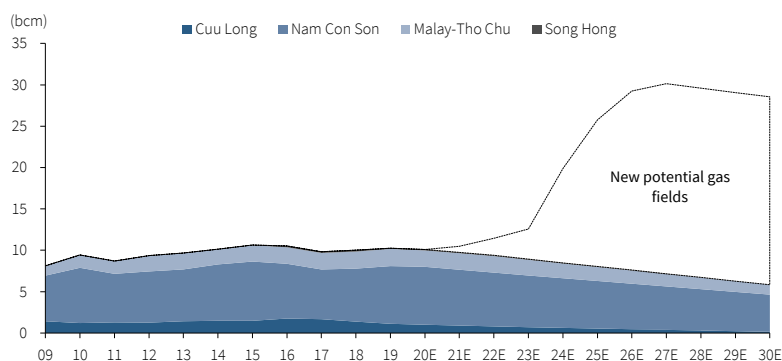
Fig 4. PV Gas (GAS) – LNG output from new terminals, 2021E–2031E (billion cubic metres)



LNG = Liquefied Natural Gas

Source: Vietnam Gas Master Plan, KB Securities Vietnam

Fig 5. PV Gas (GAS) – Natural gas production forecasts by basin, 2009–2030E (billion cubic metres)



Source: PV Gas, KB Securities Vietnam

PV Gas (GAS) – Three-stage dividend discount model

3-STAGE DDM											
PV OF DIVIDENDS											
Cost of Equity	Sustainable growth										
	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	5.5%				
	9.0%	265,842	281,695	300,429	322,911	350,388	384,734	428,894			
	9.5%	244,793	257,869	273,124	291,152	312,787	339,229	372,281			
	10.0%	226,691	237,596	250,178	264,857	282,206	303,024	328,468			
	10.5%	210,980	220,161	230,653	242,760	256,884	273,577	293,608			
	11.0%	197,233	205,027	213,860	223,955	235,603	249,193	265,253			
	11.5%	185,119	191,785	199,283	207,781	217,493	228,699	241,773			
	12.0%	174,378	180,115	186,527	193,740	201,914	211,257	222,037			
PV OF EQUITY PER SHARE											
Cost of Equity	Sustainable growth							Ex-growth			
	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	5.5%				
	9.0%	138,900	147,200	157,000	168,700	183,100	201,000	224,100	1.9x		
	9.5%	127,900	134,700	142,700	152,100	163,400	177,200	194,500	51,700		
	10.0%	118,400	124,100	130,700	138,400	147,400	158,300	171,600	-19.2%		
	10.5%	110,200	115,000	120,500	126,800	134,200	142,900	153,400	Mid-cycle		
	11.0%	103,100	107,100	111,700	117,000	123,100	130,200	138,600	3.3x		
	11.5%	96,700	100,200	104,100	108,600	113,600	119,500	126,300	89,200		
	12.0%	91,100	94,100	97,500	101,200	105,500	110,400	116,000	39.4%		
Projected Distributions (VNDbn)											
	2015A	2016A	2017A	2018A	2019A	2020E	2021E	2022E	2023E	2024E	2025E
Net income	8,534	7,020	9,685	11,454	11,902	8,168	11,569	13,651	14,969	16,112	17,287
Preferred dividend paid – cash	0	0	0	0	0	0	0	0	0	0	0
Preferred dividend per share	0	0	0	0	0	0	0	0	0	0	0
% of par value	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Internally-generated capital	8,534	7,020	9,685	11,454	11,902	8,168	11,569	13,651	14,969	16,112	17,287
Less: capital @ 50% D/E	-741	726	752	-2,082	-1,045	1,601	2,104	2,262	1,462	1,626	935
Cash for dividends/buybacks	9,274	6,294	8,933	13,536	12,947	6,567	9,464	11,389	13,508	14,486	16,352
Common dividend paid – cash	5,520	9,000	7,265	7,844	8,382	5,738	8,416	9,946	10,711	12,242	13,007
Common dividend per share	2,914	4,704	3,797	4,101	4,382	3,000	4,400	5,200	5,600	6,400	6,800
% of par value	29.1%	47.0%	38.0%	41.0%	43.8%	30.0%	44.0%	52.0%	56.0%	64.0%	68.0%
Payout ratio	64.7%	128.2%	75.0%	68.5%	70.4%	70.3%	72.7%	72.9%	71.6%	76.0%	75.2%
Net share buybacks	1	0	0	0	0	0	0	0	0	0	0
Total distributions	5,520	9,000	7,265	7,844	8,382	5,738	8,416	9,946	10,711	12,242	13,007
Net distribution ratio (%)	64.7%	128.2%	75.0%	68.5%	70.4%	70.3%	72.7%	72.9%	71.6%	76.0%	75.2%
Discount factor	0.00	0.00	0.00	0.00	0.00	1.05	1.16	1.29	1.42	1.57	1.73
Present value	0	0	0	0	0	5,452	7,237	7,740	7,543	7,799	7,499
Cost of equity											
Terminal Assumptions				Share Information							
Risk free rate	3.0%	Sustainable ROE			20.0%	PV of future dividend flows (VNDbn)			43,270		
Equity risk premium	8.9%	Dividend payout ratio			80.0%	PV of terminal value (VNDbn)			199,490		
Unlevered beta	0.600	Sustainable growth			4.0%	Terminal value as % of firm value			82.2%		
Re-levered beta	0.840	Forecast period growth			17.8%	Current shares outstanding (mn)			1,914.0		
Cost of equity	10.5%	Target gearing			50.0%	Statutory corporate tax rate			20.0%		
Forecast period	5 Yrs	Transition period			10 Yrs						
Memorandum (VNDbn)											
	2015A	2016A	2017A	2018A	2019A	2020E	2021E	2022E	2023E	2024E	2025E
Reported common equity	42,889	40,844	43,272	46,867	49,615	51,911	55,357	59,408	64,045	68,324	73,042
Debt/equity ratio	14.2%	18.5%	20.9%	10.4%	5.6%	11.6%	18.4%	24.8%	27.6%	30.6%	31.2%
Debt	6,093	7,546	9,050	4,886	2,796	5,999	10,208	14,731	17,654	20,907	22,776
YoY % Change	-19.6%	23.8%	19.9%	-46.0%	-42.8%	114.5%	70.1%	44.3%	19.8%	18.4%	8.9%

Source: Company reports, KB Securities Vietnam

PV Gas (GAS) – Summarized financials & forecasts, 2019–2022E

Income statement (VNDbn)					Balance sheet (VNDbn)				
	2019A	2020E	2021E	2022E		2019A	2020E	2021E	2022E
Net sales	75,005	64,521	74,860	89,831	Total assets	62,179	67,024	75,986	86,564
Cost of sales	58,087	52,248	56,932	68,506	Current assets	41,815	43,874	49,888	57,458
Gross Profit	16,919	12,272	17,928	21,326	Cash & equivalents	4,476	5,288	5,235	5,368
Financial income	1,665	1,486	1,442	1,725	ST investments	24,915	27,885	32,348	37,323
Financial expenses	241	382	667	941	Accounts receivable	10,359	8,841	10,167	12,200
of which: interest expenses	198	177	379	581	Inventory	1,575	1,427	1,641	1,970
Gain/(loss) from joint ventures	(1)	(12)	(4)	(5)	Other current assets	491	432	497	597
Selling expenses	2,394	1,935	2,479	2,875	Long-term assets	20,363	23,150	26,097	29,106
General & admin expenses	875	1,004	1,323	1,653	LT trade receivables	128	114	131	157
Operating profit/(loss)	15,072	10,426	14,896	17,577	Fixed assets	15,850	17,071	21,496	26,618
Other income	16	57	92	110	Investment properties	23	23	23	23
Other expense	20	31	45	54	LT incomplete assets	3,021	4,457	3,157	712
Net other income/(expenses)	(4)	26	47	57	LT investments	405	451	557	729
Pretax profit/(loss)	15,068	10,452	14,943	17,633	Goodwill	83	37	16	6
Income tax	2,983	2,163	3,082	3,636	Other LT assets	854	997	718	862
Net profit/(loss)	12,086	8,289	11,862	13,997	Liabilities	12,564	15,113	20,629	27,157
Minority interests	183	120	293	346	Current liabilities	9,964	9,805	11,037	12,926
Net profit after MI	11,902	8,168	11,569	13,651	Trade accounts payable	6,839	7,048	8,105	9,726
					Advances from customers	203	140	161	194
					ST borrowings	1,341	1,194	1,194	1,194
					Special reserves	425	398	398	398
					Other current liabilities	1,157	1,025	1,179	1,415
					Long-term liabilities	2,600	5,308	9,591	14,230
					LT payables	22	24	28	33
					LT borrowings	1,456	4,806	9,014	13,537
					Other LT liabilities	1,121	478	550	660
					Shareholders' equity	49,615	51,911	55,357	59,408
					Paid-in capital	19,140	19,140	19,140	19,140
					Share premium	211	211	211	211
					Treasury stock	0	0	0	0
					Undistributed earnings	10,109	12,433	15,878	19,929
					Reserve & others	18,851	18,860	18,860	18,860
					Minority interests	1,108	1,071	1,071	1,071
					Total liabilities & equity	62,179	67,024	75,986	86,564
Operating ratios (%)					Key ratios (x, %, VND)				
	2019A	2020E	2021E	2022E		2019A	2020E	2021E	2022E
Revenue growth	(0.8)	(14.0)	16.0	20.0	Valuations				
EBIT growth	(0.6)	(31.6)	51.3	18.9	P/E	10.3	15.0	10.6	9.0
EBITDA growth	3.6	(25.2)	39.4	20.2	P/E diluted	10.3	15.0	10.6	9.0
NP after MI growth	3.9	(31.4)	41.6	18.0	P/B	2.5	2.4	2.2	2.1
Gross profit margin	22.6	19.0	23.9	23.7	P/S	1.6	1.9	1.6	1.4
EBITDA margin	22.9	19.9	23.9	24.0	EV/EBITDA	7.1	9.5	6.8	5.7
EBIT margin	18.2	14.5	18.9	18.7	EV/EBIT	9.0	13.1	8.7	7.3
Pre-tax profit margin	20.1	16.2	20.0	19.6	Dividend yield, ordinary (%)	6.8	4.7	6.9	8.1
Net profit margin	15.9	12.7	15.5	15.2	EPS	6,219	4,268	6,044	7,132
					BVPS	25,923	27,123	28,923	31,039
					SPS	39,189	33,711	39,113	46,935
					DPS (annual, ordinary)	4,382	3,000	4,400	5,200
					Dividend payout ratio (%)	70.4	70.3	72.7	72.9
					Operating performance				
					ROE	24.7	16.1	21.6	23.8
					ROA	19.1	12.6	16.2	16.8
					ROIC	23.9	14.9	20.1	20.8
					Financial structure				
					Total liab/equity	25.3	29.1	37.3	45.7
					Net debt/equity	(3.4)	1.4	9.0	15.8
					Current ratio (x)	4.2	4.5	4.5	4.4
					Interest coverage (x)	69.1	52.8	37.3	28.9
					Activity ratios				
					Asset turnover	1.2	1.0	1.0	1.1
					Receivables turnover	7.3	6.7	7.9	8.0
					Inventory turnover	42.6	43.0	48.8	49.8
					Payables turnover	9.3	9.1	9.7	9.9

Source: Company reports, KB Securities Vietnam

Petrolimex (PLX)

Turnaround underway

July 27, 2020

Nguyen Vinh Analyst / Oil & Gas & Chemicals
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Initiate coverage with BUY rating and target price of VND57,800

We initiate our coverage of PLX with a BUY rating and a target price of VND57,800. Our target price is based on a mid-cycle P/B multiple derived from our three-stage dividend discount model. We apply a mid-cycle valuation for our target price to reflect our view for more modest recovery in retail pump prices amid an extended period of weak oil prices.

Retail pump prices have recovered sufficiently to restore profitability

Retail pump prices have bounced back by 30% and have returned to levels that should restore profitability. The company plans to reverse about 90% of 1Q's inventory provision in 2Q results. Management expects sequential earnings recovery for the remainder of the year and a return to positive earnings in 3Q.

Continuing to add higher-margin company-owned, company-operated locations (COCO)

Management remains committed to boosting its number of company-owned, company-operated (COCO) stations to boost margins. Despite the coronavirus, COCO locations now represent 49.4% of the gas station network vs 48.7% at the end of 2019 and the 50%+ goal by the end of 2021E.

BUY initiate

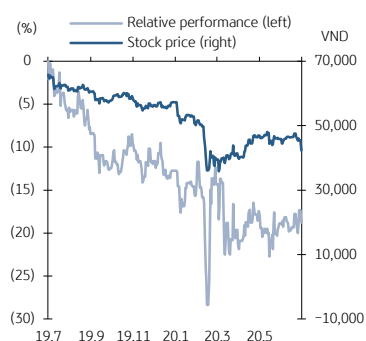
Target Price	VND57,800
Total return (%)	40.4%
Current price (Jul 27)	VND42,250
Consensus target price	VND48,400
Mkt capitalization (USDbn)	USD2,358mn

Trading data	
Free float (%)	10.0%
Avg trading value (3M)	USD2.07mn
Foreign available (%)	5.4%
Major shareholders (%)	MOIT (75.9%)

Share price performance				
(%)	1M	3M	6M	12M
Absolute	-7.8	5.1	-26.3	-35.8
Relative	0.1	3.2	-6.9	-18.8

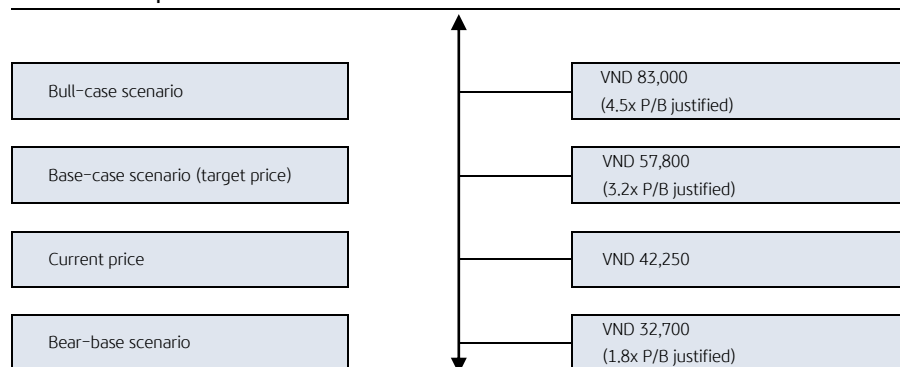
Forecast earnings & valuation

Fiscal year-end	2019A	2020E	2021E	2022E
Revenue (VNDbn)	189,604	131,940	177,889	190,342
EBIT	4,827	995	4,975	6,878
NP attributable to parent	4,158	623	4,115	5,500
EPS (VND)	3,213	481	3,180	4,251
EPS growth (%)	10.9	(85.0)	na	33.7
P/E (x)	13.1	87.8	13.3	9.9
EV/EBITDA (x)	9.3	20.9	8.3	6.8
P/B (x)	2.1	2.3	2.2	2.0
ROE (%)	17.0	2.5	16.8	20.9
Div yield (%)	7.3	3.6	6.6	8.5



Source: Bloomberg, KB Securities Vietnam

Investment opinion & risks



Base-case scenario: catalysts

- 1) Brent above USD55 in 2021E
- 2) Steady recovery in pump prices
- 3) Positive earnings in 2H

Bull-case scenario: upside risk

- 1) Brent above USD55 in 2020E
- 2) Full economic reopening
- 3) Strong earnings turnaround

Bear-case scenario: downside risk

- 1) Coronavirus second wave
- 2) Failure to turnaround in 3Q
- 3) Volatile input cost

Revised earnings estimates

(VNDbn, %)	Revised		Previous		Change	
	2020E	2021E	2020E	2021E	2020E	2021E
Revenue						
EBIT						
OP						
NP after MI						

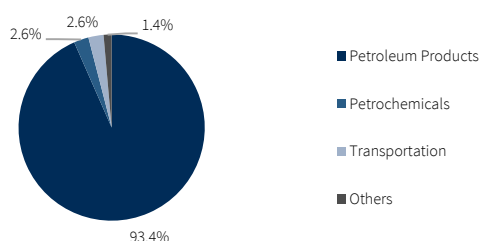
Source: Bloomberg, KB Securities Vietnam

KBSV estimate vs consensus

(VNDbn, %)	KBSV estimates		Consensus		Difference	
	2020E	2021E	2020E	2021E	2020E	2021E
Revenue	131,940	177,889	129,744	175,230	1.7	1.5
EBIT	4,975	6,878	2,351	4,164	111.6	65.2
OP	1,424	5,450	2,152	4,799	(33.8)	13.6
NP after MI	623	4,115	1,653	3,731	(62.3)	10.3

Source: Bloomberg, KB Securities Vietnam

Revenue composition (2019)



Source: Company reports, KB Securities Vietnam

Peer group comparison

(USDbn, x, %)	Mkt	12m fwd	3y EPS	12m fwd	12m fwd
	Cap	P/E	CAGR	ROE	P/B
PLX VN	2.2	19.8	0.0	11.8	1.9
GAS VN	5.3	14.3	-5.7	17.6	2.4
BSR VN	0.8	-6.7	-18.7	2.1	0.6
PVT VN	0.1	5.4	-6.9	9.4	0.4
PVS VN	0.2	6.5	-7.5	6.6	0.4
PVD VN	0.2	21.9	13.8	0.9	0.3

Source: Bloomberg, KB Securities Vietnam

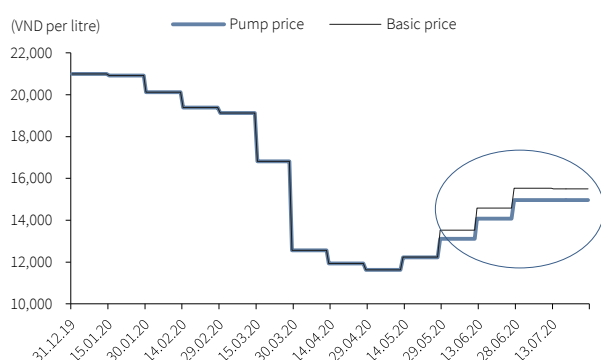
2Q earnings down 72% YoY despite reversing 90% of 1Q's inventory provision

Management released preliminary 2Q earnings of VND350 billion (down 72% YoY) despite booking VND1,440 billion in reversals or 90% of 1Q's VND1,590 billion in inventory provisions. This implies 1H results remained at a loss of VND1,460 billion (vs 1Q's loss of VND1,890 billion) and operations remained weak during the quarter.

Better 3Q/4Q outlook as operations normalize

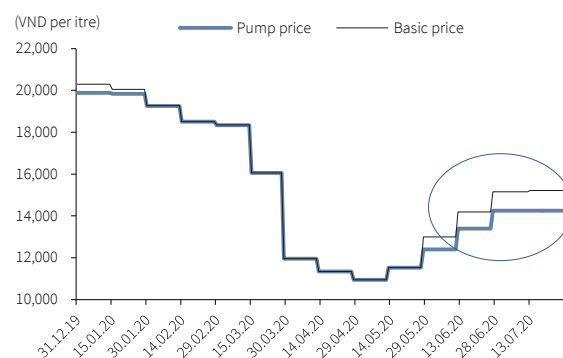
Further normalization of operations should allow higher retail pump prices to restore earnings in 3Q/4Q. We expect 3Q earnings of VND1,159 billion or up 231% QoQ (up 4% YoY) and 4Q earnings of VND1,082 billion or down a modest 2% QoQ (but up 23% YoY). We also assume PLX will reverse its remaining VND159 billion in provisions in 3Q and that demand for petroleum will fully recover in 2H.

Fig 1. Petrolimex (PLX) – RON 95 pump prices, Jan 20–Jul 20 (VND per litre)



Source: Company reports, KB Securities Vietnam

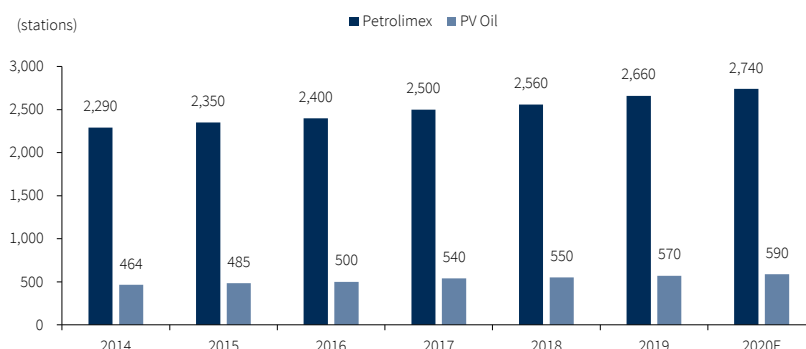
Fig 2. Petrolimex (PLX) – RON 92 pump prices, Jan 20–Jul 20 (VND per litre)



Source: Company reports, KB Securities Vietnam

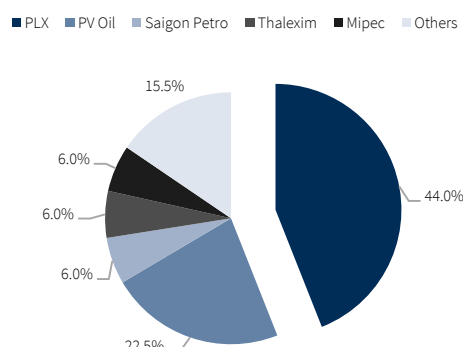
Strong bounce back expected for 2021E earnings and 16% CAGR between 2021E to 2025E

We expect a strong rebound in earnings for 2021E at VND4,115 billion or 448% YoY growth but largely due to low base effect after operations normalize. Longer-term growth should be at about 16.4% CAGR between 2021E and 2025E and our forecasts assume: 1) continued strategic expansion of the COCO station channel; and 2) re-focus on the energy-related business as they exit financial services. We have not reflected the *Nam Van Phong* LNG terminal into our current outlook until we are provided additional details and we have greater clarity on the approvals of the large mega gas projects that could force cancellation of this project.

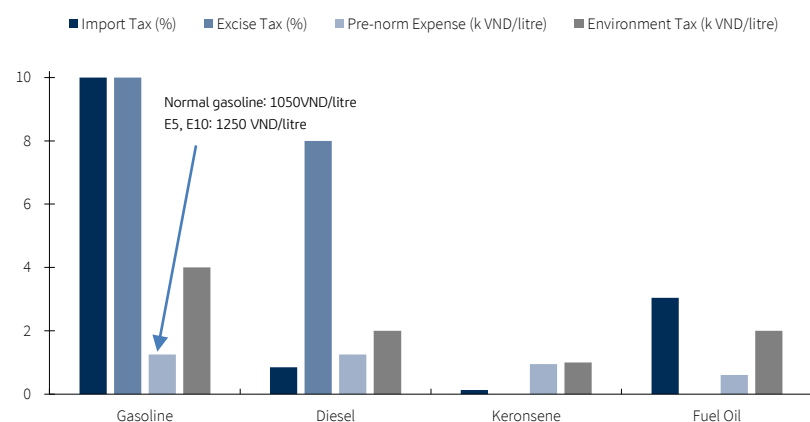
Fig 3. Petrolimex (PLX) – COCO stations, 2014–2020E (stations)

COCO = Company Owned–Company Operated

Source: Company reports, KB Securities Vietnam

Fig 4. Petrolimex (PLX) – Retail gasoline market share, 2020E (%)

Source: Company reports, KB Securities Vietnam

Fig 5. Petrolimex (PLX) – Retail pump prices (VND)

Source: Company reports, KB Securities Vietnam

1) Basic price = [(15-day average of CIF MOPS Singapore + import tax + excise tax) x (exchange rate) x (10% VAT)] + [(pre-norm expense + VND300/litre stabilization fund provision expense + VND300/litre markup + environment tax + other expenses)]

2) Retail price is equal to or lower than the basic price after calculating the sequential change in retail price over the 15-day repricing period (see below)

3) Retail price periodic adjustment (15-day):
If basic price increases less than or equal to 3% then basic price is raised the same percentage.
If basic price increases between 3% and 7% then only 60%-70% of the increase is reflected in the retail price and gap against the basic price is subsidized by the price stabilization fund.

Any increase in the basic price above 7% is regulated by the government to set the retail price in order to control inflation

Petrolimex (PLX) – Three-stage dividend discount model

3-STAGE DDM

PV OF DIVIDENDS

Cost of Equity	Sustainable growth						
	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	5.5%
9.7%	117,168	123,746	131,385	140,365	151,071	164,055	180,130
10.2%	108,270	113,795	120,145	127,520	136,188	146,523	159,057
10.7%	100,520	105,204	110,538	116,668	123,787	132,155	142,132
11.2%	93,720	97,721	102,243	107,392	113,310	120,182	128,260
11.7%	87,712	91,155	95,018	99,383	104,354	110,067	116,701
12.2%	82,372	85,353	88,677	92,406	96,620	101,419	106,934
12.7%	77,601	80,197	83,075	86,283	89,883	93,951	98,583

PV OF EQUITY PER SHARE

Cost of Equity	Sustainable growth							Ex-growth
	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	5.5%	
9.7%	90,600	95,600	101,500	108,500	116,800	126,800	139,200	1.8x
10.2%	83,700	87,900	92,900	98,600	105,300	113,200	122,900	32,700
10.7%	77,700	81,300	85,400	90,200	95,700	102,100	109,800	-22.6%
11.2%	72,400	75,500	79,000	83,000	87,600	92,900	99,100	Mid-cycle
11.7%	67,800	70,500	73,400	76,800	80,700	85,100	90,200	3.2x
12.2%	63,700	66,000	68,500	71,400	74,700	78,400	82,600	57,800
12.7%	60,000	62,000	64,200	66,700	69,500	72,600	76,200	36.8%

Projected Distributions (VNDbn)	2015A	2016A	2017A	2018A	2019A	2020E	2021E	2022E	2023E	2024E	2025E
Net income	3,079	4,669	3,468	3,748	4,158	623	4,115	5,500	5,855	6,927	6,953
Pref dividend paid – cash	0	0	0	0	0	0	0	0	0	0	0
Preferred dividend per share	0	0	0	0	0	0	0	0	0	0	0
% of par value	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Internally-generated capital	3,079	4,669	3,468	3,748	4,158	623	4,115	5,500	5,855	6,927	6,953
Less: capital @ 30% D/E	-942	-1,736	1,878	-433	207	356	476	290	260	209	136
Cash for dividends/buybacks	4,021	6,405	1,590	4,181	3,951	266	3,638	5,210	5,595	6,718	6,817
Common dividend paid – cash	49	150	3,978	3,689	3,371	1,608	3,001	3,859	4,287	5,145	5,359
Common dividend per share	45	132	3,556	3,297	3,102	1,500	2,800	3,600	4,000	4,800	5,000
% of par value	0.5%	1.3%	35.6%	33.0%	31.0%	15.0%	28.0%	36.0%	40.0%	48.0%	50.0%
Payout ratio	1.6%	3.2%	114.7%	98.4%	81.1%	258.2%	72.9%	70.2%	73.2%	74.3%	77.1%
Net share buybacks	4	0	757	0	0	0	0	0	0	0	0
Total distributions	53	150	4,735	3,689	3,371	1,608	3,001	3,859	4,287	5,145	5,359
Net distribution ratio (%)	1.7%	3.2%	136.5%	98.4%	81.1%	258.2%	72.9%	70.2%	73.2%	74.3%	77.1%
Discount factor	0.00	0.00	0.00	0.00	0.00	1.06	1.17	1.31	1.45	1.61	1.80
Present value	0	0	0	0	0	1,523	2,556	2,955	2,953	3,186	2,984

Cost of equity		Terminal Assumptions		Share Information	
Risk free rate	3.0%	Sustainable ROE	20.0%	PV of future dividend flows (VNDbn)	16,156
Equity risk premium	8.9%	Dividend payout ratio	80.0%	PV of terminal value (VNDbn)	91,236
Unlevered beta	0.747	Sustainable growth	4.0%	Terminal value as % of firm value	85.0%
Re-levered beta	0.926	Forecast period growth	27.2%	Current shares outstanding (mn)	1,293.9
Cost of equity	11.2%	Target gearing	30.0%	Statutory corporate tax rate	20.0%
Forecast period	5 Yrs	Transition period	10 Yrs		

Memorandum (VNDbn)	2015A	2016A	2017A	2018A	2019A	2020E	2021E	2022E	2023E	2024E	2025E
Reported common equity	16,632	23,201	23,384	23,092	25,923	23,680	25,251	27,503	29,722	32,273	34,640
Debt/equity ratio	94.3%	42.6%	69.1%	63.7%	59.4%	70.0%	72.0%	69.6%	67.3%	64.2%	61.1%
Debt	15,676	9,890	16,152	14,708	15,398	16,586	18,174	19,141	20,007	20,704	21,158
YoY % Change	-16.7%	-36.9%	63.3%	-8.9%	4.7%	7.7%	9.6%	5.3%	4.5%	3.5%	2.2%

Source: Company reports, KB Securities Vietnam

Cash flow (VNDbn)	2019A	2020E	2021E	2022E
Net profit	4,677	835	4,572	6,111
Plus: depreciation & amort	991	2,712	2,313	2,030
Plus: investing (profit)/loss	(1,424)	(1,484)	(1,491)	(1,495)
Change in working capital	182	2,089	413	113
(Incl)/dec - receivables	(790)	(298)	210	(592)
(Incl)/dec - inventory	(1,470)	4,270	(1,425)	(63)
(Incl)/dec - other curr assets	(68)	464	(75)	(110)
Inc/(dec) - payables	2,343	(4,605)	1,305	963
Inc/(dec) - advances	42	100	105	26
Inc/(dec) - other curr liab	126	2,158	293	(110)
Other adj for operations	293	(2,061)	(204)	(1,628)
Operating cash flow	4,181	4,424	6,171	7,205
ST investments	(683)	(1,765)	(2,314)	(1,582)
Capital expenditures	(1,871)	(1,590)	(2,055)	(2,303)
Investment properties	10	(9)	(10)	(10)
Investment in subsidiaries	44	0	0	0
Other assets	(1,084)	118	(966)	(237)
Other adj for investments	1,117	3,362	4,142	4,152
Investing cash flow	(2,467)	115	(1,204)	20
Free cash flow	2,310	2,834	4,116	4,902
Issuance/(repayment) of debt	95	400	1,587	967
ST debt	596	789	0	0
Other liabilities	(56)	48	48	(31)
Issuance/(retirement) of equity	1,679	530	0	0
Dividends paid	(3,371)	(1,608)	(3,001)	(3,859)
Less: changes in equity	(153)	(2,000)	(0)	0
Other adj for financing	552	(2,149)	(3,015)	(3,103)
Financing cash flow	(659)	(3,991)	(4,381)	(6,026)
Net increase in cash & equivalents	1,054	548	586	1,199
Cash & equivalents - beginning	10,221	11,275	11,823	12,409
Cash & equivalents - ending	11,275	11,823	12,409	13,609

Key ratios (x, %, VND)	2019A	2020E	2021E	2022E
Valuations				
P/E	13.1	87.8	13.3	9.9
P/E diluted	11.2	73.3	11.0	8.2
P/B	2.1	2.5	2.2	2.0
P/S	0.3	0.4	0.3	0.3
EV/EBITDA	8.7	19.2	7.5	6.1
EV/EBIT	11.3	55.0	11.0	7.9
Dividend yield, ordinary (%)	7.3	3.6	6.6	8.5
EPS	3,213	481	3,180	4,251
BVPS	20,035	18,302	19,516	21,256
SPS	146,539	101,973	137,485	147,109
DPS (annual, ordinary)	3,102	1,500	2,800	3,600
Dividend payout ratio (%)	81.1	258.2	72.9	70.2
Operating performance				
ROE	17.0	2.5	16.8	20.9
ROA	7.0	1.0	6.7	8.3
ROIC	26.0	3.6	26.3	31.5
Financial structure				
Total liab/equity	138.3	150.3	154.2	148.1
Net debt/equity	15.9	20.1	22.8	20.1
Current ratio (x)	1.1	1.1	1.2	1.2
Interest coverage (x)	6.1	1.3	6.4	8.7
Activity ratios				
Asset turnover	3.2	2.2	2.9	2.9
Receivables turnover	23.9	15.5	20.9	21.9
Inventory turnover	17.2	13.7	21.7	21.2
Payables turnover	11.8	8.8	13.3	13.1

Source: Company reports, KB Securities Vietnam

PV Transportation (PVT)

Key beneficiary of growing energy imports

July 27, 2020

Nguyen Vinh Analyst / Oil & Gas & Chemicals
vinhn@kbsec.com.vn

Initiate coverage with BUY rating and target price of VND17,300

We initiate our coverage of PVT with a BUY rating and a target price of VND17,300. Our target price is based on a mid-cycle P/B multiple derived from our three-stage dividend discount model. We apply a mid-cycle valuation for our target price to reflect our view for more modest recovery in freight rates amid an extended period of weak oil prices.

Best positioned to capture the boom in Vietnam's energy imports

Vietnam's growing energy demand has already outstripped local supplies and shortages will require more energy imports. PVT is the most likely candidate to win these lucrative transportation contracts for Vietnam's coming energy import boom. Currently, PVT mainly focuses on LPG (Liquefied Petroleum Gas) and crude oil imports – and clearly shown in the company's current fleet expansion plan – but management will now need to prepare for 2022E's opening of the *Thi Vai* LNG terminal scheduled to go online in 2022E.

Await the new fleet expansion plan that will need to include LNG carriers

Management has only announced its fleet expansion plan for 2020E–2021E but we expect a new plan for ships purchased for 2022E onwards should reveal the size and timing of expansion into the lucrative LNG market. New tonnage in the near term will likely include a Very Large Crude Carrier (VLCC) that will allow the company to secure supply contracts to transport 2.5 million tons of crude to Nghi Son Refinery.

BUY initiate

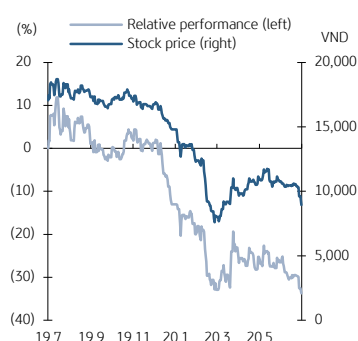
Target Price	VND17,300
Total return (%)	104.9%
Current price (Jul 27)	VND8,930
Consensus target price	VND12,800
Mkt capitalization (USDbn)	USD108mn

Trading data	
Free float (%)	44.0%
Avg trading value (3M)	USD0.68mn
Foreign available (%)	26.6%
Major shareholders (%)	PetroVietnam (51%)

Share price performance				
(%)	1M	3M	6M	12M
Absolute	-16.9	-10.7	-39.7	-47.6
Relative	-9.9	-12.3	-23.8	-33.7

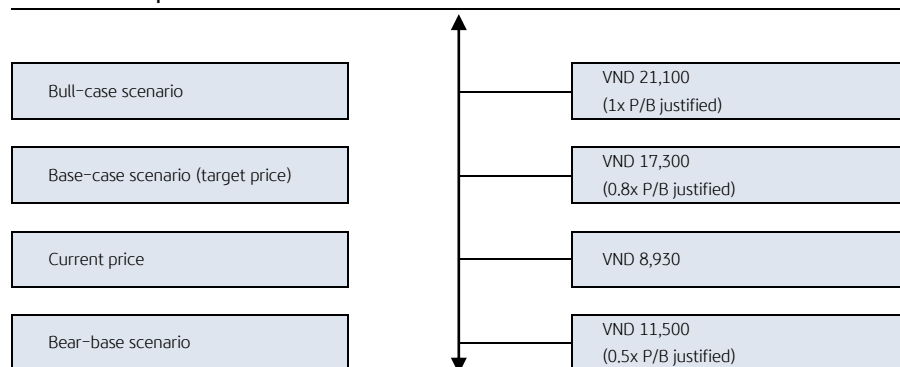
Forecast earnings & valuation

Fiscal year-end	2019A	2020E	2021E	2022E
Revenue (VNDbn)	7,758	7,138	8,561	10,700
EBIT	928	934	1,212	1,681
NP attributable to parent	690	538	699	971
EPS (VND)	2,450	1,912	2,485	3,451
EPS growth (%)	5.8	(22.0)	30.0	38.9
P/E (x)	3.6	4.7	3.6	2.6
EV/EBITDA (x)	2.7	3.5	3.5	3.2
P/B (x)	0.4	0.4	0.4	0.3
ROE (%)	12.7	9.1	11.0	13.9
Div yield (%)	13.5	11.2	13.4	15.7



Source: Bloomberg, KB Securities Vietnam

Investment opinion & risks



Base-case scenario: catalysts

- 1) Brent prices above USD55 in 2021E
- 2) 4Q earnings recovery
- 3) Recovery in freight rates

Bull-case scenario: upside risk

- 1) Brent prices above USD55 in 2020E
- 2) Strong freight rates
- 3) Correction in used VLCC prices

Bear-case scenario: downside risk

- 1) Coronavirus second wave
- 2) Weak freight rates
- 3) Spike in used VLCC prices

Revised earnings estimates

(VNDbn, %)	Revised		Previous		Change	
	2020E	2021E	2020E	2021E	2020E	2021E
Revenue						
EBIT						
OP						
NP after MI						

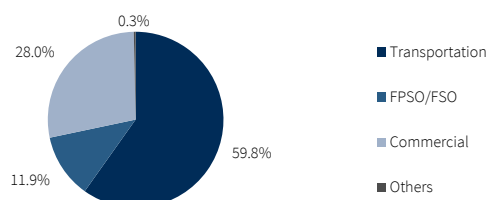
Source: Bloomberg, KB Securities Vietnam

KBSV estimate vs consensus

(VNDbn, %)	KBSV estimates		Consensus		Difference	
	2020E	2021E	2020E	2021E	2020E	2021E
Revenue	7,138	8,561	6,567	7,455	8.7	14.8
EBIT	934	1,212	758	892	23.2	35.8
OP	795	1,001	739	882	7.6	13.5
NP after MI	538	699	437	527	23.1	32.7

Source: Bloomberg, KB Securities Vietnam

Revenue composition (2019)



Source: Company reports, KB Securities Vietnam

Peer group comparison

(USDbn, x, %)	Mkt	12m fwd	3y EPS	12m fwd	12m fwd
	Cap	P/E	CAGR	ROE	P/B
PVT VN	0.1	5.4	-6.9	9.4	0.4
GAS VN	5.3	14.3	-5.7	17.6	2.4
PLX VN	2.2	19.8	0.0	11.8	1.9
PVS VN	0.2	6.5	-7.5	6.6	0.4
PVD VN	0.2	21.9	13.8	0.9	0.3
BSR VN	0.8	-6.7	-18.7	2.1	0.6

Source: Bloomberg, KB Securities Vietnam

2Q earnings down by 36% YoY due to: 1) lower freight rates offered to BSR; and 2) drop in FSO day rates from production cuts

Management released 2Q earnings of VND157 billion or down 36% YoY due to: 1) a 10% drop in freight rates for the Binh Son Refinery (BSR); and 2) 20% fall in FSO day rates (Floating, Storage & Offloading) for the *Dai Hung Queen*. Results for 1H were 57% of management's conservative business targets for the year. Management agreed to lower freight rates to BSR as part of an *ad hoc* cost sharing agreement to offer some relief over the next two quarters. Weak Brent prices and production cuts largely explain the 20% drop in day rates to the USD40,000 level for FSO *Dai Hung Queen*.

3Q likely to see another tough quarter before recovering in 4Q

We expect a further drop in 3Q earnings to VND117 billion or down another 26% QoQ on suspended crude oil shipments to BSR during its two-month maintenance shutdown. BSR will conduct its three-year facility overhaul in August and September. That said, we expect earnings to recover to VND292 billion when the purchase of a VLCC tanker (Very Large Crude Carrier) allows the company to secure long-term crude transportation contracts with Nghi Son Refinery (NSR). Currently, margins are thin on its VLCC contract due to the reliance on a leased tanker from SK Shipping.

Our 19.6% CAGR for 2020E–2025E could be overly conservative if management expands the fleet to include new opportunities from LNG terminals and refineries

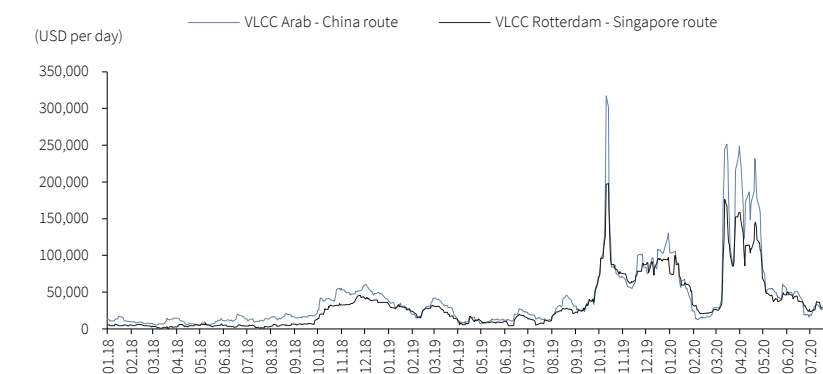
Our 19.6% CAGR for 2020E–2025E could prove to be overly conservative given new opportunities in LNG terminals and petrochemicals. Management has only released its fleet expansion plans up to 2022E and we still await details on potential LNG carriers, chemical tankers or product tankers. Currently, the company has budgeted USD300 million in capital expenditure for 14–16 ships but we believe management will need to expand this plan to include purchasing or leasing LNG tankers for the startup of the *Thi Vai* LNG terminal in 2022E. Any new plan may need to reflect Vietnam's construction of 9 LNG terminals over the next 15 years as well as management's preparations to transport chemical products for the new Long Son Petrochemicals plant.

Table 1. PV Transportation (PVT) – Fleet expansion plans, 2020E–2021E (vessels, dry weight tons in thousands)

Type	Current fleet		New tonnage		Expected fleet size	
	Quantity	DWT (thous)	Quantity	DWT (thous)	Quantity	DWT (thous)
Crude oil tanker	4	418	3	560	7	978
Product carrier	11	190	7	133	18	323
LPG carrier	14	47	2	170	16	217
Bulk carrier	2	83	1	15	3	98
FPSO/FSO	2	199	0	0	2	199
Total	33	938	13	878	46	1,816

Source: Company reports, KB Securities Vietnam

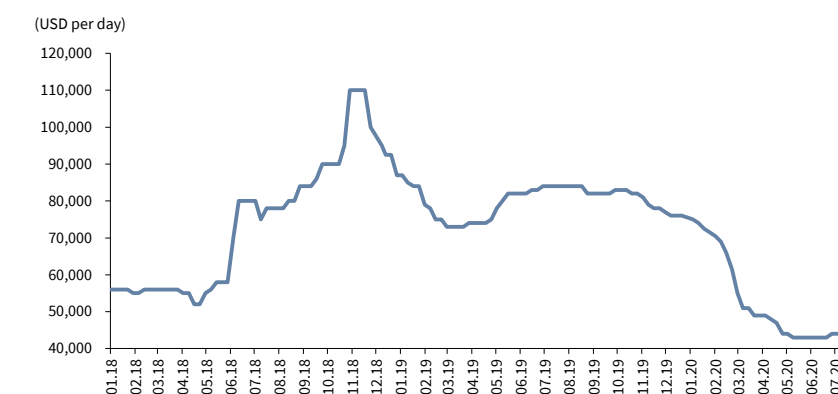
Fig 1. PV Transportation (PVT) – VLCC tanker day rates of Arabian Gulf–China route & Rotterdam–Singapore route, Jan 2018–July 2020 (USD)



VLCC = Very Large Crude Carrier

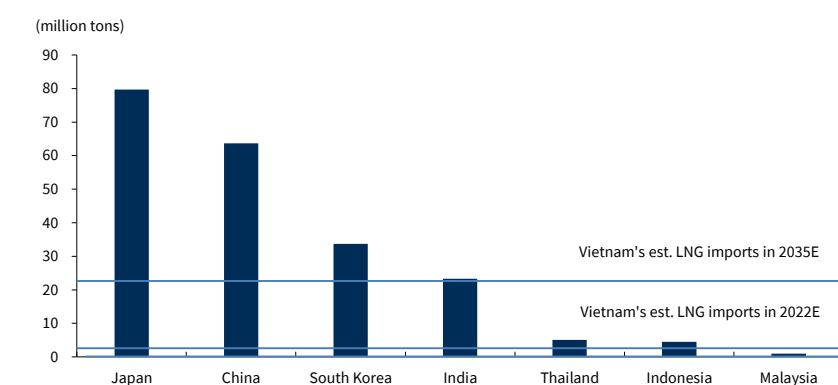
Source: Bloomberg, KB Securities Vietnam

Fig 2. PV Transportation (PVT) – US LNG tanker day rates, Jan 2018–Jul 2020 (USD)



Source: Bloomberg, KB Securities Vietnam

Fig 3. PV Transportation (PVT) – Asia LNG imports by country, 2019 (million tons)



Source: Bloomberg, KB Securities Vietnam

PV Transportation (PVT) – Three-stage dividend discount model

3-STAGE DDM

PV OF DIVIDENDS

Cost of Equity	Sustainable growth						
	0.6%	1.1%	1.6%	2.1%	2.6%	3.1%	3.6%
11.7%	6,434	6,600	6,782	6,983	7,206	7,455	7,735
12.2%	6,120	6,265	6,424	6,599	6,792	7,007	7,246
12.7%	5,834	5,962	6,102	6,255	6,423	6,608	6,814
13.2%	5,574	5,687	5,810	5,944	6,091	6,252	6,431
13.7%	5,337	5,437	5,546	5,664	5,793	5,933	6,088
14.2%	5,119	5,208	5,305	5,409	5,522	5,646	5,781
14.7%	4,919	4,999	5,084	5,177	5,277	5,386	5,504

PV OF EQUITY PER SHARE

Cost of Equity	Sustainable growth							Ex-growth
	0.6%	1.1%	1.6%	2.1%	2.6%	3.1%	3.6%	
11.7%	22,900	23,400	24,100	24,800	25,600	26,500	27,500	0.5x
12.2%	21,700	22,300	22,800	23,400	24,100	24,900	25,700	11,500
12.7%	20,700	21,200	21,700	22,200	22,800	23,500	24,200	28.8%
13.2%	19,800	20,200	20,600	21,100	21,600	22,200	22,800	Mid-cycle
13.7%	19,000	19,300	19,700	20,100	20,600	21,100	21,600	0.8x
14.2%	18,200	18,500	18,800	19,200	19,600	20,100	20,500	17,300
14.7%	17,500	17,800	18,100	18,400	18,800	19,100	19,600	93.7%

Projected Distributions (VNDbn)	2015A	2016A	2017A	2018A	2019A	2020E	2021E	2022E	2023E	2024E	2025E
Net income	368	416	450	652	690	538	699	971	975	1,176	1,336
Preferred dividend paid – cash	0	0	0	0	0	0	0	0	0	0	0
Preferred dividend per share	0	0	0	0	0	0	0	0	0	0	0
% of par value	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Internally-generated capital	368	416	450	652	690	538	699	971	975	1,176	1,336
Less: capital @ 100% D/E	-249	-656	-272	298	445	1,363	1,458	931	362	330	297
Cash for dividends/buybacks	618	1,072	722	354	244	0	0	40	614	847	1,038
Common dividend paid – cash	41	232	305	311	340	281	338	394	450	507	563
Common dividend per share	146	824	1,083	1,106	1,209	1,000	1,200	1,400	1,600	1,800	2,000
% of par value	1.5%	8.2%	10.8%	11.1%	12.1%	10.0%	12.0%	14.0%	16.0%	18.0%	20.0%
Payout ratio	11.2%	55.8%	67.7%	47.7%	49.3%	52.3%	48.3%	40.6%	46.2%	43.1%	42.1%
Net share buybacks	0	0	0	0	0	0	0	0	0	0	0
Total distributions	41	232	305	311	340	281	338	394	450	507	563
Net distribution ratio (%)	11.2%	55.8%	67.7%	47.7%	49.3%	52.3%	48.3%	40.6%	46.2%	43.1%	42.1%
Discount factor	0.00	0.00	0.00	0.00	0.00	1.07	1.21	1.37	1.55	1.75	1.98
Present value	0	0	0	0	0	264	280	289	291	289	284

Cost of equity		Terminal Assumptions		Share Information	
Risk free rate	3.0%	Sustainable ROE	7.0%	PV of future dividend flows (VNDbn)	1,698
Equity risk premium	8.9%	Dividend payout ratio	70.0%	PV of terminal value (VNDbn)	4,247
Unlevered beta	0.635	Sustainable growth	2.1%	Terminal value as % of firm value	71.4%
Re-levered beta	1.142	Forecast period growth	14.9%	Current shares outstanding (mn)	281.4
Cost of equity	13.2%	Target gearing	100.0%	Statutory corporate tax rate	20.0%
Forecast period	5 Yrs	Transition period	10 Yrs		

Memorandum (VNDbn)	2015A	2016A	2017A	2018A	2019A	2020E	2021E	2022E	2023E	2024E	2025E
Reported common equity	4,325	4,333	4,662	5,140	5,691	6,103	6,608	7,384	8,109	9,020	10,066
Debt/equity ratio	83.6%	68.4%	57.7%	58.1%	60.3%	78.6%	94.7%	97.3%	93.1%	87.3%	81.2%
Debt	3,618	2,962	2,690	2,988	3,433	4,797	6,255	7,186	7,548	7,878	8,175
YoY % Change	-6.5%	-18.1%	-9.2%	11.1%	14.9%	39.7%	30.4%	14.9%	5.0%	4.4%	3.8%

Source: Company reports, KB Securities Vietnam

PV Transportation (PVT) – Summarized financials & forecasts, 2019–2022E

Income statement (VNDbn)					Balance sheet (VNDbn)				
	2019A	2020E	2021E	2022E		2019A	2020E	2021E	2022E
Net sales	7,758	7,138	8,561	10,700	Total assets	10,997	13,369	15,555	17,525
Cost of sales	6,567	6,003	7,159	8,818	Current assets	3,841	4,633	4,396	6,395
Gross Profit	1,191	1,134	1,402	1,882	Cash & equivalents	1,208	1,154	1,290	1,225
Financial income	221	132	153	156	ST investments	1,479	2,096	1,795	3,608
Financial expenses	193	270	363	439	Accounts receivable	865	1,165	1,019	1,183
of which: interest expenses	169	217	329	403	Inventory	127	115	121	158
Gain/(loss) from joint ventures	34	0	0	0	Other current assets	162	102	170	221
Selling expenses	14	8	9	11	Long-term assets	7,157	8,736	11,160	11,130
General & admin expenses	249	193	182	191	LT trade receivables	14	26	27	35
Operating profit/(loss)	990	795	1,001	1,398	Fixed assets	6,781	6,545	7,043	7,847
Other income	34	42	63	79	Investment properties	0	0	0	0
Other expense	7	8	10	13	LT incomplete assets	0	1,793	3,705	2,805
Net other income/(expenses)	26	34	53	66	LT investments	199	203	207	211
Pretax profit/(loss)	1,016	829	1,054	1,464	Goodwill	0	0	0	0
Income tax	195	173	211	294	Other LT assets	163	170	179	232
Net profit/(loss)	821	656	843	1,170	Liabilities	5,306	7,266	8,948	10,141
Minority interests	131	118	143	199	Current liabilities	2,523	2,923	3,307	3,461
Net profit after MI	690	538	699	971	Trade accounts payable	796	1,106	1,161	1,072
					Advances from customers	49	35	49	63
					ST borrowings	1,015	1,027	1,027	1,027
					Special reserves	107	100	100	100
					Other current liabilities	557	655	971	1,199
					Long-term liabilities	2,784	4,343	5,641	6,681
					LT payables	236	445	279	347
					LT borrowings	2,419	3,770	5,228	6,160
					Other LT liabilities	129	128	134	174
					Shareholders' equity	5,691	6,103	6,608	7,384
					Paid-in capital	2,814	2,814	2,814	2,814
					Share premium	0	0	0	0
					Treasury stock	0	0	0	0
					Undistributed earnings	991	1,383	1,888	2,664
					Reserve & others	576	576	576	576
					Minority interests	1,310	1,330	1,330	1,330
					Total liabilities & equity	10,997	13,369	15,555	17,525
Operating ratios (%)					Key ratios (x, %, VND)				
	2019A	2020E	2021E	2022E		2019A	2020E	2021E	2022E
Revenue growth	3.1	(8.0)	19.9	25.0	Valuations				
EBIT growth	15.7	0.6	29.8	38.7	P/E	3.6	4.7	3.6	2.6
EBITDA growth	19.7	(0.1)	19.1	24.2	P/E diluted	3.6	4.7	3.6	2.6
NP after MI growth	5.8	(22.0)	30.0	38.9	P/B	0.4	0.4	0.4	0.3
Gross profit margin	15.4	15.9	16.4	17.6	P/S	0.3	0.4	0.3	0.2
EBITDA margin	23.0	24.9	24.8	24.6	EV/EBITDA	1.4	1.4	1.2	1.0
EBIT margin	12.0	13.1	14.2	15.7	EV/EBIT	2.7	2.7	2.1	1.5
Pre-tax profit margin	13.1	11.6	12.3	13.7	Dividend yield, ordinary (%)	13.5	11.2	13.4	15.7
Net profit margin	8.9	7.5	8.2	9.1	EPS	2,450	1,912	2,485	3,451
					BVPS	20,221	21,685	23,478	26,236
					SPS	27,567	25,361	30,418	38,020
					DPS (annual, ordinary)	1,209	1,000	1,200	1,400
					Dividend payout ratio (%)	49.3	52.3	48.3	40.6
					Operating performance				
					ROE	12.7	9.1	11.0	13.9
					ROA	6.5	4.4	4.8	5.9
					ROIC	10.9	8.9	9.6	11.3
					Financial structure				
					Total liab/equity	93.2	119.1	135.4	137.3
					Net debt/equity	39.1	59.7	75.1	80.7
					Current ratio (x)	1.5	1.6	1.3	1.8
					Interest coverage (x)	5.5	4.3	3.7	4.2
					Activity ratios				
					Asset turnover	0.7	0.6	0.6	0.6
					Receivables turnover	7.9	7.0	7.8	9.7
					Inventory turnover	55.8	58.9	72.3	76.7
					Payables turnover	8.2	7.2	7.3	9.1

Source: Company reports, KB Securities Vietnam

Binh Son Refinery (BSR)

Setting stage for 4Q turnaround

July 27, 2020

Nguyen Vinh Analyst / Oil & Gas

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Initiate coverage with BUY rating and target price of VND8,100

We initiate our coverage of BSR with a BUY rating and a target price of VND8,100. Our target price is based on a mid-cycle P/B multiple derived from our three-stage dividend discount model. We apply a mid-cycle valuation for our target price to reflect our view for more modest recovery in domestic gasoline prices amid an extended period of weak oil prices.

Price recovery underway for 4Q earnings turnaround

Local ex-factory gasoline and diesel prices have bounced back by 48% and should allow steady recovery in margins despite our outlook for a flatter trajectory in oil price recovery. BSR returned to profitability in June and volumes have come back to set the stage for an earnings turnaround for 4Q after August's two-month scheduled maintenance shutdown. The three-year annual maintenance overhaul should reduce 3Q utilization to 16% but after completion we expect the company to be on track for sequential earnings recovery into 2021E.

Upgrading facilities should be ready by 2022E alongside the start of localized petrochemical production

Vietnam will begin local production of petrochemicals when onshore capacity is ready for startup in 2023E. BSR is also currently upgrading facilities to enter into the petrochemical market. We strongly believe this initial step is significant and marks the beginning of a much more substantial push into petrochemicals, especially in the context of Vietnam's sizable LNG capacity expansion.

BUY initiate

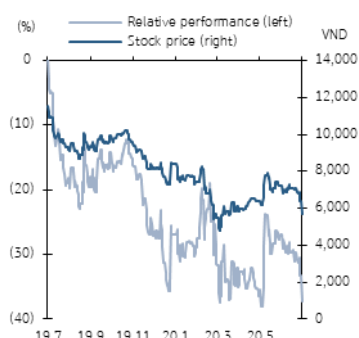
Target Price	VND8,100
Total return (%)	37.3%
Current price (Jul 27)	VND5,900
Consensus target price	VND6,000
Mkt capitalization (USDbn)	USD789mn

Trading data	
Free float (%)	7.9%
Avg trading value (3M)	USD1.25mn
Foreign available (%)	7.9%
Major shareholders (%)	PetroVietnam (92%)

Share price performance				
(%)	1M	3M	6M	12M
Absolute	-20.8	-1.7	-32.1	-50.4
Relative	-14.1	-3.5	-14.3	-37.3

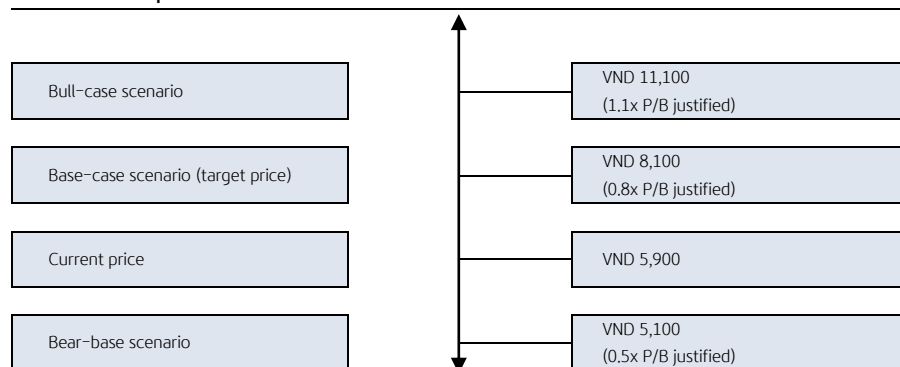
Forecast earnings & valuation

Revenue (VNDbn)	102,824	61,429	90,819	95,360
EBIT	2,869	(2,699)	4,063	4,497
NP attributable to parent	2,914	(2,942)	3,355	3,705
EPS (VND)	940	(949)	1,082	1,195
EPS growth (%)	(22.3)	(201.0)	(214.0)	10.4
P/E (x)	6.3	(6.2)	5.5	4.9
EV/EBITDA (x)	3.1	(42.2)	2.9	3.1
P/B (x)	0.5	0.6	0.5	0.5
ROE (%)	8.9	(9.1)	10.4	10.6
Div yield (%)	2.8	0.0	2.7	6.8



Source: Bloomberg, KB Securities Vietnam

Investment opinion & risks



Base-case scenario: catalysts

- 1) Brent prices above USD55 in 2021E
- 2) 4Q earnings turnaround
- 3) Higher diesel prices on IMO2020

Bull-case scenario: upside risk

- 1) Brent prices above USD55 in 2020E
- 2) Spike in diesel prices on IMO2020
- 3) Strong gasoline prices

Bear-case scenario: downside risk

- 1) Coronavirus second wave
- 2) Weak diesel prices despite IMO2020
- 3) Failure to turnaround earnings in 4Q

Revised earnings estimates

(VNDbn, %)	Revised		Previous		Change	
	2020E	2021E	2020E	2021E	2020E	2021E
Revenue						
EBIT						
OP						
NP after MI						

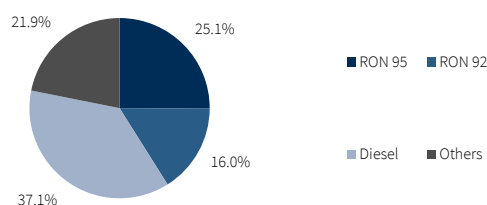
Source: Bloomberg, KB Securities Vietnam

KBSV estimate vs consensus

(VNDbn, %)	KBSV estimates		Consensus		Difference	
	2020E	2021E	2020E	2021E	2020E	2021E
Revenue	61,429	90,819	49,836	89,730	23.3	1.2
EBIT	(2,699)	4,063	0	1,944	na	109.0
OP	(2,901)	3,547	(909)	1,944	219.1	82.5
NP after MI	(2,942)	3,355	(909)	1,935	223.7	73.4

Source: Bloomberg, KB Securities Vietnam

Revenue composition (2019)



Source: Company reports, KB Securities Vietnam

Peer group comparison

(USDbn, x, %)	Mkt	12m fwd	3y EPS	12m fwd	12m fwd
	Cap	P/E	CAGR	ROE	P/B
BSR VN	0.8	-6.7	-18.7	2.1	0.6
GAS VN	5.3	14.3	-5.7	17.6	2.4
PLX VN	2.2	19.8	0.0	11.8	1.9
PVT VN	0.1	5.4	-6.9	9.4	0.4
PVS VN	0.2	6.5	-7.5	6.6	0.4
PVD VN	0.2	21.9	13.8	0.9	0.3

Source: Bloomberg, KB Securities Vietnam

Unexpected 2Q losses despite VND500 billion in provision reversals

Losses for 2Q reached VND1,897 billion versus 2019's profits of VND106 billion on revenue that plunged by 51% YoY to VND13,736 billion. Weak 2Q results should have largely been expected as they still reflect: 1) the brunt of the pandemic-induced fall in global refinery product demand; and 2) decreased domestic output and consumption due to Vietnam's nationwide lockdown. Losses for 1H were VND4,245 billion versus last year's earnings of VND704 billion but 2Q losses did narrow on VND500 billion in reversals for 1Q's inventory provisions with the bounce back in oil prices. Moreover, management indicated that the company returned to profitability in June, which bodes well for continuing recovery into 2H.

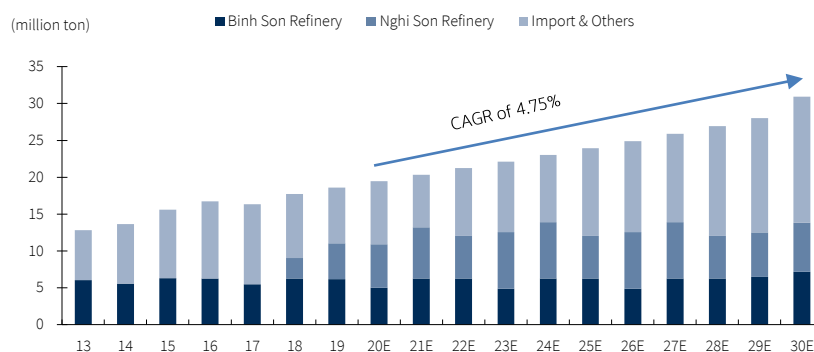
Pick up in gasoline & diesel should help 3Q operations but 4Q before any real turnaround

Recovery in global refinery demand should support 2H recovery and we expect 3Q earnings of VND605 billion or up 0.7% YoY (vs 2Q's VND1,898 billion loss). That said, 3Q results should still be weighed down by the two-month maintenance overhaul in August, which should lower the utilization ratio to 16%. The turnaround should come in 4Q when we expect earnings of VND684 billion (up 13% QoQ but down 57.2% YoY). Given the depth of 1H losses, however, 2H recovery should not be enough to bring full-year earnings into positive territory and we estimate VND2,957 billion in losses for the year.

CAGR at 17.5% after earnings normalize in 2021E

We estimate CAGR at 17.5% between 2021E and 2025E. Earnings performance should be better for 2021E at VND3,335 billion due to: 1) refinery product prices back at pre-pandemic and profitable levels; and 2) utilization ratios back to normal levels at 110%. We also assume on-time completion of the USD1.8 billion upgrading and expansion plan in 2022E despite current financing difficulties. The upgrade/expansion should: 1) boost total capacity by 30%; 2) upgrade facilities to complex refining from simple refining and diversify feedstock to both sour and sweet crude oil; and 3) increase the percentage of petrochemical products offering higher margins than refinery products.

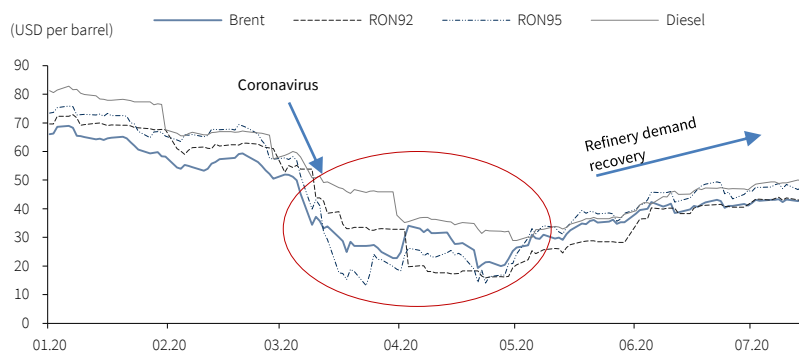
Fig 1. Binh Son Refinery (BSR) – Petroleum product output forecasts, 2013–2030E (million tons)



Source: Company reports, KB Securities Vietnam

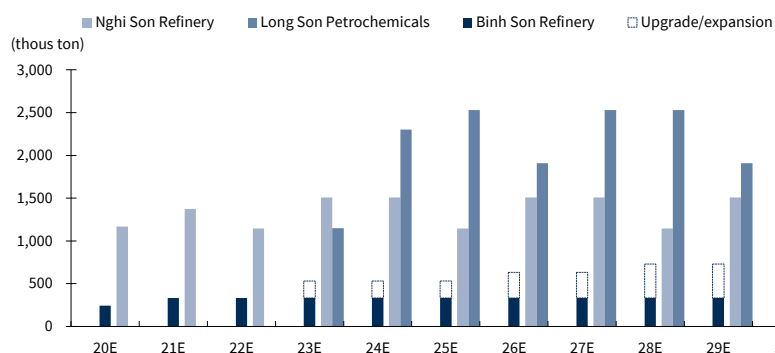
Fig 2. Binh Son Refinery (BSR) – Singapore RON 92, RON 95 & Diesel Oil ex-factory prices, Jan 2020–Jul 2020 (USD)

Refinery output price = Average MOPS 5, 10 or 15 days (number of days depends on buyers & contracts) + premium (negotiated)



Source: Bloomberg, KB Securities Vietnam

Fig 3. Binh Son Refinery (BSR) – Petrochemical output forecasts, 2013–2030E (thousand tons)



Source: Company reports, KB Securities Vietnam

Binh Son Refinery (BSR) – Three-stage dividend discount model

3-STAGE DDM

PV OF DIVIDENDS

Cost of Equity	Sustainable growth						
	1.7%	2.2%	2.7%	3.2%	3.7%	4.2%	4.7%
14.1%	37,138	38,320	39,605	41,008	42,546	44,239	46,112
14.6%	35,108	36,165	37,310	38,556	39,916	41,407	43,048
15.1%	33,250	34,198	35,222	36,332	37,540	38,859	40,304
15.6%	31,544	32,397	33,316	34,309	35,386	36,557	37,835
16.1%	29,975	30,744	31,571	32,462	33,425	34,469	35,605
16.6%	28,527	29,223	29,970	30,771	31,635	32,569	33,581
17.1%	27,189	27,821	28,496	29,219	29,997	30,835	31,740

PV OF EQUITY PER SHARE

Cost of Equity	Sustainable growth							Ex-growth
	1.7%	2.2%	2.7%	3.2%	3.7%	4.2%	4.7%	
14.1%	12,000	12,400	12,800	13,200	13,700	14,300	14,900	0.5x
14.6%	11,300	11,700	12,000	12,400	12,900	13,400	13,900	5,100
15.1%	10,700	11,000	11,400	11,700	12,100	12,500	13,000	-13.6%
15.6%	10,200	10,400	10,700	11,100	11,400	11,800	12,200	Mid-cycle
16.1%	9,700	9,900	10,200	10,500	10,800	11,100	11,500	0.8x
16.6%	9,200	9,400	9,700	9,900	10,200	10,500	10,800	8,100
17.1%	8,800	9,000	9,200	9,400	9,700	9,900	10,200	37.3%

Projected Distributions (VNDbn)	2015A	2016A	2017A	2018A	2019A	2020E	2021E	2022E	2023E	2024E	2025E
Net income	6,176	4,483	7,711	3,606	2,914	-2,942	3,355	3,705	4,280	5,244	6,386
Preferred dividend paid – cash	0	0	0	0	0	0	0	0	0	0	0
Preferred dividend per share	0	0	0	0	0	0	0	0	0	0	0
% of par value	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Internally-generated capital	6,176	4,483	7,711	3,606	2,914	-2,942	3,355	3,705	4,280	5,244	6,386
Less: capital @ 20% D/E	-5,017	-579	-451	-819	-767	458	118	445	322	3	3
Cash for dividends/buybacks	11,193	5,062	8,161	4,425	3,680	0	3,237	3,260	3,958	5,241	6,383
Common dividend paid – cash	0	0	0	0	508	0	496	1,240	1,488	1,860	2,480
Common dividend per share	0	0	0	0	164	0	160	400	480	600	800
% of par value	0.0%	0.0%	0.0%	0.0%	1.6%	0.0%	1.6%	4.0%	4.8%	6.0%	8.0%
Payout ratio	0.0%	0.0%	0.0%	0.0%	17.4%	0.0%	14.8%	33.5%	34.8%	35.5%	38.8%
Net share buybacks	0	0	713	0	0	0	0	0	0	0	0
Total distributions	0	0	713	0	508	0	496	1,240	1,488	1,860	2,480
Net distribution ratio (%)	0.0%	0.0%	9.3%	0.0%	17.4%	0.0%	14.8%	33.5%	34.8%	35.5%	38.8%
Discount factor	0.00	0.00	0.00	0.00	0.00	1.08	1.25	1.44	1.67	1.93	2.23
Present value	0	0	0	0	0	0	398	861	893	966	1,114

Cost of equity		Terminal Assumptions		Share Information	
Risk free rate	3.0%	Sustainable ROE	8.0%	PV of future dividend flows (VNDbn)	4,231
Equity risk premium	8.9%	Dividend payout ratio	60.0%	PV of terminal value (VNDbn)	30,078
Unlevered beta	1.221	Sustainable growth	3.2%	Terminal value as % of firm value	87.7%
Re-levered beta	1.417	Forecast period growth	49.5%	Current shares outstanding (mn)	3,100.5
Cost of equity	15.6%	Target gearing	20.0%	Statutory corporate tax rate	20.0%
Forecast period	5 Yrs	Transition period	10 Yrs		

Memorandum (VNDbn)	2015A	2016A	2017A	2018A	2019A	2020E	2021E	2022E	2023E	2024E	2025E
Reported common equity	31,747	32,884	34,358	31,378	34,054	30,960	33,836	36,320	39,133	42,543	46,481
Debt/equity ratio	61.0%	50.1%	41.4%	32.3%	18.5%	27.7%	27.1%	31.4%	33.3%	30.6%	28.1%
Debt	19,374	16,479	14,226	10,131	6,299	8,588	9,178	11,402	13,012	13,028	13,044
YoY % Change	-56.4%	-14.9%	-13.7%	-28.8%	-37.8%	36.3%	6.9%	24.2%	14.1%	0.1%	0.1%

Source: Company reports, KB Securities Vietnam

Binh Son Refinery (BSR) – Summarized financials & forecasts, 2019–2022E

Income statement (VNDbn)					Balance sheet (VNDbn)				
	2019A	2020E	2021E	2022E		2019A	2020E	2021E	2022E
Net sales	102,824	61,429	90,819	95,360	Total assets	53,584	49,930	56,268	61,602
Cost of sales	98,851	63,288	85,692	89,759	Current assets	26,896	24,198	31,840	37,028
Gross Profit	3,973	(1,859)	5,127	5,601	Cash & equivalents	8,352	2,982	8,077	8,065
Financial income	537	627	473	473	ST investments	4	2	3	5
Financial expenses	416	828	989	1,051	Accounts receivable	9,972	7,774	10,106	10,612
of which: interest expenses	360	355	386	449	Inventory	8,515	13,302	13,475	18,158
Gain/(loss) from joint ventures	0	0	0	0	Other current assets	52	138	180	189
Selling expenses	714	667	908	954	Long-term assets	26,688	25,732	24,428	24,574
General & admin expenses	389	173	156	150	LT trade receivables	534	777	1,011	1,061
Operating profit/(loss)	2,990	(2,901)	3,547	3,919	Fixed assets	24,848	24,568	22,649	22,759
Other income	69	35	54	56	Investment properties	0	0	0	0
Other expense	4	2	3	4	LT incomplete assets	1,026	58	344	309
Net other income/(expenses)	65	33	50	53	LT investments	10	11	11	11
Pretax profit/(loss)	3,054	(2,868)	3,598	3,972	Goodwill	0	0	0	0
Income tax	181	89	225	249	Other LT assets	271	318	413	434
Net profit/(loss)	2,873	(2,957)	3,372	3,723	Liabilities	19,530	18,970	22,432	25,283
Minority interests	(41)	(15)	17	19	Current liabilities	12,916	11,932	14,185	15,327
Net profit after MI	2,914	(2,942)	3,355	3,705	Trade accounts payable	8,674	4,640	5,854	6,121
Operating ratios (%)					Advances from customers	4	6	8	9
Revenue growth	(8.2)	(40.3)	47.8	5.0	ST borrowings	1,106	3,617	3,617	4,267
EBIT growth	(27.4)	(194.1)	(250.5)	10.7	Special reserves	120	215	215	215
EBITDA growth	(21.5)	(110.7)	nm	5.2	Other current liabilities	3,012	3,455	4,492	4,716
NP after MI growth	(19.2)	(201.0)	(214.0)	10.4	Long-term liabilities	6,614	7,037	8,247	9,955
Gross profit margin	3.9	(3.0)	5.6	5.9	LT payables	0	0	0	0
EBITDA margin	5.2	(0.9)	7.3	7.3	LT borrowings	5,192	4,971	5,561	7,135
EBIT margin	2.8	(4.4)	4.5	4.7	Other LT liabilities	1,422	2,066	2,686	2,820
Pre-tax profit margin	3.0	(4.7)	4.0	4.2	Shareholders' equity	34,054	30,960	33,836	36,320
Net profit margin	2.8	(4.8)	3.7	3.9	Paid-in capital	31,005	31,005	31,005	31,005
Cash flow (VNDbn)					Share premium	0	0	0	0
Net profit	2,873	(2,957)	3,372	3,723	Treasury stock	0	0	0	0
Plus: depreciation & amort	2,513	2,227	2,593	2,505	Undistributed earnings	2,975	(95)	2,781	5,264
Plus: investing (profit)/loss	(340)	(352)	(351)	(351)	Reserve & others	3	3	3	3
Change in working capital	1,166	(6,508)	(527)	(4,755)	Minority interests	71	48	48	48
(Inc)/dec – receivables	(1,019)	1,954	(2,565)	(556)	Total liabilities & equity	53,584	49,930	56,268	61,602
(Inc)/dec – inventory	711	(4,787)	(173)	(4,683)	Key ratios (x, %, VND)				
(Inc)/dec – other curr assets	27	(87)	(41)	(9)	Valuations				
Inc/(dec) – payables	205	(4,034)	1,214	267	P/E	6.1	(6.0)	5.3	4.8
Inc/(dec) – advances	(9)	2	2	1	P/E diluted	6.1	(6.0)	5.3	4.8
Inc/(dec) – other curr liab	1,252	443	1,037	225	P/B	0.5	0.6	0.5	0.5
Other adj for operations	2,916	(3,912)	(448)	1,544	P/S	0.2	0.3	0.2	0.2
Operating cash flow	4,937	(6,178)	5,320	1,368	EV/EBITDA	3.3	(31.2)	2.7	2.5
ST investments	0	2	(1)	(2)	EV/EBIT	6.2	(6.5)	4.3	3.9
Capital expenditures	(13)	(884)	(960)	(2,580)	Dividend yield, ordinary (%)	2.9	0.0	2.8	7.0
Investment properties	0	0	0	0	EPS	940	(949)	1,082	1,195
Investment in subsidiaries	0	0	0	0	BVPS	10,983	9,986	10,913	11,714
Other assets	77	(48)	(95)	(21)	SPS	33,164	19,813	29,292	30,756
Other adj for investments	(7)	435	546	546	DPS (annual, ordinary)	164	0	160	400
Investing cash flow	57	(495)	(511)	(2,057)	Dividend payout ratio (%)	17.4	0.0	14.8	33.5
Free cash flow	4,924	(7,062)	4,360	(1,213)	Operating performance				
Issuance/(repayment) of debt	(2,123)	(221)	590	1,574	ROE	8.9	–9.1	10.4	10.6
ST debt	(1,710)	2,511	0	650	ROA	5.5	–5.7	6.3	6.3
Other liabilities	3	645	620	134	ROIC	8.1	–8.3	11.0	11.7
Issuance/(retirement) of equity	0	0	0	0	Financial structure				
Dividends paid	(508)	0	(496)	(1,240)	Total liab/equity	57.4	61.3	66.3	69.6
Less: changes in equity	311	(136)	0	0	Net debt/equity	(6.0)	18.1	3.3	9.2
Other adj for financing	1,623	(1,495)	(428)	(440)	Current ratio (x)	2.1	2.0	2.2	2.4
Financing cash flow	(2,404)	1,302	286	678	Interest coverage (x)	8.0	(7.6)	10.5	10.0
Net increase in cash & equivalents	2,590	(5,371)	5,095	(12)	Activity ratios				
Cash & equivalents – beginning	5,762	8,352	2,982	8,077	Asset turnover	1.9	1.2	1.7	1.6
Cash & equivalents – ending	8,352	2,982	8,077	8,065	Receivables turnover	10.9	6.9	10.2	9.2
					Inventory turnover	11.6	5.6	6.8	6.0
					Payables turnover	12.0	9.2	17.3	15.9

Source: Company reports, KB Securities Vietnam

PV Technical Services (PVS)

Harder hit from weak oil prices

July 27, 2020

 Nguyen Vinh Analyst / Oil & Gas & Chemicals
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Initiate coverage with HOLD rating and target price of VND11,100

We initiate our coverage of PVS with a HOLD rating and a target price of VND11,100. Our target price is based on a mid-cycle P/B multiple derived from our three-stage dividend discount model. We apply a mid-cycle valuation for our target price to reflect our view for more modest recovery in FPSO day rates (Floating, Production, Storage & Offloading) amid an extended period of weak oil prices.

Margins continually under pressure at current and upcoming projects

Project delays include the *Sao Vang-Dai Nguyet* and *Gallaf* gas fields and although they may restart in mid 3Q both projects are in the finishing phase (albeit offering higher margins in the short term during this phase). Backlogs are still under pressure as competition squeezes margins at the upcoming *Su Tu Trang* and *Thi Vai* LNG projects.

Not just exposed to weak oil prices but also operating in a sunset industry

Vietnam's mature oil and gas fields also exacerbate the situation for upstream operators as higher extraction costs translate into quicker production cutbacks on any fall in oil prices. No new crude oil projects are scheduled and approvals for the large gas mega projects – *Blue Whale* and *Block B* – still face uncertainties amid ongoing delays.

HOLD initiate

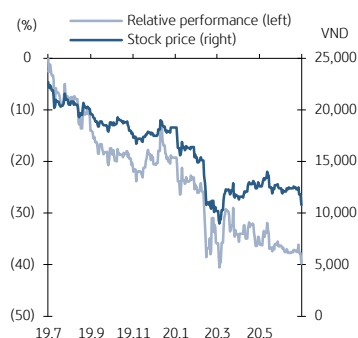
Target Price	VND11,000
Total return (%)	8.3%
Current price (Jul 27)	VND10,800
Consensus target price	VND16,500
Mkt capitalization (USDbn)	USD223mn

Trading data	
Free float (%)	48.5%
Avg trading value (3M)	USD2.41mn
Foreign available (%)	37.5%
Major shareholders (%)	PetroVietnam (51.4%)

Share price performance				
(%)	1M	3M	6M	12M
Absolute	-12.9	-6.9	-41.0	-52.4
Relative	-5.5	-8.6	-25.5	-39.8

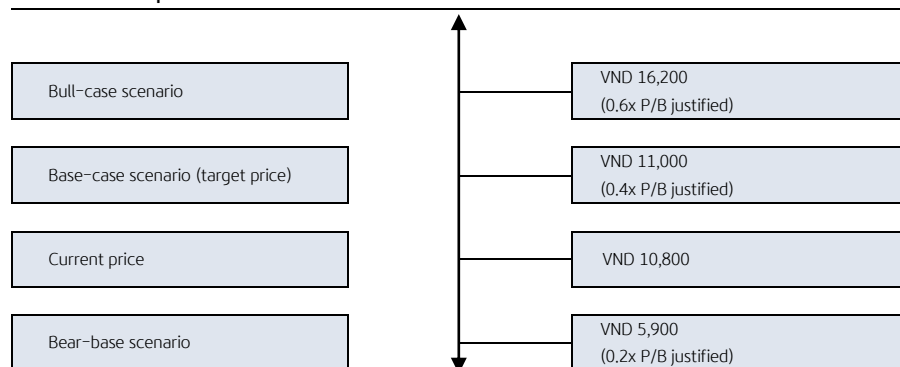
Forecast earnings & valuation

Fiscal year-end	2019A	2020E	2021E	2022E
Revenue (VNDbn)	16,968	17,039	15,358	16,126
EBIT	140	531	330	364
NP attributable to parent	849	902	1,195	1,427
EPS (VND)	1,777	1,887	2,499	2,985
EPS growth (%)	(23.3)	6.2	32.4	19.4
P/E (x)	6.1	5.7	4.3	3.6
EV/EBITDA (x)	(0.6)	1.3	1.7	1.6
P/B (x)	0.4	0.4	0.4	0.3
ROE (%)	6.7	6.9	8.7	9.7
Div yield (%)	7.7	6.5	7.4	9.3



Source: Bloomberg, KB Securities

Investment opinion & risks



Base-case scenario: catalysts

- 1) Brent prices above USD55 in 2021E
- 2) Project delays
- 3) Weak FPSO day rates

Bull-case scenario: upside risk

- 1) Brent prices above USD55 in 2020E
- 2) New gas fields approved
- 3) Strong FPSO day rates

Bear-case scenario: downside risk

- 1) Coronavirus second wave
- 2) Project cancellations
- 3) FPSO provisions

Revised earnings estimates

(VNDbn, %)	Revised		Previous		Change	
	2020E	2021E	2020E	2021E	2020E	2021E
Revenue						
EBIT						
OP						
NP after MI						

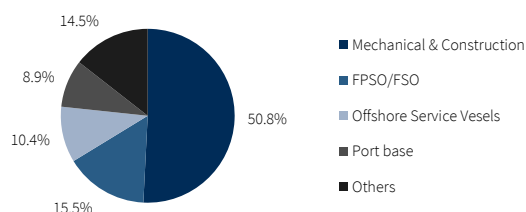
Source: Bloomberg, KB Securities Vietnam

KBSV estimate vs consensus

(VNDbn, %)	KBSV estimates		Consensus		Difference	
	2020E	2021E	2020E	2021E	2020E	2021E
Revenue	17,039	15,358	15,628	17,292	9.0	(11.2)
EBIT	531	330	285	334	86.4	(1.1)
OP	1,330	1,709	271	450	390.6	279.8
NP after MI	902	1,195	788	862	14.4	38.6

Source: Bloomberg, KB Securities Vietnam

Revenue composition (2019)



Source: Company reports, KB Securities Vietnam

Peer group comparison

(USDbn, x, %)	Mkt	12m fwd	3y EPS	12m fwd	12m fwd
	Cap	P/E	CAGR	ROE	P/B
PVS VN	0.2	6.5	-7.5	6.6	0.4
GAS VN	5.3	14.3	-5.7	17.6	2.4
PLX VN	2.2	19.8	0.0	11.8	1.9
PVD VN	0.2	21.9	13.8	0.9	0.3
BSR VN	0.8	-6.7	-18.7	2.1	0.6
PVT VN	0.1	5.4	-6.9	9.4	0.4

Source: Bloomberg, KB Securities Vietnam

2Q earnings beat on one-off bad debt repayment from PVEP

2Q's earnings surged by 61.2% to VND272 billion on revenue of VND5,473 (up 13.4% YoY) due to: 1) VND51 billion in provision reversals for a debt repayment from PetroVietnam Exploration Production (PVEP); and 2) base effect from 2Q19's sizable non-operating losses. General expenses were down 44% YoY after PVEP repaid VND51 billion in bad debt. Year-over-year performance also benefitted from last year's VND120 billion in non-operating losses related to the disposal of the unprofitable seismic survey segment. Despite the one-offs, 2Q results still showed disruptions to M&C (Mechanical & Construction) projects from the pandemic and lower day rates for the FPSO (Floating, Production, Storage & Offloading) on weak oil prices. Management also warned of additional delays to upcoming M&C contracts due to the pandemic. 1H earnings were VND393 billion and down 39% YoY.

Pandemic leading to delays for upstream operators

We expect 3Q earnings of VND271 billion or flat on the quarter but up 222% YoY and 4Q profits at VND295 billion or up 9% QoQ and up 73% YoY. But given project delays and limited number of ongoing projects, even our forecasts rely heavily on the *Sao Vang-Dai Nguyet* and *Gallaf* gas projects as they peak and enter the finishing phase in 4Q. Projects in the finishing phase usually offer higher margins.

Earnings CAGR of 13.6% between 2021E-2025E but still risk of delays

Our 13.6% earnings CAGR between 2021E and 2025E assumes PVS will win EPC contracts (Engineering, Procurement & Construction) for major gas projects, including *White Lion Phase 2* and *Nam Du-U Minh*. We have excluded the mega gas projects – *Blue Whale* and *Block B* – given the complexity of the approval process and our expectations for extended delays. Notwithstanding, the operating environment for Vietnam's upstream operators should be characterized by industry decline, intensifying competition and weak oil prices that should continue to squeeze margins and exacerbate any delays from offshore tensions and complications in the approval process.

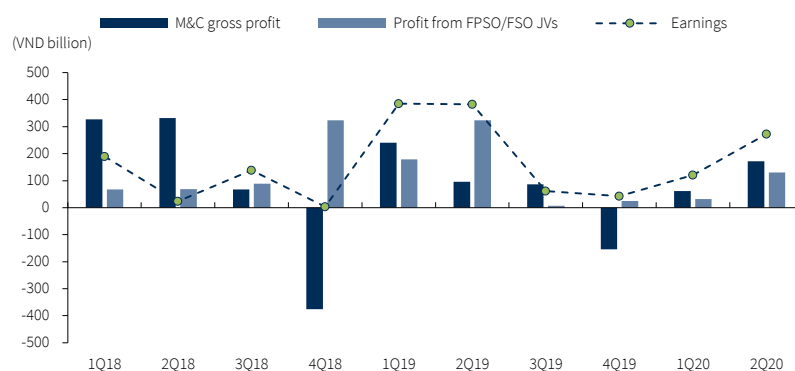
Table 1. PV Technical Services (PVS) – Natural gas E&P projects, 2018–2025E (USD)

Projects	2018	2019	2020E	2021E	2022E	2023E	2024E	2025E
<i>Sao Vang Dai Nguyet</i>	EPC + FSO + JUs (USD600 mn)							
<i>White Lion Phase 2</i>			EPC + FSO (USD500 mn)					
<i>Nam Du – U Minh</i>			EPC + FSO (USD850 mn)					
<i>Blue Whale</i>			(Estimated investment value = USD10 billion)					
<i>Black B – O Mon</i>				EPC + FSO + 1 tender barge + 1 JUs (USD1.2 bn)				
<i>Red Emperor</i>	Suspended							

EPC = Engineering, Procurement & Construction; FSO = Floating, Storage & Offloading; JU = Jackup rigs

Note: Red Emperor (*Ca Rong Do*) suspended due to offshore tensions.

Source: Company reports, KB Securities Vietnam

Fig 1. PV Technical Services (PVS)– M&C gross profit, profits from FPSO/FSO joint ventures & total earnings (VND billion)

M&C = Mechanical & Construction; FPSO/FSO: Floating (Production) Storage Offloading

Source: Company reports, KB Securities Vietnam

PV Technical Services (PVS) – Three-stage dividend discount model

3-STAGE DDM

PV OF DIVIDENDS

Cost of Equity	Sustainable growth						
	-0.1%	0.4%	0.9%	1.4%	1.9%	2.4%	2.9%
15.1%	8,344	8,498	8,662	8,839	9,029	9,234	9,456
15.6%	8,000	8,139	8,287	8,446	8,616	8,799	8,997
16.1%	7,681	7,807	7,940	8,083	8,236	8,401	8,577
16.6%	7,385	7,499	7,620	7,749	7,886	8,034	8,192
17.1%	7,109	7,213	7,322	7,439	7,563	7,696	7,838
17.6%	6,853	6,947	7,046	7,152	7,264	7,384	7,512
18.1%	6,613	6,699	6,789	6,885	6,987	7,095	7,210

PV OF EQUITY PER SHARE

Cost of Equity	Sustainable growth							Ex-growth
	-0.1%	0.4%	0.9%	1.4%	1.9%	2.4%	2.9%	
15.1%	17,500	17,800	18,100	18,500	18,900	19,300	19,800	0.2x
15.6%	16,700	17,000	17,300	17,700	18,000	18,400	18,800	5,900
16.1%	16,100	16,300	16,600	16,900	17,200	17,600	17,900	-45.4%
16.6%	15,500	15,700	15,900	16,200	16,500	16,800	17,100	Mid-cycle
17.1%	14,900	15,100	15,300	15,600	15,800	16,100	16,400	0.4x
17.6%	14,300	14,500	14,700	15,000	15,200	15,400	15,700	11,000
18.1%	13,800	14,000	14,200	14,400	14,600	14,800	15,100	1.9%

Projected Distributions (VNDbn)	2015A	2016A	2017A	2018A	2019A	2020E	2021E	2022E	2023E	2024E	2025E
Net income	1,517	1,039	1,007	1,047	849	902	1,195	1,427	1,691	1,749	1,986
Preferred dividend paid – cash	0	0	0	0	0	0	0	0	0	0	0
Preferred dividend per share	0	0	0	0	0	0	0	0	0	0	0
% of par value	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Internally-generated capital	1,517	1,039	1,007	1,047	849	902	1,195	1,427	1,691	1,749	1,986
Less: capital @ 10% D/E	-33	-67	-42	-24	44	49	76	0	0	0	0
Cash for dividends/buybacks	1,551	1,106	1,049	1,071	805	853	1,119	1,427	1,691	1,749	1,986
Common dividend paid – cash	579	809	284	509	397	335	382	478	574	765	956
Common dividend per share	1,297	1,811	636	1,064	830	700	800	1,000	1,200	1,600	2,000
% of par value	13.0%	18.1%	6.4%	10.6%	8.3%	7.0%	8.0%	10.0%	12.0%	16.0%	20.0%
Payout ratio	38.2%	77.9%	28.2%	48.6%	46.7%	37.1%	32.0%	33.5%	33.9%	43.7%	48.1%
Net share buybacks	0	0	0	0	0	0	0	0	0	0	0
Total distributions	579	809	284	509	397	335	382	478	574	765	956
Net distribution ratio (%)	38.2%	77.9%	28.2%	48.6%	46.7%	37.1%	32.0%	33.5%	33.9%	43.7%	48.1%
Discount factor	0.00	0.00	0.00	0.00	0.00	1.08	1.26	1.47	1.72	2.00	2.34
Present value	0	0	0	0	0	309	303	325	334	382	409

Cost of equity		Terminal Assumptions		Share Information	
Risk free rate	3.0%	Sustainable ROE	3.5%	PV of future dividend flows (VNDbn)	2,061
Equity risk premium	8.9%	Dividend payout ratio	60.0%	PV of terminal value (VNDbn)	5,687
Unlevered beta	1.414	Sustainable growth	1.4%	Terminal value as % of firm value	73.4%
Re-levered beta	1.527	Forecast period growth	23.4%	Current shares outstanding (mn)	478.0
Cost of equity	16.6%	Target gearing	10.0%	Statutory corporate tax rate	20.0%
Forecast period	5 Yrs	Transition period	10 Yrs		

Memorandum (VNDbn)	2015A	2016A	2017A	2018A	2019A	2020E	2021E	2022E	2023E	2024E	2025E
Reported common equity	11,875	11,752	13,112	12,705	12,784	13,275	14,137	15,146	16,334	17,391	18,504
Debt/equity ratio	18.9%	13.4%	8.8%	7.2%	10.6%	13.9%	18.4%	17.2%	15.9%	15.0%	14.1%
Debt	2,248	1,576	1,155	914	1,356	1,846	2,602	2,602	2,602	2,602	2,602
YoY % Change	-12.9%	-29.9%	-26.7%	-20.9%	48.3%	36.1%	41.0%	0.0%	0.0%	0.0%	0.0%

Source: Company reports, KB Securities Vietnam

PV Technical Services (PVS) – Summary financials & forecasts, 2019–2022E

Income statement (VNDbn)					Balance sheet (VNDbn)				
	2019A	2020E	2021E	2022E		2019A	2020E	2021E	2022E
Net sales	16,968	17,039	15,358	16,126	Total assets	26,004	26,769	28,614	29,500
Cost of sales	16,071	15,910	14,396	15,105	Current assets	15,984	16,200	17,626	18,159
Gross Profit	898	1,129	962	1,020	Cash & equivalents	6,949	5,556	5,998	5,999
Financial income	320	385	423	443	ST investments	2,743	4,567	5,300	5,606
Financial expenses	67	156	169	175	Accounts receivable	4,627	5,099	5,201	5,461
of which: interest expenses	34	49	39	39	Inventory	1,269	552	693	637
Gain/(loss) from joint ventures	581	569	1,124	1,416	Other current assets	396	425	433	455
Selling expenses	108	113	123	129	Long-term assets	10,020	10,569	10,988	11,341
General & admin expenses	649	485	509	527	LT trade receivables	164	170	173	137
Operating profit/(loss)	974	1,330	1,709	2,048	Fixed assets	3,177	3,266	3,380	3,510
Other income	425	75	77	81	Investment properties	183	179	174	170
Other expense	296	26	31	32	LT incomplete assets	200	398	451	505
Net other income/(expenses)	129	49	46	48	LT investments	5,208	5,462	5,732	6,015
Pretax profit/(loss)	1,103	1,379	1,755	2,096	Goodwill	0	0	0	0
Income tax	295	421	511	610	Other LT assets	1,087	1,095	1,077	1,005
Net profit/(loss)	808	958	1,244	1,486	Liabilities	13,220	13,494	14,476	14,355
Minority interests	(41)	56	50	59	Current liabilities	8,995	8,836	8,990	9,112
Net profit after MI	849	902	1,195	1,427	Trade accounts payable	6,151	5,949	6,068	6,144
					Advances from customers	320	510	520	501
					ST borrowings	771	772	772	772
					Special reserves	316	330	330	330
					Other current liabilities	1,436	1,275	1,300	1,365
					Long-term liabilities	4,225	4,658	5,486	5,243
					LT payables	1,243	1,317	1,344	1,320
					LT borrowings	584	1,074	1,830	1,830
					Other LT liabilities	2,397	2,267	2,313	2,093
					Shareholders' equity	12,784	13,275	14,137	15,146
					Paid-in capital	4,780	4,780	4,780	4,780
					Share premium	40	40	40	40
					Treasury stock	0	0	0	0
					Undistributed earnings	3,857	4,375	5,237	6,245
					Reserve & others	3,394	3,389	3,389	3,389
					Minority interests	714	693	693	693
					Total liabilities & equity	26,004	26,769	28,614	29,500
					Key ratios				
					(x, %, VND)				
					Valuations				
					P/E	6.1	5.7	4.3	3.6
					P/E diluted	6.1	5.7	4.3	3.6
					P/B	0.4	0.4	0.4	0.3
					P/S	0.3	0.3	0.3	0.3
					EV/EBITDA	6.7	4.6	4.9	4.6
					EV/EBIT	36.8	9.7	15.6	14.2
					Dividend yield, ordinary (%)	7.7	6.5	7.4	9.3
					EPS	1,777	1,887	2,499	2,985
					BVPS	26,747	27,774	29,578	31,688
					SPS	35,501	35,649	32,132	33,738
					DPS (annual, ordinary)	830	700	800	1,000
					Dividend payout ratio (%)	46.7	37.1	32.0	33.5
					Operating performance				
					ROE	6.7	6.9	8.7	9.7
					ROA	3.5	3.4	4.3	4.9
					ROIC	1.0	3.3	1.8	1.8
					Financial structure				
					Total liab/equity	103.4	101.6	102.4	94.8
					Net debt/equity	(43.8)	(28.0)	(24.0)	(22.4)
					Current ratio (x)	1.8	1.8	2.0	2.0
					Interest coverage (x)	4.2	10.8	8.6	9.4
					Activity ratios				
					Asset turnover	0.7	0.6	0.6	0.6
					Receivables turnover	3.5	3.5	3.0	3.0
					Inventory turnover	19.2	18.7	24.7	24.2
					Payables turnover	3.1	2.6	2.4	2.4

Source: Company reports, KB Securities Vietnam

PV Drilling & Services (PVD)

Drilling doldrums

July 27, 2020

Nguyen Vinh Analyst / Oil & Gas & Chemicals
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Initiate coverage with HOLD rating and target price of VND9,600

We initiate our coverage of PVD with a HOLD rating and a target price of VND9,600. Our target price is based on a discounted cash flow model that reflects weaker cash generating capabilities following the sharp slowdown in Vietnam's upstream E&P activities.

Jack up day rates flat at USD65,000 for 2020E & 2021E

Jack up days rates should remain flat at USD65,000 for 2020E and into 2021E due to: 1) cuts to capital expenditure budgets amid weak oil prices; and 2) fewer contracts from Malaysia after the country agreed to May's OPEC+ production cuts. We expect Malaysian project delays to drop jack up utilization rates to 77% in 2020E and only move up to 85% in 2021E.

Outlook only improves from 2H 2021E when the TAD starts up operations

The *PV Drilling V-Tender Assisted Rig (TAD)* will start up operations in 2H 2021E after sitting idle for the past three years. But mediocre day rates at USD85,000-90,000 should keep any profits unexciting during the six-year contract with Brunei Shell Petroleum. The job will offer a four-year contract and optional two-year extension and day rates can only be renegotiated after an initial four-year lock up period.

HOLD initiate

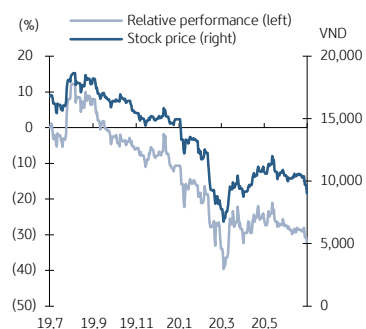
Target Price	VND9,600
Total return (%)	6.3%
Current price (Jul 27)	VND9,030
Consensus target price	VND11,900
Mkt capitalization (USDmn)	USD164mn

Trading data	
Free float (%)	49.4%
Avg trading value (3M)	USD2.25mn
Foreign available (%)	36.9%
Major shareholders (%)	PetroVietnam (50.46%)

Share price performance				
(%)	1M	3M	6M	12M
Absolute	-13.6	0.1	-39.6	-46.2
Relative	-6.2	-1.7	-23.7	-31.9

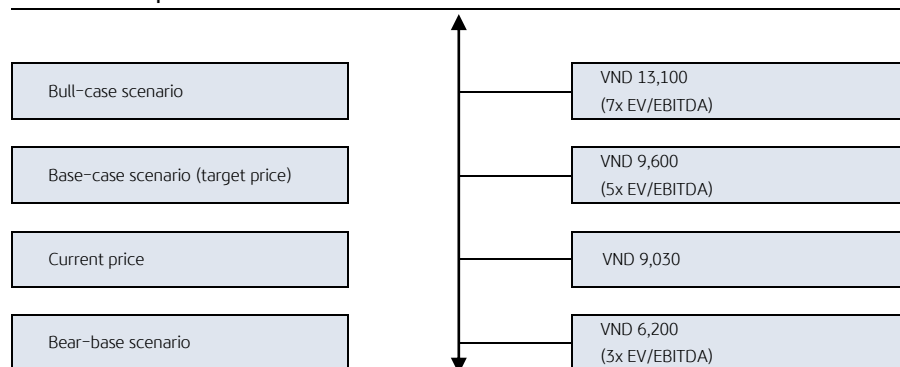
Forecast earnings & valuation

Fiscal year-end	2019A	2020E	2021E	2022E
Revenue (VNDbn)	4,368	5,029	5,709	6,597
EBIT	37	118	135	498
NP attributable to parent	184	132	165	473
EPS (VND)	438	314	392	1,121
EPS growth (%)	(6.3)	(28.3)	24.8	186.3
P/E (x)	20.6	28.8	23.1	8.1
EV/EBITDA (x)	8.8	8.9	8.3	4.9
P/B (x)	0.3	0.3	0.3	0.3
ROE (%)	1.3	0.9	1.1	3.2
Div yield (%)	0.1	0.0	0.0	0.0



Source: Bloomberg, KB Securities Vietnam

Investment opinion & risks



Base-case scenario: catalysts

- 1) Brent prices above USD55 in 2021E
- 2) Jack up day rates at USD65,000
- 3) Tender Assisted Rigs in 2H21

Bull-case scenario: upside risk

- 1) Brent prices above USD55 in 2020E
- 2) Jack up day rates above USD70,000
- 3) Tender Assisted Rigs before 2H21

Bear-case scenario: downside risk

- 1) Coronavirus second wave
- 2) Jack up day rates below USD65,000
- 3) Tender Assisted Rigs after 2H21

Revised earnings estimates

(VNDbn, %)	Revised		Previous		Change	
	2020E	2021E	2020E	2021E	2020E	2021E
Revenue						
EBIT						
OP						
NP after MI						

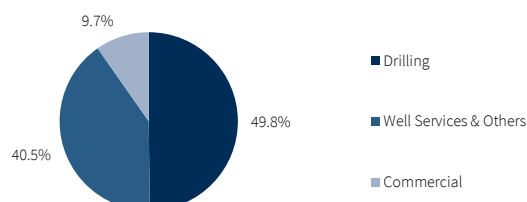
Source: Bloomberg, KB Securities Vietnam

KBSV estimate vs consensus

(VNDbn, %)	KBSV estimates		Consensus		Difference	
	2020E	2021E	2020E	2021E	2020E	2021E
Revenue	5,029	5,709	204	206	2,361.2	2,666.8
EBIT	118	135	162	336	(27.0)	(59.7)
OP	54	42	150	221	(64.1)	(80.8)
NP after MI	132	165	107	120	23.7	37.6

Source: Bloomberg, KB Securities Vietnam

Revenue composition (2019)



Source: Company reports, KB Securities Vietnam

Peer group comparison

(USDbn, x, %)	Mkt Cap	12m fwd P/E	3y EPS CAGR	12m fwd ROE	12m fwd P/B
PVD VN	0.2	21.9	13.8	0.9	0.3
GAS VN	5.3	14.3	-5.7	17.6	2.4
PLX VN	2.2	19.8	0.0	11.8	1.9
PVS VN	0.2	6.5	-7.5	6.6	0.4
BSR VN	0.8	-6.7	-18.7	2.1	0.6
PVT VN	0.1	5.4	-6.9	9.4	0.4

Source: Bloomberg, KB Securities Vietnam

Headline 2Q earnings down 44% YoY but up 27% YoY excluding last year's one-off due to higher jackup days rates and steady utilization

Preliminary headline 2Q earnings were VND61 billion or down 44% YoY but were up 27% YoY excluding last year's one-off on the still vibrant drilling market in Malaysia. Based on our estimates, we believe 2Q earnings benefitted from: 1) 2% QoQ increase in average jackup day rates vs 1Q's 3% QoQ rise (up 10% YoY in 2Q and up 9% YoY in 1Q); and 2) still high utilization at 86% vs 1Q's 97%. PVD recognized one-offs last year after reversing VND60 billion in Malaysian holding taxes. 1H earnings were VND85 billion or up 286% YoY.

Expecting softer earnings in 2H as Malaysian drilling projects are pushed back to 2021E

Conditions in 1H's Malaysian drilling market are unlikely to continue into 2H and management has already warned that several drilling projects will be pushed back to 2021E. We estimate 3Q earnings at VND31 billion or up 14% YoY but down 49% QoQ and 4Q earnings at VND27 billion or down 14% YoY and down a further 13% QoQ due to these delays. We estimate that Malaysia's production cuts will drop PVD's utilization ratio to 77% from 89% at the start of the year.

We expect a 36.7% CAGR between 2020E–2025E driven by the TAD rig (Tender-Assisted Drilling)

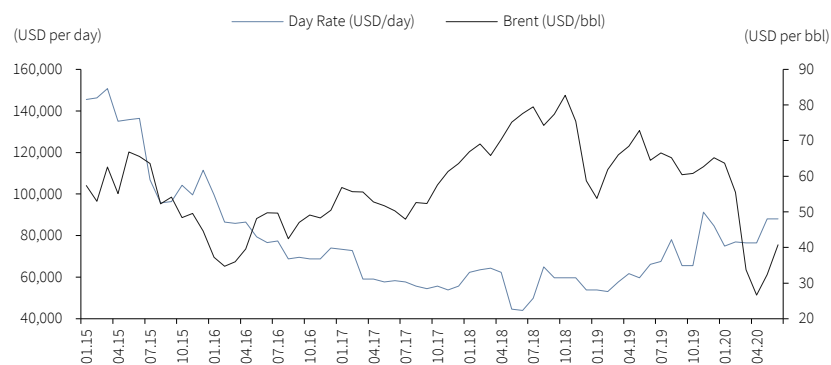
Our forecasts generate a CAGR of 36.7% between 2020E to 2025E. We expect PVD's average jackup drilling day rates to remain flat at about USD65,000 into 2021E as depressed oil prices force many E&P companies to cut capital expenditure budgets. Jobs from Malaysian operators – some of PVD's largest clients – are down after the country agreed to May's extension of OPEC+ production cuts. Moreover, PVD will need to find new drilling contracts for the jackup rigs as most contracts will end by the 2H of 2021E even after factoring in projects that have been pushed back to 2021E. The company may need to rely on the 6-year contract (4-year contract plus 2-year option) with Brunei Shell Petroleum for the TAD rig (Tender-Assisted Drilling) until new drilling contracts are announced.

Table 1. PV Drilling & Well Services (PVD) – Jackup & Tender Assisted Rig (TAD) Projects, Jan 20–Dec 21E

Names	Types	2020E												2021E											
		1Q			2Q			3Q			4Q			1Q			2Q			3Q			4Q		
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
PVD I	Jackup	Hibicus												No official plan											
PVD II	Jackup	Petronas						Not announced						Petronas			No official plan								
PVD III	Jackup	Repsol					Cambodia							Kris Energy & Repsol						No official plan					
PVD VI	Jackup	Sapura			Rosneft									No official plan											
TAD	TAD	Idle																		Brunei Shell Petroleum					

Source: Company reports & KB Securities Vietnam

Fig 1. PV Drilling & Well Services (PVD) – Southeast Asia jackup drilling day rates, Jan 15–Jun 20 (USD per day, USD per barrel)



Source: IHS Markit, KB Securities Vietnam

PV Drilling & Well Services (PVD) – Discounted cash flow model

DCF VALUATION												
Terminal value (VND in billions)						Terminal value (US\$ in millions)						
	4,557	6,076	7,595	9,114	10,633		197	262	328	393	459	
Present value of firm						Present value of firm						
WACC	3.0x	4.0x	5.0x	6.0x	7.0x		3.0x	4.0x	5.0x	6.0x	7.0x	
14.0%	5,487	6,276	7,065	7,854	8,642		235	269	303	337	371	
15.0%	5,386	6,141	6,896	7,651	8,406		230	263	295	328	361	
16.0%	5,290	6,013	6,736	7,459	8,183		226	257	289	320	351	
17.0%	5,199	5,891	6,584	7,277	7,970		222	252	282	312	342	
18.0%	5,112	5,776	6,440	7,104	7,768		218	247	276	304	333	
Present value of equity per share						Present value of equity per share						
WACC	3.0x	4.0x	5.0x	6.0x	7.0x		3.0x	4.0x	5.0x	6.0x	7.0x	
14.0%	6,700	8,500	10,400	12,300	14,200		0.30	0.40	0.40	0.50	0.60	
15.0%	6,400	8,200	10,000	11,800	13,600		0.30	0.30	0.40	0.50	0.60	
16.0%	6,200	7,900	9,600	11,400	13,100		0.30	0.30	0.40	0.50	0.60	
17.0%	6,000	7,600	9,300	10,900	12,600		0.30	0.30	0.40	0.50	0.50	
18.0%	5,800	7,400	8,900	10,500	12,100		0.20	0.30	0.40	0.40	0.50	
Projected Unlevered Free Cash Flows (VNDbn)												
2014A	2015A	2016A	2017A	2018A	2019A	2020E	2021E	2022E	2023E	2024E	2025E	
EBIT	2,939	2,146	161	-396	100	37	118	135	498	486	591	650
Taxes on EBIT @ 20.0%	588	429	32	-79	20	7	24	27	100	97	118	130
Earnings before interest	2,351	1,717	129	-317	80	29	95	108	398	388	473	520
Depreciation & provisions	1,162	1,643	921	791	501	576	587	788	970	1,021	997	966
(Profit)/loss from investing	-387	-372	-231	-143	-163	-223	-145	-154	-167	-180	-194	-210
Other adj for oper activities	-180	-1	-462	-707	-154	-153	88	139	220	226	238	242
Cash flow from operations	2,946	2,987	356	-376	263	229	625	881	1,421	1,456	1,513	1,519
Change in working capital	113	-252	641	139	-193	-450	269	-141	-21	-13	-14	-9
Capital expenditures	-1,801	-4,418	-635	-55	-163	-44	-651	-336	-212	-200	-187	-174
Decrease in investments	342	16	-6	64	-27	-63	-52	-56	-61	-65	-71	-76
Unlevered free cash flow	1,599	-1,667	356	-228	-119	-328	191	347	1,127	1,177	1,242	1,259
Forecasted exchange rate	21,388	22,445	22,761	22,698	23,175	23,173	23,266	23,359	23,453	23,547	23,641	23,736
Unlevered FCF (US\$mn)	75	-74	16	-10	-5	-14	8	15	48	50	53	53
Firm Value Calculations												
WACC	16.0%	PV of future cash flows (VNDbn)				3,120	2020E Total debt (VNDbn)				4,521	
DCF period	5 Yrs	PV of terminal value (VNDbn)				3,616	2020E Cash (VNDbn)				1,846	
Terminal EBITDA (VNDbn)	1,519	PV of Firm (VNDbn)				6,736	Terminal value as % of firm value				53.7%	
Terminal multiple (x)	5.0x	Current exchange rate (VND)				23,180	Current shares outstanding (mn)				421.5	
Cost Of Capital Calculations												
WACC	16.0%	Re-levered beta				1.693	Risk free rate				3.0%	
Cost of equity	18.1%	Debt beta				0.449	Market risk premium				8.9%	
Cost of debt	7.0%	Unlevered beta				1.459	Target gearing				20.0%	
		Statutory corporate tax rate				20.0%	Debt premium				4.0%	
Memorandum (VNDbn, US\$mn)												
2014A	2015A	2016A	2017A	2018A	2019A	2020E	2021E	2022E	2023E	2024E	2025E	
Discount Factor	0.00	0.00	0.00	0.00	0.00	0.00	1.08	1.25	1.45	1.68	1.95	2.27
Present value in VND	0	0	0	0	0	0	177	277	776	699	636	555
Present value in US\$	0	0	0	0	0	0	8	12	33	30	27	23

Source: Company reports, KB Securities Vietnam

Source: Company reports, KB Securities Vietnam

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Investment ratings & definitions

Investment Ratings for Stocks

(based on expectations for absolute price gains over the next 6 months)

Buy:	Hold:	Sell:
+15% or more	+15% to –15%	–15% or more

Investment Ratings for Sectors

(based on expectations for absolute price gains over the next 6 months)

Positive:	Neutral:	Negative:
Outperform the market	Perform in line with the market	Underperform the market

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