

Petrolimex (PLX)

Turnaround underway

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

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

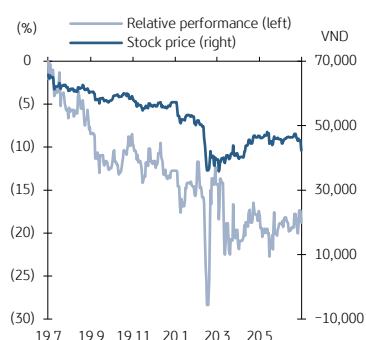
Target Price	VND57,800
Total return (%)	40.4%
Current price (Jul 27)	VND42,250
Consensus target price	VND48,400
Mkt capitalization (USDbn)	USD2,358mn

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

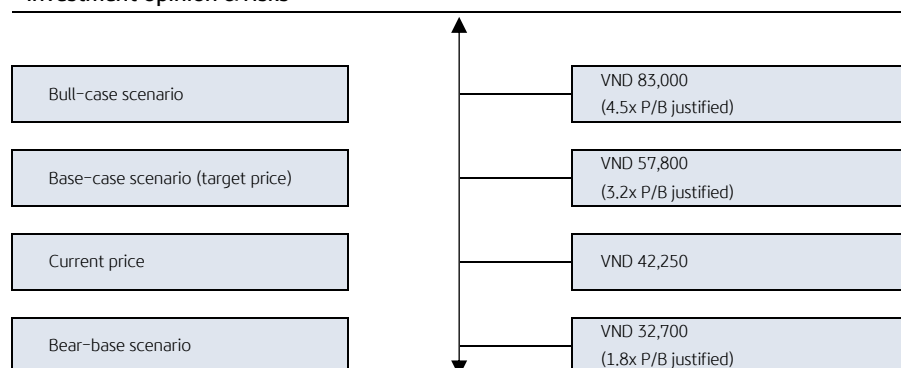
Forecast earnings & valuation

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)	3,215	481	3,180	4,251
EPS growth (%)	10.9	(85.0)	na	35.7
P/E (x)	13.1	87.8	13.3	9.9
EV/EBITDA (x)	9.5	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 (%)	7.5	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						

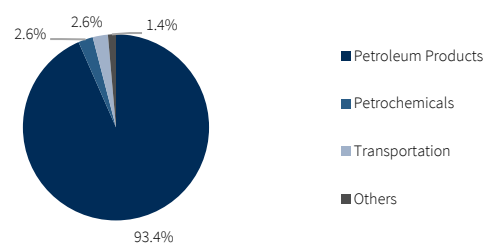
Source: Bloomberg, KB Securities Vietnam

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 Cap	12m fwd P/E	3y EPS CAGR	12m fwd ROE	12m fwd 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

Turnaround underway

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

Line item	Notation		Notes
Cost of equity	k_E	11.2%	$r_f + (B_E * m)$
Re-levered beta	B_E	0.926	$B_A(1 + ((1-t)*D/E))$
Unlevered beta	B_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
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	
Total return		40.4%	
Target price (VND)		57,800	
Dividend per share (VND)		1,500	

Source: KB Securities Vietnam

Our 12-month target price set to mid-cycle price objective vs fully-growth loaded valuation

Our valuation is based on the three-stage dividend discount model (DDM) that utilizes the capital asset pricing model (CAPM) to determine an appropriate discount rate for projected cash dividends/stock buybacks for individual stocks. 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 is 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

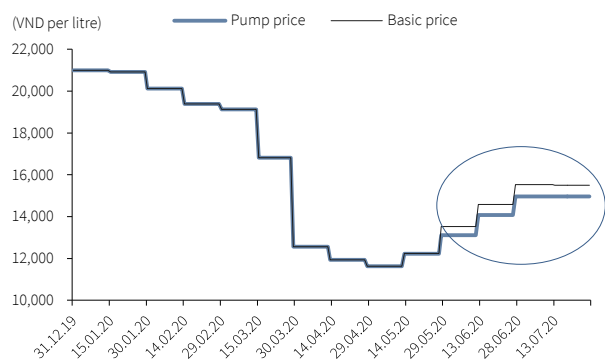
2Q earnings down 72% YoY despite reversing 90% of 1Q's inventory provision

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

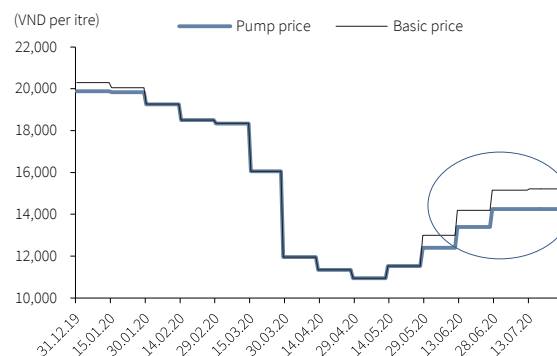
Further normalization of operations should allow higher retail pump prices to restore earnings in 3Q/4Q. We expect 3Q earnings of VND1,159 billion or up 231% QoQ (up 4% YoY) and 4Q earnings of VND1,082 billion or down a modest 2% QoQ (but up 23% YoY). We also assume PLX will reverse its remaining VND159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



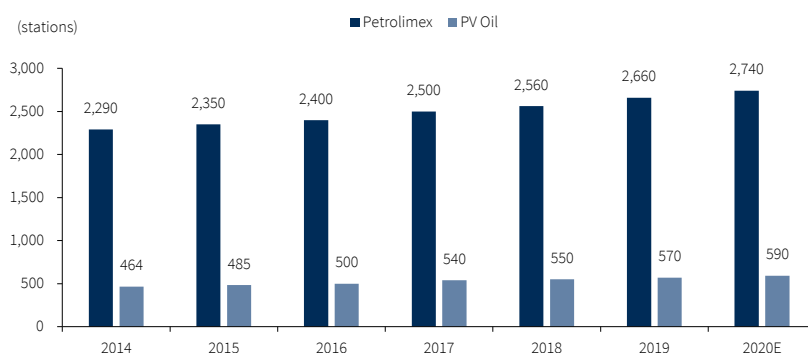
Source: Company reports, KB Securities Vietnam

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



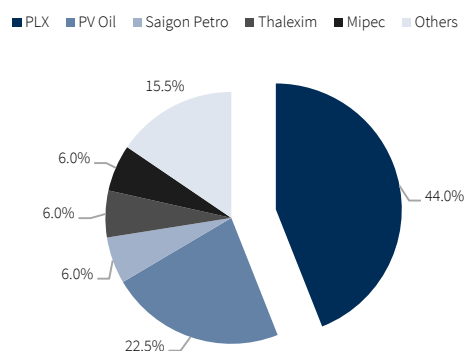
Source: Company reports, KB Securities Vietnam

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



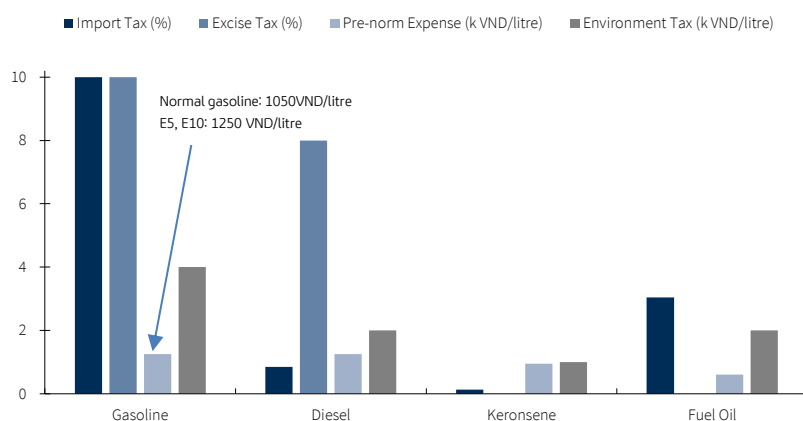
COCO = Company Owned-Company Operated
 Source: Company reports, KB Securities Vietnam

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.

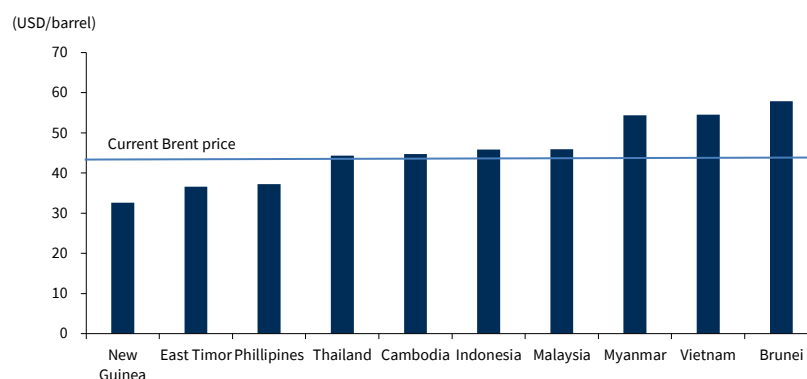
Any increase in the basic price above 7% is regulated by the government to set the retail price in order to control inflation

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 6. 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 3. 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 4. Vietnam oil & gas – Natural gas production & consumption forecasts, 2019–2030E (billion cubic metres, years)

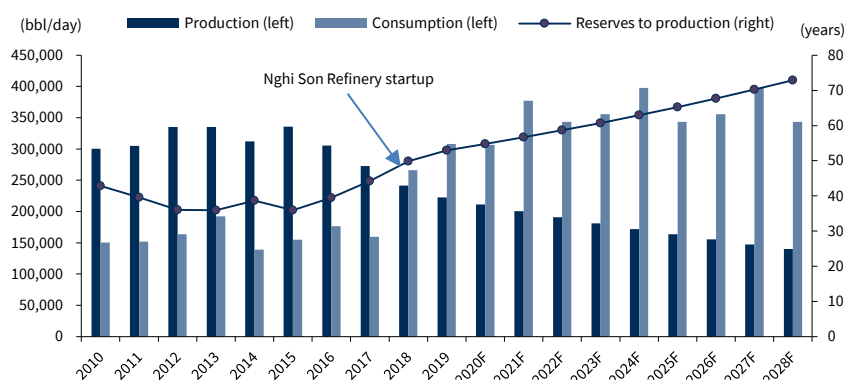
Metrics/Year	19	20E	21E	22E	23E	24E	25E	26E	27E	28E	29E	30E
Production (bcm)	10.3	10.1	10.5	11.4	12.6	19.9	25.8	29.3	30.1	29.6	29.1	28.5
Consumption (bcm)	10.3	10.1	14.3	18.3	19.5	26.8	39.6	57.1	59.4	60.2	61.1	66.6
Proven reserves (bcm)	718.0	707.9	697.4	686.0	673.4	653.5	627.8	598.5	568.4	538.8	509.7	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 7. 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.

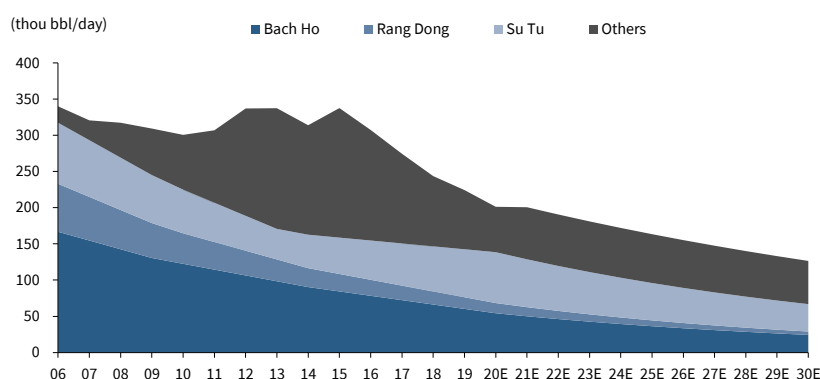
Other fields: Vietnam's other major fields generate about 62.7 thousand barrels per day or 31% of total output. Major fields include *Dai Hung*, *Hong Ngoc* (Ruby) and *Te Giac Trang* (White Rhino) that have been producing for more than 20 years. *Dai Hung* is located in the *Nam Con Son* basin off the 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 5. 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 8. 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 9. 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

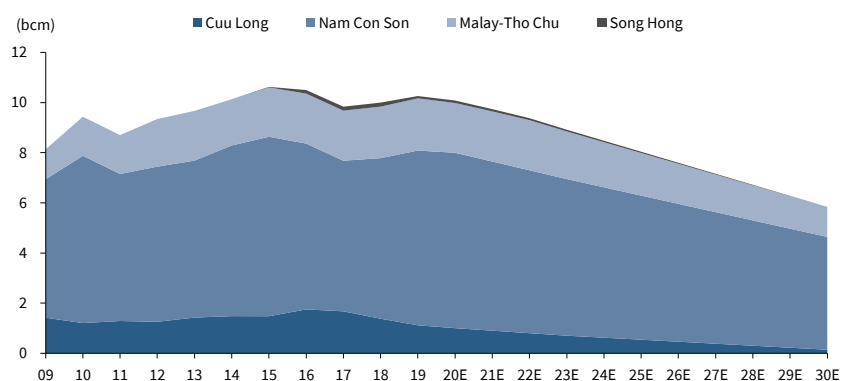
Vietnam's existing gas fields are also witnessing a similar situation of falling production volumes after peaking in 2018. We estimate that Vietnam's gas output could drop by almost half to 5.8 billion cubic metres from 10.1 billion cubic metres now by 2030E if no new major gas fields come online. Growing 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 6. 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 10. Vietnam oil & gas – Natural gas production by basin (assuming no new fields), 2019–2030E (billions of cubic metres)



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

But the situation changes dramatically if the mega projects are approved

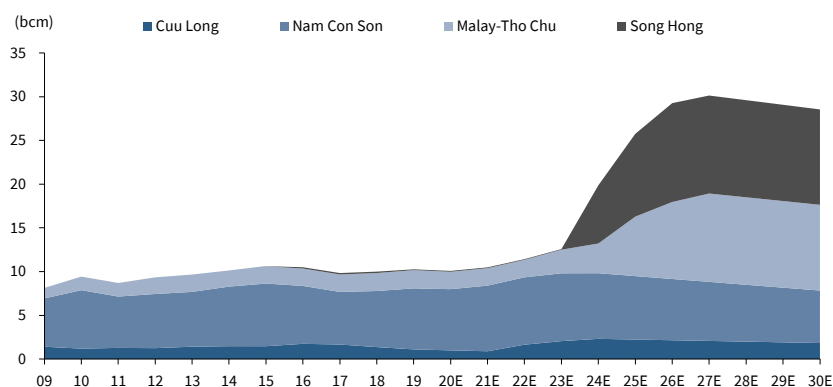
The *Ca Voi Xanh (Blue Whale)* & *Block B* mega projects are pending approval and the addition of these fields could almost triple natural gas production volumes to 28.5 billion cubic metres by the end of our forecast period in 2030E. The potential size of these projects are massive and could start another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

Table 7. 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 11. 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 8. 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

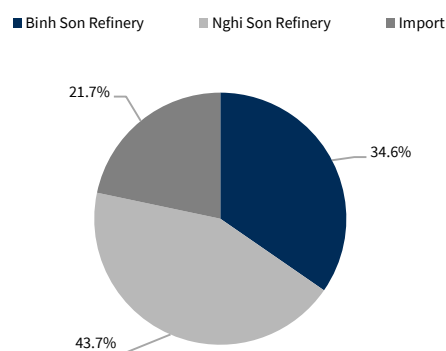
Downstream segments remain the bright spots in Vietnam's oil & gas industry

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

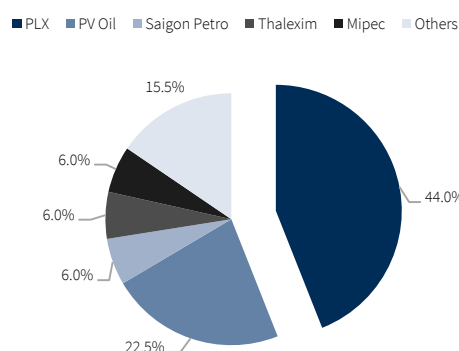


Source: Company reports, KB Securities Vietnam

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 Mipecc the military gas station network operating in the northern region.

Fig 13. Vietnam oil & gas – Retail gasoline market share, 2020E (%)

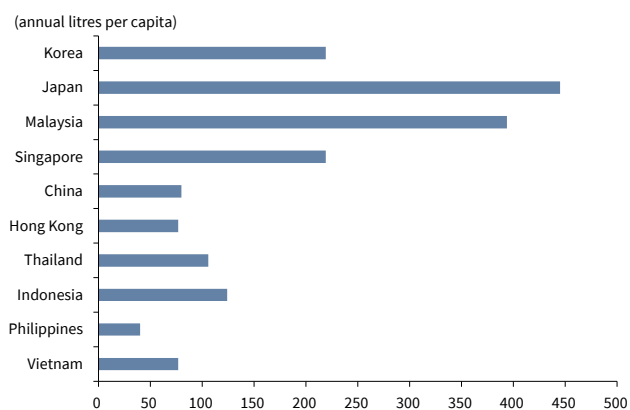


Source: Company reports, KB Securities Vietnam

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

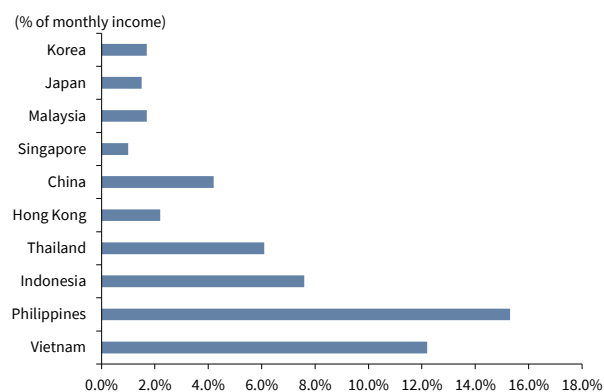
Vietnam’s annual per-capita consumption of gasoline was only 77 litres in 2019 compared to Thailand’s 106 litres and Indonesia’s 124 litres. Part of this disparity can be explained by respective fuel costs between countries, with Vietnam requiring 12% of monthly pay to fill a 40-litre tank of gasoline 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 14. Asia oil & gas – Annual per-capita gasoline consumption by country, 2019 (annual litres per capita)



Source: Global Petrol Prices, KB Securities Vietnam

Fig 15. Asia oil & gas – Percent of monthly income to fill 40-litre tank of gasoline, 2019 (%)

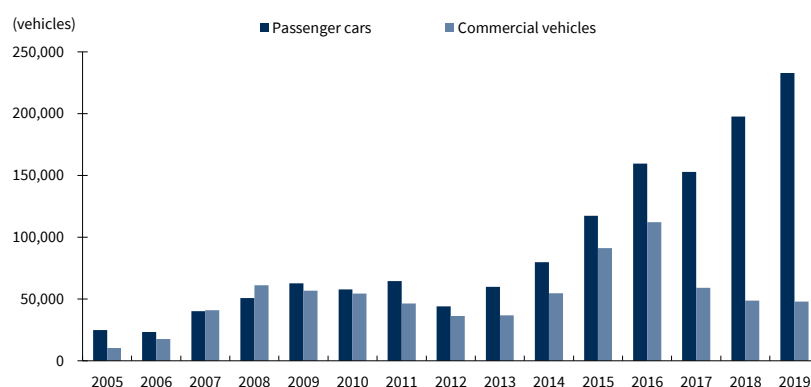


Source: Global Petrol Prices, KB Securities Vietnam

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

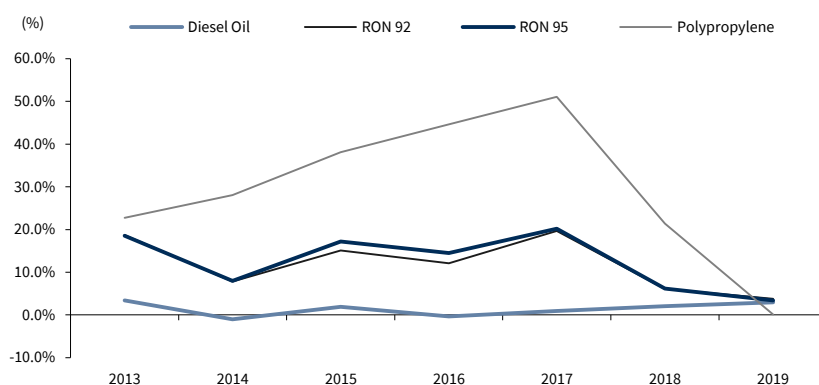
Location	Refinery name	Capacity (bbl/day)	Status	Startup date	Main owner	Note
Quang Ngai	Dung Quat	148,000	Active	2009	PetroVietnam (PVN)	Seeking expansion financing
Thanh Hoa	Nghi Son	200,000	Active	2018	PetroVietnam, Kuwait Petroleum, Idemitsu Kosan, Mitsui	
Ba Ria-Vung Tau	Long Son	na	Under construction	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 17. Binh Son Refinery (BSR) – Gross margin by refinery products, 2013–2019 (%)

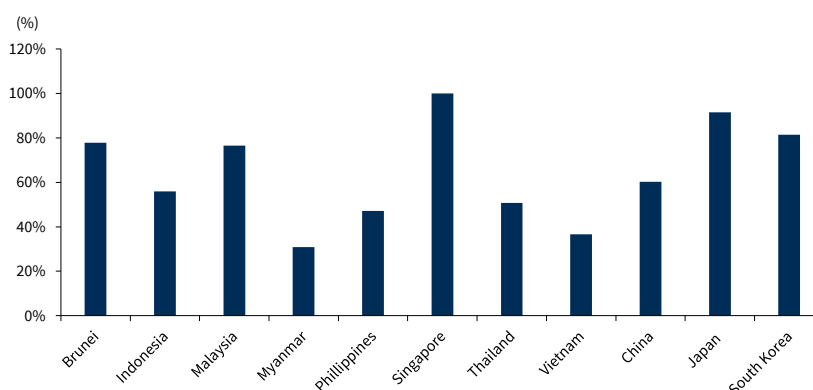


Source: Company reports, KB Securities Vietnam

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 18. Asia – Urbanization rate, 2019 (%)



Source: World Bank

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

Petrolimex (PLX) – Summarized financials & forecasts, 2019–2022E

Income statement					Balance sheet				
(VNDbn)	2019A	2020E	2021E	2022E	(VNDbn)	2019A	2020E	2021E	2022E
Net sales	189,604	131,940	177,889	190,342	Total assets	61,762	59,273	64,182	68,249
Cost of sales	175,434	122,269	163,303	174,289	Current assets	38,753	36,616	40,792	44,335
Gross Profit	14,169	9,672	14,587	16,053	Cash & equivalents	11,275	11,823	12,409	13,609
Financial income	1,004	956	977	980	ST investments	5,397	7,162	9,477	11,059
Financial expenses	966	1,046	1,022	1,041	Accounts receivable	8,344	8,628	8,403	8,991
of which: interest expenses	791	773	774	792	Inventory	11,773	7,502	8,928	8,991
Gain/(loss) from joint ventures	646	520	519	519	Other current assets	1,964	1,500	1,575	1,686
Selling expenses	8,702	8,143	8,894	8,565	Long-term assets	23,010	22,656	23,390	23,914
General & admin expenses	640	534	717	609	LT trade receivables	23	38	53	56
Operating profit/(loss)	5,511	1,424	5,450	7,336	Fixed assets	15,406	15,439	15,464	15,936
Other income	202	222	372	398	Investment properties	190	199	209	220
Other expense	65	118	177	190	LT incomplete assets	990	698	415	216
Net other income/(expenses)	136	103	195	208	LT investments	3,887	3,867	3,867	3,867
Pretax profit/(loss)	5,648	1,527	5,644	7,544	Goodwill	0	0	0	0
Income tax	971	692	1,072	1,453	Other LT assets	2,514	2,416	3,382	3,619
Net profit/(loss)	4,677	835	4,572	6,111	Liabilities	35,839	35,593	38,931	40,745
Minority interests	519	212	457	611	Current liabilities	34,173	33,432	35,105	35,976
Net profit after MI	4,158	623	4,115	5,500	Trade accounts payable	17,031	12,379	13,654	14,610
					Advances from customers	162	263	368	393
					ST borrowings	13,953	14,742	14,742	14,742
					Special reserves	1,433	2,297	2,297	2,297
					Other current liabilities	1,593	3,751	4,044	3,933
					Long-term liabilities	1,666	2,161	3,827	4,770
					LT payables	28	75	105	112
					LT borrowings	1,445	1,845	3,432	4,399
					Other LT liabilities	193	242	290	258
					Shareholders' equity	25,923	23,680	25,251	27,503
					Paid-in capital	12,939	12,939	12,939	12,939
					Share premium	3,926	4,455	4,455	4,455
					Treasury stock	(1,031)	(881)	(881)	(881)
					Undistributed earnings	4,852	2,888	4,458	6,711
					Reserve & others	1,252	8	8	8
					Minority interests	2,887	3,170	3,170	3,170
					Total liabilities & equity	61,762	59,273	64,182	68,249
Operating ratios					Key ratios				
(%)	2019A	2020E	2021E	2022E	(x, %, VND)	2019A	2020E	2021E	2022E
Revenue growth	(1.2)	(30.4)	34.8	7.0	Valuations				
EBIT growth	0.8	(79.4)	400.3	38.2	P/E	13.1	87.8	13.3	9.9
EBITDA growth	(16.9)	(55.0)	156.3	22.2	P/E diluted	11.2	73.3	11.0	8.2
NP after MI growth	10.9	(85.0)	nm	33.7	P/B	2.1	2.3	2.2	2.0
Gross profit margin	7.5	7.3	8.2	8.4	P/S	0.3	0.4	0.3	0.3
EBITDA margin	3.3	2.2	4.1	4.7	EV/EBITDA	8.7	19.2	7.5	6.1
EBIT margin	2.5	0.8	2.8	3.6	EV/EBIT	11.3	55.0	11.0	7.9
Pre-tax profit margin	3.0	1.2	3.2	4.0	Dividend yield, ordinary (%)	7.3	3.6	6.6	8.5
Net profit margin	2.2	0.5	2.3	2.9	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

KB SECURITIES VIETNAM RESEARCH

Head of Research – Nguyen Xuan Binh

binhnx@kbsec.com.vn

Macro/Strategy

Head of Macro & Strategy – Tran Duc Anh

anhtd@kbsec.com.vn

Macro Analyst – Thai Thi Viet Trinh

trinhhtt@kbsec.com.vn

Market Strategist – Le Anh Tung

tungla@kbsec.com.vn

Equity (Hanoi)

Head of Equity Research (Hanoi) – Duong Duc Hieu

hieudd@kbsec.com.vn

Information Technology & Logistics Analyst – Nguyen Anh Tung

tungna@kbsec.com.vn

Property Analyst – Pham Hoang Bao Nga

ngaphb@kbsec.com.vn

Power & Construction Material Analyst – Le Thanh Cong

congltt@kbsec.com.vn

Financials Analyst – Nguyen Thi Thu Huyen

huyenntt@kbsec.com.vn

Equity (Ho Chi Minh)

Head of Equity Research (Ho Chi Minh) – Harrison Kim

harrison.kim@kbf.com

Consumer & Retailing Analyst – Dao Phuc Phuong Dung

dungdpp@kbsec.com.vn

Fisheries & Pharmaceuticals Analyst – Nguyen Thanh Danh

danhnt@kbsec.com.vn

Oil & Gas & Chemicals Analyst – Nguyen Vinh

vinhn@kbsec.com.vn

Research Marketing

Korea Marketing Analyst – Seon Yeong Shin

shin.sy@kbsec.com.vn

KB SECURITIES VIETNAM (KBSV)

Head Office:

Levels G, 2 & 7, Sky City Tower, 88 Lang Ha Street, Dong Da District, Hanoi, Vietnam
Tel: (+84) 24 7303 5333 – Fax: (+84) 24 3776 5928

Hanoi Branch:

Level 1, VP Building, 5 Dien Bien Phu, Ba Dinh District, Hanoi, Vietnam
Tel: (+84) 24 7305 3335 – Fax: (+84) 24 3822 3131

Ho Chi Minh Branch:

Level 2, TNR Tower Nguyen Cong Tru, 180-192 Nguyen Cong Tru Street, District 1, HCMC, Vietnam
Tel: (+84) 28 7303 5333 – Fax: (+84) 28 3914 1969

Saigon Branch:

Level 1, Saigon Trade Center, 37 Ton Duc Thang, Ben Nghe Ward, District 1, HCMC, Vietnam
Tel: (+84) 28 7306 3338 – Fax: (+84) 28 3910 1611

CONTACT INFORMATION

Institutional Client Center: (+84) 28 7303 5333 – Ext: 2656
Private Customer Care Center: (+84) 24 7303 5333 – Ext: 2276
Email: ccc@kbsec.com.vn
Website: www.kbsec.com.vn

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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