



# **OIL & GAS**

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# VIET NAM OIL AND GAS INDUSTRY

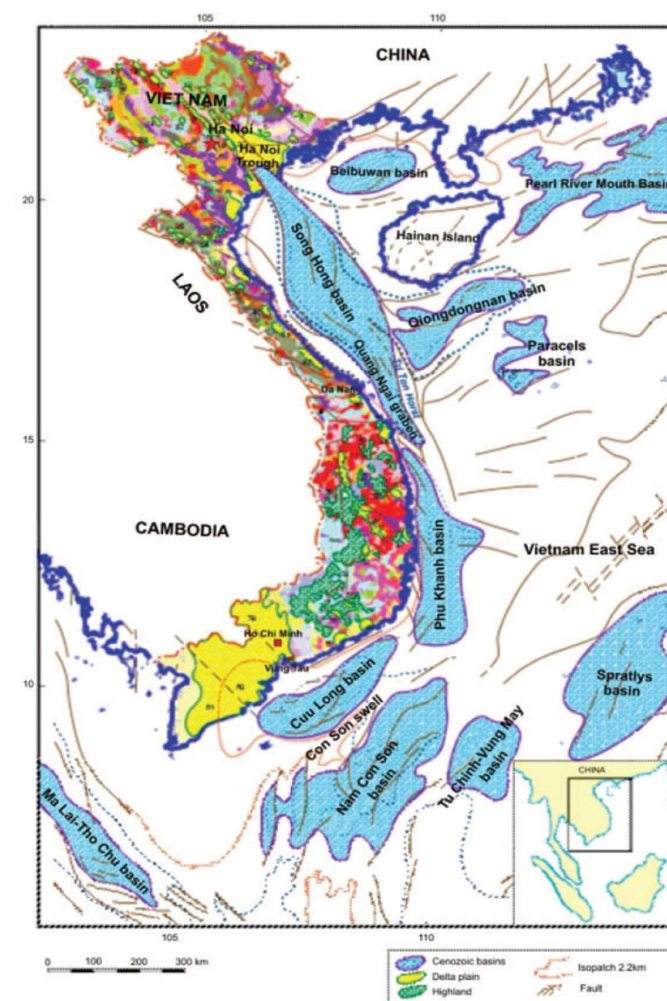
## Part I: Vietnam's Oil and Gas Industry Situation

### I. Potential of Vietnamese Oil and Gas industry

This industry has enormous potential in Vietnam. According to data from the oil and gas industry, Vietnam has the second-largest crude oil reserves in East Asia, at 4.4 billion barrels, just behind China. Natural gas reserves is 720 billion m3.

From the North to the South, Vietnamese petroleum potential is distributed among the following sedimentary basins: Song Hong - Phu Khanh - Cuu Long - Nam Con Son - Malai Tho Chu - Tu Chinh Vung May - Truong Sa. While the Cuu Long basins are explored and exploited for oil products, accounting for 80% of domestic production, the other basins produce mainly gaseous products.

Criteria	Unit	2015A	2016A	2017A	2018A	2019A	2020A	2021F	2022F	2023F	2024F	2025F
Oil reserves	mbbl	4,400	4,400	4,400	4,400	4,400	4,323	4,249	4,177	4,107	4,039	3,974
Reserves growth	%	0.0%	0.0%	0.0%	0.0%	0.0%	-1.8%	-1.7%	-1.7%	-1.7%	-1.7%	-1.6%
Oil production	tbpd	352	317	284	257	236	207	208.6	202.5	198.8	192.8	185.5
Reserve/Production	year	34	38	43	50	53	55	56	57	57	57	59
Natural gas reserves	bcm	710	720	720	720	720	708	699.2	682.5	670.5	647.6	630.7
Reserves growth	%	0%	1.4%	0.0%	0.0%	0.0%	-1.7%	-1.2%	-2.4%	-1.8%	-3.4%	-2.6%
Gas production	bcm	10.7	10.6	9.9	10.0	10.2	9.2	9.2	9.9	12.8	16.1	17.7
Reserve/Production	year	67	68	73	72	71	77	76	69	52	40	36



Source: MOIT, GSO, PVN, BP, FitchSolutions, MBS Research



# VIET NAM OIL AND GAS INDUSTRY



## Part I: Vietnam's Oil and Gas Industry Situation

### II. Exploitation – Consumption situation

#### Upstream

Crude oil production has declined recently, due to the decrease in reserves in exploited mines. Besides, difficulties in capital have slowed down exploration and exploitation investment.

The development potential of the gas industry becomes more promising as the demand for clean fuel increases. Investments in developing gas exploitation projects achieved great outcomes with Block B and Ca Voi Xanh projects and the discovery of Ken Bau gas in 2020.

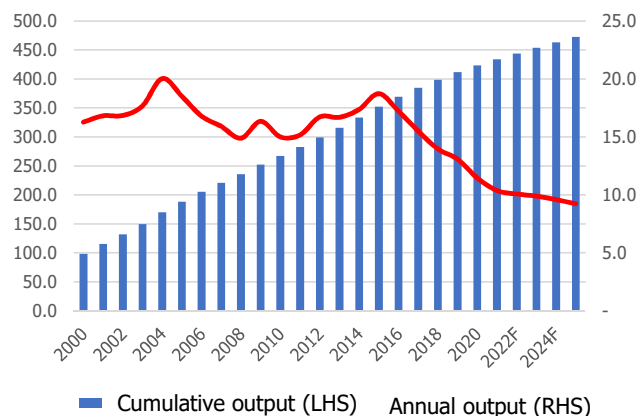
Vietnam has been imported crude oil since 2016. When the Nghi Son Refinery and Petrochemical came into operation in 2018, the volume of imported crude oil increased rapidly, outstripping the export volume.

#### Middle and Downstream

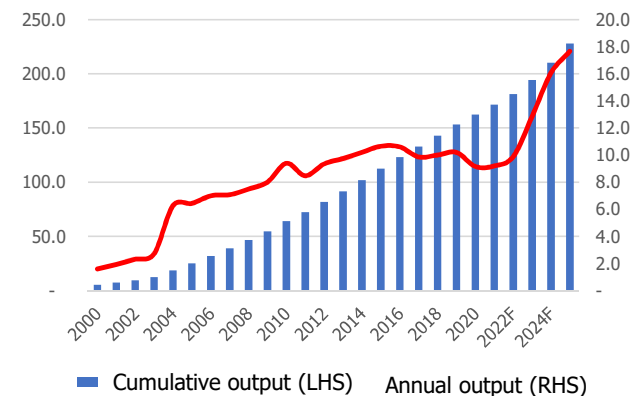
Vietnam's oil refining activities have been carried out since 2010 after the construction Dung Quat oil refinery, the first factory with a capacity of 6.5 million tons/year.

Long Son Petrochemical Plant is being invested and will put into operation by the end of 2022, with a capacity of 3 million tons of petrochemical products.

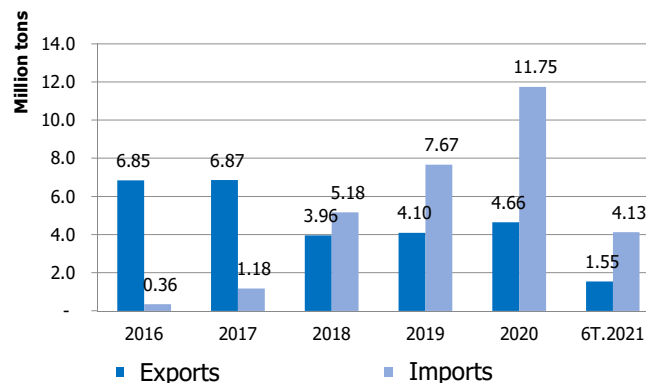
Crude oil exploitation of Vietnam (million tons)



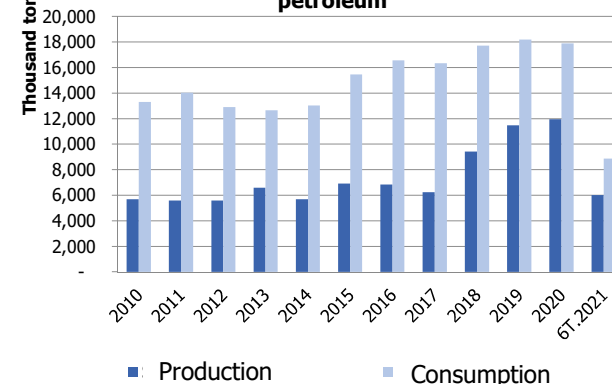
Natural gas exploitation of Vietnam (billion m3)



Import and export crude oil output of Vietnam



Domestic production and consumption of petroleum



Source: MOIT, GSO, PVN, FitchSolutions, MBS Research

# VIET NAM OIL AND GAS INDUSTRY



## Part I: Vietnam’s Oil and Gas Industry Situation

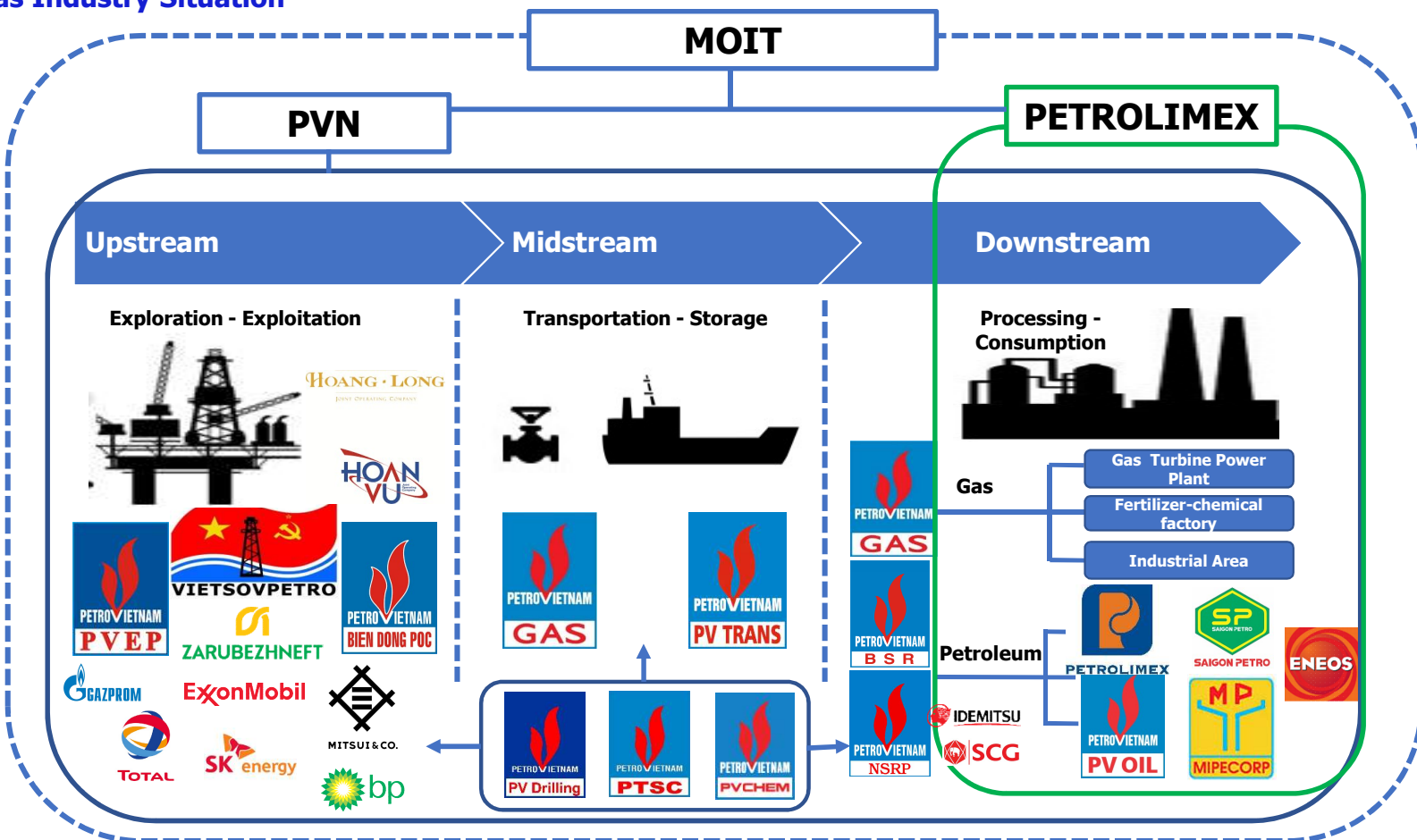
### III. Organizational structure

MOIT manages Vietnam’s Oil & Gas industry through major units, including Vietnam Oil & Gas Group – PVN and Vietnam National Petroleum Group - PETROLIMEX

PVN operates directly and indirectly through subsidiaries and associates at all Upstream - Midstream - Downstream value chain stages.

PETROLIMEX is primarily involved in the downstream stage, including import - export, distribution and retailing of refined and petrochemical products such as gasoline, jet fuel, and other petrochemical products.

Foreign oil contractors participate in the oil and gas value chain, especially in exploration and production through Joint Venture Company (JOC), Product Sharing Contract (PSC)



Source: MOIT, PVN, PETROLIMEX, MBS Research

## Part I: Vietnam's Oil and Gas Industry Situation

### IV. Industry Legal

**The following documents govern the legal framework for the oil and gas industry's activities:**

- Vietnam Oil and Gas Law (1993); Law amending and supplementing several articles of the Law on Petroleum (2008);
- Circular 32/2009/TT-BTC dated February 19, 2009 guiding the implementation of tax regulations for organizations and individuals conducting oil and gas exploration and exploitation activities following the Law Oil and Gas;
- Decree No. 95/2015/ND-CP dated October 16, 2015 detailing several articles of the Petroleum Law;
- Decree 84/2009/ND-CP dated October 15, 2009 of the Government on petrol and oil commerce in Vietnam;
- Decision No 1748/QD-TTg, October 14, 2015 of the Prime Minister approving the Strategy on Development of the Oil and Gas Industry of Vietnam to 2025 and orientation to 2035;
- Decision No 1749/QD-TTg October 14, 2015 of the Prime Minister approving the development strategy of the Vietnam Oil and Gas Group to 2025 and orientation to 2035;
- Decision 12119/QD-BCT in 2015 approving the Restructuring Project of Vietnam's Oil and Gas Industry to serve the industrialization, modernization and sustainable development in the period to 2020, with a vision to 2030, promulgated by the Minister of Industry and Trade;
- Decision No. 60/QD-TTg dated January 16, 2017 of the Prime Minister approving the development strategy of Vietnam's gas industry to 2025, with orientation to 2035;



*Source: MBS Research*

## VIET NAM OIL AND GAS INDUSTRY



### Part I: Vietnam's Oil and Gas Industry Situation

#### V. Business results of PVN

Criteria	Unit	2017	2018	2019	2020	2021		
						Target	6M completion	% Target
<b>Increase oil reserves</b>	Million tons	4.00	12.00	13.38	15	15	na	na
<b>Extracted oil output</b>	Million tons	15.50	14.00	13.11	11.47	9.72	5.52	56.8%
<b>Exploited gas output</b>	Billion m3	9.90	10.00	10.21	9.16	9.76	4.22	43.2%
<b>Petroleum output</b>	Million tons	6.80	11.80	11.49	11.87	6.37	3.66	57.5%
<b>Power output</b>	Billion kwh	20.58	21.00	22.60	19.17	22.71	9.84	43.3%
<b>Protein output</b>	Million tons	1.65	1.63	1.58	1.80	1.62	0.79	48.7%
<b>Revenue</b>	Trillion VND	<b>267.2</b>	<b>320.9</b>	<b>396.9</b>	<b>566.0</b>	<b>490.7</b>	<b>299.3</b>	61.0%
<b>PBT</b>	Trillion VND	46.9	50.6	43.8	17.5	Na	21.3	Na
<b>PAT</b>	Trillion VND	<b>37.2</b>	<b>38.6</b>	35.2	Na	Na	Na	Na
<b>Budget submission</b>	Trillion VND	97.5	121.3	108.0	83.0	Na	45.2	

\*: - PVN built the 2021 target based on the scenario of Brent oil price of USD 45 /barrel, the USD/VND exchange rate of VND23,500.

- 2017-2019's revenue is taken according to the consolidated financial statements

Source: PVN, MBS Research

# VIET NAM OIL AND GAS INDUSTRY



## Part II: Growth prospect

### I. International Oil and Gas outlook

#### PRICE FLUCTUATION

Oil prices have rebounded and increased strongly since the beginning of the year, thanks to the surging potential for oil demand as North America and Europe reopened their economies, while OPEC+ continued to control oil supply tightly.

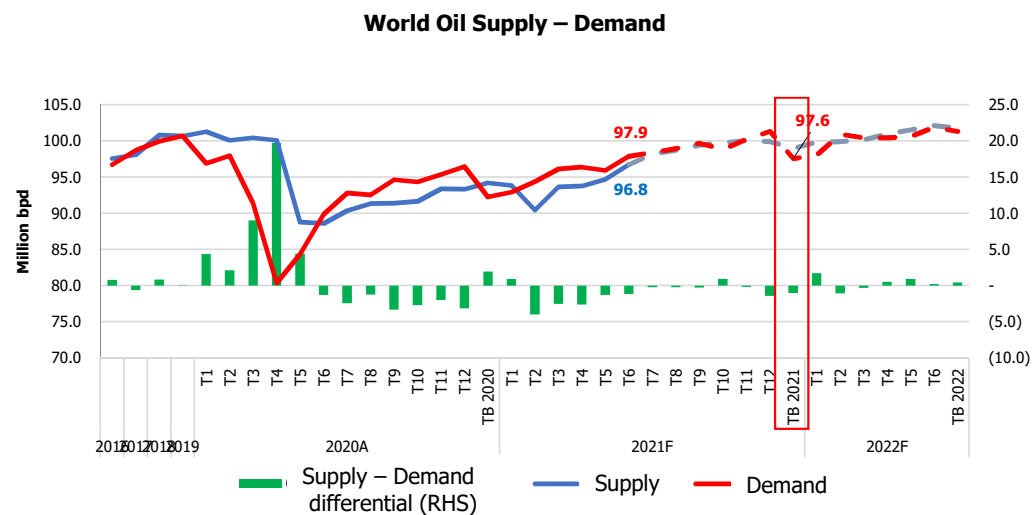
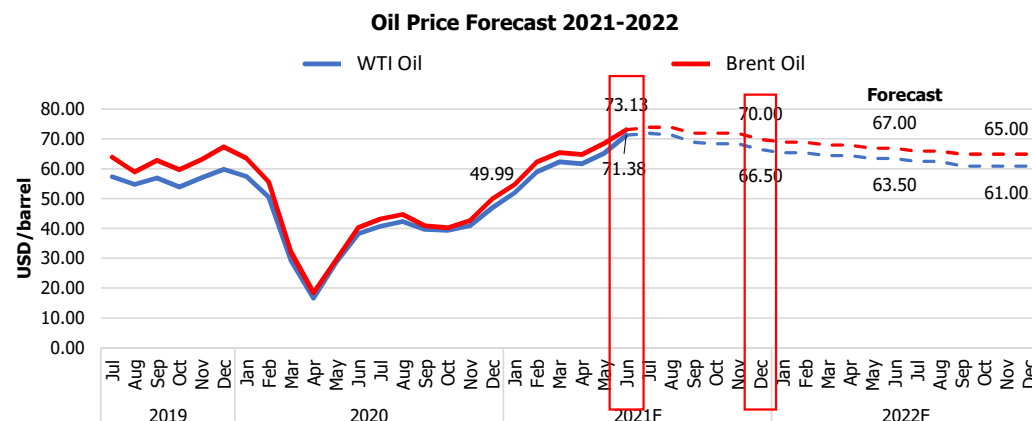
Oil prices are expected to gradually decrease in 2022, but remain at USD 65-70/ barrel with Brent oil.

#### DEMAND

Global oil consumption demand continues to rise enormously as the US and European countries promote Covid19 vaccination campaigns. In June, oil consumption reached 97.9 million bpd. According to EIA, demand will continue to increase through the 2H2021, reaching 101.4 million bpd in December 2021, bringing the full-year average to 97.61 million bpd, up 5.3 million bpd (5.7%) from the 2020 average. 2022's demand is expected to add about 3.6 million bpd (3.8%) compared to 2021.

#### SUPPLY

Supply was well controlled in 1H2021, oil production in June reached 96.75 million bpd. Supply is expected to increase in 2H2021 and 2022 after the OPEC+ agreed to raise oil output by 0.4 million bpd from August 2021 to September 2022.



Source: Bloomberg, EIA, MBS Research



## Part II: Growth prospect

### II. Vietnam's Oil and Gas industry development strategy

#### Oil and Gas industry development strategy

According to The development strategy of Vietnam's oil and gas industry to 2025 and orientation to 2035, issued together with Decision No. 1748/QĐ-TTg dated October 14, 2015 of the Prime Minister:

- About oil and gas exploration and exploitation: Promote domestic activities to increase reserves, efficiently exploit and promptly invest in existing mines; expand oil and gas exploration and production activities internationally.
- About oil and gas production: Focusing on processing to fully meet the domestic demand and developing the petrochemical sector;

No	Planned targets	Unit	Period	
			2016-2020	2021-2030
<b>I</b>	<b>Increase reserves</b>		<b>33-40</b>	<b>30-39</b>
	- Domestic	Tons of oil equivalent/year	25-30	20-28
	- Foreign		8-10	10-11
	<b>Total reserves increase</b>		<b>33-40</b>	<b>30-39</b>
<b>II</b>	<b>Exploiting</b>			
	Oil and condensate	Million tons	11-14	5-12
	Gas	Billion m3	11-14	15-21
	Total domestic exploitation	Million tons	22-28	20-33
	Total abroad exploitation	Million tons	3-7	7-8
	<b>Total exploitation</b>	Million tons/year	<b>25-35</b>	<b>27-41</b>
<b>III</b>	<b>Oil refinery</b>			
	Petroleum products			60-70% demand
	Petrochemical products			>50% demand

#### Gas industry development plan

The overall plan on developing Vietnam's gas industry to achieve the industry targets in the Strategy on Development of the Oil and Gas Industry in Vietnam to 2025 and orientation to 2035 has been approved by the Prime Minister.

No	Criteria	Unit	Period									
			2016-2020					2021-2025				
			2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<b>I</b>	<b>Exploiting- Importing gas</b>											
	Exploited output	Billion m3	10-11					13-19				
	Imported output	Billion m3						1-4				
	Actual output	Billion m3	10,7	9,8	10,0	10,2	9,2					
	Forecasted output	Billion m3						9,2	9,9	12,8	16,1	17,7
<b>II</b>	<b>Gas consumption</b>											
	Planned output	Billion m3	11-15					13-27				
	Actual output	Billion m3	10,7	9,8	10,0	10,2	9,2					
	Forecasted output	Billion m3						9,0	10,1	15,1	19,4	21,9
<b>III</b>	<b>Investment capital ( for collecting gas pipeline system, LNG warehouse and gas treatment plants)</b>											
	North	Billion usd						0,43				
	Middle	Billion usd						0,54				
	South East	Billion usd						6,12				
	Southwest	Billion usd						3,48				
	<b>Total</b>	Billion usd						<b>10,57</b>				

Source: MOIT, PVN, MBS Research

# VIET NAM OIL AND GAS INDUSTRY

## Part II: Growth prospect

### III . Demand for oil and gas

#### Demand for petroleum and petrochemicals

##### Petroleum products

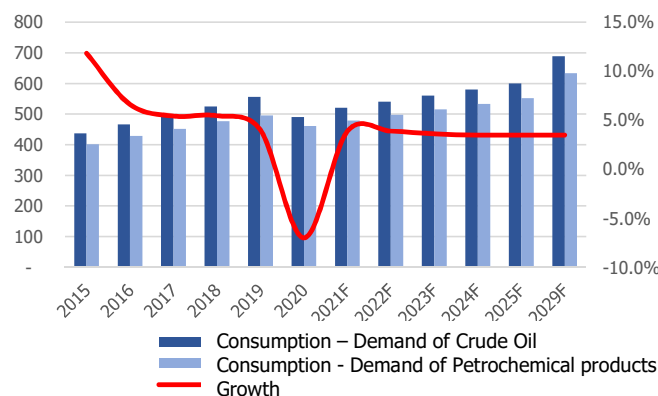
Vietnam's demand for petroleum in recent years has grown about 5-6%, reaching 19-20 million tons/year.

The 2020 – 2025 period is expected to grow at 4%-5% and continue to rise at 3.5% - 4% in 2025-2030

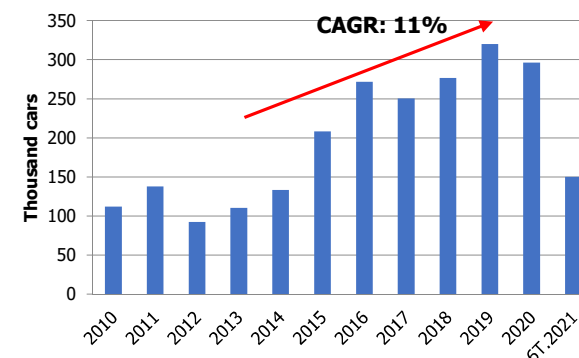
##### Petrochemicals products

With the plastic industry, Vietnam's yearly demand for plastic resins is 8.6-9.1 million tons. Meanwhile, domestically produced raw materials can only cover 20% - 25% of demand, leading to a huge amount of primary plastic materials importation from 5.5-6 million tons each year.

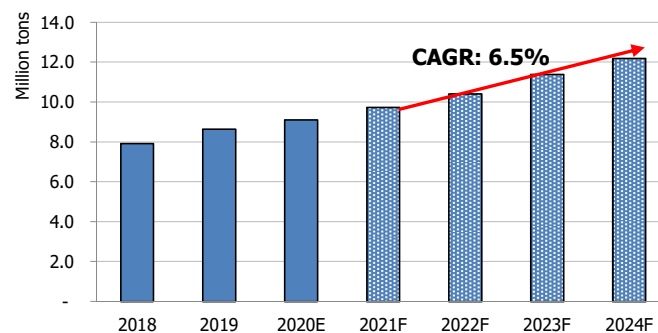
**Petrochemical products demand in Vietnam  
(thousand barrels/day)**



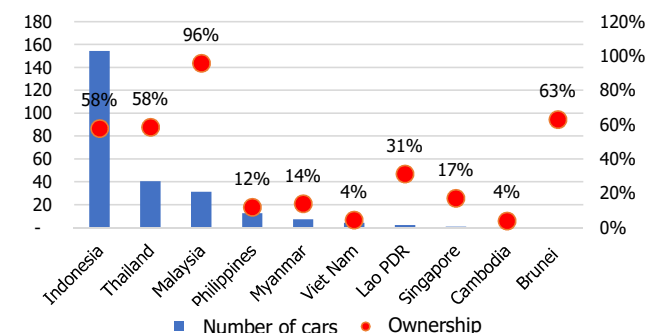
**Car sales in Vietnam market**



**Plastic products demand in Vietnam**



**Number of cars and ownership rate in ASEAN**



Source: MOIT, MOT, VAMA, DataAseanstate, MBS research

# VIET NAM OIL AND GAS INDUSTRY



## Part II: Growth prospect

### III . Demand for oil and gas

#### Gas demand

▪The gas demand in Vietnam is being boosted with the rise in electricity demand to satisfy economic growth and the trend of clean energy, reducing CO2 emission.

▪According to the Draft Power Plan 8, the total capacity of gas-fired power plants will reach 45 GW by 2030, 67 GW by 2045, accounting for 21% and 24% of the total system capacity.

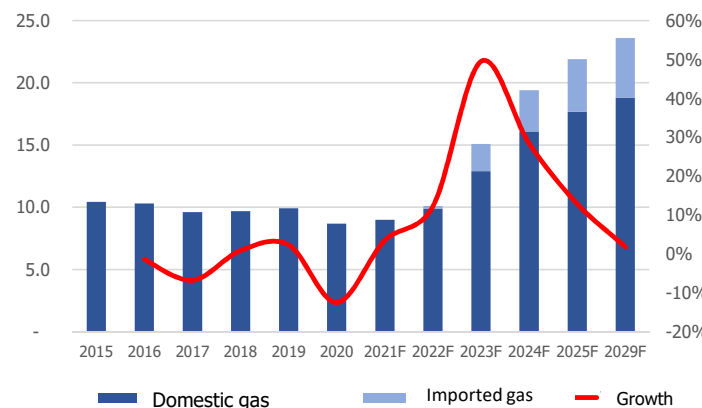
#### Imported LNG gas project

▪PVGAS is investing in the LNG Thi Vai terminal cluster project with the scale of phase 1 reaching 1 million tons/year, expected to be completed in 2Q2022. Phase 2 will have its capacity increased to 3 million tons/year by 2025.

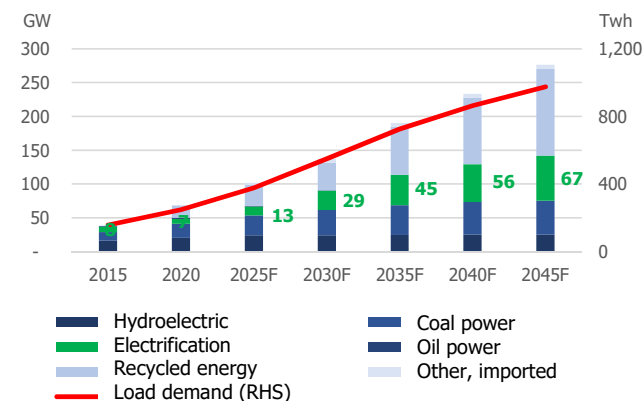
▪Son My LNG project, which has a Phase 1 capacity of 3.6 million tons per year and a total investment value of around USD 1.3 billion, is now preparing legal documentation. It is expected to be implemented in 2023-2026.

▪The tendency toward using clean energy sources for long-term development: 14 thermal power projects using liquefied natural gas (LNG) are applying for investment policy in 2020-2030 with a total capacity of 47,650 MW.

Consumption And Demand Of Natural Gas



Total Capacity And Power Output Based On Draft Power Plan VIII



Power - liquefied gas complex projects

No	Project	Investor	Electric Factory	Capacity (MW)
1	LNG Thi Vai Project	PVGAS-PVPOWER	NT3, 4 Power Plant: 1.500 MW	1,500
			Son My 1 Power Plant (3x750MW)	2,250
2	LNG Son My project	PVGAS-AES	Son My 2 Power Plant (3x750MW)	2,250
3	LNG Long An project	PVGAS-Vinacapital	LA1, LA2	3,000
4	LNG Hai Phong project	ExxonMobil	Tien Lang Industrial Zone, Hai Phong	4,500
			LNG Cap Trap, Hai Phong	1,600
5	LNG Quang Ninh Project	PVPOWER- TokyoGas-Marubeni		1,500
6	LNG Vung Ang project	PVPOWER- CTCP TTG- Quantum Infrastructure Capital LLC (USA)		3,000
7	LNG Cai Mep Ha project	T&T Group và GEN X Energy		6,000
8	LNG Van Phong	Petrolimex- JX Energy		1,500
9	LNG Long Son project	EVN-GENCO3		4,500
10	Long Son Power Plant project	Marubeni (Japan)	Long Son Power Plant	4,800
11	Ba Ria 2 Power Plant project	BaRia Thermal Power Joint Stock Company	Ba Ria 2 Power Plant	1,200
12	Phu My 3.1 Project	BOT Phu My 3		850
13	LNG Ca Na Project	Gulf Energy Development	Ca Na – Binh Thuan Power Plant	6,000
14	LNG Bac Lieu	Delta Offshore Energy (Singapore)	Bac Lieu Power Plant	3,200
15	LNG Long An project			47,650

Source: Moit, EVN, FitchSolutions, MBS Research

## VIET NAM OIL AND GAS INDUSTRY



### Part III: Investment opportunities

#### I. Oil and Gas enterprises – business results

Ticker	Unit	Financial Situation as of 6.2021			2021 Plan		Actual 6M.2021		Compared to 2020		2021 Forecast		2H2021 Outlook		
		Asset	Equity	Capitalization 23.8.2021	Revenue	PBT	Revenue	PBT	Revenue	PBT	Revenue	PBT	Mid-term - 6M	Basic valuation	Cash flow – technical valuation
<b>GAS</b>	VND bn	74,826	47,845	167,470	70,169	8,795	40,272	5,570	123%	106%	79,282	12,408	Positive	99	110-115
<b>PLX</b>	VND bn	68,380	27,444	60,701	135,200	3,360	84,836	2,742	130%	na	172,511	5,179	Positive	61	70-72
<b>BSR</b>	VND bn	63,852	34,586	55,190	70,898	871	48,908	3,590	154%	na	100,326	5,390	Neutral	18	21-22
<b>PVS</b>	VND bn	26,279	20,180	11,232	10,000	700	5,677	428	65%	71%	16,569	920	Positive	26	28-30
<b>PVD</b>	VND bn	20,856	14,042	7,707	4,400	25	1,790	-95	57%	-101%	4,250	60	Neutral	20	25-26
<b>PVT</b>	VND bn	12,452	6,276	6,910	6,000	500	3,581	559	105%	142%	8,092	1,050	Positive	23	24-25
<b>OIL</b>	VND bn	25,057	10,986	14,040	55,750	400	25,189	534	86%	na	58,000	750	Neutral	14	18-20
<b>PVC</b>	VND bn	1,725	787	423	2,000	22	960	12	111%	80%	2,100	40	Neutral	10	15-16
<b>PVP</b>	VND bn	2,350	1,436	1,565	1,100	210	612	119	88%	183%	1,250	220	Positive	20	22-23

Source: Financial statements, MBS research

## PETROVIETNAM GAS JOINT STOCK CORPORATION (HSX: GAS)



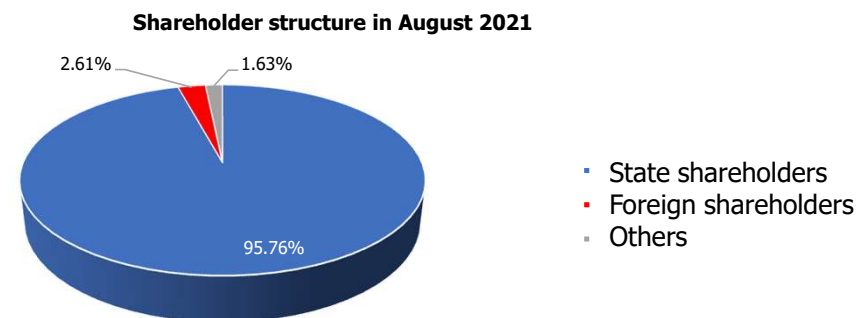
### CORPORATION INFORMATION

VIETNAMESE NAME	TỔNG CÔNG TY KHÍ VIỆT NAM -CTCP
FOREIGN NAME	PETROVIETNAM GAS JOINT STOCK CORPORATION
ABBR NAME	PVGAS
HEAD QUARTER	PV Gas Tower, 673 Nguyen Huu Tho, Phuoc Kien commune Nha Be Ho Chi Minh
TEL	(028)37816777
FAX	(028)37815666
WEBSITE	<a href="http://www.pvpgas.com.vn">http://www.pvpgas.com.vn</a>
AUTHORIZED CAPITAL	VND 19,139.50 billion



### Shareholder structure in August 2021

In the 2015 PVN restructuring scheme, the state capital in PVGAS will continue to be reduced to 75% by 2020 and 65% by 2030. The restructuring process is still being carried out and investment opportunities will appear as the state divestment at PVGAS is seen as quite appealing.





# PETROVIETNAM GAS JOINT STOCK CORPORATION (HSX: GAS)



## HOLD; TARGER PRICE: VND 99.000

**We recommend investment opportunities in GAS with the following main points: 1) PVGAS is currently the only natural gas collector, processing and trading unit in Vietnam; 2) High business efficiency; 3) Healthy financial situation; 4) Invest in growing business capacity of domestic gas sources and import liquefied natural gas (LNG) suitable with Vietnam's gas sector growth strategy when the demand for clean natural gas is increasing.**

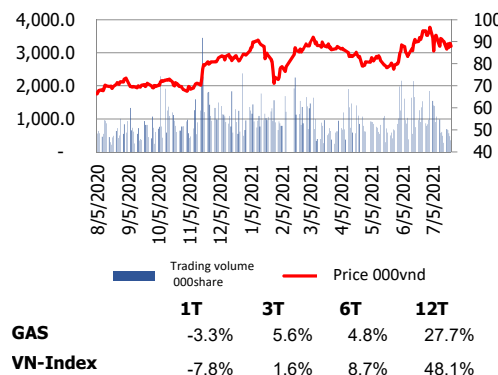
### Investment points:

- PVGAS is currently the only natural gas collector, processing and trading unit in Vietnam:** The company operates 4 gas gathering and processing systems, including Cuu Long - Nam Con Son - Ca Mau - Tien Hai with an annual gas output of 9-11 billion m3. In 2021-2024, PVGAS continues to develop strongly with domestic and imported gas projects supplying gas for domestic power projects. We expect gas output to rise to 12 billion m3 in 2023, thanks to the operation of the LNG Thi Vai project, and to 15 billion m3 in 2025, thanks to the Block B and Son My LNG projects.
- High business efficiency** with an annual pre-tax profit of VND 9-15 trillion, PV GAS is one of the few units with the highest and stable business results in the oil and gas industry. With new investment projects, business results will continue to grow in the coming years.
- Healthy financial situation:** Stable asset structure with large balance cash and cash equivalents, Fixed assets operating with high efficiency while debt accounts for a low rate (8-12% of total capital). This allows the company to operate stably, expand investment in large gas projects, and maintain a strong dividend policy of 30-40 percent per year.
- Vietnam's gas demand is forecasted to increase sharply in the coming years,** following the clean energy using trend: By 2025, Vietnam's gas demand is expected to reach 17-18 billion m3, an increase of 10 billion m3 compared to the current level. The company currently carries out large domestic gas gathering projects such as Nam Con Son - Block B - Ca Whale or such as LNG import projects Thi Vai, Son My 1&2, etc...

### Updated information

- The total volume of wet gas received in 1H2021 reached 4.21 billion m3, the volume of dry gas produced and supplied to customers reached 4.07 billion m3, completing 84% of the 6-month plan and equal to 88% of the same period last year. LPG traded volume reached 1,023 thousand tons, up 12% yoy. Condensate output reached nearly 30,000 tons, completing 28% of the year plan.
- Some investment projects continued to be implemented under the complicated situation of the Covid-19 epidemic: the Thi Vai LNG project completed 66.5% progress, the Thi Vai-Phu My LNG pipeline reached 51.1%, Su Tu Trang gas, Son My LNG project...
- Revenue in 1H2021 was VND 40,272 billion, up 23% yoy and achieved 57% of the year plan. Despite poor dry gas production., the sharp increase in selling price was the main reason for the good increase in revenue.
- Profit before tax in 1H2021 reached VND 5,570 billion, increased by 6% yoy and completed 63% of the year plan. Profit after tax was VND 4,359 billion, EPS of VND 2,242.

### Price movement



Report date	20/8/2021
Current price	VND 87.500
Target price	VND 99.000
Upside	+13.0%
Bloomberg	GAS VN
Market capitalization	VND 156,753 billion USD 6,771 million
52-week price movement	VND 61.560 VND 96.600
Average trading volume	944 thousand shares
Average trading value	VND 76.52 billion
FOL	49.00%
Current FOL ratio	2.61%

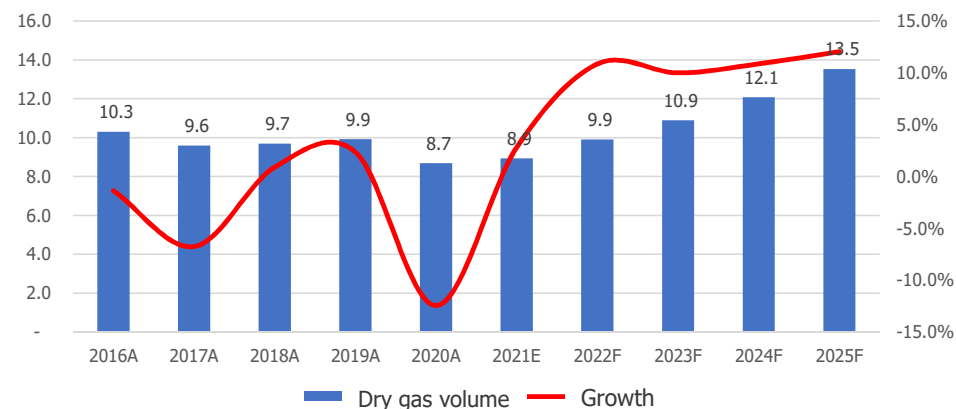
Criteria	Unit	2020	2021F	2022F	2023F	2024F
Net revenue	VND billion	64,135	80,865	87,620	99,348	116,408
Growth	%	-14.5%	26.1%	8.4%	13.4%	17.2%
Gross profit	VND billion	11,406	14,856	16,837	19,475	21,782
EBIT	VND billion	10,079	12,624	14,031	16,042	17,329
PBT	VND billion	9,978	12,343	13,664	15,592	16,675
PAT	VND billion	7,972	9,875	10,931	12,473	13,340
Growth	%	-34.0%	23.9%	10.7%	14.1%	7.0%
Net profit	VND billion	7,855	9,755	10,810	12,349	13,214
EPS	VND	4,104	4,973	5,517	6,322	6,773
Growth	%	-34.0%	21.2%	10.9%	14.6%	7.1%
Cash dividend	VND/share	3,000	3,000	4,000	4,000	4,000
Dividend yield	%	3.6%	3.4%	4.5%	4.5%	4.5%
PE	x	20.0	20.1	18.1	15.8	14.8
PB	x	3.25	3.72	3.45	3.22	3.02
EV/EBITDA	x	12.7	13.7	12.4	10.9	10.1
ROE	%	16.1%	18.8%	19.3%	20.6%	20.6%
ROA	%	12.6%	13.7%	14.2%	14.7%	14.2%

Source: PVGAS, MBS Research

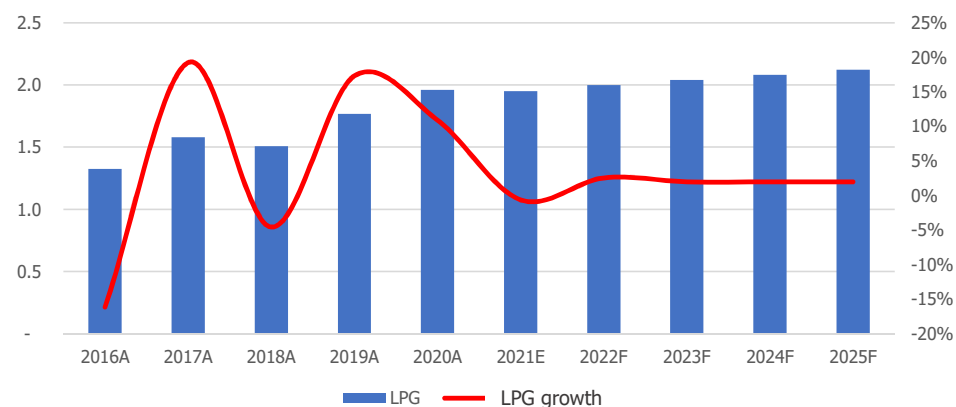
**The amount of gas gathered and traded is expected to continue to rise dramatically.**

- The company's dry gas is currently sold to main business customers, including: Electricity (75%), Chemical fertilizers (15%), other consumer customers (10%). Dry gas products are mainly sold through the gas pipeline system or being compressed and transported to remote customers (CNG).
- Dry gas sales volume has reached 9.6-10.3 billion m3 recently and will decrease to 8.7 billion m3 in 2020 due to low demand as an impact of Covid 19. From 2022, commercial dry gas production is expected to increase enormously due to growing market demand and the operation of new gas projects.
- In 2021-2030, the firm intends to invest in and implement large-scale projects including :: LNG Thi Vai with a capacity of 1-3 million tons/year; Son My LNG terminal project with a capacity of 3-6 million tons/year; Gas collection and distribution project Block B with 4-5 billion m3/year, Ca Voi Xanh with 4-5 billion m3/day...
- LPG production volume has increased sharply from 1.4 million tons in 2016 to approximately 2 million tons in 2020. The company now accounts for 75% of the national LPG market share. We forecast LPG trading volume will increase steadily by 2%/year in 2021-2025.

**Dry gas trading volume (billion m3)**

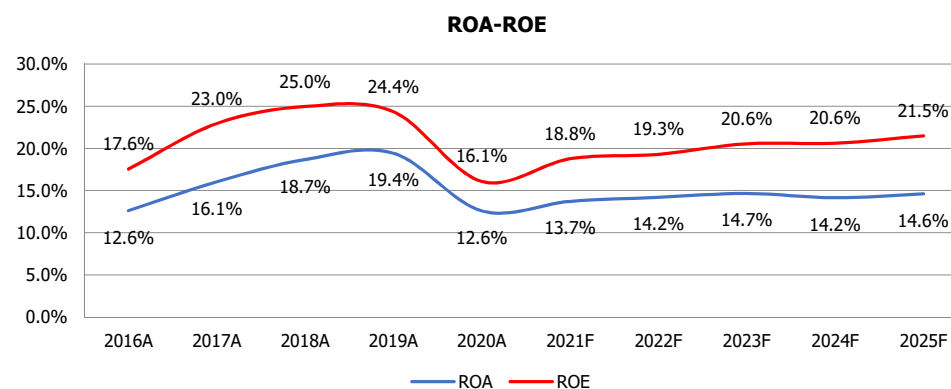
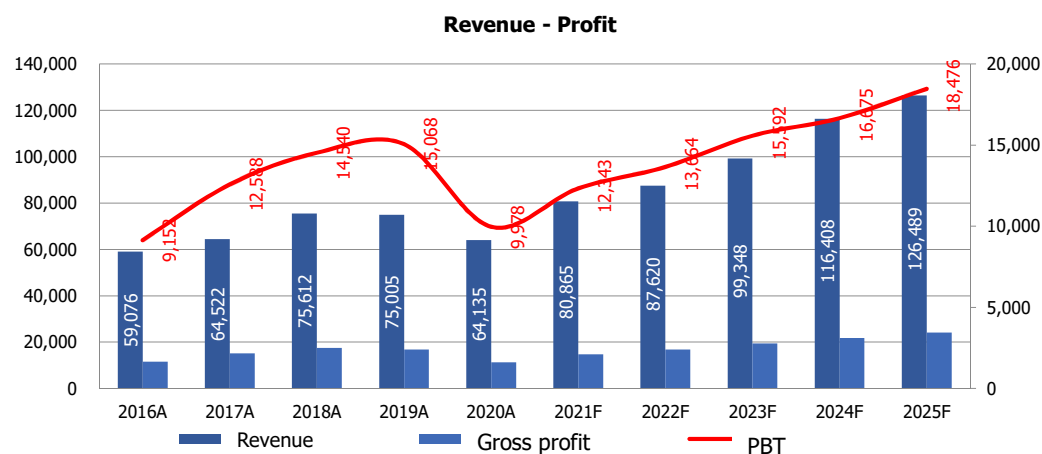


**LPG trading volume (million tons)**



## Business results

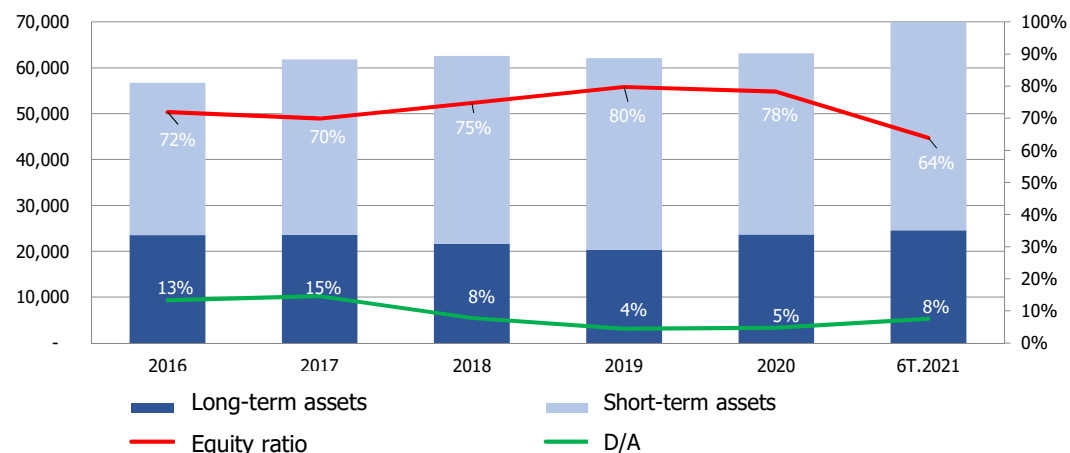
- **High-quality business results that are stable** with an annual pre-tax profit of VND 9 to 15 trillion, being a unit with high and stable business results in the oil and gas industry. Business outcomes are expected to grow in the next few years as a result of new investment projects.
- The forecasted CAGR of revenue and pre-tax profit in 2020-2025 is 15% and 13%/year, respectively. By 2025, revenue and profit before tax might reach VND 126.5 trillion and VND 18.5 trillion, respectively.



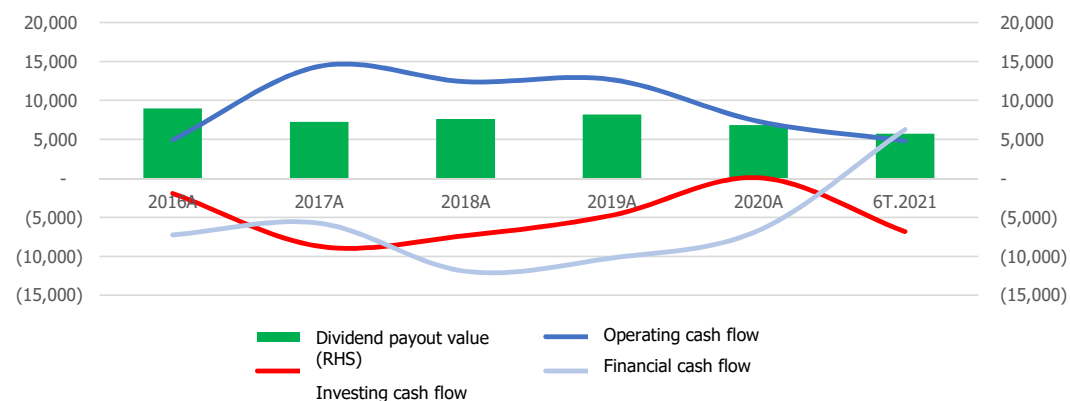
## Strong financial strength

- **Asset – Capital structure reflects the company's strong financial strength and outstanding performance.** Cash, cash equivalents and short-term financial investments are valued at VND 25-27 trillion. While accounts receivable and inventory are controlled well with low value, fixed assets are invested with good performance.
- Equity always accounts for a high proportion of 70-80% of total capital, while short-term and long-term debt to credit institutions is low with less than 10% in the past 4 years. This allows the company to operate stably through intense fluctuations periods in the oil and gas market and invest in significant projects with higher capital requirements in the long run.
- Good business management ensures that operating cash flow is constantly positive at a high level, maintaining the quality of business profits, on the other hand, implementing an attractive cash dividend policy.

### Asset and Equity structure



### Operating cash flow and dividend payout value



# PETROVIETNAM GAS JOINT STOCK CORPORATION (HSX: GAS)



## Operating and business results forecast 2021

- With low trading volume in the first 6 months of the year, we lowered our forecast of gas collection and trading volume down to 9.2-9.4 billion m3, up 4% YoY. Despite being added from Sao Vang Dai Nguyet project through Nam Con Son 2 gas pipeline system phase 2 from the end of 2020, gas demand for power production is at a low level. Meanwhile, LPG trading volume was stable at 1.95 million tons.
- With an assumed average annual oil price of USD 68/barrel (Brent oil), the company's revenue and PBT are forecast at VND 80,865 billion and VND 12,343 billion, up 26% YoY and 24% YoY, respectively.
- From 2022, the company's development prospect continues to grow positively, thanks to the completion of investment projects in domestic gas exploitation and the completion of the liquefied natural gas (LNG) import terminal project, boosting sales volume and business performance.

## Stock valuation:

We evaluate GAS stock at VND 99,000/share using the DCF and comparing PE, PB, and EV/EBITDA.

Valuation results	Value (vnd/share)
- DCF_FCFE	<b>109.023</b>
- PB	<b>81.234</b>
- PE	<b>106.143</b>
- EV/EBITDA	<b>99.355</b>
<b>The average value</b>	<b>99.000</b>

Criteria	Unit	2020	2021F	2022F	2023F	2024F	2025F	2026F
Dry gas output	billion m3	8.69	8.94	10.50	11.90	12.10	13.50	15.48
LPG output	Thousand tons	1.96	1.95	1.84	1.87	1.91	1.95	1.99
Oil price (Brent)	Usd/barrel	43	68	66	70	75	75	75
Net revenue	VND billion	64,135	80,865	87,620	99,348	116,408	126,489	139,817
Growth	%	-14.5%	26.1%	8.4%	13.4%	17.2%	8.7%	11%
Cost of goods sold	VND billion	-52,729	-66,009	-70,783	-79,873	-94,626	-102,280	-112,599
Gross profit	VND billion	11,406	14,856	16,837	19,475	21,782	24,209	27,218
Financial income	VND billion	1,451	1,233	1,233	1,233	1,233	1,233	1,233
Financial expenses	VND billion	-169	-361	-487	-573	-778	-921	-1,028
Selling expenses	VND billion	-1,943	-2,264	-2,629	-2,980	-3,492	-3,795	-4,195
General and Administrative expenses	VND billion	-769	-1,132	-1,314	-1,590	-2,095	-2,277	-2,517
Operating income	VND billion	9,965	12,318	13,645	15,570	16,655	18,455	20,717
PBT	VND billion	9,978	12,343	13,664	15,592	16,675	18,476	20,738
PAT	VND billion	7,972	9,875	10,931	12,473	13,340	14,781	16,590
Net income	VND billion	7,855	9,755	10,810	12,349	13,214	14,652	16,459
EPS	VND/share	4,104	4,973	5,517	6,322	6,773	7,525	8,469

## Valuation by DCF

Criteria	Unit	Value
Cost of equity	%	12.32%
Terminal growth rate after 2026	%	3.00%
Present value of net cash flow in 2021F-2026F	VND billion	59,559
Present value of cash flow after 2026	VND billion	144,298
Cash and cash equivalents, current short-term financial investment	VND billion	10,339
Enterprise Value	VND billion	214,196
Current long-term debt	VND billion	5,532
Equity value	VND billion	208,664
Number of shares	Million shares	1,914
<b>Value per share</b>	<b>VND</b>	<b>109.023</b>

## PE-PB ratio

Company	Nation	P/B	P/E	EV/EBITDA
TOKYO GAS CO LTD	Japan	0.85	19.84	7.51
INDIAN OIL CORP LTD	India	0.86	4.44	4.84
OSAKA GAS CO LTD	Japan	0.82	10.95	7.13
PETRONAS GAS BHD	Malaysia	2.49	15.64	8.92
HENAN LANTIAN GAS CO LTD-ACHINA	China	3.27	18.11	12.05
TOHO GAS CO LTD	Japan	1.86	77.92	14.78
S-OIL CORP	South Korea	1.78	25.77	13.35
PETRONET LNG LTD	India	3.19	13.12	8.73
INDRAPRASTHA GAS LTD	India	6.56	28.17	21.66
THAI OIL PCL	Thailand	1.02	8.29	9.37
NIPPON GAS CO LTD	Japan	3.07	22.93	10.19
PETROVIETNAM GAS JOINT STOCK	Vietnam	3.06	20.48	11.86
<b>Average</b>		<b>2.61</b>	<b>21.34</b>	<b>13.31</b>

Source: PVGAS, Bloomberg, MBS Research



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