

VALUATION REPORT

Industry: Oil & Gas

22/01/2014

PETROVIETNAM SOUTHERN GAS JSC (HNX: PGS)

Tien Thi Thuy Tran	Current price	34,900	-18%	-7%	0%	7%	18%
Analyst	Target price	40,800	Sell	Reduce	Neutral	Add	Buy
Email: tienttt@fpts.com.vn	Inc/dec	16.91%				400	
Tel: (84) - 8 6290 8686 - Ext: 8928	Dividend yield	3.4%				ADD	

PGS Stock Price Movement



Trading Information	22/01/2014
52-Week high (VND/share)	35.500
52-Week low (VND/share)	17.100
Listed shares (shares)	38.000.000
Shares outstanding (shares)	38.000.000
3M Average trading volume	499.260
% Current foreign ownership	22,72%
Chartered capital (VND bn)	380
Market cap (VND bn)	1.235
	Source: FPTS

Major Shareholders	Proportio
PVGas	35,26%
Halley Sicav-Halley Asian Property	7,23%
DaiA Bank	4,56%
Anpha Petrol	3,83%
Others	52,95%

Valuation	2011	2012	2013F
EPS	5.940	3.493	5.531
P/E	3,18	8,07	6,31
BV (VND/share)	19.409	21.325	26.073
P/B	0,97	1,32	1,34
ROE	43,12%	19,32%	24,06%
ROA	11,46%	6,24%	9,16%

SUMMARY

Recommendation is given based on the results of FCFF pricing model, prospective consumption demand as well as company's positive finance. Capital structure is less likely to incur risks and interest payment strain seems to reduce when debts have been paid. Though accelerated depreciation caused decrease in net income in 2013, which is happening for next years, it turned out to be crucial for LNG import in 2017.

EAT of the company in 2013 is projected to be VND 210 bn, **EPS** forward is 5,531 dong. Results of FCFF pricing model show PGS target price in 12 months at 40,800 dong which is 16.91% higher than the market price (34,900 dong). We would like to continue supporting our positive recommendation and suggest an ADD for PGS. Potential risks when investing in PGS may relate to price increasing plan for gas providing to industrial enterprises while it is the major product of PGS.

Revenue and net income in 2013 are forecasted to rapidly grow in comparison with 2012. Revenue is expected to reach VND 7,099 bn which is 15% higher than target and 12% higher than that in 2012. EAT is expected to be VND 278 bn which is 53% higher than goal and 31.26% higher than that in 2012. Key factors producing those results are as follows:

- **1.**Growth in CNG sales volume for current clients and new client which is 138 million m³, 18.19% higher than last year.
- **2.**Growth in LPG sales volume which is 5.68% higher than 2012; increase in LPG and CNG prices in Q4 2013 due to increase in LPG price in global market in 12/2013 which is by 32.91% in late Q3 2013.
- **3.**Rise in price of CNG in 2013 to 16-17 USD/MMBTU from 14-15 USD/MMBTU in 2012.
- **4.**Decrease in interest payment in the first 9M2013 from VND 96 bn last same period to VND 45 bn.

Prospect for the years to come: We estimate that operating activities of PGS still remain positive although profits are affected by constantly rising CNG input price at 10% per annum until 2017. Causes are as follows:

1.Sales volumes of LPG and CNG are expected to grow at rates of 3.5-3.9% and 5.3-7.7% respectively.

Units: VND bn 2.Net income is expected to increase remarkably when depreciation



\mathbf{CO}	DE-	PGS

P&L Statement	2011	2012	2013F
Revenue	5.764	6.375	7.099
Gross profit	961	984	1.158
Earnings before tax	380	237	336
Earnings after tax	330	193	278
Net income to common	226	133	210
Basic EPS	5.940	3.493	5.531

Balance Sheet	2011	2012	2013F
Short-term assets	1.457	1.190	1.722
Long-term assets	1.819	1.732	1.435
Total Assets	3.276	2.921	3.157
Short-term liabilities	1.542	1.397	1.611
Long-term liabilities	767	492	264
Owner's equities	738	810	991
Total Liabilities & Equities	3.276	2.921	3.157

expense from its subsidiary, CNG Vietnam is about to close in 2014.

3.Income from investing in VTGas is expected to increase when investment is promoted from 50% to 100%. Revenue average growth rate and CAGR of net profit in 2013-2019 are subjected to be 5.53% and 11.65% per annum respectively.

Constant growth rate: Based on goals set for the period 2012-2025 growth rate of sales volume is expected to remain steady at 2.46% per annum. Cash flow growth rate is estimated to reach 4.08% based on ROIC and reinvesment rate in PGS.

Source: FP1	S's estimation
-------------	----------------

Forecasted Financial Indicators

Indicator	2012	2013F	2014F	2015F	2016F	2017F	2018F	2019F
Equities (VND bn)	1.033	1.282	1.536	1.795	2.009	2.204	2.450	2.793
Total assets (VND bn)	2.921	3.157	3.212	3.497	3.798	4.061	4.399	4.873
Revenue (VND bn)	6.375	7.099	7.765	8.000	8.408	8.886	9.330	9.803
Revenue growth rate (%)	10,60%	11,36%	9,38%	3,02%	5,10%	5,69%	4,99%	5,07%
EBT (VND bn)	237	336	399	401	327	306	416	590
EBT growth rate (%)	-37,84%	42,23%	18,49%	0,72%	-18,45%	-6,51%	36,02%	41,75%
Net income to common (VND bn)	133	210	254	246	204	204	276	407
Growth rate (%)	-42,04%	12,84%	20,21%	12,00%	-18,56%	-24,85%	1,44%	13,75%
EPS (VND)	3.493	5.531	6.674	6.479	5.369	5.381	7.263	10.716
Book value (VND)	21.325	26.073	30.612	35.014	38.662	42.326	47.279	54.593
ROE (%)	19,32%	24,06%	23,83%	20,30%	14,66%	12,38%	14,31%	18,01%
ROA (%)	6,24%	9,16%	10,54%	10,08%	7,65%	6,64%	7,87%	10,18%
Dividend yield (%)	12%	12%	21%	20%	17%	17%	22%	33%

Source: FPTS's estimation



VALUATION

FCFF Valuation Model

12-M target price of PGS is expected to be **40,800 VND/share** based on DCF valuation model.

Summary of FCFF valuation results

DCF assumptions		DCF valuation	Units: VND mil
WACC (2014)	17,15%	Time projection (years)	6
Tax rate (%)	20%	Total present value of cash flow	1.848.945
Cost of equity (%)	18,97%	(+) Cash & short-term investments	406.415
Risk-free rate (10yr government bond) (%)	8,89%	(-) Short- & long-term debts	456.916
Risk premium (%)	9,88%	Equity value	1.798.444
Beta	1,02	(-) Minority interest	455.513
Cost of debt (%)	11,81%	Equity value of parent company	1.342.931
Revenue growth rate (2013-2019)	5,53%	Shares outstanding (shares)	38
After-tax Profit growth rate (2013- 2019)	11,65%	Intrinsic value (VND/share)	35.341
Cash flow growth rate (2013-2019)	13,62%	Cost of equity (%)	18,97%
Constant growth rate (%)	4,08%	Estimated dividend yield (%)	3,40%
		Target price in 12 months (VND/share)	40.844

Source: FPTS's estimation



We also conducted valuation based on P/E comparables to PGS. Forecasted EPS in 2013 is 5,531 VND/share and in 2014 is 6,674 VND/share, resulting in P/E at 6.31x and 5.23x respectively. This is the lowest P/E in comparison with other comparable enterprises in gas distribution industry. We supposed there were typical risks related to price increase roadmap in PGS. Opportunity for profit growth in following years depends on investment in CNG product development, which leads to substantial difference in valuation after risk discount was taken when investing in Vietnam. However, this is still an attractive valuation for any investors to invest in PGS at the moment.

	Company	Nation	Revenue (Million USD)	ROE 2013	Discounted PE
1	Siam Pan Group Public Co Ltd	Thailand	126,0	16,0%	6,58
2	Clex Co	Japan	181,4	15,7%	7,62
3	Aurora Oil & Gas	Australia	283,8	19,9%	7,03
4	Gazpromneft	Russia	455,9	14,2%	11,30
5	China Oil And Gas Group	China	630,9	17,0%	9,60
6	Gas Malaysia Bhd	Malaysia	672,6	17,4%	18,94

Relative Valuation In The Industry

Source: Reuters & FPTS gathered



ANALYSIS OF BUSINESS ACTIVITIES

Total Asset and Equity through years About



Billion VND PetroVietnam Southern Gas Joint Stock Company (PGS) was established in 2000 as a subsidiary of PetroVietnam Gas Joint Stock Corporation – PVGas with sales volume at only 5,000 tons/year and revenue of VND15 bn/year. In 2008-2012, total assets and total equities of PGS increased by 3.54 times and 6.26 times respectively. Its business covered all towns from Da Nang to Ca Mau. Currently, LPG sales volume of PGS has reached nearly 270,000 tons/year and over 130 bn m³/year of that from CNG (maximum capacity of 180 bn m³), leading to total revenue of more than VND 4,000 bn per year with propect to leap in next period of time.

Core Business

During 2008-2012, PGS revenue increased from VND 1,713 bn to VND 6,375 bn with CAGR of 37.32%. Revenue stream comes from 2 cores products: Liquefied Petroleum Gas (LPG) and Compressed Natural Gas (CNG). Particularly since 2009, PGS has started its business in CNG by founding CNG Vietnam Joint Stock Company and has continued expanding its own operation, which stimulated such rapid growth in revenue and income.



2012 Revenue structure





Profit and profit margin of PGS



Source: PGS & FPTS gathered

CNG sales contributed significantly to PGS's gross margin growth in 2009-2011 with its higher return on net income (15-30% depending on COGS) than that from LPG sales (2-3% per year). In 2012, CNG net income growth rate started to remain steady because of the followings.

1. In recent years, gas price sold to PVGas subsidiaries has been increased each year according to PVGas roadmap so local gas price will be equal to global one in 2017. As the results, CNG COGS went up by 28% in 2012.

2. Investments in equipment and facilities as well as accelerated depreciation implementation (since 2011) within 3 years in CNG Vietnam have increased total depreciation expense of the company



Production cost over net revenue of PGS in 2012



for years, which affected overall gross margin of PGS.

3. Economy downturn has reduced consumption demand and customers of PGS have alternated into other kinds of fuel due to constant increase in LPG price. Therefore, revenue has remained steady.

LPG business:

LPG business is the major contributor to PGS revenue (accounting for 74%); however, net profit margin from LPG usually is not high since LPG COGS accounts for more than 87% of the revenue as its business nature. LPG input of PGS comes from two main sources, Dung Quat Refinery (33%) and a subsidiary of PVGas Dinh Co Gas Processing Plant (67%). LPG input price is computed based on CP price¹ plus price premium². Currently price premium applied in Vietnam is about 80-85 USD/ton.





Production, Revenue and gross profit of LPG business



Source: PGS & FPTS

Depreciation cost of PGS



There are two main groups of customers in PGS:

- i. Industrial distributors, key accounts in fields such as enamel, ceramics, and construction materials, etc., supply stations in residential areas, which is called wholesale activity and accounts for 45% of total LPG sales volume;
- **ii.** Individuals and households for use or commercial purposes, which are called retail activity and accounts for 55% of total LPG sales volume.

LPG price is customised depending on group of customers. LPG retail price is often higher than wholesale price because of burden on commission, discount for stores, promotion expense, container depreciation expense, warehouse building and maintenance expense,

² Price premium includes: transportation fare, insurance, administrative and production cost, other expenses and a part of PVGas's operating income.

¹ CP price is the price stated in trading contract between PGS and PVGas and computed based on monthly global price. It is applied during the whole month in case term contract was signed with GAS. It is referred from import price of PVGas from Saudi Aramco, the second biggest crude oil exporter in the world. This is the standard price applied to Asia by Middle East.



Gross profit structure in 2012



Source: PGS & FPTS

Comparing gross profit margin of LPG companies



Production, Revenue and Gross profit of CNG business at PGS



Source: PGS

transportation expense, etc.

Currently, LPG retail price comprises of COGS plus 130 USD/ton, while wholesale price is added with COGS and 15 USD/ton. Gross margin remains steady at 16% for retail and 2% for wholesale. In comparison with competitors, net profit margin of PGS stays in average level as wholesale-retail structure is in balance. In particular, Petrolimex Gas Joint Stock Company (PGC) has more than 90% of revenue from retail so its net profit margin is the highest one in the industry, while PetroVietnam Northern Gas Joint Stock Companyn (PVG) net profit margin is the lowest since wholesale accounts for 70% of sales volume.

CNG business:

Gas input which is the main material in CNG production accounts for large proportion of CNG COGS. Gas input is supplied by PetroVietnam Low Pressure Gas Distribution Joint Stock Company (PVGasD) with the price equal to COGS plus pipeline shipping fee. COGS accounts for about 65% of gas input price which is 8.93 USD/MMBTU in 2013 with shipping fee at 0.4 USD/MMBTU. Gas input price is increasing by 10% every year until 2017 when LNG is imported, which is applied for both PGS and CNG Vietnam. Gas price is forecasted to be 12.49 USD/MMBTU in 2017.

Additionally, disadvantage of PGS is that CNG price cannot rise despite input price increase, because it is discounted at ceiling price applied for alternative fuels such as DO oil or LP. To be specific:

- Parent company: 30% CNG volume at fixed price, 40% volume at discounted FO price (80-85% of FO price), and 30% volume at discounted LPG price (80-83% of LPG price)

- Subsidiary CNG Vietnam: 85% volume at discounted FO price (80-85% of FO price) and 15% volume at discounted LPG price (80-83% of LPG price)

Other businesses: gas and other fuel container deposit, which is the added-in activity to diversify product portfolio and gain more income. Usually this activity brings back 2% of revenue with gross margin at about 2.6%.

Raw material supplying

Being a member of Vietnam Oil & Gas Group (PVN), PGS has advantages in acquiring stable supply and other incentives from refinaries and gas plants of the Group. For instance, major supplier of materials and fuels is the parent company PVGas.

Currently PVGas has noticeable advantage as amarket leader with 70% domestic market share. Dinh Co Gas Processing Plant, a project with maximum capacity of 350,000 tons and production volume of 250,000 tons per year, is managed by PVGas. Major part of LPG volume is supplied by PVGas while the rest of cool LPG comes from Middle East and compressed LPG from South East Asia and China. As the results, PGS has its competitive advantage with its activeness in supply management and its stand as a market leader in LPG domestic as well as Southern market.



Input source structure in Vietnam

Area	Market Demand	Dinh Co	Dung Quat	Import
North	37%	0%	12%	26%
Central	8%	0%	7%	1%
South	55%	16%	13%	26%

Source: PGS & FPTS

LPG Station system



Source: PGS & FPTS

LPG Market Structure of PGS



Source: PGS & FPTS

Business Capacity

At the moment, PGS has 28 LPG filling stations with total capacity of 24,580 tons/month from Da Nang to Ca Mau, in which 13 stations (capacity of 7,800 tons/month) are owned by the company and 15 stations are leased. In addition to those, PGS owns 04 warehouses with storing capacity of up to 7,700 tons. Later, PGS is constructing more warehouses and filling stations to increase storing capacity by 6,000 tons and filling capacity by 8,300 tons/month.

Until now, PGS has been investing in CNG filling system to supply for transportation and industry sectors, which could be a potential emerging field. Design capacity of the system is 150 mil m^3 /year, in which PGS with industrial zones My Xuan and Hiep Phuoc have capacity of 80 mil m^3 /year and 30 mil m^3 /year respectively, plus 70 mil m^3 /year from Phu My industrial zone of CNG Vietnam.

Consumption Market & Sales Policy

LPG business

LPG business network of the company has fully covered all towns in the South. LPG residential retail sales volume is 7,000-8,500 tons/month; LPG industrial wholesale volume is 12,000-14,000 tons/month, which may address PetroVietnam Gas reputation on Southern market.

Market of cylinders in Ho Chi Minh City and South East remains the dominating market accounting for about 47% of the company's sales. With such a large market as Ho Chi Minh City, the company has focused on building filling station system evenly distributed throughout South-Western region, South Central Coast, South East, and has built the system of LPG head distribution agencies to periodically meet and exchange policies to strengthen, promote, agree upon the price index, enhance distribution system and competitiveness, which can assure the ability to expand further and sustainably develop.

CNG business

CNG Phu My Plant is designed to supply for customers in Ba Ria -Vung Tau, while CNG Nhon Trach Plant is for Dong Nai, Ho Chi Minh City, Binh Duong and CNG Hiep Phuoc is for Ho Chi Minh City and surrounding areas.

PGS focuses on providing CNG for major industries with a distance of less than 200 km from the factory to the reasonable consuming place. CNG distribution policy is flexible, depending on the customer characteristics and requirements of delivery, and tank trucks can move into areas of rough terrain.

Position of PGS

Under circumstances there is fierce competition in the market providing residential LPG (LPG cylinders) and industrial LPG (LPG pipeline) with the participation of large fuel companies in the world, PVGas South is still the market leader among LPG businesses in the South, with a stable market share maintained at 33%. That is because:

- Being a subsidiary of PVGas ensures stable input



PGS'CNG Station Locations



- By having financial advantage, PGS has invested in wholesale storage and distribution system to cover entirely the South. Total storage capacity of PGS reaches 7,700 tons and is expected to increase by 6,000 tons in late 2021.

- PGS has another huge advantage by choosing CNG as the alternative product instead of selling conventional fuels such as coal, FO oil, DO, etc. Pros brought by CNG are shown in several aspects – technology, economy, and especially environment.

Subsidiaries and Associates

In 4th quarter of 2013, the company planned to add more shares from PVGas Cylinder, increasing its ownership ratio from 20% (as an associate) to 100% (as a subsidiary). Although business operation of PVGas Cylinder has not been efficient (loss of VND 3.93 bn after 9M2013), it is believed to change significantly after restructured.

In addition, PGS has an opportunity to increase its income by acquiring 45% of shares of PTT in VTGas. VTGas's business has been promising with earnings before tax of VND 31 bn per annum compare to chartered capital Of VND 115 bn.

i onns or ownersnip							
Company	Chartere d Capital	Ownership	Explanation				
CNG Việt Nam	270	54,75%					
VTGas	115	55=>100%	Processing negotiation				
PVGas Sài Gòn	100	100%					
PVGas Clynder	72	20=>100%	Expected buy price is 58 billion VND				
Vinabenny	357	14	Has provision for 50 billion corresponding to the percentage holding.				
			Source: PC				

Forms of ownership

Business Risks

Input price risk

The company is facing the risk of price rising every year until 2017 at the rate of 10% in accordance with roadmap from the Group. Meanwhile, prices at PGS are discounted at the ceiling level with 30% CNG volume at fixed price, 40% volume at discounted FO price (80-85% of FO price), and 30% volume at discounted LPG price (80-83% of LPG price). Since prices are discounted at most by FO price and LPG price, its increase possibility is not assured. Margins of PGS are on downtrend while input price is increasing.

Economic risks

Domestic supply of LPG from Dinh Co and Dung Quat plants only meets around 45% of market aggregate demand. Shortage of gas still has been tackled by global supply. Meanwhile, constant increase with fluctuation of oil price and LPG price and low gross margin hastily



lower net income of the company.

Competition risks

Competition in LPG supplying market in Vietnam, especially the South, has been intense with the participation of about 40 enterprises. Apart from local market leaders such as Petrolimex Gas, Van Loc Gas, Hong Ha Gas, Minh Quang Gas, Anpha Gas, there has been a number of foreign-invested companies like Shell Gas, Total Has, Thang Long Gas, Dai Hai Gas, ELF Gas and emerging enterprises focusing on importing and supplying for foreign companies. The more competitive it is, the less appeal and margins for the whole industry including PGS.

Operational risks

- Due to CNG specifications, supplying CNG is only efficient in the area within a radius of less than 200 km from the source.

- Business performance of the company is sensitive to changes in the market because of LPG large proportion in sales. Any movement in input or output affects PGS's sales and production.

- It takes a long time to invest in setting up production of CNG and to communicate, negotiate with customers so they decide to turn to CNG using instead of DO, FO, LPG, coal, etc., which may cause a delay in CNG business plan.



FINANCIAL ANALYSIS AND FORECAST

Forecasted revenue and growth rate



Forecasted after-tax profit and growth rate



Depreciation and profit



Depreciation Profit after tax

Gross profit ans after-tax profit margin



[→] Gross profit → Profit after tax

Business Activities

In 2013-2019

Annual revenue growth rate during 2013-2019 is forecasted at 5.57%. Annual EAT growth rate is expected to surpass revenue growth rate in 2019 at 11.65% due to potential growth rate of LPG and CNG sales and largely decreasing depreciation expenses. To be specific:

1. PGS has favourably positioned LPG in Southern market with 33% of market share (Southern market accounts for 55% of domestic aggregate demand). Domestic LPG demand is subjected to increase from 1.2 mil tons at the moment to 1.3 mil tons in 2015 and 1.5 mil tons in 2025. LPG growth in Vietnam has not fluctuated sharply but remained at stable rate. According to BMI's forecast, it would stay at 3.87%/year. Based on market situation and growth forecast, PGS aims at the leading position in LPG Southern market. Goal for market share in 2025 is set at 35% based on (i) input from PVGas, (ii) broad distribution network, (iii) investing in strengthening distribution system.

2. Propect for CNG sales in next 2 years might be positive since there were customers signing contracts though CNG has not been delivered. For example, PGS signed contracts with customers in Long Duc Industrial Zone, while CNG Vietnam signed contracts with Song than 2 and My Phuoc 3 Industrial Zones. At the moment, plants are run at 68-88% of designed capacity and are planned to run at higher capacity to meet the demand of customers for each period, expected to reach 100% capacity in 2019.

3. Depreciation expense is decreasing, starting from 2014, for CNG Vietnam because this company has applied accelerated depreciation since 2011. It is expected to decrease by 32% in 2014 (by VND 43 bn from VND 134 bn each year) and close in 2015. Depreciation expense of PGS also starts decreasing in late 2016 and closes in 2017 for acceleratedly depreciated assets. As a result, total depreciation expense is forecasted to decrease by VND 228 bn in 2017 from VND 311 bn in 2013.

From 2009 onwards

Growth rate of PGS after 2019 is forecasted to remain constant at 2.46% per annum based on company capacity and its long-term plan up to 2025. Besides, based on references such as Vietnam Energy Yearbook 2012, long-term average growth rate is subjected to fluctuate between 2.78-3.12%. Cash flow growth rate is estimated to reach 4.07% based on ROIC and plowback ratio in PGS.

+ Forecast assumptions

Revenue and gross profit

- LPG:

Billions

LPG sales volume

LPG sales volume is expected to increase by 3.97% every year during 2013-2019. According to PGS's business plan in 2013, retail and

Source: PGS & FPTS



Forecasted oil price



wholesale LPG volumes account for 54.64% and 45.36% of total LPG sales respectively. Retail ratio will increase to around 55.83% in case strategy of the company till 2025 to increase retail market share works out.

LPG cost of goods sold

COGS of PGS depends on LPG price in global market. We estimate COGS of PGS based on World Bank Forecast about oil price and then to calculate LPG price in Vietnam.

LPG selling prices

Gross margins are maintained at 16% for retail and 2% for wholesale.

- CNG:

Nguồn: World Bank

CNG sales volume

In 2013, sales volumes of PGS and CNG are forecasted to be 75 mil m^3 and 61.9 mil m^3 respectively with constant growth rate of 5-6% for next years.

CNG cost of goods sold

CNG input price is subjected to increase by 10% every year until 2017 (when LNG is imported), which is applied for both PGS and CNG Vietnam.

CNG selling prices

FO and LPG prices are forecasted based on crude oil price forecast of World Bank similarly to how LPG input price is calculated. Units of FO and LPG prices are converted from USD/ton to USD/MMBTU and LPG price is wholesale price at parent company.

- Other businesses:

Revenue and gross margins from **1.** Deposit for LPG cylinders corresponding to the allocated value of other long-term payables reflects deposits and escrows LPG cylinders value received from customers, which are allocated annually to revenue and other profits. Number of allocation years depends on number of years that cylinders can be used safely (In early 2013, PGS decreased allocation years from 10 to 6). COGS of cylinders are allocated to long-term prepaid expenses as investments in PGS. This is typical in LPG business; **2.** Revenue from petrol and other businesses which accounts for 2% of total revenue. Gross margin of this business is 2.6% based on results of previous years.



Year	Crude oil price (USD/ barrel)	LPG Price (USD/ ton)	LPG price in Vietna m (USD/ ton)	FO Price(USD/ barrel)
2010	79	670	793	644
2011	104	863	995	848
2012	105	870	1.003	856
2013	105	870	1.006	856
2014	106	876	1.009	862
2015	102	847	979	831
2016	101	837	968	821
2017	100	833	964	816
2018	100	829	960	812
2019	99	825	955	808
2020	99	822	952	805

Source: World Bank & FPTS

Forecasted CNG selling price





Chỉ tiêu	Đvt	2013	2014	2015	2016	2017	2018	2019	2020
LPG	Tons	265.171	275.629	286.215	296.914	307.707	318.576	329.501	340.461
- LPG tank	Tons	144.900	150.986	157.169	163.440	169.789	176.205	182.680	189.199
- LPG for industry	Tons	120.271	124.642	129.046	133.474	137.918	142.370	146.821	151.262
Existing filling capacity	Tons/ month	9.850	11.750	13.700	15.600	16.000	16.000	16.000	16.000
Filling capacity to meet the actual needs	Tons/ month	12.075	12.582	13.097	13.620	14.149	14.684	15.223	15.767
CNG	Million m3	136,90	152,50	160,95	169,87	179,29	184,15	189,88	190,00
Parent Company	Million m3	75,00	82,50	87,45	92,70	98,26	104,15	109,88	110,00
CNG Company	Million m3	61,90	70,00	73,50	77,18	81,03	80,00	80,00	80,00
Efficiency									
PGS	%	68%	75%	80%	84%	89%	95%	100%	100%
CNG VN	%	88%	88%	92%	96%	100%	100%	100%	100%

Forecasted every business of PGS in the period of 2013F - 2020F

Source: PGS & FPTS

Depreciation:

Early 2013, PGS adjusted depreciation policy for both CNG and LPG. For instance, 1. Cylinder depreciation allocation (from 10 years to 6 years), 2. Depreciation for fixed assets related to CNG from 6 years to 5 years. That for CNG Vietnam is 3 years (with accelerated depreciation since 2011).

According to company policy, depreciation period is shortened to minimum (3 years for equipment; 3 years for transportation vehicles, 5 years for cylinders, 10 years for plants, warehouses, and buildings). Accelerated depreciation is necessary for investments in new facilities for LNG import in 2017.

Selling, General and Administrative expenses:

Selling expenses are separated into 2 parts; one part corresponds to revenue, which is about 14% of LPG retail revenue, the same as in previous years; another is total depreciation expenses on CNG related and a part of cylinder depreciation allocated to selling expenses (identical to part allocated to COGS). Administrative expenses are computed in ratio with revenue.

Financial Income: Interests from current account and 3-month saving account at Vietcombank.

Financing expenses: Weighted average interests to banks that provide loans to the company based on ratio of loans among banks.

Corporate income tax:

Tax rate for PGS is 25% in 2013, 22% in 2014-2015, and 20% from 2016 onwards. CNG Vietnam is exempted from income tax for 2 years since the first year making profits (2009) and receives 50% discount of tax rate for next 6 years after that. Thus tax rate for CNG Vietnam is 10% from 2013 to 2017, and 20% since 2017. Consolidated tax rate is computed on weighted average based on ratio of EAT of those companies in 2012.

+ Assumptions related to assets and liabilities

Needs of working capital:

Receivables, inventory, payables in next years are defined based on target revenue of each year and receivable, inventory, and payable



Debt structure of PGS



Capital expenditure and Depreciation cost of PGS



Source: PGS & FPTS forecasted Asset structure



Capital structure



Source: PGS & FPTS

turnovers in 2012. Total receivables and inventories are smaller than total payables each year. PGS can purchase on credit for a long time (70 days on average) while inventory is maintained for only a few days (usually 7 days). With this advantage, the company has efficiently structured its capital to reduce interest expenses from loans for working capital, and the need to get those loans only accounts for 2% of total revenue in previous years. PGS is forecasted to keep this advantage for following years.

Further investments:

- **Investment in LPG:** With current LPG volume of 265,171 tons/year and forecasted growth rates, PGS is investing further in storage, filling stations, and cylinders as response to the company's capacity every year.

- **Investment in CNG:** Current CNG capacity of PGS is 180 mil m³/year, including 110 mil m³/year from parent company and 70 mil m³/year from CNG Vietnam. In following years, only CNG Vietnam has planned to increase its design capacity to 80 mil m³ while PGS remain its one. To upgrade its main compression station, CNG Vietnam only has to pay VND 16 bn. In addition, in order to optimize the design capacity to meet new customers' need, PGS and CNG Vietnam have to invest in special tank to ship the gas. At customers' plants, CNG has to be processed through a decompression station. We estimated that for every one mil m³ more supplied, VND 3 bn more has to be invested in tanks and new decompression stations.

Financial Analysis

+ Asset and liability & equity structures

Asset structure

Total assets of PGS increased remarkably by 3.5 times from VND 825 bn in 2008 to VND 2,921 bn in 2012. Besides to this growth, assets of PGS were restructured from current assets to non-current assets. Proportion of long-term assets increased every year from 39.43% in 2008 to 59.27% in 2012. This change was because of new investments in facilities and storage to expand LPG business. Among current assets, receivables account for more than 40% which is typical for commercial business. In general, asset structure of PGS is stable.

Liability & equity structure

There were variety of loans for the company so as to invest in storage; however, liability structure of PGS in recent years has shown few risks as liability (short- and long-term) proportion decreased from 81% in 2008 to 59% in 2013. Equity proportion has increased every year due to stable performance of the company and its trend to pay debts, restructuring liability and lowering interest payment strain. Proportion of accounts payable and short-term debts account for 72.8% of total liabilities, which reflects company business nature in which it requires more short-term liabilities to serve the needs of working capital. Working capital of PGS is required to be VND 150 bn each year which is offset mainly by debts. From late 2014, working capital need tends to decrease when there are no further investments planned.



Business capacity



ROE and Dupont analysis 7,0 80% 69,10 5,76346 70% 6.0 52 60% 5,0 185 43,12% 50% 4.0 6319 3 09828 40% 3,0 2,6261 30% 2,0 6%₄ 1,0 10% 0% r 2011 2010 2012 2013F 2008 2009 Assetturnovei Asset/Equity - Atter-tax protit margin -

Operating efficiency

Days payable outstanding (DPO) remains at high level because of support from parent company PVGas. Days sales outstanding (DSO) is much lower than DPO, which is favorable for working capital and free cash flow of the company. Since 2010, days sales of inventory (DSI) have improved noticeably, decreasing from 11.65 days to 6.73 days due to effective inventory management policy. Asset turnover has maintained stable with 2 VND of revenue on average for every 1 VND of assets. In conclusion, operating efficiency ratios are positive at the moment.

ROE and DuPont analysis

Return on equity (ROE) increased rapidly in 2008-2010 and slightly decreased in 2010-2012. Although asset turnover has been stable, ROE has decreased for recent years because of equity multiplier and after-tax profit margin decrease. This decrease reflects capital restructure and downtrend of profit margin recently. Currently ROE tends to improve vastly from 19.32% in 2012 to 24.06%. In comparison with other competitors, ROE of PGS also stays at higher level.

Source: PGS & FPTS

Item (billion)	2012	2013F	2014F	2015 F	2016F	2017F	2018F	2019F
Net revenue	6.375	7.099	7.765	8.000	8.408	8.871	9.330	9.803
Cost og goods sold	-5.391	-5.941	-6.557	- 6.775	-7.235	-7.761	-8.126	-8.453
Gross profit	984	1.158	1.208	1.224	1.173	1.111	1.204	1.350
Selling expense	-509	-634	-643	-661	-676	-628	-575	-554
Enterprise administration expense	-134	-144	-156	-160	-169	-178	-187	-197
EBIT	342	380	410	403	328	304	441	599
Financial Revenue	40	30	29	28	28	27	26	25
Financial Cost	145	86	53	42	41	41	44	51
- Interest expense	-118	-58	-44	-34	-33	-32	-35	-42
Financial net income	-105	-57	-24	-14	-14	-14	-18	-26
Profit from associates and others	19	13	13	13	13	13	13	17
Profit before tax	255	336	399	401	327	304	436	590
- Enterprise income tax	-43	-58	-63	-63	-49	-45	-87	-118
Profit after tax	193	278	336	338	279	259	349	472
- Minority interest	-61	-68	-82	-92	-75	-56	-57	-65
Parent company's profit before tax	133	210	254	246	204	203	292	407
EPS (basic)	3.493	5.531	6.674	6.479	5.369	5.343	7.684	10.716

Forecasted business performance of 2013F – 2019F



APPENDIX

INDUSTRY OVERVIEW

Southern market structure



LPG MARKET

+ Supply

Intense competition

LPG market has an intense competition among players including large energy companies in global market. PVGas is the biggest LPG supplier in Vietnam with more than 70% of retail and wholesale market share, providing input for almost every gas company in the market such as Petrolimex, Saigon Petro, Elf Gas, Shell Gas, Gia Dinh Gas. It supplies for retail market through its subsidiaries and distributors of PGS and PVGas North.

Big LPG suppliers by regions

- In Southern market, PGS has leaded with 33% of market share with its network covering all towns from Da Nang to Ca Mau. In addition to PGS, there are companies such as Saigon Petro, Petrolimex, PetroVietnam, Shell Gas Vietnam, Elf Gas Saigon, Gia Dinh Gas, VinaGas, etc.

- Petrolimex Gas – PGC, is one among three market leaders in sales volume and market share with the network covering across the country in 63 cities and provinces.

- PVGas North is the market leader in the North with market share of 39% and distribution and filling system across North-Central Vietnam. Besides, competitors in this market include Petrolimex, Elf Gas Da Nang, Shell Gas Hai Phong, Thang Long Gas, etc.

Major supply from import

Domestic LPG supply comes from Dinh Co Refinery (capacity of 300,000 tons/year) and Dung Quat Refinary (capacity of 350,000 tons/year). Large amount of LPG demand is imported from surrounding nations and territories such as Thailand, Malaysia, Singapore, Taiwan, Mainland of China, and Middle East. In 2012, 55% of total LPG volume was imported.

+ Demand

LPG demand plays major role in the South

Basically, LPG market in Vietnam is divided into 3 main regions, the North, the Central, and the South. Southern market has highest demand for LPG, accounting for 66% of the whole nation; proportions of the North and the Central are 30% and 4% respectively. There are 4 main groups of consumer. **1.** Industry **2.** Resident (LPG is used in 12-kg cylinders) **3.** Services (mainly hotels, restaurants, recreations, etc., using 45-kg cylinders) **4.** Transportation (LPG is used in minority as alternative energy of conventional gasoline and oil)

Low growth rate of demand

Liquefied petroleum gas market in Vietnam was opened up later than those in surrounding countries and in the world, having sharp increase in 2001-2008 and lower rates recently due to stable demand and

Source: PGS– 2012











Nguồn: PGS



CODE: PGS

Market segmentation of natural gas consumption in Vietnam



Pipeline Position Chart in SouthEast area



Source: PVGas – 2012

Production of CNG consumed in Vietnam



Source: PGS

Potential customers. Currently, there may be 480 potential customers for CNG sales in Industrial Zones Long Thanh, Bien Hoa, Hiep Phuoc, Nhon Trach, etc. They mainly specialize in construction materials (industrial

economic downturn. At current moment, demand growth rate remains steady at 3-4% per year.

Fluctuating LPG price

Lately there has been a fluctuation on upward trend of LPG price because of following reasons. **1.** Unstable political situation in the Middle East; **2.** Oil price fluctuation in global market; **3.** Demand in countries such as Japan increased sharply (Nuclear power plant collapse in Japan resulted in LPG demand increase as an alternative energy). This led to decrease in LPG sales growth rate when some customers in ceramic, porcelain, and glass industry alternated to cheaper energy such as coal, biomass, or CNG.

CNG MARKET

Supply

Monopoly of PGS, CNG, and PGD

PGS is one of two CNG monopolies in the market with its business done by subsidiary CNG Vietnam; the other one is PVGasD. Business of PGS is coordinated by PVGas through pipeline system of PVGasD. Since Q2 2012, PVGasD supplied more CNG by setting up low pressure gas distribution system in Industrial Zones Nhon Tran and Hiep Phuoc.

Plentiful supply

Total design capacity of CNG in PGS is 180 mil m³/year with 2 main compression stations managed by PGS (CNG My Xuan A in Ba Ria – Vung Tau, Hiep Phuoc in Ho Chi Minh City) and 1 station managed by CNG Vietnam (Phu My 1 in Ba Ria – Vung Tau). PGS and CNG Vietnam account 120-130 mil m³ each year. With total supply of 11 bn m³ from the Group which was taken by 9.6 bn m³, there is still an amount of 1.5-2 bn m³ CNG for supply.

Demand

Major demand in the South

CNG only entered the market in 2008 to serve the needs of energy for industry of the South. CNG specifications only allow it supplying to limited areas of less than 200 km radius from the source. Thus CNG use only suits industrial zones specializing in steel, construction materials, brick, ceramic, etc. in the South East and South West.

The South has already had gas processing, shipping, and distribution industry; industrial zone density is high. Industrial zones using gas mainly locate in Phu My, My Xuan (Ba Ria – Vung Tau), Go Dau (Dong Nai). Those zones locate nearby the main gas pipeline Phu My – Nhon Trach – Dong Nai, which makes it easier to construct gas distribution infrastructure. Gas market in the North and the Central is said to be potential; however, only collecting and distributing system in Tien Hai gas field has been constructing. It is expected to be in operation in Q3 2015. After completion, the system will collect gas from Thai Binh field and distribute it to consumers through CNG distribution system (constructed simultaneously) with estimated maximum capacity of 206 mil m³/year.



glass, steel, ceramic, etc.) with potential capacity of about 338 mil m^3 /year.

Growth in users was considerable in previous year but 2011-2012

CNG was favourite type of energy because of its environment-friendly attribute and it is cheaper price than alternative fuels such as FO, DO, and LPG. During the economic downturn, energy saving was the top priority, so since 2008 number of customers has increased considerably. It is expected to increase from 3 customers in 2009 with 9 mil m³ of sales volume to 50 customers in late Q1 2014. However, Vietnam economy has not yet been recovered, production was downscaled, and real estate market was dull. Thus demand for CNG was weakened. 2012 is the year of decreasing CNG demand since most of its customers cut back on production. For instance, steel production volume (accounting for 74% of CNG sales volume) decreased by 25% and ceramic production volume went down by 15%. This result in cancellation of expansion of PGS such as Nhon Trach CNG Plant or LNG Project. However, due to its superiority and government direction of using CNG in industry and services, CNG still has potential to be future fuel.



Income Statement (million VND)	2011	2012	2013	2014
Net revenue	5.764.166	6.374.939	7.099.084	7.765.165
- Cost of goods sold	-4.803.210	-5.390.867	-5.941.491	-6.556.854
Gross profit	960.955	984.072	1.157.593	1.208.310
- Selling expenses	-374.118	-508.966	-633.911	-642.801
- General & Administration	-120.896	-133.529	-143.799	-155.738
expenses Operating profit	465.942	341.577	379.883	409.771
- Loss/ Profit on exchange	48.871	40.301	-56.741	-24.427
rate - Other profit	134.321	145.368	57.753	44.374
Profit before tax and loan	-122.025	-117.546	-57.753	-44.374
interest expense		171		-44.074
- Loan interest expense Profit before tax	0 12.738	18.383	0 18.554	
- Corporat income tax	380.492	236.510	336.393	18.554 398.594
Profit after tax	330.492	193.236	278.455	396.594
- Minority interest	-104.396	-60.511	-68.279	-82.079
EPS (VND)	5.940	3.493	5.531	-02.078
EPS (VND) EBITDA	5.940 656.804	3.493 604.649	5.531 648.270	669.421
Depreciation	190.862	263.072	311.877	270.826
Growth in revenue	55,6%	10,6%	11,4%	9,4%
Growth in profit before tax	190,1%	-26,7%	11,4%	9,4 % 7,9%
Growth in EBIT	27,5%	-37,8%	42,2%	18,5%
Growth in EPS	-55,6%	-41.2%	58,4%	20,7%
Profitability	2011	2012	2013	2014
Gross margin	16,7%	15,4%	3,0%	3.3%
Net profit margin	3,9%	2,1%	5,4%	5,3%
ROE DuPont	43,1%	19,3%	24,1%	23,8%
ROA DuPont	11,5%	6,2%	9,2%	10,5%
EBIT	8,1%	5,4%	5,4%	5,3%
Profit before tax/ Profit after	86,8%	81,7%	82,8%	84,2%
tax Profit before tax/ EBIT	81,7%	69,2%	88,6%	97,3%
Asset Turnover	2,0	2,1	2,3	2,4
Leverage	3.8	3,1	2,6	2,3
ROIC	18,4%	12,4%	14,4%	15,5%
Efficiency	2011	2012	2013	2014
Days sales outstanding	38,0	33,1	33,1	37,4
, .				
Days sales of inventories Days payables outstanding	8,0 74.2	6,7 62,4	7,0 62.4	6,1 66./
Cash conversion cycle	74,2 -28,2	62,4 -22,6	62,4 -22,3	66,4 -22,9
COGS / Inventories	-28,2 45,6	-22,6 54,2	-22,3 52,1	-22,9
Solvency	45,6 2011	54,2 2012	2013	2014
Current ratio	0,94	0,85	1,07	1,24
Quick ratio	0,94 0,90	0,85	1,07	1,24
Cash ratio				
	0,38	0,32	0,47	0,55
Total Liabilities/ total Assets Total Liabilities/ total Capital	0,30	0,27	0,14	0,09
used .	0,57	0,49	0,32	0,20
Total Liabilities/ total Owner Equity	1,33	0,96	0,46	0,25
Short term liabilities/ total Owner Equity	0,11	0,15	5,39	3,42
Long term liabilities/ Total Owner Equity	0,18	0,11	2,29	1,53
Interest coverage ratio	3,82	2,91	6,58	9,23
Valuation	2011	2012	2013	2014
P/E	3,2	8,1	6,3	5,2
P/B	3,2 1,0	1,3	0,3 1,3	1,1
EV/EBITDA	2,0	2,7	2,0	1,7

CODE: PGS

Balance sheet	2011	2012	2013	2014
Asset				
+ Cash and cash equivalent	586.256	443.037	763.696	836.051
+ Short term investment	108.510	68.900	68.900	68.900
+ Short-term Accounts Receivable	628.334	529.046	759.681	830.959
+ Inventories	75.337	123.514	104.379	115.190
+ Other current assets	58.674	25.332	25.332	25.332
Total current assets	1.457.111	1.189.829	1.721.988	1.876.431
+ Fixed asset	1.223.076	1.346.197	1.498.212	1.593.952
+ Accumulated depreciation	-322.650	-506.322	-773.867	-1.009.844
+ Net fixed asset	900.426	839.875	724.345	584.109
+ Long term investment	100.593	93.792	59.485	59.485
+ Other long term assets	502.031	544.909	477.278	515.310
Total long term assets	1.819.364	1.731.513	1.435.040	1.335.479
Total assets	3.276.476	2.921.342	3.157.028	3.211.910
Liabilities & Equity				
+ Account payable	1.020.477	840.709	1.185.862	1.203.642
+ Short term borrowing	372.992	451.274	320.588	203.379
+ Other current payables	148.715	104.901	104.901	104.901
Current liabilities	1.542.184	1.396.884	1.611.351	1.511.922
+ Long term borrowing	605.991	324.844	136.328	90.886
+ Long term payable	160.848	166.658	127.715	72.890
Long term liabilities	766.839	491.502	264.043	163.775
Total liabilities	2.309.023	1.888.386	1.875.394	1.675.698
+Preffered stock	0	0	0	0
+Surplus	46.199	46.150	46.150	46.150
+Chartered capital	380.000	380.000	380.000	380.000
+Retained earning	157.355	165.639	276.425	364.999
+Minority Interest	229.906	222.587	290.866	372.945
Shareholders' Equity	737.547	810.368	990.767	1.163.267
Total capital	3.276.476	2.921.342	3.157.028	3.211.910

Cash flow (million VND)	2011	2012	2013	2014
Cash at the beginning of year	349.978	586.256	443.038	763.696
Profit after tax	225.721	132.724	210.176	253.622
+ Accumulated depreciation	190.862	263.072	311.877	270.826
+ Adjusted	-18.546	11.159	70.076	90.364
+ Change in working capital	-86.040	-201.243	133.653	-64.309
CF from operating activities	416.828	278.143	794.061	632.582
+ Fixed asset liquidation	12.406	18.337	0	0
+ Expense for fixed asset	-493.691	-124.916	-180.508	-321.489
+ Increase/ decrease in investing	0	0	0	C
+ Other investment activities	33.202	0	71.907	C
CF from investing activities	-612.244	-40.640	-108.601	-321.489
+ Dividend paid	-83.127	-175.759	-45.600	-76.087
+ Increase/ decrease in capital	264.989	0	0	C
+ Change in short term liabilities	84.478	78.282	-130.687	-117.209
+ Change in long term liabilities	167.025	-281.147	-188.516	-45.443
+ Other investing activities	-35.841	-40.014	0	C
CF from financing activities	431.694	-380.721	-319.202	-162.652
Total cash flow	236.278	-143.219	320.658	72.355
Cash at the end of year	586.256	443.038	763.696	836.051



INTERPRETATION OF RECOMMENDATION

This assessment aims to determine the share's value representing the corporate valuation, in order to find each share's potential value and provide the useful information to investors during the 12-month investment.

The rate of 18% is based on the rate of 12-month Vietnamese Government Bond adjusted by the risk premium of Vietnamese market.

Recommendation	Explanation
12 months	
Buy	Target price > Market price more than 18%
Add	Target price > Market price between 7% and 18% \square
Neutral	-7% < Target price - Market price < 7%
Reduce	Target price < Market price between -7% and -18%
Sell	Target price < Market price more than -18%

History of recommendation:

Date	Recommendation	Closing price	Target pric
22/01/2014	ADD	34,900	40,800

Disclaimer

The information and statements contained herein, including any expression of opinion, are based upon sources believed to be reliable but their accuracy, completeness or correctness is not guaranteed.

Expressions of opinion herein were arrived at after due and careful consideration and they were based upon the best information then known to us, and in our opinion are fair and reasonable in the circumstances prevailing at the time. Expressions of opinion contained herein are subject to change without notice.

This document is not and should not be construed as, an offer or the solicitation of an offer to buy or sell any securities. FPTS and other related companies and/or their officers, directors and employees may have positions and may have affect transactions in securities of companies mentioned herein and may also perform or seek to perform investment banking services for these companies.

No person is authorized to give any information or to make any representation not contained in this document and any information or representation not contained in this document must not be relied upon as having been authorized by or on behalf of FPTS. This document is private circulation only and is not for publication in the press or elsewhere.

FPTS accepts no liabilities whatsoever for any direct or consequential loss arising from any use of this document or its contents. The use of any information, statements forecasts and projection contained herein shall be at the sole discretion and risk of the users. This document is confidential and is intended solely for the use of its recipient. Any duplication or redistribution of this document is prohibited.

At the time of writing this analytic report, FPTS and FPTS' analyst do not hold any share of this enterprise.

The information related to other stocks or other information related this stock can be viewed at http://ezsearch.fpts.com.vn or will be provided upon official request.

© 2010 FPT Securities

FPT Securities Joint Stock Company Head Office Floor 2 – Tower 71 Nguyen Chi Thanh, Dong Da District, Hanoi, Vietnam Tel: (84.4) 3 773 7070 / 271 7171 Fax: (84.4) 3 773 9058 FPT Securities Joint Stock Company Ho Chi Minh City Branch 29-31 Nguyen Cong Tru, District 1, Ho Chi Minh City, Vietnam Tel: (84.8) 6 290 8686 Fax: (84.8) 6 291 0607 FPT Securities Joint Stock Company Da Nang Branch 100 Quang Trung, Thach Thang Ward, Hải Châu Dist., Da Nang, Vietnam Tel: (84.511) 3553 666 Fax: (84.511) 3553 888