













THE ENTERPRISE INFORMATION

Trading name:

SOUTHERN GAS TRADING JOINT STOCK COMPANY

GENERAL INFORMATION



Name in English: SOUTHERN GAS TRADING
JOINT STOCK COMPANY

Abbreviation: GAS SOUTH JSC

Stock code: PGS

Listing date: 15/11/2007

Stock exchange: HNX

Business registration certificate No. 0305097236, first issued by the Department of Planning and Investment of Ho Chi Minh City dated 25/07/2007, registered for the 22nd change dated 30/06/2020.

Charter capital: 500,000,000,000 VND

Equity: 1,018,991,764,233 VND

(on 31/12/2022)

Total asset: 2,389,451,316,230 VND

(on 31/12/2022)

Head quarter: Floor 4th, PetroVietnam Tower, no. 1 – 5 Le Duan Street, Ben Nghe Ward, District 1, Ho Chi Minh City, Vietnam

Tel: 028 3910 0324 - 028 3910 0108

Fax: 028 3910 0165

Website: www.pgs.com.vn

On 28/03/2000 The Southern Gas Products Trading Enterprise was established On 25/07/2007 Gas South officially operated under the model of a Joint Stock Company
On 15/11/2007 officially listed on the stock exchange

Southern Gas Trading Joint Stock Company (Gas South) plays a key role in distributing and trading gas products covering the market area from Ca Mau to Nghe An province. After more than 23 years of operation, Gas South now is one of the leading LPG and CNG trading companies and the pioneer in LNG supply in Vietnam.

The motto in operation is "SAFETY – QUALITY – EFFECTIVENESS"

Formerly the Southern Gas Products Trading Enterprise, under the Gas Products Processing and Trading Company (PV GAS), the Southern Gas Trading Joint Stock Company was established under Decision No. 389/QD - HĐQT dated March 28th, 2000 of the Board of Directors of Vietnam Oil and Gas Corporation (now Vietnam Oil and Gas Group).

Undergoing a process of formation and development, for the effectiveness of production and business activities, on July 25th, 2007, Gas South officially operated as a joint stock company. On November 15th, 2007, the company's stocks were officially listed on the Hanoi Stock Exchange with the symbol of PGS.

1,360 LPG Retailers More than **70** CNG Customers

2022

2000

2007

5





LPG BUSINESS CAPACITY

- 4 LPG warehouses with the total capacity of 8,100 tons
- 17 LPG filling stations
- · 106 Wholesalers
- · 1,360 Retailers and gas shop system





CNG/LNG BUSINESS CAPACITY



With nearly 16 years of experience, Gas South has been rated as the leading CNG supplier in Vietnam. Currently, many our customers who are reputable Corporations and Companies with famous brands have chosen Gas South as the CNG supplier for their production in various fields such as glazed tiles, ceramics, steel, electronics, and means of public transport, etc.

CNG compressor station for buses

In the field of CNG supply, Gas South has the highly qualified team experienced in designing , installing, and operating the international standardized CNG supply system. Gas South is currently the unique unit owning CNG mother stations at the most convenient locations such as My Xuan CNG mother station (Ba Ria - Vung Tau Province) and Hiep Phuoc CNG mother station (Ho Chi Minh City) equipped with the modern equipments, and transport trailers for the safe and continuous CNG supply to customers.



CNG trailer



In 2023, Gas South has invested in LNG supply stations and transport vehicles for the safe, continuous and effective supply of LNG to all customers.



PRODUCTS, SERVICES AND DISTRIBUTION SYSTEM

LIQUEFIED PETROLEUM GAS (LPG)

Liquefied Petroleum Gas (LPG), commonly known as gas, is composed of Hydro-Carbon gases, mainly Propane and Butane (also Iso-Butane), obtained from the process of crude oil refining or natural gas processing.



CYLINDER LPG PRODUCTION AND DISTRIBUTION PROCESS







SAFETY IN LPG USE



The LPG producing system is operated in the closed – circuit process in which all the specialized equipments are strictly tested before out of factory, and inspected for safety the first time by a competent state authority before being put into use, and then periodically inspected.





FRIENDLY ENVIRONMENT



As a portable, clean and non-toxic fuel, LPG has replaced conventional fuels such as firewood, coal, rice husk ash, rice straw, etc., thereby, reducing the deforestation and airborne dust caused by the burning of these fuels.

During combustion, LPG does not emit NOx, toxic gases and impurities, which makes LPG become one of the clean and environmentally friendly fuels.



PRODUCTS, SERVICES AND DISTRIBUTION SYSTEM

CYLINDER LPG

The cylinder LPG products of Gas South have appeared in the market since 2000, and constantly grown over the years. In recent years, Gas South has maintained its position with the largest market share in the cylinder LPG business.

The sizes of cylinder LPG are diverse, and popular in domestic and industrial applications.

All cylinder LPG products of Gas South are insured with the compensation up to VND 25 billion/case.

THE SIZES OF CYLINDER LPG **AREVERY DIVERSE**

GAS DÂÙ KHÍ

Users: households. small food stores.

Users: Students, small households, and mobile food stands.

6kg Cylinder LPG

Cylinder's weight: 8.1 - 8.5kg

Weight of LPG: 6 kg + 50 g

DÂÙKHÍ

12kg Cylinder LPG

Cylinder's weight:

13.5 - 15.5kg

 $12kg \pm 100g$

Weight of LPG:

20kg Cylinder LPG

Users: For needs of small to medium consumption such as restaurants, cateries, and business households.

Cylinder's weight: 19.2 - 19.8kg Weight of LPG: $20 \text{kg} \pm 100 \text{g}$





45kg Cylinder LPG

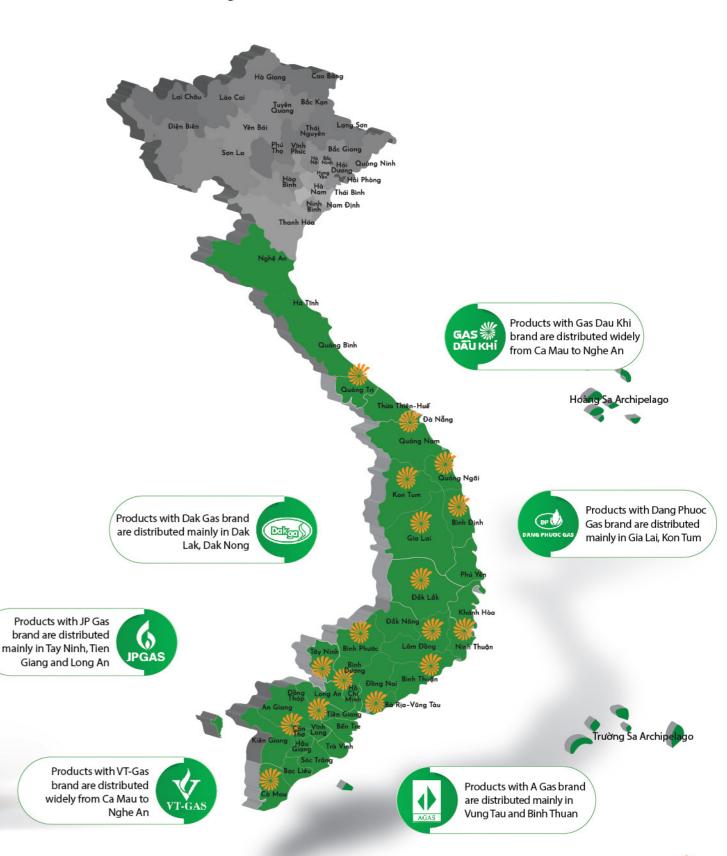
Users: for medium to large business such as restaurants, hotels, schools, catering business, small and medium-sized factories.

Cylinder's weight: 37 - 40kg Weight of LPG: 45kg <u>+</u>200g



DISTRIBUTION AREA OF CYLINDER LPG FROM CA MAU TO NGHE AN

Gas South is the leading LPG trader in the region as well as across the country with the wide network covering the spreading area from Ca Mau to Nghe An province, that includes a system of LPG warehouses and filling stations throughout the business areas. Gas South keeps promoting and maximizing the proportion of output volume through distribution systems from all wholesalers, retailers and affiliated gas store chains to ensure market coverage.



PRODUCTS, SERVICES AND DISTRIBUTION SYSTEM

WAREHOUSE SYSTEM

With the total storage capacity of 4 warehouse system up to 8,100 tons, Gas South has the biggest warehouse system in Vietnam, therefore, been able to take the advantage of operating scale and flexibility in inventory management to limit the impact of LPG price fluctuations in the market.



Dung Quat LPG warehouse in Quang Ngai (1,500 tons), taking directly from Dung Quat Oil Refinery, supplying LPG to the Central region



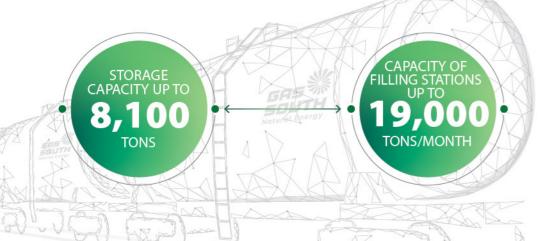
VT GAS LPG warehouse in Dong Nai (1,000 tons)



Go Dau LPG Warehouse in Dong Nai (4,000 tons), supplying LPG to the Southeast region



LPG storage and filling station in Can Tho (1,600 tons), supplying LPG to the Southwest region





SYSTEM OF FILLING STATIONS OWNED BY GAS SOUTH

	- UNIT	PROVINCE/ CITY	CAPACITY (TON/MONTH)
ı.	Western Branch		4,900
01	Ca Mau LPG station	Ca Mau	1,000
02	Can Tho LPG station	Can Tho	3,500
03	Tien Giang LPG station	Tien Giang	400
II.	VT GAS Company		7,400
01	Vinh Loc LPG station	Ho Chi Minh City	1,800
02	Dong Nai LPG station	Dong Nai	2,600
03	Vung Tau LPG station	Ba Ria – Vung Tau	600
04	Tay Ninh LPG station	Tay Ninh	600
05	Binh Phuoc LPG station	Binh Phuoc	500
06	Binh Thuan LPG station	Binh Thuan	500
07	Lam Dong LPG station	Lam Dong	800
III.	South Central Branch		3,900
01	Nha Trang LPG station	Nha Trang	2,700
02	Gia Lai LPG station	Gia Lai	500
03	Dak Lak LPG station	Dak Lak	700
IV.	Central Branch		2,800
01	Binh Dinh LPG station	Binh Dinh	500
02	Dung Quat LPG station	Quang Ngai	1,200
03	Da Nang LPG station	Da Nang	700
04	Quang Tri LPG station	Quang Tri	400
	Capacity of LPG station owned by G	ias South (17 stations)	19,000

INDUSTRIAL LPG SYSTEM

Gas South provides industrial LPG in two forms: by specialized tank trucks and bottled LPG system.

We specializes in advising, designing, installing, maintaining and guiding our partners through operating the system safely and effectively.









LPG CYLINDER

Gas South's Gas Cylinder manufacturing factory has the uniform closed-circuit and highly automated LPG cylinder production line with the main equipment imported from G7 countries (Japan, USA, etc.).

Gas South's LPG cylinders satisfy the domestic and international standards for producing LPG cylinder, specifically:

- 1. Vietnam Standard: TCVN 7763
- 2. Vietnam Standard: QCVN 04:2013/BCT
- 3. US Standard: DOT 4BA
- 4. European Standards:
- EN 1442
- ISO 4706
- ISO 22991
- 5. KGS Standard AC211(Korea)

LPG cylinders are manufactured by imported steel SG 255 of Nippon (Japan).

PRODUCTION CAPACITY OF LPG CYLINDER

1,000,000 CYLINDERS/YEAR

- Qualified valves imported to ensure safety for users.
- The outside of cylinder galvanized by high-tech electric arc technology and electrostatic powder coating technology to protect the metal inside.
- > Life Cycle: over 25 years.





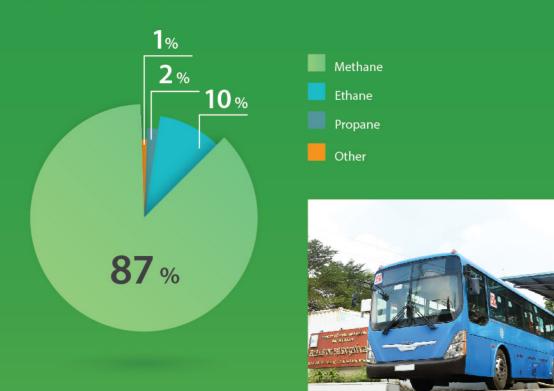


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COMPRESSED NATURAL GAS (CNG)

CNG is compressed natural gas, mainly composed of CH_4 - methane (accounting for 85%-95%), taken from natural gas fields, and then compressed at high pressure (200 to 250 bar) into specialized tanks to be transported to the location of consumption.

COMPONENTS OF CNG



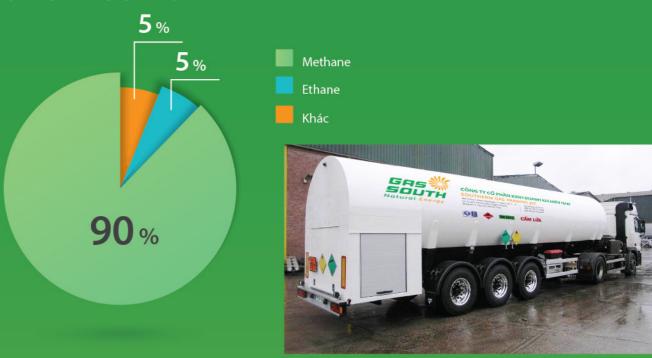




LIQUEFIED NATURAL GAS (LNG)

LNG is natural gas, mainly composed of CH₄ - methane (accounting for about 90%), colourless and odourless, cooled down at -162°C into the liquid form, and stored in specialized vessels or tanks to be transported to the location of consumption.

COMPONENTS OF LNG







17





TABLE FOR PROPERTIES OF COMBUSTION FUEL (*)							
—— PROPERTIES —	CNG	LNG	LPG	DIESEL	FO 3.5S		
Color/Odour	None	None	None	Yes	Yes		
Specific weight	0.75 - 0.83 Kg/Sm³	0.41- 0.5 Kg/Litre	0.51 - 0.56 Kg/Litre	0.82 - 0.87 Kg/Litre	0.991 (Max) Kg/Litre		
Calorific value (MJ/kg)	50 - 56	55	49.5	45.36	41.03		
Burning temperature (°C)	1,954	1,880	1,950	1,780	N/A		
Auto-ignition temperature (°C)	540	482 - 632	374	260	407		



TABLE FOR SAFETY COMPARISION OF COMBUSTION FUEL (*)						
	LNG	CNG	LPG	XĂNG DẦU		
Combustibility	Lighter than a	ir, easily disperse	Heavier than air, settle to ground and accumulate			

Combustibility		air, easily disperse nt of spillage	Heavier than air, settle to ground and accumulate in low areas; highly flammable		
Container material	Special materials, design pressure of 12kg/cm²	Special materials, able to withstand pressure above 250 bar	Normal steel, design pressure of 18kg/cm²	Normal steel	
Accessories		ncy shutdown valve will autom w to prevent the leakage in ca		None	

»» Notes on units:

• BTU: British thermal unit.

• Sm³ (Standard cubic metre): 1 m³ CNG at standard condition (temperature of 15℃, pressure of 1 at)..

• mmBTU: One million BTU.

- 111	IIIDIO	. One		OHBIC
- 1K	cal =	3 968	3211	RTU

TABLE OF CALORIFIC VALUES (*)							
FUEL	UNIT	Kcal	ВТИ	mmBTU			
		•	•				
LPG	Kg	11,823	46,917	0.046917			
DO	Kg	10,835	42,997	0.042997			
FO	Kg	9,800	38,890	0.038890			
CNG	Sm³	10,080	40,001	0.040001			
LNG	Kg	13,114	52,042	0.052042			



TABLE FOR ENERGY CONVERSION OF FUELS (*)

_	FUEL	—— UNIT	~		CONVERSION	-	
	•	•	INC (V.)	CNC (C. 2)	IDC (V.)	DO (V.)	FO (V.)
			LNG (Kg)	CNG (Sm³)	LPG (Kg)	DO (Kg)	FO (Kg)
	LNG	1 kg	1	1.30099	1.10919	1.21034	1.33816
	CNG	1 Sm³	0.768802	1	0.85258	0.93032	1.02857
	LPG	1 kg	0.901522	1.17292	1	1.09119	1.20643
	DO	1 kg	0.826198	1.07490	0.91643	1	1.10561
	FO	1 kg	0.747281	0.97222	0.82889	0.90448	1



(*) Data is only for reference



THE MODEL OF GAS SOUTH'S GAS SUPPLY SYSTEM TO CUSTOMERS **FACTORY CNG TRAILER INDUSTRIAL ZONE LPG TANK LPG TANK** MMERCIAL ZONE AIR MIXER **CNG-USED VEHICLES** LNG TRAILER HOUSEHOLD **GAS SUPPLY SYSTEM SUPPLY TO CUSTOMER**

▶ Advantages:

- Reduce maintenance and repairing costs compared to other fuels.
- Ensure safety against fire and explosion thank to a closed-circuit system, advanced technology and strictly operation management procedure.
- Extend equipment lifespan better than other fuels.
- Save costs thank to competitive prices, high combustion efficiency, as a clean feel.
- Save costs for waste treatment, harmless to the health of workers and the community.

▶ Benefits in use of CNG, LNG of Gas South:

With experience and advantages in simultaneously trading all 3 types of gas products including LPG, CNG, and LNG, Gas South will provide the following benefits:

- Stable fuel supply.
- The cheapest fuel by customer's free choice at each certain time to optimize costs.

LOYAL CUSTOMERS OF GAS SOUTH

































































1. Western Branch

Address: Lot II.5, II.6, Tra Noc II Industrial Park, Phuoc Address: Lot M2, Street 7, Lien Chieu Industrial Park, Hoa Thoi Ward, O Mon District, Can Tho City Phone: 0292 3843 064 Fax: 0292 3843 067

1.1. Western branch in Tien Giang

Address: Tan My Chanh Industrial - Industrial Cottage Cluster, Ward 9, My Tho City, Tien Giang Province Phone: 0273 3958 455 Fax: 0273 3958 445

1.2. Western branch in Vinh Long

Address: 138C Dinh Tien Hoang, Ward 8, Vinh Long Town, Vinh Long Province

Phone: 0270 3877 276 Fax: 0270 3877 276

1.3. Western branch in Ca Mau

Address: 18/4 Ly Thuong Kiet, Cluster 5, Ward 6, Ca Mau Address: Lot D601, Nhon Hoi A Industrial Park, Nhon City, Ca Mau Province

Phone: 0290 3552 991 Fax: 0290 3552 991

1.4. Western branch in Long An

Long Hiep Commune, Ben Luc District, Long An Province

2. South Central Branch

Address: Lot 19, Dien Phu Industrial - VCN, Dien Phu Commune, Dien Khanh District, Khanh Hoa province. Phone: 0258 3725 112/222

Fax: 0258 3725 113

2.1. South Central branch in Dak Lak

Address: Lot CN 7-2, Street 5, Tan An Industrial Cluster, Tan An Ward, Buon Ma Thuot City, Dak Lak Province

Phone: 0262 3949 123 Fax: 0262 3842 842

2.2. South Central Branch in Gia Lai Address: Lot D4, Tra Da Industrial Park, Tra Da

Commune, Pleiku City, Gia Lai Province Phone: 0269 3735 678 Fax: 0269 3735 123

3. Central Branch

Hiep Bac Ward, Lien Chieu District, Danang City Phone: 0236 3772 962 Fax: 0236 3773 944

3.1. Central branch in Quang Ngai

Address: Eastern Dung Quat Industrial Park, Binh Thuan Commune, Binh Son District, Quang Ngai Province Phone: 0989 665 457

3.2. Central branch in Da Nang

Address: Lot M2, Street 7, Lien Chieu Industrial Park, Hoa Hiep Bac Ward, Lien Chieu District, Danang City Phone: 0236 3772 962 Fax: 0236 3773 944

3.3. Central branch in Binh Dinh

Hoi Commune, Quy Nhon City, Binh Dinh Province Phone: 0236 3629 168

3.4. Central branch in Quang Tri

Address: Lot A-1, Street 1, Phuc Long Industrial Park, Address: Quan Ngang Industrial Park, Gio Quang Commune, Gio Linh District, Quang Tri Province

4. Dong Nai Branch

Specializing in trading CNG/LNG products Address: Street No. 3A, My Xuan A Industrial Park, Tan Thanh District, Ba Ria - Vung Tau Province Phone: 0254 3932 923/924/925 Fax: 0254 3932 926/927

5. Vietnam Liquefied Gas Company **Limited - VT GAS**

Address: Room 606, 6th floor, Waseco building, No. 10 Pho Quang, Ward 2, Tan Binh District, Ho Chi Minh City Phone: 028 3 9976 821/2 Fax: 028 3 9976 823

5.1. Vietnam Liquefied Gas Company Limited - VT GAS - Dong Nai Branch

Address: No. 1B-D3, Binh Duong Quarter, Long Binh Tan Ward, Bien Hoa City, Dong Nai Province

5.2. Business location of Vietnam Liquefied Petroleum Gas Company Limited - VT GAS

Address: Lot D1/1, Vinh Loc Industrial Park, Street No. 1B, Binh Hung Hoa B Ward, Binh Tan District, Ho Chi Minh City 5.3. Vietnam Liquefied Petroleum Gas Company Limited - VT GAS - Tay Ninh Branch

Address: 262 Nguyen Luong Bang, Truong Duc Hamlet, Truong Dong Commune, Hoa Thanh District, Tay Ninh Province

5.4. Vietnam Liquefied Gas Company Limited - VT GAS - Binh Phuoc Branch

Address: Lot H1-H2, N4 Street, Bac Dong Phu Industrial Park, Tan Phu Town, Dong Phu District, Binh Phuoc Province

5.5. Vietnam Liquefied Gas Company Limited - VT GAS - Lam Dong Branch

Address: Lot BI-11, Phu Hoi Industrial Park, Phu Hoi Commune, Duc Trong District, Lam Dong Province

5.6. Vietnam Liquefied Gas Company Limited - VT GAS - Binh Thuan Branch

Address: Lot C3.20, D5 Street, Ham Kiem II - Bitas Industrial Park, Ham Kiem Commune, Ham Thuan Nam District, Binh Thuan Province

5.7. Vietnam Liquefied Gas Company Limited - VT GAS - Vung Tau Branch

Address: Street No. 3, Dong Xuyen Industrial Park, Rach Dua Ward, Vung Tau City, Ba Ria - Vung Tau Province

6. Binh Khi Branch

Specializing in producing and maintaining LPG cylinders Address: D3 Street, Vinatex Tan Tao Industrial Park, Hiep Phuoc Town, Nhon Trach District, Dong Nai Province Phone: 0251 3566 051/053 Fax: 025 3566 052







SOUTHERN GAS TRADING JOINT STOCK COMPANY

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