

# The level of LPG business development for households in Thailand

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## Abstract

The objectives of this study are to: 1) Study the level of LPG business development for households in Thailand. 2) To propose guidelines for the development of LPG business for households in Thailand. This research is a mixed methods research that uses quantitative research as the main method of study and qualitative research to process and analyze data from both methods together, resulting in research that can be used to make the most appropriate decision. with mean and standard deviation (SD).

The results showed that the guidelines for the development of LPG business for households in Thailand were the high. When looking at each aspect, it was found that the management strategy was the most important, followed by government policy. Service strategy and marketing strategy, respectively. Government policies, service delivery strategies, and marketing strategies. The guidelines for the development of LPG business for households in the Bangkok Metropolitan Area are as follows: Management strategies such as innovation, distributor practices, and other activities. The practice of delivery staff, Insurance, etc., in terms of government policies such as regulatory improvements, safety controls, price controls, penalties, etc. Expansion of service branches, ordering and payment channels, product quality assurance, and marketing strategies such as the use of after-sales service strategies. Promotions Advertising and increasing distribution channels are important factors that help the LPG business to grow and compete effectively in the market.

**Keywords:** the level of LPG business/ development for households/ Thailand

## Introduction

Overview of energy consumption During the month of January – July 2021, it was found that the proportion of domestic liquefied petroleum gas (LPG) use reached 510 thousand tons/month. Household use is the second largest after the petrochemical sector, which accounts for about 173 thousand tons/month, or about 34% of the country's liquefied petroleum gas (LPG) consumption. Procurement of liquefied petroleum gas (LPG) to meet domestic demand. In order to meet the needs of all sectors, refer to the current data. According to the January Energy Supply Overview Report. – July 2021 found that the total supply volume was 515 thousand tons/month. (Energy Policy and Planning Office, Ministry of Energy, 2021)

The trend of the liquefied petroleum gas (LPG) import market will be clearer. During the period of 2022-2023, which is the period of opening the auction for petroleum concessions in the Erawan and Bongkot fields. As a result, the gas production capacity during that period has decreased from the present. The combined production capacity of the two sources is 2.1 billion cubic feet per day, leaving 1.5 billion cubic feet per day. Liquefied petroleum gas (LPG) has also decreased. Imports of liquefied petroleum gas (LPG) to feed the petrochemical, industrial and household sectors increased, except for the transportation sector, which is expected to decrease. (Nguyen, 2021).

The researcher chose the research in the Bangkok area because it is a large community with various types of households such as buildings, houses, condominiums, etc., with various statuses such as good, middle, and poor. Using LPG in cooking (National Statistics Office, 2023)

Therefore, the researcher is interested in research. Guidelines for the development of LPG business For households in the Bangkok area, the goal is to create suggestions. Guidelines for the development of liquefied petroleum gas (LPG) distribution business for the household sector in the Bangkok area. (Office of Management Strategy, 2021)

### Objectives

- 1) Study the level of LPG business development for households in Thailand.
- 2) To propose guidelines for the development of LPG business for households in Thailand.

### Results

The objective of the first research is to study the level of LPG business development for households in Thailand.

**Table 1** Importance of Factors

Latent Variable Sum (TOT)	amount	Mean	St. Dev.	Priority	order
Management Strategy	400	4.33	0.39	most	1
Marketing Strategy	400	4.30	0.48	most	2
Government Policy	400	4.29	0.44	most	3
Service Strategy	400	4.27	0.42	most	4

From Table 1, they can be sorted as follows: Management Strategy; The highest average score was high overall ( $\bar{X} = 4.33$ , S.D. = 0.39), followed by marketing strategy. Overall average score ( $\bar{X} = 4.30$ , S.D. = 0.48), Government Policy The overall average score is very high ( $\bar{X} = 4.29$ , S.D. = 0.44), and the overall average score is very high. ( $\bar{X} = 4.27$ , S.D. = 0.42) respectively.

**Table 2** Hypothesis Test Results

Research Hypothesis	Route coefficients	t statistics	result
Hypothesis 1: Government Policy Management Strategy Hospitality Strategy and Marketing Strategy It has a direct influence on the development of LPG business for the household sector.			
1.1 Government Policies It has a direct influence on the development of LPG business for the household sector (GOVP → DLPG).	0.74**	2.70	support

1.2 Management Strategy It has a direct influence on the development of LPG business for households (OPRS --> DLPG).	0.45*	2.13	support
1.3 Service Strategy Directly Influences the Development of LPG Business for the Household Sector (SERS--> DLPG)	0.69*	2.32	support
1.4 Marketing strategy has a direct influence on LPG Business Development for Households (MARS--> DLPG)	0.53*	2.23	support
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Hypothesis 2: Government Policy Management strategy and service strategy have a direct influence on marketing strategy.			
2.1 Government Policies Directly influencing marketing strategy (GOVP --> MARS)	0.22*	1.99	support
2.2 Management Strategy Directly Influences Marketing Strategy (OPRS --> MARS)	0.43**	3.62	support
2.3 Service Strategy Directly Influences Marketing Strategy (SERS --> MARS)	0.75**	5.22	support
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Hypothesis 3: Government Policies and Management Strategies Direct influence on service strategy			
3.1 Government Policies Direct influence on service strategy (GOVP --> SERS)	0.61**	4.36	support
3.2 Management strategy has a direct influence on Service Strategy (OPRS --> SERS)	0.34*	2.41	support
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Hypothesis 4: Government Policies It has a direct influence on management strategies.			
4.1 Government Policy Directly influencing management strategy (GOVP --> OPRS)	0.89**	13.02	support

When looking at each aspect, it was found that the management strategy was the most important, followed by government policy. Service strategy and marketing strategy, respectively. Government policies, service delivery strategies, and marketing strategies. The guidelines for the development of LPG business for households in the Bangkok Metropolitan Area are as follows: Management strategies such as innovation, distributor practices, and other activities. The practice of delivery staff, Insurance, etc., in terms of government policies such as regulatory improvements, safety controls, price controls, penalties, etc. Expansion of service branches, ordering and payment channels, product quality assurance, and marketing strategies such as the use of after-sales service strategies. Promotions Advertising and increasing distribution channels are important factors that help the LPG business to grow and compete effectively in the market.

## Discussion

Management Strategy Government Policy Service Strategy and Marketing Strategy It has a direct influence on the development of LPG business for the household sector. In the Bangkok area, the details are as follows:

Research on LPG Business Development Guidelines for the Household Sector in the Bangkok area. Discussion of findings from the research The researcher presented a discussion of the results divided into two parts: a discussion of the results of hypothesis testing and a structural equation model, and a discussion of the value of research methodology and theoretical concepts.

1. Discuss the results of the equation test of the model structure analysis model Choice of direct influence and indirect influence

1.1 Government policy (GOVP) has the most direct correlation with the management strategy (OPRS) of 0.89, followed by the direct impact on the development of LPG business for the household sector (DLPG), service strategy (SERS) and marketing strategy (MARS) of 0.74, 0.61 and 0.22 respectively, and indirectly affects the marketing strategy (MARS), service strategy (SERS) and LPG business development for the household sector (DLPG) at 0.62, 0.30 and 0.24 respectively.

1.2 Management Strategy (OPRS) was directly related to the development of LPG business for the household sector (DLPG) at 0.45, followed by Marketing Strategy (MARS) and Service Strategy (SERS) at 0.43 and 0.34 respectively, and indirectly affected the development of LPG business for the household sector (DLPG) and Marketing Strategy (MARS) at 0.52 and 0.25 respectively.

1.3 Service Strategy (SERS) is directly related to Marketing Strategy (MARS) and LPG Business Development for Households (DLPG) at 0.75 and 0.69 respectively, and indirectly affects LPG Business Development for Households (DLPG) at 0.29.

1.4 Marketing Strategy (MARS) is directly related to the development of LPG business for the household sector (DLPG) of 0.53

## **Suggestions**

This research The researcher has suggestions on issues related to the development of LPG business for the household sector. In the Bangkok metropolitan area, to build on this research. The following are as follows:

2.1 There should be research on other variables related to the business development approach. LPG for households in the Bangkok metropolitan area to compare the importance and to achieve greater coverage.

2.2 There should be a research study, evaluation, and follow-up on the LPG business development guidelines for the household sector. in the Bangkok metropolitan area to create sustainable development.

## **References**

- Energy Policy and Planning Office, Ministry of Energy. (2021). Natural gas CNG/NGV. Bangkok: Ministry of Energy.
- National Statistical Office. (2023). Summary of important results of the survey of the economic and social conditions of households 2023. National Statistical Office, Ministry of Digital Economy and Society.
- Nguyen, E. (2021). Logistics Efficiency and Service Expansion in the LPG Industry. Australian Journal of Energy Management., 34(2), 211-225.
- Office of Management Strategy (2021). Statistics of Bangkok 2021. Retrieved October 10, 2021 from <https://webportal.bangkok.go.th/pipd/page/sub/21303/Statistics-of-Bangkok-2021>.