PT Perusahaan Gas Negara (Persero) Tbk Strategic Development Facing Natural Gas Business Competition in Indonesia

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Abstract- The objectives of this research are to identify influencing factors of PGN business, to formulate alternative strategies in developing business, and to recommend the priority strategies that could be applied on PGN business development in facing competition in natural gas business in Indonesia. This research used descriptive method with case study and descriptive analysis, internal-external analysis, IE matrix analysis, and SWOT and QSPM analysis. Data collecting technique used purposive sampling. From the result, strategy priority that could be done was to develop regulation management and to increase cooperation with stakeholder; to increase competitive and reliable supply through independent gas domination; to run competent, synergic business with international perspective; to improve human resources capability, technology, innovation, and information technology focusing on the future; to improve the business domination based solution of energy in all chain of natural gas values; and to build reliable and sustainable infrastructure.

Index Terms- Natural Gas, PGN, SWOT, QSPM, Priority Strategies

I. INTRODUCTION

PT Perusahaan Gas Negara (Persero) Tbk, also known as PGN, is the company dealing with the transmission and distribution of natural gas with consumers from all over the country.

With competition and business environment that is getting more dynamic, it makes a business to have appropriate strategy to be able to compete and to win the market (Supriatna and Aminah, 2014). PGN is a leader in distribution and transmission business of natural gas in Indonesia, however with more competitive business in the field, PGN market is decreasing. The decrease of the market can be seen in Table 1 and Table 2.

Table 1 Market of natural gas distribution 2011 - 2014

<table>
<thead>
<tr>
<th>No</th>
<th>Company</th>
<th>2011 Dist (%)</th>
<th>2012 Dist (%)</th>
<th>2013 Dist (%)</th>
<th>2014 Dist (%)</th>
<th>Trend</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PGN</td>
<td>87.30</td>
<td>83.08</td>
<td>79.00</td>
<td>81.00</td>
<td>Decrease 4%</td>
</tr>
<tr>
<td>2</td>
<td>Other (Pertagas, EHK, BBG, Sadikun, etc)</td>
<td>12.70</td>
<td>16.92</td>
<td>21.00</td>
<td>19.00</td>
<td>Increase 4%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Source: 2011-2014 Annual Report

Table 2 Natural Gas Transmission 2011-2014

<table>
<thead>
<tr>
<th>No</th>
<th>Company</th>
<th>2011 Trans (%)</th>
<th>2012 Trans (%)</th>
<th>2013 Trans (%)</th>
<th>2014 Trans (%)</th>
<th>Trend</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PGN</td>
<td>52.90</td>
<td>51.72</td>
<td>52.00</td>
<td>49.00</td>
<td>Decrease 3%</td>
</tr>
<tr>
<td>2</td>
<td>Other (Pertagas, EHK, BBG, Sadikun, etc)</td>
<td>47.10</td>
<td>48.28</td>
<td>48.00</td>
<td>51.00</td>
<td>Increase 3%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Source: 2011-2014 Annual Report

Business characteristic of gas is supply - gas transmission/distribution pipeline – market should be fulfilled. Without gas supply, PGN cannot advance the transmission or distribution pipeline demanded by the market. Several regulation on the authority and obligation of many involving parties in the management of oil and natural gas sector are stipulated in elastic articles, or it is up to the government for further regulation (Qurbani, 2012). Determining the gas allocation is in government’s hands. It has already set the policy related to the utilization of natural gas in to promote the increase in domestic natural gas consumption to meet domestic demand (Presidential Regulation No. 5, 2005).

The policy on the utilization of natural gas is promulgated, however, the availability of the infrastructure of transmission and distribution line of natural gas is not yet spread evenly all over Indonesia. Only big cities in Indonesia, Sumatera and Java in particular
that have transmission and distribution of natural gas pipeline ready. The availability of infrastructure is often the obstacle in utilizing the natural gas for domestic consumption.

The change becomes the challenge for any companies to retain their business. Regulation and technology are the sample of unpredictable change (Saragih and Suwardi, 2014). It is the time in which the company needs an appropriate strategy if they do not want their business collapse and bankrupt.

**Research Purposes**

From the problems identified, the objectives of this research are:

1. To identify the influencing factors of PGN business, both from internal and external sides.
2. To formulate alternative strategies in developing PGN business.
3. To recommend the priority strategies that can be applied to develop the PGN business.

## II. RESEARCH ELABORATIONS

Anggraini (2005) conducted a research on the PT Perusahaan Gas Negara (Persero) Tbk Business Strategy: From Marketing Perspective. This research was to analyze the marketing mixture done by PGN, the strength, weakness, opportunity and threat and also to recommend marketing strategies to strengthen PGN position in competitive downstream business of natural gas. This research was done through direct observation, interview with PGN management and data from other sources. The marketing strategy was analyzed using STP and marketing mix tools. Porter Five Forces Model was used to analyze the competition structure in gas industry. SWOT Analysis was done in external and internal environment. From the analysis, the marketing strategy suited PGN was intensive growth of opportunity. The alternatives consisted of market penetration by building the marketing system with customer satisfaction orientation through development of employee in Marketing and Operation/Maintenance; marketing development strategy through the acceleration of the construction of Indonesia integrated natural gas pipeline and distribution line; and product development strategy by improving the product quality particularly the reliability through abundant supplier strategy either from gas well or other sources.

Pasaribu (2012) conducted a research on The Analysis of Company Strategy in Competition, a Case Study in PT Perusahaan Gas Negara (Persero) Tbk. This research was to analyze and to evaluate the competing strategy done by PT Perusahaan Gas Negara (Persero) Tbk in facing the competition in downstream industry of natural gas. The method of qualitative analysis was used in the research with accomplishment and growth of the company as the parameter. SWOT analysis was used to find and to evaluate factors of strength, weakness, opportunity and threat dealt with by the company, while important factors for the company and its future relevance were identified with Key Success Factor/KSF analysis. This research showed that the competing strategy currently used by PT Perusahaan Gas Negara (Persero) Tbk is still relevant with the competition and the change of environment.

Restiyan (2013) in the thesis on Competitive Strategic Analysis of PT Perusahaan Gas Negara (Persero) Tbk in Oil and Gas Downstream Business in Indonesia discussed about the effective competing strategy based on the dynamic change of business environment. This research was to analyze external and internal environment factors and to formulate the alternative competitive strategy most suited PT Perusahaan Gas Negara (Persero) Tbk (PGN). The external environment analysis was done through macro environment analysis based on political, economic, social and technological factors and industrial environment analysis using five forces theory, strategic group maps and competitive strengths to get key success factor in the competition of oil and gas downstream business in Indonesia. Internal analysis was done through resources analysis and value chain analysis using elements of resources and capability and competitive strength analysis using VRIO to identify the excellence of sustainable competition of PGN. By applying the analysis of external and internal environment to formulate the business strategy of PGN in the competition of downstream business of oil and gas in Indonesia, it is found that the alternative competitive strategy most suited the condition of PGN was Best Cost Provider Strategy. Best Cost Provider Strategy is by focusing on giving the consumers the superior value by combining the differentiation and cost leadership.

Jusharyadi (2014) conducted a research on Strategic Analysis of PT Perusahaan Gas Negara (Persero) Tbk with SWOT Analysis. This research was to identify the strategy suited PT. Perusahaan Gas Negara (Persero), Tbk (PGN) in facing the competition in Indonesia oil and gas downstream business and achieved and maintained the market leader position in Indonesia. Competitive Strategic formulation is based on the analysis on internal and external condition faced by the company. The research was also to recommend the future strategy to be run by PGN in facing the internal and external environment of the company. The method of research used was descriptive qualitative method and SWOT analysis method. The findings showed that the competing strategy fitted PGN was core business reinforcement and market development, backward integration, business diversification, creating value added strategy, and to cooperate with stakeholders. To be able to apply the strategy maximally, PGN needs to improve its marketing research ability. In addition, the company needs to improve the capability, skill, and mentality of the employee to go international in order to reduce the inefficiency and to encourage productivity through training and development program either in-house or out-house training.

The research approach used was descriptive method with case study in PT. Perusahaan Gas Negara (Persero) Tbk. The research was conducted in April-August 2015. Data used was primary (interview and questionnaire) and secondary data with purposive
sampling technique of data collection. The research used descriptive, internal, external, IE matrix, SWOT and QSPM (Qualitative Strategic Planning Matrix analysis).

III. RESULTS

Internal Factor Analysis
From the interview and questionnaire to the respondents, it is known that some factors determining the success that influence the development of PGN are:

1. Strengths
   A. To own business in the value chain of natural gas;
   B. To own large and vast spread assets and infrastructure;
   C. New organizational structure accommodates the business in the value chain of natural gas;
   D. Struktur organisasi baru mengakomodir usaha di sepanjang rantai nilai gas bumi;
   E. Ability to get loan;
   F. Domination of capability in running infrastructure projects.

2. Weaknesses
   A. Segment of infrastructure business is limited margin;
   B. Unintegrated and no synergistic assets and infrastructures;
   C. Unclear customization of service to consumers

Internal Factor Evaluation
Internal Factor Evaluation is done by calculating average balance of each of internal key factors which then is formulated in an evaluation matrix of each factors. Internal Factor Evaluation (IFE) matrix is used to see the internal condition of the company. The result of IFE analysis can be seen in Table 3.

The main strength owns by PGN in developing its business is that PGN owns the largest and vast spread assets and infrastructures. This factor is level 4 with quality of 0.142, therefore the average balance score is of 0.568. This factor, therefore, has a relatively high interest in the development of PGN.

<table>
<thead>
<tr>
<th>Internal Strategic Factors</th>
<th>Quality</th>
<th>Level</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strengths:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. To own business in the value chain of natural gas;</td>
<td>0.139</td>
<td>3</td>
<td>0.417</td>
</tr>
<tr>
<td>2. To own large and vast spread assets and infrastructure;</td>
<td>0.142</td>
<td>4</td>
<td>0.568</td>
</tr>
<tr>
<td>3. New organizational structure accommodates the business in the value chain of natural gas;</td>
<td>0.112</td>
<td>3</td>
<td>0.336</td>
</tr>
<tr>
<td>4. Struktur organisasi baru mengakomodir usaha di sepanjang rantai nilai gas bumi;</td>
<td>0.121</td>
<td>4</td>
<td>0.484</td>
</tr>
<tr>
<td>5. Ability to get loan;</td>
<td>0.132</td>
<td>4</td>
<td>0.528</td>
</tr>
<tr>
<td>Total</td>
<td>0.646</td>
<td></td>
<td>2.333</td>
</tr>
</tbody>
</table>

Weaknesses:
1. Segment of infrastructure business is limited margin;
2. Unintegrated and no synergistic assets and infrastructures;
3. Unclear customization of service to consumers

<table>
<thead>
<tr>
<th>Quality</th>
<th>Level</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.123</td>
<td>2</td>
<td>0.246</td>
</tr>
<tr>
<td>0.117</td>
<td>2</td>
<td>0.234</td>
</tr>
<tr>
<td>0.114</td>
<td>2</td>
<td>0.228</td>
</tr>
<tr>
<td>Total</td>
<td>0.354</td>
<td>0.708</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Internal Strategic Factors</th>
<th>Quality</th>
<th>Level</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Internal</td>
<td>1</td>
<td></td>
<td>3.041</td>
</tr>
</tbody>
</table>

Source: 2015 Data

The major weakness of PGN is that the segment of infrastructure business is limited margin. This weakness factor is level 2 with quality of 0.123 therefore the average balance score is of 0.246. This analysis is resulted in total balance score of 3.041. This shows that the internal factor ability of PGN in developing the business is beyond the average.

External Factor Analysis
Some key factors as opportunity and threat are as follows:

1. Opportunities
   A. Increasing potential market of natural gas;
   B. Competitive buying price of PGN natural gas;
   C. The acquisition of the competitor to prevent competition and to improve the capability.
2. Threats
   A. Steer policy and determination of gas allocation;
   B. Lack of natural gas supply;
   C. Competitions are able to take over market.

External Factor Evaluation
   External Factor Evaluation is done by calculating the average balance of each of external key factors that are then compiled in each factor evaluation matrix (Hubeis dan Najib, 2008). The main opportunity held by PGN in developing natural gas business is the increasing potential market of natural gas as seen in Table 4.

Table 4 Result of External Factor Evaluation (EFE) PGN

<table>
<thead>
<tr>
<th>External Strategic Factors</th>
<th>Quality</th>
<th>Level</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opportunities:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Increasing potential market of natural gas</td>
<td>0.182</td>
<td>3</td>
<td>0.546</td>
</tr>
<tr>
<td>2. Competitive buying price of PGN natural gas</td>
<td>0.178</td>
<td>3</td>
<td>0.534</td>
</tr>
<tr>
<td>3. The acquisition of the competitor to prevent competition and to improve the capability</td>
<td>0.148</td>
<td>2</td>
<td>0.296</td>
</tr>
<tr>
<td>Total</td>
<td>0.508</td>
<td>1</td>
<td>1.376</td>
</tr>
<tr>
<td>Threats:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Steer policy and determination of gas allocation</td>
<td>0.170</td>
<td>3</td>
<td>0.510</td>
</tr>
<tr>
<td>2. Lack of natural gas supply</td>
<td>0.193</td>
<td>4</td>
<td>0.772</td>
</tr>
<tr>
<td>3. Competitions are able to take over market</td>
<td>0.129</td>
<td>3</td>
<td>0.387</td>
</tr>
<tr>
<td>Jumlah</td>
<td>0.492</td>
<td></td>
<td>1.669</td>
</tr>
<tr>
<td>Total Eksternal</td>
<td>1</td>
<td></td>
<td>3.045</td>
</tr>
</tbody>
</table>

Source: 2015 Data

This opportunity factor holds quality of 0.182 with score of 0.546. Threat factor holding the highest score is lack of natural gas supply with quality of 0.193 and score pf 0.772. The analysis produced total balance score of 3.045. It showed that PGN response on external factor in developing the business of natural gas is beyond average.

Mapping (IE)
   The analysis result using IFE and EFE is IFE score = 3.041 and EFE = 3.045. This score is then entered into the Internal External (ie) analysis. The evaluation result in Figure 1 put PGN in Quadrant I (Grow and Develop). The Strategy to be taken to optimize the development of PGN is by applying intensive strategy and integration strategy, and merger and strategic alliance. Intensive strategy can be done by market penetration and development and product development. Integration strategy can be done through backward integration, future integration and horizontal integration.

Figure 1 Internal External Matrix of PT Perusahaan Gas Negara (Persero) Tbk

Total Value of IFE Quality

<table>
<thead>
<tr>
<th>Strong 3.00 – 4.00</th>
<th>Average 2.0 – 2.99</th>
<th>Weak 1.0 – 1.99</th>
</tr>
</thead>
<tbody>
<tr>
<td>I Grow and Develop (3.041; 3.045)</td>
<td>II Grow and Develop</td>
<td>III Keep and Maintain</td>
</tr>
<tr>
<td>IV Grow and Develop</td>
<td>V Keep and Maintain</td>
<td>VI Harvest or Divestment</td>
</tr>
<tr>
<td>VII Keep and Maintain</td>
<td>VIII Harvest or Divestment</td>
<td>IX Harvest or Divestment</td>
</tr>
</tbody>
</table>

Strategy Alternatives with TOWS Matrix
   From the analysis result of the combination of internal and external factors through TOWS matrix, the strategy alternatives of PGN development are as follows:
1. **SO Strategy (Strengths-Opportunities)**
   - The strategy resulted from the combination of managing the strength of PGN and utilizing the opportunity is:
     - Strategy SO1: Building reliable and sustainable infrastructure
     - Strategy SO2: Improving human resources capability, technology, innovation, and information technology focusing on the future.

2. **WO Strategy (Weaknesses-Opportunities)**
   - Strategy resulted from the combination of utilizing the opportunity and overcome the weakness of PGN is:
     - Strategy WO: Improving the solution of business domination based energy in the entire value chain of natural gas.

3. **ST Strategy (Strengths-Threats)**
   - Strategy resulted from the combination of managing the strength of PGN and anticipating the threat is:
     - Strategy ST1: Increasing the reliable and competitive supply through independent gas domination.
     - Strategy ST2: Developing regulation management and increasing the cooperation with stakeholders.

4. **WT Strategy (Weaknesses-Threats)**
   - Strategy resulted from the combination of overcoming the weakness and anticipating the threat of PGN is:
     - Strategy WT: Running a competent, synergic business with international perspective

**Determining Priority Strategy with QSPM**

In QSPM analysis, the alternatives are determined based on the interest level in the internal and external environment of PGN, therefore the alternatives can be done based on the interest.

The result of QSPM shows that the first priority strategy that can be done by PGN is applying the strategy based on the strength and threat (ST2), i.e. developing the regulation management and increasing the cooperation with the stakeholders. Second priority strategy is applying the strategy based on the strength and threat (ST1) that is increasing the reliable and competitive supply through independent gas domination. Third priority strategy is applying the strategy based on the weakness and threat (WT) that is running the competent, synergic business with international perspective. Fourth priority strategy is applying strategy based on the strength and opportunity (SO2), i.e. increasing human resources capability technology, innovation, and information technology focusing on the future. Fifth priority strategy is applying strategy based on weakness and opportunity (WO) that is improving the solution of business domination based energy in the entire value chain of natural gas. Sixth priority strategy is applying strategy based on strength and opportunity (SO1) that is building reliable and sustainable infrastructure.

**IV. CONCLUSION**

From the findings, it can be concluded that the first priority strategy to be done is developing the regulation management and increasing the cooperation with the stakeholders, and next priority strategy is increasing the reliable and competitive supply through independent gas domination. For the third priority strategy is running the competent, synergic business with international perspective while fourth priority strategy is increasing human resources capability technology, innovation, and information technology focusing on the future. Fifth priority strategy is improving the solution of business domination based energy in the entire value chain of natural gas and sixth priority strategy is applying strategy based on strength and opportunity (SO1) that is building reliable and sustainable infrastructure.

Some recommendations for this research is that PGN should actively involve in the discussion about developing discourse in current gas natural business that is the establishment or appointment of business entity as natural gas aggregator functioning as collector business entity that collects and purchases the natural gas supply from several suppliers or producer of domestic natural gas so that the natural gas supply for domestic needs is guaranteed. PGN should make breakthroughs in opening new market by creating natural gas based integrated area. This integrated area includes industrial, commercial and property area including natural gas generating power plant. The development of this integrated area can give stimulant for the growth of economy around the area.

**REFERENCES**


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