



# PT PGAS Company Performance Analysis Using the Balanced Scorecard

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**ABSTRACT:** The balanced scorecard can assist companies in assessing company performance so that managers can make the right decisions to achieve company goals. This study aims to determine and measure company performance by applying the balanced scorecard. This study uses a descriptive design that involves analyzing and describing the results of the research to draw conclusions. The object used in this research is PT Perusahaan Gas Negara Tbk (PGAS). The data collection technique uses a documentation technique, namely collecting data and recording existing data in the company in the form of financial reports from 2019–2021. Performance measurement at PT Perusahaan Gas Negara Tbk (PGAS) with a balanced scorecard approach uses four perspectives: a financial perspective, a customer perspective, an internal business process perspective, and a learning and growth perspective. According to the results of the four perspectives, the total score for 2019-2020 is 18 and for 2020-2021, it is 23. As a result, it is possible to conclude that the company's performance improved in 2020-2021.

**Keywords:** Balanced Scorecard; Financial Perspective; Customer Perspective; Internal Business Process Perspective; Learning and Growth Perspective

## I. INTRODUCTION

The development of the business for now is very fast, and many companies are starting to stand up for now, so there are many competitors. Many companies are trying to improve the quality of goods and services produced. A company that strives to be the best in its field. However, economic changes occur in business, and companies must be able to adjust to the economic conditions that surround them. The existence of competitors can also affect the company. Companies must be able to optimize the goods and services they produce. With the effectiveness and efficiency implemented by the company, it can also optimize the goods and services produced. Not only external factors but also internal factors also affect developments in the company.

Performance appraisal has the objective of determining the contribution of a part within the company to the company's organization as a whole, providing a basis for assessing the quality of performance of managers within the company, and providing motivation for managers within the company in tune with the main objectives of the company's organization as a whole (Mulyadi, 2007). Performance measurement that only focuses on financial aspects often eliminates other aspects that are no less important. Such as customer aspects, internal business process aspects, and learning and growth aspects. One of the contemporary management tools that can measure performance in a balanced way is the balanced scorecard. The balanced scorecard can assist companies in assessing company performance so that managers can make the right decisions to achieve company goals (Khattoon & Farooq, 2014).

PT Perusahaan Gas Negara Tbk (PGAS) is engaged in implementing and supporting the government's

national and economic development programs, particularly developing the use of natural gas for the benefit of the community as well as providing sufficient volume and quality of gas for public consumption. Judging from the annual report for the 2019–2021 period, the net profit of PT Perusahaan Gas Negara Tbk has decreased, and there have been problems with PT Perusahaan Gas Negara Tbk. The COVID-19 pandemic is a challenge experienced by companies. With measurements of company performance from a financial perspective, customer perspective, internal business perspective, and learning and growth perspective, companies can evaluate from several aspects and anticipate external threats such as the economic downturn in Indonesia.

In research conducted by Riyana (2017), it was stated that the 2015–2016 period was better than the 2014–2015 period based on the perspectives of finance, customers, internal business processes, and learning and growth. Based on this background, the researchers conducted research on "PT PGAS Company Performance Analysis with the Balanced Scorecard Approach."

## II. MATERIAL AND METHODS

### 2.1. Agency Theory

Agency theory, according to Anthony & Govindarajan (2010), is a relationship or contract between a principal and an agent. Agency theory assumes that each individual is solely motivated by his own self-interest, giving rise to a conflict of interest between the principal and the agent

Agency theory shows that the company can be seen as a contractual relationship between resource holders. An agency relationship arises when one or more individuals called principals employ one or more other individuals called agents to perform certain services and then delegate decision-making authority to agents.

The link between agency theory and the balanced scorecard is that the shareholder gives the task or authority to the company's management. The company's management exercises this authority by using a balanced scorecard system during a predetermined period. Then the owner assesses the performance of the company's management to see whether it is in accordance with the targets set.

### 2.2. Definition of Performance Measurement

Mulyadi (2007:328) explains the notion of "company performance" as the success of the company as a whole in achieving strategic goals that have been set through selected strategic initiatives. So performance measurement is the process of assessing the progress made in achieving the goals and objectives set by the organization to support the achievement of the organization's mission, including the efficiency and effectiveness of organizational activities.

### 2.3. Factors Affecting Employee Performance

Factors that directly influence the level of achievement of company performance, according to Tangkilisan (2007), are as follows:

- a. Technology, which includes work equipment and work methods used to produce products or services produced by the company
- b. Quality of inputs or materials used by the company
- c. The quality of the physical environment, which includes work safety, room arrangement, and cleanliness
- d. Organizational culture is a pattern of behavior and work patterns that exist within the company.
- e. Leadership as an effort to control the company's employees
- f. Management of human resources, which includes aspects of compensation, rewards, and others.

### 2.4. Definition of Balanced Scorecard

Tunggal (2008:110) defines the balanced scorecard as a framework for translating the company's vision and strategy into a set of integrated performance measures. In the balanced scorecard approach, top management explains or elaborates its strategy into performance benchmarks so that employees understand it and can implement something to achieve this strategy. As a result, the balanced scorecard is a framework, a

language that communicates to all employees the vision, mission, and strategy regarding the key determinants of current and future success. In addition, the balanced scorecard also emphasizes that the measurement of financial and non-financial performance must be part of the information system for all employees, both top and bottom management.

### 2.5. Balanced Scorecard Perspective

The balanced scorecard provides a comprehensive framework that translates the company's strategic goals into a comprehensive set of performance measurements that seek to balance financial measurements with other measurements so that organizational performance can be described in a complete and accurate manner.

There are 4 perspectives in the balanced scorecard, namely:

a) Financial perspective

The balanced scorecard contains goals and measurements that represent the final measure of the success of a profit-seeking sale. Measurements of financial performance, such as operating income and return on investment, show whether the company's strategy and its implementation can increase shareholder value. Financial performance increases through two basic approaches: revenue growth and productivity. This perspective measures organizational performance in achieving optimal financial and market value. The three main objectives in this perspective are revenue growth, cost management, and asset utilization.

b) Customer Perspective

In this perspective, the company's attention should be directed to its internal capabilities to improve product performance, innovation, and technology by understanding market tastes. In this perspective, the role of market research is very large. A product or service must be of value to customers or potential customers, meaning that it provides greater benefits than the customers are willing to sacrifice to get them.

c) Internal Business Process Perspective

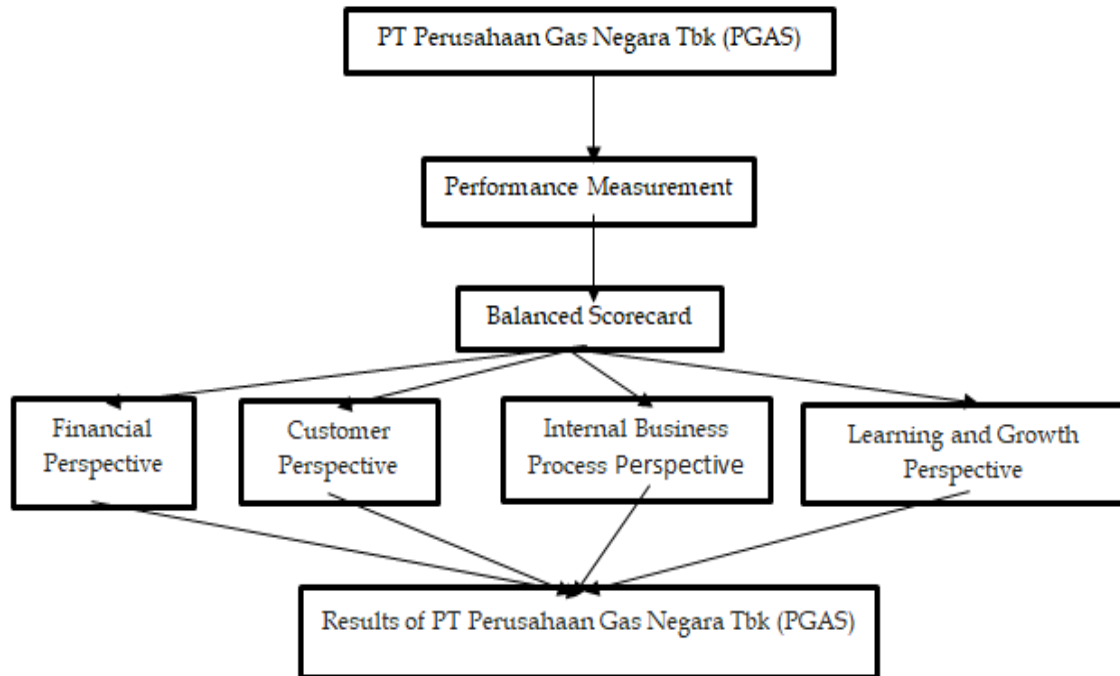
In this perspective, the company measures all activities carried out by the company, both by managers and employees, to create a product that can provide certain satisfaction for customers and shareholders.

d) A Look at the Learning and Growth Process

In the perspective of learning and growth processes, companies see three main factors, namely people, organizational systems, and procedures, which play a role in the company's long-term growth.

The four perspectives mentioned above are measured by complementary performance indicators, which show that if there is an increase in the quality of products or services produced by employees and the capability of information systems (learning and growth perspective) in the perspective of internal business processes, then a quality product will increase customer satisfaction (customer perspective) and, ultimately, sales and profits of the organization (financial perspective). From this relationship, it can be seen that the learning and growth perspective is the basis for other perspective.

### 2.6. Conceptual Framework



### III. RESEARCH METHOD

#### Types of Research

This research is a qualitative approach to research. This study uses a descriptive design that involves analyzing and describing the results of the research to draw conclusions. This study uses the balanced scorecard method to determine company performance using four financial perspectives, customer perspectives, internal business process perspectives, and learning and growth perspectives, which are expressed by a total score at PT Perusahaan Gas Negara Tbk (PGAS). The object used in this research is PT Perusahaan Gas Negara Tbk (PGAS).

#### Operational Definition

Table 1: Definitions and Measurement Methods of Financial and Non-Financial Perspectives

No	Variable	Dimension	Description
1	Financial Perspective	The financial perspective describes the company's achievements as measured from the financial side.	a. ROE b. ROA c. Growth and Revenue d. Profit margin e. Cost Efficiency f. Total asset turnover
2	Customer Perspective	The customer perspective describes the level of customer satisfaction with products, prices, distribution and services.	a. Customer cash b. Customer acquisition c. Customer retention
3	Internal Business Process Perspective	The customer perspective describes the level of The internal business process perspective describes the internal processes that provide value for customers and owners' satisfaction with	a. Operating profit b. Productivity level

No	Variable	Dimension	Description
		products, prices, distribution and services.	
4	Learning and Growth Perspective	The learning and growth perspective describes the ability of individual companies to increase profits and corporate value.	a. Net income per employee b. Skilled worker

### Data Collection Techniques

Data collection techniques using documentation techniques, namely collecting data and recording existing data in the company, Data collection methods are techniques or methods used by researchers to collect data. Data collection was carried out to obtain the information needed in the framework of the research. This technique is used to measure company performance using the balanced scorecard method at PT Perusahaan Gas Negara Tbk (PGAS) in the form of financial reports from 2019–2021.

### Data Analysis Technique

The descriptive analysis method is a data collection, classification, interpretation, and interpretation activity that provides an overview of the problems encountered or studied. The descriptive analysis method using the balanced scorecard includes the following steps:

- Calculating the score of the financial perspective related to the company's financial statements. This analysis is obtained by calculating the company's financial performance, namely ROE, ROA, growth and revenue, net profit margin, cost efficiency and total assets turnover.
  - Return on Equity  

$$\text{ROE} = \frac{\text{Net profit}}{\text{Total capital}} \times 100\%$$
 Source: (Riyana, 2017)
  - Return on Assets  

$$\text{ROA} = \frac{\text{Net profit}}{\text{Total assets}} \times 100\%$$
 Source: (Riyana, 2017)
  - Growth and Revenue  

$$\text{Growth and Revenue} = \frac{\text{Current year's income} - \text{Last year's income}}{\text{Last year's income}} \times 100\%$$
 Source: (Nany, Raharjo and Handini, 2008)
  - Net Profit Margin  

$$\text{Net Profit Margin} = \frac{\text{Net profit}}{\text{Sales}} \times 100\%$$
 Source: (Nugrahyu & Retnani, 2015)
  - Cost Efficiency  

$$\text{Cost Efficiency} = \frac{\text{Operating expenses}}{\text{Revenue}} \times 100\%$$
 Source: (Nugrahyu & Retnani, 2015)
  - Total Assets Turnover  

$$\text{Total Assets Turnover} = \frac{\text{Net Sales}}{\text{Average total assets}} \times 100\%$$
 Source: (Prasetyatno, Hidayat and Utami, 2011)
- Calculate the customer perspective score with the following steps:
  - Comparing the amount of cash receipts from customers with the previous period (Riyana, 2017).
  - Customer Retention  

$$\text{Customer Retention} = \frac{\text{Number of existing customers}}{\text{Number of customers}} \times 100\%$$
 Source: (Nugrahyu & Retnani, 2015)
  - Customer Acquisition

$$\text{Customer Acquisition: } \frac{\text{Number of new customers}}{\text{Number of customers}} \times 100\%$$

Source: (Nugrahyu & Retnani, 2015)

3. Calculating the internal business process score with the achievement of results
  - a. Operating profit describes the efficiency of sales costs and production costs (Riyana, 2017).
  - b. Level of Productivity

$$\text{Level of Productivity: } \frac{\text{Revenue}}{\text{Business expenses}} \times 100\%$$

Source: (Nany, Raharjo and Handini, 2008)

4. Calculating learning and growth scores by:

- a. Net Income per Employee

$$\text{Net Income per Employee: } \frac{\text{Net profit}}{\text{Number of employee}}$$

Source: (Riyana, 2017)

- b. Skilled Worker

$$\text{Skilled Workers: } \frac{\text{Given employee training}}{\text{Number of employee}} \times 100\%$$

Source: (Lesmana, 2021)

5. To measure performance, a comparison will be made between the achievements of a period and those of the previous period.

$$\text{Performance range: } \frac{\text{Achievement year n} - \text{Achievement year n-1}}{\text{Achievement year n-1}}$$

Source: (Riyana, 2017:49)

Table 2

Determination of Score Based on the Range of Performance Measurement Results

Performance Range	Rates	In Score	Relationship Level
<0%	D	1	Not Good
0-50%	C	2	Pretty Good
51-100%	B	3	Good
>100%	A	4	Very Good

## IV. RESULTS

### Data Description

PT Perusahaan Gas Negara Tbk (PGAS) is engaged in implementing and supporting the government's national and economic development programs, particularly developing the use of natural gas for the benefit of the community as well as providing sufficient volume and quality of gas for public consumption. The headquarters of PT Perusahaan Gas Negara Tbk (PGAS) are located at Jl. K.H. Zainul Arifin No. 20 DKI Jakarta 11140. In 1859, the first company was founded by the Eindhoven family. In 1863, the Dutch government took over the Eindhoven family business and changed the company's name to NIGM. In 1879, NIGM operated two gas plants in Jakarta and Surabaya. In 1950, the Dutch government operated 11 gas plants out of 33 power plants. In 1958, the Indonesian government nationalized foreign companies. Furthermore, the gas company and the state electricity company merged in 1961.

On May 13, 1965, based on Government Regulation Number 19 of 1965, PGN was designated as a state company. In 1984, the change in business form became a public company (Perum). And in 1994, the company changed its status to that of a company, accompanied by an increase in the scope of its business. Apart from natural gas distribution, PGN also functions as a transporter in the transmission sector. In 2003, PGN's shares were listed on the Jakarta Stock Exchange and the Surabaya Stock Exchange on December 15, 2003, with the trading transaction code PGAS.

### Data Analysis

#### 1. Financial Perspective

Table 3: Consolidated reports and income statements

Description	2019	2020	2021
Total Assets	\$ 7.373.713.156	\$ 7.533.986.395	\$ 7.510.948.902
Debt Amount	\$ 4.139.412.275	\$ 4.578.547.540	\$ 4.226.024.344
Total Capital	\$ 3.234.300.881	\$ 2.955.438.855	\$ 3.284.924.558
Total Debt + Capital	\$ 7.373.713.156	\$ 7.533.986.395	\$ 7.510.948.902
Income	\$ 3.848.717.684	\$ 2.885.536.105	\$ 3.036.100.956
Cost of Revenue	\$ 2.621.348.716	\$ 2.031.118.705	\$ 2.449.252.234
Gross Profit	\$ 1.227.368.968	\$ 854.417.400	\$ 586.848.722
Burdens	\$ 743.127.006	\$ 592.658.536	\$ 204.010.817
Other Income	\$ 62.091.786	\$ 41.956.047	\$ 37.477.725
Operating Profit	\$ 546.333.748	\$ 303.714.911	\$ 420.315.630
Profit Before Tax	\$ 279.902.491	\$ (175.355.545)	\$ 467.938.895
Income Tax Expense	\$ 166.921.296	\$ 40.412.269	\$ 103.404.760
Net Profit/Loss	\$ 112.981.195	\$ (215.767.814)	\$ 364.534.135

Table 4: Financial Perspective Measurement Results

Measuring Instrument	2019	2020	2021	Average
ROE	3,49%	-7,30%	11,10%	2,43%
ROA	1,53%	-2,86%	4,85%	1,17%
Growth and Revenue	-0,56%	-25,03%	5,22%	-6,79%
Net Profit Margin	2,94%	-7,48%	12,01%	2,49%
Cost Efficiency	19,31%	20,54%	6,72%	15,52%
Total Asset Turnover	52,20%	38,30%	40,42%	43,64%

Table 5: Financial Perspective Scorecard

Measuring Instrument	2019-2020	2020-2021	Rate		Score	
			2019-2020	2020-2021	2019-2020	2020-2021
ROE	-309,00%	-252,00%	D	D	1	1
ROA	-286,91%	-269,47%	D	D	1	1
Growth and Revenue	4394,74 %	-120,85%	A	D	4	1
Net Profit Margin	-354,72%	-260,57%	D	D	1	1
Cost Efficiency	6,37%	-67,28%	C	D	2	1
Total Asset Turnover	-26,62%	5,54%	D	C	1	2
Total					10	7

Based on table 5, it is stated that PT PGAS Tbk ROE financial statements from 2019–2021 have decreased in 2020 and increased in 2021. With a ROE percentage of 3.49% in 2019, -7.30% in 2020, and 11.10% in 2021. As for the average of 2.43%. The performance range criteria for 2019-2020 with a percentage result of -309.00% is a good good criterion, with this percentage including a scale of <0% and a score of 1. Meanwhile, the performance range criteria for 2020-2021 results -52.00% is a good criterion, with this percentage including a scale of <0% and getting a score of 1.

The PT PGAS Tbk ROA from 2019 to 2021 was said to have decreased in 2020, but increased in 2021. With the

ROA percentage in 2019 of 1.53%, in 2020 of -2.86%, and in 2021 of 4.85%. Meanwhile, the average for 2019–2021 is 1.17%. The performance range criteria for 2019–2020 with a percentage result of -286.91% is a good criterion, with this percentage including a scale of <0% and a score of 1. Meanwhile, the performance range criteria for 2020–2021 results -269.57% is a not good criterion, with this percentage including a scale of <0% and getting a score of 1.

The growth and revenue of PT PGAS Tbk from 2019 to 2021 were stated to have decreased in 2020, but increased in 2021. With the percentage of growth and income in 2019 of -0.56%, in 2020 of -25.03%, and in 2021 of 5.22%. Meanwhile, the average for 2019–2021 is -6.79%. The criteria for the performance range in 2019–2020 with a percentage result of 439.74 percent is a very good criteria, with this percentage including a scale > 100% and getting a score of 4. Meanwhile, the criteria for the performance range in 2020–2021 with a result of -120.85% is a not good criterion, with this percentage including a scale of <0% and getting a score of 1. The PT PGAS Tbk net profit margin from 2019–2021 was stated to have decreased in 2020, but in 2021 it has increased. With a net profit margin percentage of 2.94% in 2019, it was -7.48% in 2020, and 12.01% in 2021. Meanwhile, the average for 2019–2021 is 2.49%. The performance range criteria for 2019–2020 with a percentage result of -354.72% is a not good criterion, with this percentage including a scale of <0% and a score of 1. Meanwhile, the performance range criteria for 2020–2021 results of -260.57 percent is a not good criterion, with this percentage including a scale of <0% and getting a score of 1.

The cost efficiency of PT PGAS Tbk from 2019–2021 was stated to have increased in 2020 and decreased in 2021. With the percentage of cost efficiency in 2019 of 19.31%, in 2020 of 20.54%, and in 2021 of 6.72%. Meanwhile, the average for 2019–2021 is 15.52%. The criteria for the range of performance in 2019–2020 with a percentage result of 6.37% is a pretty good criterion, with this percentage including a scale of 0–50% and getting a score of 2. Meanwhile, the criteria for the range of performance in 2020–2021 with a result of -67.28 percent is a not good criterion, with this percentage including a scale of <0% and getting a score of 1.

PT PGAS Tbk total asset turnover from 2019–2021 was stated to have decreased in 2020 and increased in 2021. With the percentage of total assets turned over in 2019 of 52.20%, in 2020 of 38.30%, and in 2021 of 40.42%. Meanwhile, the average for 2019–2021 is 43.64%. The performance range criteria in 2019–2020 with a percentage result of -26.62% is a not good criterion, with this percentage including a scale of <0% and getting a score of 1. Meanwhile, the performance range criteria in 2020–2021 with a result of 5.54% is a pretty good criterion, with this percentage including a scale of 0–50% and getting a score of 2.

## 2. Customer Perspective

Table 6: Customer Data

Description	2019	2020	2021
Customer Cash	\$ 3.789.156.813	\$ 2.922.620.734	\$ 3.084.768.270
Number of Customers	397.474	495.935	663.877
Number of Existing Customers	325.914	397.474	495.935
Number of New Customers	71.560	98.461	167.942

Table 7: Customer Perspective Measurement Results

Measuring Instrument	2019	2020	2021	Average
Customer Cash				
Customer Retention	82,00%	80,15%	74,70%	78,95%
Customer Acquisition	18,00%	19,85%	25,30%	21,05%

Table 8: Customer Perspective Scorecard

Measuring Instrument	2019-2020	2020-2021	Rate		Score	
			2019-2020	2020-2021	2019-2020	2020-2021
Customer Cash	-22,87%	5,55%	D	C	1	2
Customer Retention	-2,26%	-6,79%	D	D	1	1
Customer Acquisition	10,28%	27,42%	C	C	2	2
Total					4	5

Based on Table 8 and the results of the percentage calculation of the results of cash receipts from customers from 2019–2021, it is stated that the criteria for the performance range in 2019–2020 with a percentage result of -22.87% is a pretty criteria, with this percentage including the scale <0% and getting a score of 1. While the criteria for the performance range in 2020-2021 with a result of 5.55% is a pretty good criteria, with this percentage including a scale of 0–50% and getting a score of 2.

PT PGAS Tbk customer retention from 2019–2021 is stated to have decreased in 2020 and 2021. With the percentage of customer retention in 2019 of 82.00%, in 2020 of 80.15%, and in 2021 of 74.70%. Meanwhile, the average for 2019–2021 is 78.95%. The performance range criteria for 2019-2020 with a percentage result of -2.26% is a not good criterion, with this percentage including a scale of <0% and a score of 1.

PT PGAS Tbk customer acquisitions from 2019–2021 are stated to have increased in 2020 and 2021. with the percentage of customer acquisition in 2019 of 18.00%, in 2020 of 19.85%, and in 2021 of 25.30%. Meanwhile, the average for 2019–2021 is 21.05%. The criteria for the performance range in 2019-2020 with a percentage result of 10.28% is a pretty good criterion, with this percentage including a scale of 0–50% and getting a score of 2. Meanwhile, the criteria for the performance range in 2020-2021 with a result of 27.42% is a pretty good criterion, with this percentage including a scale of 0–50% and getting a score of 2.

### 3. Internal Business Process Perspective

Table 9: Internal Business Process Perspective Measurement Results

Measuring Instrument	2019	2020	2021	Average
Operating Profit				
Productivity Level	517,91%	486,88%	1488,21%	831,00%

Table 10: Internal Business Process Perspective Scorecard

Measuring Instrument	2019-2020	2020-2021	Rate		Score	
			2019-2020	2020-2021	2019-2020	2020-2021
Operating Profit	-44,41%	38,39%	D	C	1	2
Productivity Level	-5,99%	205,66%	D	A	1	4
Total					2	6

Based on table 10 and the results of the percentage calculation of the operating profit score results for 2019–2021, it is stated that the criteria for the performance range in 2019–2020 with a percentage result of -44.41% is a not good criteria, with this percentage including a scale of <0% and getting a score of 1. Meanwhile, the performance range criteria for 2020–2021 with a result of 38.39% is a pretty good criterion, with this percentage including a scale of 0–50% and getting a score of 2.

The productivity level of PT PGAS Tbk from 2019–2021 was declared to have decreased in 2020, but in 2021 it has increased. The percentage results for the productivity level in 2019 were 517.91%, 486.88% in 2020, and 1488.21% in 2021. Meanwhile, the average for 2019–2021 is 831.0%. The performance range criteria for 2019–

2020 with a percentage result of -5.99% is a not good criterion, with this percentage including a scale of <0% and getting a score of 1. Meanwhile, the performance range criteria for 2020-2021 with a result of 205.66% is a very good criterion, with this percentage including a scale of >100% and getting a score of 4.

#### 4. Learning and Growth Perspective

Table 11: Employee Data

Description	2019	2020	2021
Number of Employee	3.268	3.324	3.239
Given Employee Training	2.138	1.006	3.381

Table 12: Learning and Growth Perspective Measurement Results

Measuring Instrument	2019	2020	2021	Average
Net Income Per Employee	34.572	-64.912	112.545	27.402
Skilled Workers	65,42%	30,26%	104,38%	66,69%

Table 13: Learning and Growth Perspective Scorecard

Measuring Instrument	2019-2020	2020-2021	Rate		Score	
			2019-2020	2020-2021	2019-2020	2020-2021
Net Income Per Employee	-287,76%	-273,38%	D	D	1	1
Skilled Workers	-53,74%	244,90%	D	A	1	4
Total					2	5

Based on table 13, it is stated that the net income per employee of PT PGAS Tbk from 2019–2021 has decreased in 2020 and will increase in 2021. With net income per employee percentage results in 2019 totaling 34.572, 2020 totaling -64.912, and 2021 totaling 112.545. Meanwhile, the average for 2019-2021 is 27.402. The performance range criteria for 2019-2020 with a percentage result of -287.76% is a not good criterion, with this percentage including a scale of <0% and a score of 1. Meanwhile, the performance range criteria for 2020-2021 results -273.38 is a not good criterion, with this percentage including a scale of <0% and getting a score of 1.

Skilled workers at PT PGAS Tbk from 2019–2021 were declared to have decreased in 2020, but experienced an increase in 2021. With the results, the percentage of skilled workers in 2019 was 65.42%, in 2020 it was 30.26%, and in 2021 it was 104.38%. Meanwhile, the average for 2019–2021 is 66.69%. The performance range criteria for 2019-2020 with a percentage result of -53.74% is a not good criterion, with this percentage including a scale of <0% and getting a score of 1. Meanwhile, the performance range criteria for 2020-2021 with a result of 244.90% is a very good criterion, with this percentage including a scale of >100% and getting a score of 4.

#### V. CONCLUSION

Based on the results of measuring the performance of PT Perusahaan Gas Negara Tbk (PGAS) with a balanced scorecard approach using four perspectives, it can be concluded as follows:

Table 14: Total *Balanced Scorecard*

Perspective	2019-2020	2020-2021
	Score	Score
Financial Perspective	10	7
Customer Perspective	4	5
Internal Business Process Perspective	2	6
Learning and Growth Perspective	2	5
<b>Total <i>Balanced Scorecard</i> PT Perusahaan Gas Negara (PGAS) Tbk</b>	<b>18</b>	<b>23</b>

#### 1. Financial Perspective

Based on the results of a financial perspective at PT Perusahaan Gas Negara Tbk (PGAS), it can be concluded that the company's performance in 2020 has increased and in 2021 has decreased.

#### 2. Customer Perspective

Based on the results of the customer perspective at PT Perusahaan Gas Negara Tbk (PGAS), it can be concluded that the company's performance in 2020 has decreased and in 2021 has increased.

#### 3. Internal Business Process Perspective

Based on the results of the internal business process perspective at PT Perusahaan Gas Negara Tbk (PGAS), it can be concluded that the company's performance in 2020 has decreased and in 2021 has increased.

#### 4. Learning and Growth Perspective

Based on the results of the learning and growth perspective at PT Perusahaan Gas Negara Tbk (PGAS), it can be concluded that the company's performance in 2020 decreased and increased in 2021.

Performance measurement at PT Perusahaan Gas Negara Tbk (PGAS) with a balanced scorecard approach uses four perspectives: a financial perspective, a customer perspective, an internal business process perspective, and a learning and growth perspective. According to the results of the four perspectives, the total score for 2019-2020 is 18 and for 2020-2021, it is 23. As a result, it is possible to conclude that the company's performance improved in 2020-2021.

#### Research limitations:

The research limitations in this research are as follows:

1. The object of this research is only conducted at PT Perusahaan Gas Negara Tbk (PGAS).
2. The period used in this study uses 3 years from 2019–2021 and is considered not optimal for obtaining comparative results in analyzing company performance.
3. The balanced scorecard method is incomplete in measuring external performance, only measuring the customer aspect.

#### Suggestions:

The suggestions in this research are as follows:

1. For further research, it is expected to add research objects using other companies in the energy sector, for example, PT Medco Energi Internasional Tbk.
2. For further research, use a period of more than 3 years so that the results can be more generalizable.
3. For further research, the Integrated Performance Measurement System (IPMS) method can be used to achieve a wider external reach by measuring stakeholder aspects.

## VI. REFERENCES

1. Anthony, & Govindarajam, V. (2010). Management Accounting System. In *Boston*. Mc Graw-Hill Company.
2. Khatoon, S., & Farooq, A. (2014). Balanced Scorecard to Measure Organizational Performance: A Case Based Study. *The International Journal of Business & Management*, 2(9), 106.

3. Lesmana, I. S. (2021). Analisis Balanced Scorecard Sebagai Pendekatan Penilaian Kinerja Pada Koperasi Kartika Sultan Ageng Tirtayasa Serang. *Jesya (Jurnal Ekonomi Dan Ekonomi Syariah)*, 4(1), 24–36.
4. Mulyadi. (2007). *Sistem Perencanaan & Pengendalian Manajemen (Edisi 3)*. Salemba Empat.
5. Nany, M., Raharjo, L., & Handini, K. W. (2008). Penerapan Balanced Scorecard Sebagai Pengukur Kinerja Manajemen pada Rumah Sakit Umum Daerah Indramayu. *Jurnal Riset Akuntansi Dan Keuangan*, 4(1), 48–56.
6. Nugrahayu, E. R., & Retnani, E. D. (2015). Penerapan Metode Balanced Scorecard Sebagai Tolok Ukur Pengukuran Kinerja Perusahaan. *Jurnal Ilmu Dan Riset Akuntansi (JIRA)*, 4(10).
7. Prasetyatno, Hidayat, R., & Utami, I. D. (2011). Pengukuran Kinerja Perusahaan dengan Metode Balanced Scorecard. *Jurnal Jurusan Teknik Industri, Universitas Trunojoyo Madura*, 10(2), 71–82.
8. Riyana, H. D. (2017). Pengukuran kinerja perusahaan pt indofood dengan menggunakan balanced scorecard. *Jurnal SEKURITAS (Saham, Ekonomi, Keuangan Dan Investasi)*, 1(2).
9. Tangkilisan, H. . (2007). *Manajemen Publik*. PT Grasindo.
10. Tunggal, A. . (2008). *Pengukuran Kinerja dengan Balanced Scorecard*. Havarindo.