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ACCOUNTING POLICY ON OIL AND GAS ASSETS AT PT XYZ TO INCREASE THE COMPANY'S NET PROFIT

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ABSTRACT

This paper focuses on the basis for determining accounting policies for oil and gas assets to increase the company's net profit. Indonesia has implemented International Financial Reporting Standards (IFRS) since 2012, which at the same time it opens the opportunity for the Company to choose from several accounting policy options related to oil and gas assets. The company needs to review the available options related to the oil and gas contracts owned by the Company and other factors such as oil and gas reserves, cost and price projections. A review of the effect of these options for PT XYZ will be carried out through data owned by the company and comparison with other company's information.

The combination of several accounting policies (not just focusing on one or two specific choices) will help management to obtain the best results to increase the company's net profit. In this case, by changing the company's policy for the capitalization of exploration and development expenditure and combination of the several depreciation methods (units of production and straight line method) and also the usage of reserves in the broader scope. The implementation of these policies needs to be carried out consistently, hence management needs to consider the short and long-term impact to the company's net profit.

Keywords: accounting policy, net profit, oil and gas assets.

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1. INTRODUCTION

In accordance with the agreement of the G-20 countries in 2009, starting from January 1, 2012, all business and government entities in Indonesia began to apply the Statement of Financial Accounting Standards (PSAK) adopted from the International Financial Reporting Standards (IFRS). The implementation of IFRS was followed by the revocation of the previous standard that referred to US GAAP, which used the rule base and changed to the principal base due to the implementation of IFRS. In addition, IFRS does not have standards made specifically for certain industries because IFRS, which is due to the application of the principal base, refers more to the uniformity of principals across industry sectors and avoids issuing special standards for certain industries.

This issue was experienced by companies engaged in oil and gas exploration and production that apply to PSAK. Prior to January 1, 2012, oil and gas companies that were using PSAK adopted PSAK 29, which regulates accounting for oil and gas, starting from the exploration stage using the Full Cost (FC) or Successful Effort (SE) method up to the production stage. This standard refers to the US General Accepted Accounting Principal (US GAAP). With the enactment of PSAK, which was adopted from IFRS on January 1, 2012, PSAK 29 was replaced with PSAK 64 (which is the adoption of IFRS 6 – Exploration for and Evaluation of Mineral Resources), which only provides accounting policies at the exploration and evaluation stage. With the revocation of PSAK 29, the accounting for the development and production stages for oil and gas companies refers to other existing standards such as PSAK 16 for Fixed Assets, PSAK 19 for Intangible Assets, and PSAK 48 for Impairment of Assets.

Several studies have been conducted by parties in order to standardize the accounting standards for oil and gas companies, such as those conducted by the International Accounting Standards Board (IASB) in November 2000, when the International Accounting Standards Committee (IASC) published a paper on the extractive industry, which included a discussion on accounting issues faced by mining and oil and gas companies, for example related to estimates of reserves and resources, treatment of removal and restoration costs, impairment of assets, revenues, inventories, and recording of risk sharing arrangements.

In 2010, the IASB published a Discussion Paper on mining and oil and gas activities containing findings from research activities to national standard setters from Australia, Canada, Norway and South Africa. In its development, the IASB decided to suspend this project.

Then, in 2018, the IASB decided to start a new research project on accounting policies for the extractive industry, which aims to collect evidence

that can help to decide whether to develop a proposal to amend or replace IFRS 6. Based on this research, the benefits of reducing the diversity of accounting policies applied to expenditures in the exploration and evaluation phase will outweigh the costs. The IASB has also temporarily decided not to continue the efforts to develop requirements or guidelines for mineral resource and reserve information in financial statements.

These possibility for the company to be able to choose accounting policies they applied, resulted the management action to use the accounting policy as a tool to increase the Company's net profit, as well as to improve the financial ratios that can be used by the financial analyst in assessing the company's prospects. Examples of the ratios that are commonly used to assess company performance can be seen in the company's annual reports, i.e. profitability ratios, leverage, and operating ratios. Since many of these ratios are based on numbers disclosed in the financial statements, the company's external auditor also needs to have the ability to assess whether the accounting policy choices taken by the management are in accordance with applicable financial accounting standards and are not biased to meet the short-term objectives of the company's management to increase the net profit.

Nowadays, it is the right time for the management of PT XYZ to conduct an accounting policy analysis on oil and gas assets because in 2020 the company has entered the second stage of development, at which time there has also been a significant decline in world oil prices. Companies need to be able to find alternative accounting policies that will reduce the pressure on the company's net income caused by additional expenses recognized related to the company's oil and gas assets (both direct costs and through depreciation and depletion methods).

This paper was created to analyze various accounting policies for oil and gas assets that can be applied by PT XYZ in accordance with the Basic Framework for the Preparation and Presentation of PSAK's Financial Statements that was issued by the Institute of Indonesia Chartered Accountants. This includes the choice of accounting policies that can be used by the management of PT XYZ, the influencing factors in determining the choice of accounting policies related to oil and gas assets, and the effect of these accounting policies on the company's net profit, in accordance with the company's condition as of December 31, 2020.

Hopefully, this paper can provide insight and knowledge, especially related to the application of accounting policies for oil and gas assets and their effects both in the short and long term. It can also be used as a reference for the

company's management in determining accounting policies in accordance with the company's conditions.

This paper is structured as follows: Section 2 presents a theoretical framework, with the subsection on currently applied accounting standards and other research on the application of accounting standards in oil and gas companies Section 3 describes the research design; Section 4 consists of result and discussion including the the background of PT XYZ; and the final section contains conclusions.

2. LITERATURE REVIEW

The company's accounting policy is a specific principle and practice adopted by a business entity to reflect the effects of transactions and events through measurement and reporting recognition. This allows the business entity to present assets, liabilities, gains, losses, and changes in shareholder funds (Vitez, 2011). The goal is to keep the disclosures in the financial statements at the same standard. The accounting policies used by a business entity will determine how transactions and events are recorded in the financial statements. According to Collings (2010), the accounting policies chosen by management must be in accordance with the circumstances and most appropriate to be able to present fairly and accurately the results of transactions and financial position in management's opinion. Companies must adopt accounting policies that will result in the company's financial statements being able to provide a true and accurate view of the company's operating activities to the readers of the financial statements.

There are 3 condition that derived the Company decision on the selection of accounting policies under PSAK25:

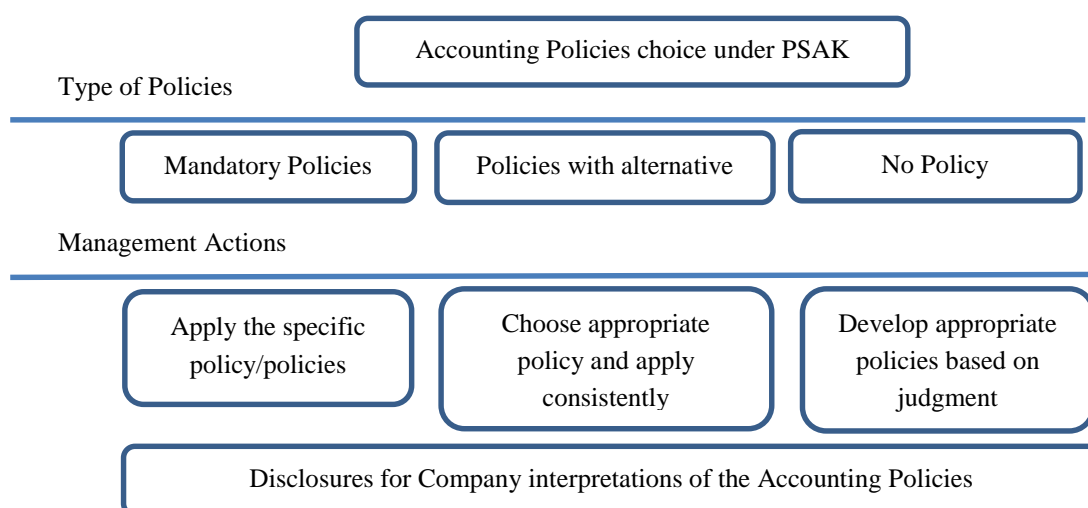


Figure 1. Company decision on the selection of accounting policies

In situations where an accounting standard does not provide a policy for a transaction, management should use its judgment in developing an appropriate accounting policy. However, management should also consider the application of IFRS/PSAK in similar transactions (Healy, 1998). According to Wong and Wong (2010), if the standard provides an alternative accounting policy, then management is responsible for making the right choice of accounting policy or a series of accounting policies to be applied.

This is in-line with PSAK 25 – Accounting policies, changes in accounting estimates and errors, par. 10, in the absence of an IFRS that specifically applies to a transaction, other event or condition, management shall use its judgement in developing and applying an accounting policy that results in information that is relevant to the economic decision-making needs of users and reliable, in that the financial statements (i) represent faithfully the financial position, financial performance and cash flows of the entity; (ii) reflect the economic substance of transactions, other events and conditions, and not merely the legal form; (iii) are neutral, i.e. free from bias; (iv) are prudent; and (v) are complete in all material respects.

For transactions that are not regulated in the standard, PSAK/IFRS allows companies to use standards that are more advanced or that have been previously applied by the company. Therefore, accounting for oil and gas companies often refers to US GAAP, Statement of Recommended Practice, UK Oil Industry Accounting Committee, June 2001 (OIAAC SORP), Australian Accounting Standard 7 (AAS7), or other accounting policies as long as they do not conflict with the conceptual framework for financial reporting. Among them are in accordance with the Basic Framework for the Preparation and Presentation of Financial Statements (Indonesian Institute of Accountants, 2004) par. 89. It is stated that an asset is recognized on the balance sheet when it is probable that future economic benefits will flow to the enterprise and the asset has a value or cost that can be measured reliably.

There have been several previous studies, such as that conducted by Mgbame, Donwa and Oyewole (2016), which recommended that oil and gas assets, including related pipelines, should be depreciated using the unit of production method while well production costs should be amortized using proved developed reserves. However, another study conducted by Power, Cleary, and Donnelly (2017) suggested that flexibility in the application of accounting policies for exploration expenditures is needed to facilitate the disclosure of accounting information that is relevant to decision makers.

3. RESEARCH METHODS

This study used a qualitative research method with a case study approach. According to Moleong (2018), qualitative research is research that intends to understand phenomena that are experienced by research subjects, such as behavior,

perception, motivation, action, etc., holistically, and by way of description in the form of words and language, in a special context that is natural and by utilizing various natural methods. While the case study, according to Yin (2014), is a research method in the form of empirical investigation to examine a contemporary phenomenon (or referred to as a case) in depth and using real-world contexts, where the boundaries between the context and the phenomenon may not be clear. Case study research can use a case to provide the clearest possible description of a phenomenon.

In connection with this, this study will analyze the accounting policies on oil and gas assets at PT XYZ, which can increase the company's net profit in accordance with the scope of PSAK applicable in Indonesia. The study begins by determining several options of accounting policies that can be applied to oil and gas companies in accordance with accounting standards that are applicable in Indonesia as well as the application of accounting policies used by several other companies. The discussion is expected to provide a choice of accounting policies for oil and gas assets that may be applied by PT XYZ.

This research was conducted through the collection of secondary data obtained directly from the company and other sources. This data is in the form of documents owned by PT XYZ related to the company's financial statements, other accounting information used in preparing financial statements for the last few years, and contracts/agreements owned by the company related to oil and gas assets. Meanwhile, other data comes from other companies' published financial reports and government regulations related to oil and gas activities.

The second data analysis technique used in this study is narrative analysis, in which the researcher focuses on a topic and analyzes data collected from case studies, surveys, observations, or other similar methods. The researcher will write down the findings and then conduct a review and analysis of the findings. The use of narrative analysis in this study will be divided according to the sequence of activities in oil and gas companies, starting from the stages of exploration, development, and production. Meanwhile, in his discussion of the limiting factors in the selection of accounting policies, it will be seen from the company's review, starting from the company's internal and external factors.

4. ORGANIZATION PROFILE

4.1 COMPANY PROFILE

PT XYZ is a company formed in 2001. This company is owned by 2 multinational companies domiciled in other countries and both have different types of businesses, namely ABC Company as the main shareholder (56% share ownership in PT XYZ) with a conglomeration in several types of industries (most of the total assets of this company is in the consumer product business line) and DEF Company (44% share ownership in PT XYZ), which is engaged in the exploration and production of oil and gas in several countries.

PT XYZ is one of the partners in the Block B Production Sharing Contract (PSC) in eastern Indonesia. Apart from the company, there are 3 other partners in the PSC (together they are the “oil and gas contractors”), one of which acts as an operator, with the agreed scope to manage the exploration and production activities in Block B. PT XYZ purchased a participating interest in block B from another contractor in 2001.

Followings are summary of PSC agreement that are applicable as of December 31, 2020:

- The share of petroleum production between the company and the government is 58.9% and 41.1%, respectively. The distribution of oil and gas production is calculated on an annual basis, which is the total lifting of oil and gas for each year ended December 31 after deducting First Tranche Petroleum (“FTP”), recoverable operating costs (current and prior year allowable costs), Domestic Market Obligation (“DMO”), and investment credit.
- The share of natural gas production between the company and the government is 67.9% and 32.1%, respectively. The distribution of oil and gas production is calculated on an annual basis, which is the total lifting of oil and gas for each year ended December 31, after deducting FTP, recoverable operating cost (current and prior year allowable cost), DMO, and investment credit.
- The Company is subject to income tax from PSC operations based on its share of the company's oil and gas production, less production bonuses, at a combined tax rate of 44%, consisting of corporate income tax at a rate of 30% and dividend tax at a rate of 20%. Even if the company is a legal entity in the other country, the application of the double taxation regulation between Indonesia and those countries for companies engaged in the oil and gas sector is still a matter of debate. The application of double taxation regulations for oil and gas companies is considered to be able to reduce the portion of the government's share that has been stipulated in the PSC agreement based on the tax regulations enacted at the time the agreement was signed.
- Recoverable operating costs according to the PSC are divided into capital costs and non-capital costs and can be recoverable only from the related oil and gas production in the block or PSC agreement. The annual operating cost return consists of:
 - Non-capital costs for the year, including exploration costs, operating costs, and general and administrative costs.
 - Depreciation for the year at the cost of capital, where the depreciation period is between 1.5 years and 20 years, Most use the declining balance method.
 - Operating costs of previous years that have not been reimbursed (unrecovered costs).
- The contractor is entitled to an investment credit facility, in addition to the return on operating costs, amounting to 27% of the capital investment costs incurred for the development of natural gas production facilities (but not

including the facility for converting gas to liquid). This investment credit can be obtained if it is approved by SKK Migas and is calculated as a deduction from the total lift before the return of operating costs and must be calculated at the beginning of the production year. Tax on this investment credit is payable in the year in which this investment credit is included in the profit sharing.

- Each year, the government and the company are entitled to receive a share of 15% of the oil and gas production before deducting the return on operating costs and investment credit. FTP is shared between the government and the company in the same way that rights to oil and gas production are shared, as described in section Production Sharing of Crude Oil and Natural Gas above.
- Domestic Market Obligation (“DMO”)

Crude Oil

The contractor is obliged to meet Indonesia's domestic needs, which is calculated by 25% of the amount of crude oil produced from the PSC working area annually and multiplied by the percentage of crude oil production sharing in section production sharing above. The maximum amount that becomes the contractor's liability is whichever is smaller between the results of this calculation and the contractor's share of the current year's production after deducting FTP and recovering operating costs.

The DMO price for crude oil in the first 5 years after production from a new field uses the weighted average price of all types of crude oil used by the contractor in determining entitlement for the year. For the sixth year onwards, use 25% of the weighted average price of all types of crude oil used by the contractor in determining entitlement for that year.

Natural Gas

The contractor is also required to meet Indonesia's domestic gas needs with the amount of reserves found after the extension of the PSC agreement takes effect. The maximum amount of this obligation is based on the percentage of proven reserves agreed by all parties to the PSC agreement multiplied by the percentage of the company's natural gas revenue sharing in section production sharing multiplied by the amount of newly discovered proven reserves.

The DMO price for natural gas is based on the agreed arm's length price as a result of negotiations between the contractor and the domestic buyer.

- Ownership of inventories, supplies, and equipment

Inventories, supplies, and equipment purchased by the company for oil and gas operations are owned by the government (in the case of procurement of imported goods, when the inventory is already at the Indonesian import port). The company has the right to use the asset and has the right to recover costs through recoverable operating costs. These state-owned goods are recorded as assets in the company's financial statements until the assets are surplus or abandoned with the approval of SKK Migas.

Because of this clause, the company is only able to recognize such assets in their book until the end of the contract period (or until it is abandoned, whichever is earlier).

4.2 ACCOUNTING POLICIES FOR OIL AND GAS ASSETS IMPLEMENTED BY THE COMPANY IN 2020

The following are the accounting policies adopted by the company in accordance with the accounting and financial reporting policies which are inline with IFRS. This accounting policy is consistently applied in the preparation of the financial statements for December 31, 2020 by the company.

Exploration and Evaluation Assets

Expenditures related to oil and gas exploration and evaluation activities are recorded using the “successful efforts” accounting method. The costs incurred are accumulated on a field-by-field basis.

Geological and geophysical costs, including seismic surveys for exploration purposes, are expensed as incurred.

The costs of drilling exploratory wells and the costs of drilling stratigraphic test wells are capitalized as part of assets under construction - exploration and evaluation wells within oil and gas assets until it is determined whether the wells have found proven reserves. When the well discovers proven reserves, the capitalized costs of drilling the well are evaluated for impairment and transferred to a construction in progress - development well (even though the well will not be converted into a production well). However, if the well does not find proven reserves, the capitalized cost of drilling the well will be charged to profit or loss as a dry hole.

Exploration and evaluation assets are reclassified from exploration and evaluation assets when evaluation procedures are completed. Exploration and evaluation assets with proven commercial reserves will be reclassified as development assets. Exploration and evaluation assets are tested for impairment before being reclassified out of exploration and evaluation assets.

Development Assets

Development well drilling costs, including the cost of drilling non-producing development wells and stratigraphic development wells, together with exploration and evaluation assets, are capitalized as part of construction in progress-development wells until the drilling process is complete. When the development of a well in a certain field has been completed, the well will be transferred to a production well.

Production Assets

Production assets are an aggregation of exploration and evaluation assets and development expenditures related to producing wells. Production assets are depleted

using the units of production method based on proven developed reserves since the commencement of commercial production from each field.

Impairment of Non-Financial Assets

Exploration wells are tested for impairment when they are reclassified as development wells or when events or changes in circumstances indicate that the carrying amount may not be recovered. An impairment loss is recognized at the amount where the carrying amount of the exploration well exceeds the recoverable amount, which is the higher of the fair value of the asset less costs to sell or value in use of the exploration well. In order to test for impairment, assets are grouped into existing cash-generating units from production fields located in the same geographic area. Impairment losses are recognized in profit or loss. Recovery of the allowance for impairment losses is recognized as income in the year in which the recovery occurs.

Oil and gas assets that have proven reserves (development and production assets) and other oil and gas assets are reviewed for impairment when events or changes in circumstances indicate that the carrying amount cannot be recovered. An impairment loss is recognized at the amount by which the carrying amount of the asset exceeds the recoverable amount, which is the higher of the fair value of the asset less costs to sell or value in use of the asset. In order to test for impairment, assets are grouped down to the smallest unit that generates separate cash flows. Impairment losses are recognized in profit or loss. Recovery of the allowance for impairment losses is recognized as income in the year in which the recovery occurs.

5. RESULT AND DISCUSSION

5.1 ANALYSIS OF CURRENTLY APPLICABLE ACCOUNTING POLICY

Recognition of exploration costs

In Premier Oil PLC's accounting policy, the company applies the Successful Efforts accounting policy for its exploration and production activities in accordance with IFRS 6 – Exploration for and evaluation of mineral resources. In its accounting policy, it is stated that the limitation on the capitalization of exploration costs can be in the scope of wells, fields, or cost centers of exploration costs. This exploration cost will be a write-off unless an economical result is obtained or is still in the process of further assessment (for example, it is still necessary to dig an appraisal well to ascertain the amount of reserves or is still in the stage of analyzing data obtained from exploration wells). The company does not need to wait for the results of the exploration activity (it usually takes 1-2 years for the exploration department to assess the data obtained from exploration activities before it is declared a success or dry hole) because it can directly capitalize the cost of the exploration well partially.

Since PT XYZ only has a working interest in Block B, the area of interest option that may be applied is only up to the PSC level. Meanwhile, applying an area of interest that is smaller than the field or structure level, or in this case, at the well level, is also

not possible due to the limitations of the data owned by the company, which is currently at the field or structure level.

Cost Recognition at the Production Stage

The costs at the production stage, in accordance with PSAK 16 par. 12-13, state that the entity cannot recognize the cost of daily maintenance as part of property, plant, and equipment, but the entity can recognize periodic replacement as part of the carrying amount of property, plant, and equipment if there are future benefits of these assets, while the replaced part must be expensed. Another way that can be taken is to estimate the period when the replacement must be conducted, so that the part will be depreciated according to the useful period, so that it is not necessary to derecognise at the time of replacement.

The same policies apply to BP Plc., which in its 2020 financial statements stated that the cost of replacing an asset or part of an asset as well as inspection costs related to major maintenance programs can be capitalized, and the cost of replaced assets must be derecognized. Meanwhile, repair costs in the main maintenance program and other maintenance costs are expensed when incurred.

As for PT XYZ, which is a non-operating company of a PSC block, the information received from the operator of the block will be very limited to information at the PSC level, which is in accordance with PSC accounting policies, maintenance costs are included as part of operating costs that will be charged to the PSC cost recovery when it happened. Thus, the company needs to conduct further discussions with the operator to obtain additional information regarding these costs.

Depreciation and Depletion Method

The declining balance method is rarely used because the consumption/production pattern of an oil and gas field, even though it is experiencing a natural decline (if it is not balanced with activities to reduce the decline in reserves through artificial production plans or enhance oil recovery), does not have a certain pattern (usually stable in the initial year of production stage (approximately the first 3-5 years), then decreases to 30% per year until the remaining reserves are no longer economical to produce). Therefore, this method is considered unable to reflect the consumption pattern of oil and gas assets.

In accordance with paragraph 61 of PSAK 16, if there is a different pattern of use of the future economic benefits of the asset, the company can differentiate the depreciation method for the well/facility and refinery.

Wells/facilities assets built by the company are intended to produce the proven reserves that have been developed. Therefore, the use of the depletion method is considered the most appropriate because the oil and gas resources/reserves owned by the company are irreplaceable resources.

For processing refinery assets, the depreciation method can be used by looking at the consumption pattern/processing level produced by the refinery. This can be assessed through the planned production of proven reserves that have been developed

and other plans for the development of unproven reserves (probable or possible). If the expected level of output from the refinery is stable over the period of the PSC agreement, the straight-line method can be used as the basis for depreciation.

However, it should be noted that the use of the straight-line method, if in the future there is a change in the level of production in the reserves owned by the company (a decrease in the amount of reserves that is beyond the initial estimate) This may result in an impairment test for these assets.

The combination of the implementation of depreciation and depletion policies was taken by several companies in the world and Indonesia, for example, BHP Group Plc. and PT Pertamina (Persero). For the application of this method, the company needs to have detailed data related to the classification of the oil and gas assets owned by the company. Each classification of oil and gas assets may have different useful lives, so the company must be able to analyze changes in the useful lives of each asset classification.

Currently, the company uses one type of reserve to calculate the unit production method for both wells/facilities and processing refineries. If the plan for the development of unproven reserves is already decided at this time, the company can include the value of unproven reserves in the calculation of depletion from the processing refineries.

While for the reserves used related to depreciation of wells/facilities assets, the company can observe the consumption pattern of the facilities because such facilities are usually designed to assist the production process from proven reserves that have not been developed at this time (but are included in future development plans). Therefore, well assets can use proven reserves that have been developed.

There are several combinations of reserves that are usually used by companies in calculating depreciation or depletion, which are the following:

- (a) Proved developed reserves. which is the reserve most frequently used by oil and gas companies such as Royal Dutch Shell Plc and PT Pertamina (Persero), including PT XYZ.
- (b) Proved developed and undeveloped reserves. To use these types of reserves, companies must be able to make reliable estimates of the development costs for proved undeveloped reserves.
- (c) Proved and probable reserves. This wider use of reserves assumes that the cost of the facilities that have been built is also intended to carry out production from reserves that are still probable.
- (d) Proved and probable reserves and part of the resources that will be produced in the future.
- (e) Proved, probable and possible reserves.

For reserves in (d) and (e) it is rarely applied because it is difficult to estimate future development costs for such reserves.

5.2 FACTORS THAT LIMIT THE SELECTION OF OIL AND GAS ASSET ACCOUNTING POLICIES

To determine the accounting policies that will be taken by the company, the management must return to the purpose of the implementation of IFRS, which is to provide transparency by increasing the comparability and quality of financial information that allows investors and other market participants to be able to make economic decisions based on that information. Therefore, the accounting policies taken must be neutral, that is, free from bias (PSAK 25 par. 10) and increase the level of comparability of the results in the financial statements.

The accounting policies adopted should also be more or less similar to the accounting policies applied by its competitors, such as other multinational companies or public companies that have a good track record in the implementation of their accounting policies. In addition to making it comparable with similar companies, the comprehensive analysis of the impact of the accounting policies on the company's financial statements needs to be done. This includes the company's production profile, the assumption of inflation rates, the company's cost profile, the company's long-term plans and stakeholders on the company's financial statements.

5.3 THE IMPACT OF ACCOUNTING POLICY TO THE COMPANY'S NET PROFIT

The impact of unsuccessful costs of exploration and evaluation in the full cost method will be spread over several years of production and company performance. This implementation will also reduce the impact on financial performance when the company decides not to continue exploration activity. However, it will lead to the allocation of these exploration costs in the end of production years activities, where production levels have decline, or when there is a decrease in commodity prices in the global market which can pose to the risk of decline in the fixed assets value. The contrary impact will occur if the company uses the successful effort method, i.e., all exploration costs that are not successful will be charged to expenses when it is decided not to proceed. This application can reduce the cost per barrel in the future, especially during a decline in the world oil prices, which will result in the amount of provision for impairment of oil and gas assets being smaller.

The decision to use the straight-line method or units of production can be seen from the company's annual production. If the company's production level is unstable (or will experience a decline), it can result in the company having to recognize a provision for the decline in the value of fixed assets, because in the early days of production the company already enjoys depreciation costs that are much smaller than income/production. However, if there is a plan to develop another field in the same contract areathat can restore production levels in the last 10 years according to the gas processing capacity, then the use of the straight-line method is more appropriate.

If the company uses the unit of production method, the company must be able to determine the most appropriate reserves to be included in the depreciation/depletion

calculation and also to consider the costs and benefits of the estimation that must be made if the company uses reserves other than proven reserves that have been developed (because the company must include an assumption of future development cost in calculating depreciation/depletion). In addition, the company must determine whether to use gross reserves or net entitlement reserves.

6. CONCLUSION AND RECOMMENDATION

PT XYZ has the option to change the company's policy on capitalizing exploration and development activities, using a combination of depreciation methods (using production units and straight line) and using a wider range of reserves (total proved reserves). To be able to make decisions regarding these changes in accounting policies, companies need to hold discussions with operators regarding the availability of information needed to implement these accounting policies.

In addition, the company also needs to prepare internal procedures to develop the assumptions needed in implementing the policies, such as the assumption of oil and gas reserves, which are strongly influenced by the assumption of future commodity prices, development plans, and production costs. Inappropriate assumptions can lead to issues related to asset declines, such as a decline in the value of reserves, which is an indicator of an impairment for oil and gas companies. Ultimately, this may result in a decrease in the value of the company's oil and gas assets.

There are several accounting policies available for PT XYZ that are not appropriate for the company to implement, such as the use of the revaluation model and the full cost method, so that the company can limit the options for further analysis regarding the costs and benefits of these options.

To be able to determine the most appropriate accounting policies to apply, the company needs to make a more detailed simulation for each of these options. In the first semester of 2022, there are many unstable assumptions related to the global economy, such as very high commodity prices and rising inflation rates in several countries, so it is difficult to be able to determine the reliable estimates for those assumptions. It is necessary for the company to conduct detailed simulation of the magnitude of the impact of each accounting policy on the company's net income. Therefore, the company will be able to assess the correlation of each accounting policy to increase the company's net income, and to assist the company in the decision of whether to apply only one new accounting policy or a combination of several accounting policies to obtain optimal results with minimum costs.

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