

## PEFINDO's Rating Methodology in Assessing Water Utility Companies

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PEFINDO is of the view that the outlook of the treated water industry in Indonesia is stable, supported by the large population and high potential business as the connection rate for treated water is low and natural sources of clean water are limited. In addition, government policies are stringent on the use of ground water by the industrial and corporate segments, which will further support strong demand for treated water in the near to medium term.

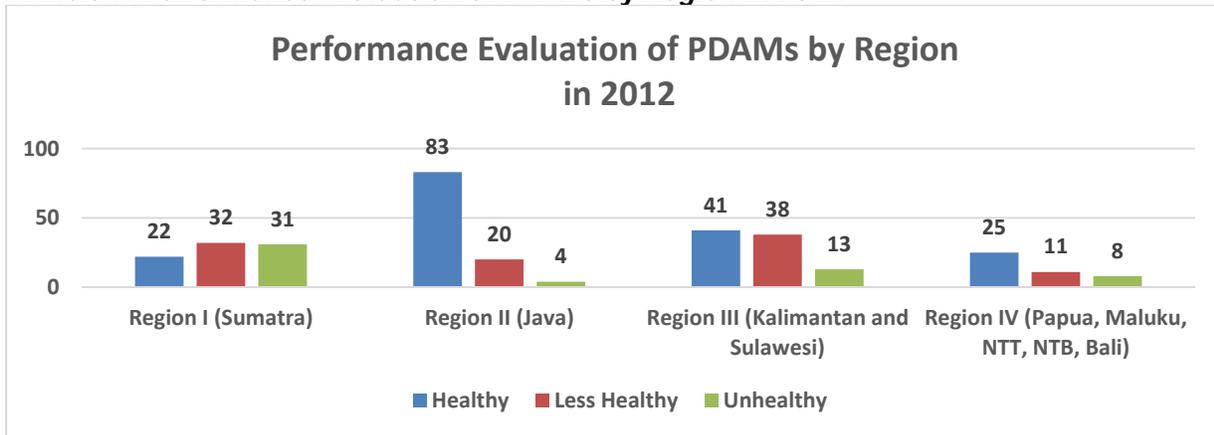
Despite promising business prospects, we note that the treated water industry faces several challenges such as large investment and an unfavorable tariff structure, which have hindered the industry's growth. Large investment is needed to provide water and sanitation facilities, mostly for piped water supply. Most water treatment operators have weak financial performances due to heavy debt burdens, leading to poor quality of service in maintaining production and distribution facilities.

Another challenge for the industry is to ensure the availability of its raw water supply, which usually comes from rivers. Due to limited government budgets, river maintenance has been minimal, so the supply of water is often unreliable and decreases substantially during the dry season. In addition, poor quality of raw water leads to high production costs, and, in some cases, it is contaminated by waste from the industrial sector due to improper waste management and sanitation systems. Lack of environmental awareness by people living along the rivers also contributes to the deteriorating quality.

Given its strategic role, both socially and politically, the government's commitment to the industry has gradually increased through establishing policies and programs, including debt restructuring and private sector participation through private-public partnership (PPP) schemes. The urgency to accelerate the industry is related to the remaining time needed to reach the Millennium Development Goals (MDGs) for the access of safe drinking water by 2015 for 68.8% of the population nationwide and the universal access target in 2019. Statistics Indonesia reported that Indonesia achieved 67.7% access of safe drinking water in 2013. Citing the Minister of Public Works' keynote speech at the Indowater Expo & Forum 2014 in May 2014, Indonesia needs IDR274.8 trillion for water treatment development and IDR385.3 trillion for adequate sanitation to reach the universal access target in 2019. In addition, the Indonesia Water Investment Roadmap 2011-2014 noted that there was a potential funding gap of IDR22.3 trillion faced by Perusahaan Daerah Air Minum (PDAMs) as the water treatment operators in Indonesia. As a result, central government faces significant challenges to obtain external funding.

Based on Ministry of Public Works data, there were 375 PDAMs in Indonesia in 2012. Of the 328 PDAMs evaluated by Badan Pendukung Pengembangan Sistem Penyediaan Air Minum (BPPSPAM) in 2012, 171 were categorized as healthy, 101 as less healthy, and 56 as unhealthy. Exhibit 1 shows the performance evaluation results for PDAMs in 2012 by region.

**Exhibit 1: Performance Evaluation of PDAMs by Region in 2012**



Source: BPPSPAM Ministry of Public Works (2012)

The proportion of healthy PDAMs increased between 2010 and 2012 to 171 PDAMs in 2012 from 142 in 2010. PDAMs categorized as healthy companies have the opportunity to cooperate with the private sector and have access to private bank financing. Despite the increasing number of healthy PDAMs, lack of funding remains a critical issue given their weak liquidity and financial flexibility.

A visible grading measure of PDAM's credit worthiness can be shown by a company rating. A company rating is an assessment of its overall credit worthiness, or its capacity to fulfill all of its financial obligations. Our latest rated water utility company is PDAM Kota Surakarta, categorized as healthy. PEFINDO assigned a "idBBB-" rating to PDAM Kota Surakarta with a "stable" outlook. The rating reflects its exclusive position as the only treated water operator in Surakarta City and its adequate raw water supply. However, the rating is constrained by its aggressive financial leverage, high water loss ratio, and limited financial flexibility.

Aside performing industry risks assessment as mentioned above, PEFINDO's rating methodology in assessing the water utilities sector also emphasizes business and financial risk assessments that may influence a company's overall credit profile.

### Business Risks Assessment

PEFINDO focuses on four key success factors in assessing business risks for the water utilities sector:

1. *Regulation.*

The treated water sector is highly regulated. Tariff structure is based on blocks of consumption and an annual tariff adjustment is allowed with the approval of the local governor. For several water treatment operators, there are specific agreements and predetermined targets with specific penalties or compensation levels if they fail to achieve technical and service targets. Several regional governments have set targets for PDAMs summarized in their medium term investment programs. Our assessment includes the water treatment operator's ability to comply with existing regulations and to reach its targets (technical and non-technical targets). We also assess the company's flexibility to cope with the possible renegotiation due to inconsistency of regulation implementation and regulation changes. Few water treatment operators have experienced renegotiation with the concession holders, such as lowering the internal rate of return and water charge indexation negotiation, which impacts their business sustainability. We also assess the contract termination risk. In our view, this risk is low due to the exclusive position of a water treatment operator in a specific region and the long investment period needed when appointing a new water treatment operator. Performance and healthiness level monitoring conducted by government entities are also assessed.

2. *Economic Service Area.*

The analysis covers the company's economic service area indicators, which include number of population, number of connections, length of network, and business activities. We also consider the company's service coverage ratio to determine the percentage of the total population served by water utilities. Furthermore, assessment of the economic service area will determine the potential demand and its sustainability in the future. We also assess the historical and potential growth of water volume sold and the existence of competitors. Areas with high economic activities and strong bargaining power should be less sensitive to tariff adjustments.

3. *Operating Management.*

The analysis covers the assessment of the company's strategy and effort for costs efficiency, productivity or utilization rate of water treatment plants, maintenance programs of production and distribution facilities, energy or power supplies, infrastructure, cost structure and profitability margin. Maintenance program assessment includes assessing the company's efforts in reducing technical and non-technical losses both in production and distribution facilities. We consider that the water loss ratio of most of water utility companies in Indonesia is high, as we calculated around 40% of healthy PDAMs in 2012 had a water loss ratio of more than 30%, which deteriorated the water production volume and revenue growth. Comparison of profitability margin indicators with peers will determine the company's efficiency and competitive advantage. PDAMs which achieved a full cost recovery tariff had better margins. We noted that 71% of PDAMs in 2012 did not apply the full cost recovery tariff, which impacted on their financial sustainability and going concern. A good operating track-record and gravity method of raw water distribution will support the company to manage costs and compensate for inflexible tariff adjustments. Assessment of credit and payment terms as well as the receivable collection period are useful to estimate the company's cash flow.

4. *Diversification.*

We assess the company's diversification in its market segment and sources of raw water to evaluate its productivity and revenue sustainability. Having a diversified revenue stream will provide a strong cushion should there be any downturn in certain market segments. Diverse raw water sources are needed to anticipate the supply shortage, especially during the dry season. A high reliance on only one raw water source may increase the risk of disruption, which could have a negative impact on the company's stability and service continuity.

### **Financial Risks Assessment**

PEFINDO's assessment of the financial risks of the water utilities sector is based on several fundamental indicators, with a timeframe of historical, current, and expected/projected performances. Our financial risks assessment includes:

1. *Financial Policy.*

We assess the company's financial policy including reviews of management philosophy, strategy and policies toward financial risks. The examination includes management's financial targets (growth, financial leverage, debt structure, and dividend policy), hedging policy, and other policies in order to reduce the company's overall financial risks. We also examine the company's track record on fulfilling its financial obligations in the past to determine the degree of its commitment, willingness, and consistency to pay obligations on a timely basis.

2. *Capital Structure.*

We examine the company's financial leverage, measured by debt to equity and debt to EBITDA ratios, debt structures and compositions (such as debt currency, tenor, and interest rates) to evaluate its ability in fulfilling its financial obligation. Liability management is also thoroughly reviewed. The efforts of central and local governments to write-off PDAM loans contributes to place their financial leverage on a conservative level. However, debt-funded investment in the near to medium term may lead their financial leverage to an aggressive level.

3. *Cash flow protection.*

We examine the company's cash flow generation and capability to meet its short-term and long-term financial obligations. The degree of the debt-servicing capability level is measured by the

company's interest and debt coverage ratios. The degree of the company's liquidity in fulfilling its short-term liabilities is also thoroughly assessed.

4. *Financial Flexibility.*

In addition to the analysis covering combined evaluations of all the financial measures as previously mentioned, we assess other related factors that are not specifically examined above such as restrictive covenants in loan/bond agreements and parental linkage and support. The evaluation also includes its access to the domestic capital markets, contingency plans, other capabilities, and flexibility to deal with various adverse scenarios. A poor financial condition, high financial leverage, and no access to the capital market leads water utility companies to limited financial flexibility. The characteristic of the business that requires long term returns also somewhat reduces the appetite of banks to provide credit facilities, although the business is considered sustainable and stable as water is a basic need.

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