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## Analysis of Corporate Social Responsibility (CSR) Program Implementation on Environmental Sustainability by PT Freeport Indonesia

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### **Abstract**

*This study aims to analyze the implementation of Corporate Social Responsibility (CSR) programs by PT Freeport Indonesia in maintaining environmental sustainability. Using a descriptive qualitative approach and content analysis technique, the study reviews sustainability and annual reports from the past five years available on Freeport's official website. The findings reveal that Freeport has conducted several environmental programs, including waste and mine water management, biodiversity conservation, and post-mining land rehabilitation. These efforts reflect the company's commitment to Environmental, Social, and Governance (ESG) principles and the Sustainable Development Goals (SDGs). Although positive outcomes are observed, the effectiveness of CSR programs requires further improvement, particularly in terms of reporting transparency and community engagement. This research provides valuable insights for developing sustainable CSR policies in the extractive industry sector.*

**Keywords:** CSR, Environment, ESG, Freeport Indonesia, SDGs, Rehabilitation

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### **INTRODUCTION**

Corporate Social Responsibility (CSR) has become an essential part of modern business practices, particularly for companies operating in extractive sectors such as mining. CSR serves not only as a means to build a positive corporate image but also as a manifestation of commitment to social and environmental sustainability. One crucial aspect of CSR implementation is a company's efforts to maintain and restore the quality of the natural environment affected by operational activities. PT Freeport Indonesia, as one of the largest mining companies in Indonesia and the world, bears significant responsibility for preserving the environment around its operational area, especially in the Papua region known for its biodiversity. Large-scale mining activities, such as land excavation, chemical use, and mine waste disposal (tailings), have the potential to cause significant environmental degradation, including river pollution, damage to terrestrial and aquatic ecosystems, and declining soil and air quality. Therefore, the implementation of environmentally-oriented CSR programs becomes critically

important in efforts to maintain environmental sustainability and overall ecosystem balance.

Furthermore, public, government, and other stakeholders' attention to environmental aspects has increasingly grown alongside the development of Environmental, Social, and Governance (ESG) principles as global standards for assessing corporate sustainability performance. In this context, Freeport's CSR approach needs to be comprehensively analyzed to evaluate the extent to which the implemented programs are effective in environmental mitigation and recovery. This includes assessing environmental report transparency, local community involvement, as well as company policies in responding to ecological issues. A thorough evaluation of Freeport's environmental CSR programs is important not only to measure the success of initiatives that have been undertaken but also as strategic input for developing more adaptive and sustainable policies. This study aims to analyze the implementation of environmental CSR by Freeport, identify challenges and obstacles, and evaluate its impact on environmental sustainability in the company's operational areas.

## **METHOD**

This study employs a descriptive qualitative approach to analyze the implementation of PT Freeport Indonesia's CSR programs in maintaining environmental sustainability. The data was obtained through document analysis, specifically sustainability reports and annual reports accessed from PT Freeport Indonesia's official website ([www.freeportindonesia.co.id](http://www.freeportindonesia.co.id)) over the past five years. The analysis technique used is content analysis, focusing on environmental programs such as waste management, biodiversity conservation, post-mining rehabilitation, and pollution mitigation. The study also refers to ESG indicators and global standards such as the Global Reporting Initiative (GRI) and Sustainable Development Goals (SDGs), particularly goals 13 and 15. This analysis aims to assess the effectiveness of CSR programs, their contribution to environmental conservation, as well as the level of transparency and accountability in the company's environmental impact reporting.

## **RESULT AND DISCUSSION**

Based on the analysis of PT Freeport Indonesia's sustainability reports, several key findings were identified regarding the company's CSR implementation in environmental sustainability. The following three main aspects were analyzed:

### **Waste and Mine Water Management**

PT Freeport Indonesia demonstrates its commitment to mining waste management, particularly tailings, through the implementation of control systems that comply with standards. In recent sustainability reports, the company details its use of tailings deposition methods in designated areas, accompanied by reclamation and post-operation land revegetation efforts. Additionally, mine wastewater management involves regular water quality monitoring to prevent contamination of surrounding water bodies. The reports also present laboratory testing data indicating that processed water quality remains within established environmental standards.



These efforts reflect the company's ESG approach to sustainably reducing environmental impacts, although challenges such as community perceptions and ecosystem damage remain ongoing concerns.

### ***Biodiversity Conservation***

In addition to waste management, PT Freeport Indonesia also implements biodiversity conservation programs around its operational area, particularly in the highlands of Papua, which are rich in endemic flora and fauna. These programs include the identification of rare and endangered species, the establishment of conservation zones, and the protection of natural habitats from industrial activity disturbances. In its sustainability report, Freeport notes collaborations with research institutions and local universities to conduct periodic ecological studies as a basis for conservation policy-making. Educational initiatives and the involvement of local communities are also carried out to enhance environmental awareness and strengthen the community's role in preserving the surrounding ecosystem. One tangible effort is training local communities in wildlife monitoring techniques and the conservation of rare plants. This approach not only strengthens the company's ESG (Environmental, Social, and Governance) aspects but also creates social value for communities living near the mining area.



### ***Post-Mining Land Rehabilitation***

Post-mining land rehabilitation is a priority in PT Freeport Indonesia's environmental responsibility. The company carries out revegetation of former mining areas by replanting local plant species suited to the soil characteristics of the region. This process is conducted based on environmental studies that include land contour mapping, soil types, and previous biodiversity assessments. Additionally, Freeport also constructs drainage systems and slope stabilization to prevent erosion and accelerate ecosystem recovery. In its report, the company mentions the use of environmentally friendly rehabilitation technologies and science-based approaches. This initiative not only aims to restore the ecological function of the land but also to create new green areas that can be utilized by local communities, such as for agriculture or community forests. The results of revegetation are also monitored periodically to ensure the sustainability of vegetation growth and its long-term impact on environmental balance.

## **CONCLUSION**

Based on the analysis of PT Freeport Indonesia's sustainability report, it can be concluded that the company has demonstrated tangible efforts in implementing CSR programs focused on environmental conservation. Three key aspects that stand out are the management of mining waste and water, biodiversity conservation, and

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post-mining land rehabilitation. The waste management program is carried out systematically and measurably, while biodiversity conservation focuses on protecting Papua's endemic flora and fauna. On the other hand, the revegetation of former mining lands reflects Freeport's commitment to restoring ecosystems affected by mining operations. Nevertheless, the effectiveness of these programs needs to be continuously evaluated and improved through community involvement and reporting transparency. Overall, Freeport's environmental CSR approach aligns with ESG principles and contributes to sustainable development goals, but still requires ongoing monitoring to ensure the long-term sustainability of the environment around its operational area.

#### **REFERENCES**

- Indonesia, P. F. (2021). Corporate Social Responsibility Report of PT Freeport Indonesia.
- Indonesia, P. F. (2022). Corporate Social Responsibility Report of PT Freeport Indonesia.
- Indonesia, P. F. (2023). Corporate Social Responsibility Report of PT Freeport Indonesia.
- Indonesia, P. F. (2024). Corporate Social Responsibility Report of PT Freeport Indonesia.