
CSR in Sustainability Accounting: Digital Report Visualization & Transparency at PT. PLN Indonesia Power

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Abstract

This article aims to examine how Corporate Social Responsibility (CSR) is integrated into interactive sustainability accounting through the visualization and transparency of digital annual reports, with a focus on a case study of PT. PLN Indonesia Power. The method used in this research is a descriptive qualitative approach with documentary analysis of the company's digitally published annual reports. This approach was chosen to evaluate how CSR elements are visualized and communicated to the public, as well as how they reflect the company's accountability and information transparency. The key findings indicate that PT. PLN Indonesia Power has effectively adopted interactive visualization practices in presenting its CSR activities, which not only enhance the readability of information but also strengthen stakeholder trust. The implications of this research highlight the importance of digital innovation in sustainability reporting to expand public participation and corporate transparency. The novelty of this study lies in its emphasis on interactivity and digital visualization in the context of sustainability accounting, which remains underexplored in accounting literature in Indonesia.

Keywords: *CSR, Sustainability Accounting, Digital Visualization, Transparency, Interactive Annual Report*

INTRODUCTION

Higher education should not only produce academically competent graduates but also economically independent individuals. Many students still rely on financial support from parents, scholarships, or part-time work, highlighting the importance of financial self-sufficiency. While financial aid helps cover expenses, it does not guarantee economic independence without proper cash flow management - ensuring wise spending, avoiding deficits, and prioritizing needs. Additionally, early investment plays a key role in fostering long-term financial thinking, preparing students for post-graduation challenges. Three interconnected factors—financial aid, cash flow management, and early investment—collectively shape students' financial behavior. Optimizing these elements helps students build

economic resilience during and after their studies. This study examines the relationship between financial aid, cash flow management, early investment, and students' economic independence.

METHOD

This study employs a descriptive qualitative approach to analyze the representation of Corporate Social Responsibility (CSR) programs in the context of interactive sustainability accounting, focusing on data visualization and transparency in PT PLN Indonesia Power's digital annual reports. Data was collected through documentary analysis of the company's officially published annual and sustainability reports on its corporate website. The research examines how data visualization, CSR narratives, and transparency elements in digital reports reflect the company's commitment to Environmental, Social, and Governance (ESG) principles, particularly in social and sustainable governance aspects. Using content analysis, the study evaluates the visual and narrative presentation of CSR information to assess its role in enhancing accountability, interactivity, and stakeholder transparency. As a secondary data-based study, it focuses on assessing the effectiveness of digital sustainability communication rather than collecting primary data.

RESULTS AND DISCUSSION (Capital, 12 pts, bold)

This study evaluates the integration of Corporate Social Responsibility (CSR) principles in interactive sustainability accounting through the digital annual reports of PT PLN Indonesia Power, focusing on data visualization, transparency, and interactivity. Based on analysis of the company's official reports, the findings can be grouped into three main aspects: (1) CSR Visualization and Narrative, (2) Interactivity and Transparency, and (3) Compliance with Global Standards. The following discussion connects these empirical findings with sustainability accounting theory and corporate reporting best practices.

CSR Visualization and Narrative in Digital Reporting

PT PLN Indonesia Power's annual reports utilize infographics, charts, diagrams, and CSR activity photos to present data in a concise yet communicative manner, such as bar charts with beneficiary icons that facilitate public understanding. This approach not only accelerates information processing but also enhances report appeal through visual storytelling, where CSR narratives are presented in segmented formats supported by program timelines, beneficiary testimonials, and key-point summaries. This combination of visual and narrative elements effectively builds positive perceptions while presenting facts in a more engaging and digestible format.

Interactivity and Transparency in Sustainability Reporting

PLN's digital reports incorporate interactive features such as flexible navigation with internal links, hover effects for additional information, and responsive design across various devices, enabling readers to access information

non-linearly according to their needs. Furthermore, the company demonstrates transparency commitment through detailed disclosure of CSR budgets per program, measurable social impact indicators, and stakeholder involvement in planning. This integration of interactive technology and comprehensive data disclosure not only creates better user experience but also strengthens corporate accountability in stakeholders' eyes.

Alignment with Global Standards and Strategic Implications

PT PLN Indonesia Power demonstrates serious commitment to sustainable governance by referencing global standards such as the Global Reporting Initiative (GRI), Sustainable Development Goals (SDGs), and ESG (Environmental, Social, Governance) principles, which enhances its report legitimacy at international level. These findings carry strategic implications for three parties: (1) academics gain new perspectives on visualization and interactivity roles in sustainability accounting, (2) business practitioners obtain concrete examples of communicative digital reporting, and (3) policymakers can use them as references for developing future regulations on digital-based non-financial reporting.

Table 1. *Visual Elements Analysis of Digital CSR Reports*

Picture

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graph TD
    L1[Langkah 1 Identifikasi  
Step 1 Identification] --> L2[Langkah 2 Prioritas  
Step 2 Priority]
    L2 --> L3[Langkah 3 Validasi  
Step 3 Validation]
    L3 --> L4[Langkah 4 Review  
Step 4 Review]
    L4 --> L1
    
    subgraph Context [Konteks Keberlanjutan  
Sustainability Context]
        M[Materialitas  
Materiality]
        K[Kelengkapan  
Completeness]
    end
    
    subgraph Involvement [Pelibatan Pemangku Kepentingan  
Stakeholder Involvement]
        L4
    end
  
```

The diagram illustrates a four-step process for developing a digital CSR report. The steps are: 1. Identification, 2. Priority, 3. Validation, and 4. Review. The process is supported by two main components: Sustainability Context (Materiality and Completeness) and Stakeholder Involvement. A small image of a CSR report cover is shown next to the process flow.


Example of CSR Program Data Visualization

PLN considers the aspirations of stakeholders related to the Company's activities, products, and services during the reporting period. Relevant issues from stakeholders and how the stakeholder engagement process is carried out.

No	Aspek Keberlanjutan Sustainability Aspect	Pemangku Kepentingan Terkait Related Stakeholder		Indikator GRI yang Dipaparkan dalam Laporan Sustainability Report
		Entitas Internal Internal Entity	Entitas Eksternal External Entity	
1	Anti-korupsi/Anti-corruption	✓	✓	205-2
2	Kesehatan dan Keselamatan Kerja/ Occupational Health and Safety	✓	✓	403-2
3	Energi Baru dan Terbarukan/Renewable Energy	✓	✓	81-1 302-1
4	Masyarakat Sekitar/Local Community	✓	✓	413-1
5	Kesehatan dan Keselamatan Konsumen/ Consumer Health and Safety	✓	✓	413-2
6	Kinerja Ekonomi/Economic Performance	✓	✓	201-1 201-4
7	Program Pelatihan dan Pengembangan Karier Pegawai/Training and Development	✓	✓	404-2
8	Dampak Ekonomi Tidak Langsung/ Indirect Economic Impact	✓	✓	203-1 305-2
9	Limbah B3/Hazardous and Toxic Waste	✓	✓	306-1
10	Energi/Energy	✓	✓	302-1
11	Air dan Air Limbah/Water and Waste	✓	✓	306-2
12	Keberagaman, Kesetaraan, dan Kesempatan yang Sama/Diversity and Equal Opportunity	✓	✓	401-2


Source: <https://web.pln.co.id/cms/media/2022/08/digitalisasi-pembangkit-pln-tingkatkan-efisiensi-operasi-dan-layanan-ketenagalistrikan/>

Table 2. *Interactive Features and Level of Report Transparency*

Picture	Digital Report Navigation Mechanism
	The development of power plant digitalization is carried out by Indonesia Power through the launch of the Smart Monitoring of Operation Management System (SMOMS) on the Digital Assistant to Monitor Operation Daily (IP Diamond) application which is integrated with Maximo, namely application software that functions to carry out asset management.

Source: <https://web.pln.co.id/cms/media/2022/08/digitalisasi-pembangkit-pln-tingkatkan-efisiensi-operasi-dan-layanan-ketenagalistrikan/>

Table 3. *Mapping Global Standards in CSR Reports*

Picture	ESG Principles Compliance
	At COP 26, PLN has announced its commitment to achieve Net Zero Emission by 2060. PLN will focus on expanding electricity capacity using clean energy to support Indonesia's economic growth and electricity demand. Under the Net Zero Emission scenario, emissions will peak in 2030 and then decline gradually to reach Net Zero by 2060. This will reduce 1,057 million tons of greenhouse gas emissions by 2060, compared to the business as usual scenario.

Source: <https://web.pln.co.id/en/sustainability/climate-change-management>

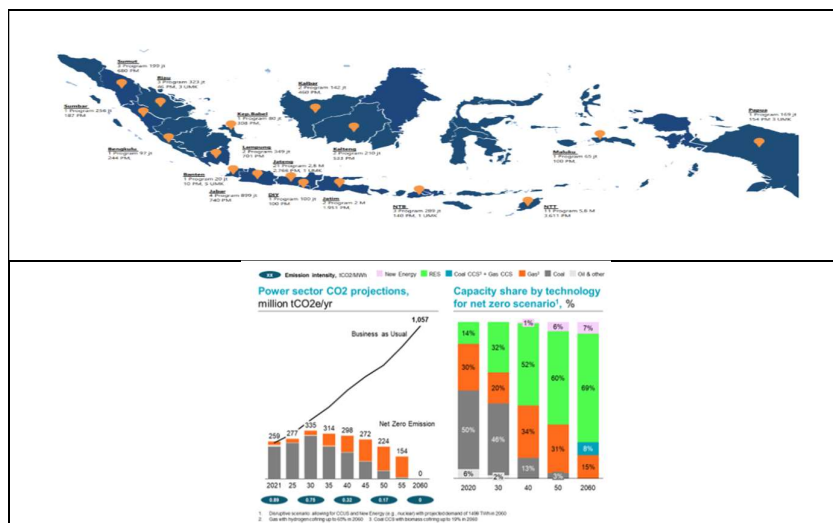


Figure 1. **Distribution of Free Electricity Connection Program**

Figure 2: **Diagram Mapping Global Standards in CSR Reports**

Source 1: <https://web.pln.co.id/sustainability/corporate-social-responsibility-csr>

Source 2 : <https://web.pln.co.id/en/sustainability/climate-change-management>

CONCLUSION

This study demonstrates that PT PLN Indonesia Power has successfully transformed its CSR reporting through digital innovation, effectively integrating sustainability accounting with interactive visualization, enhanced transparency, and alignment with global ESG standards. The findings reveal that dynamic infographics, user-friendly navigation features, and comprehensive data disclosure not only improve stakeholder engagement but also strengthen corporate accountability. By adopting frameworks like GRI and SDGs, PLN has positioned its reporting as both locally relevant and internationally credible. For practitioners, these results highlight the strategic value of investing in digital reporting platforms to communicate CSR impacts more effectively. Academically, this case offers new insights into how visual and interactive elements can enhance sustainability accounting practices in emerging markets. Moving forward, researchers should explore the long-term effects of digital CSR reporting on investment decisions and stakeholder trust, while corporations are encouraged to develop standardized metrics for comparing digital reporting effectiveness across industries. Policymakers should consider establishing guidelines for interactive sustainability disclosures to ensure consistency and comparability in non-financial reporting. Ultimately, this study underscores digital innovation as a critical driver for advancing sustainability communication in the modern corporate landscape.

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