SIRD #103
SOCIAL INVESTMENT ROUNDTABLE DISCUSSION

Social Investment Indonesia

FREE

DAPATKAN GIVEAWAY !

Kupas Tuntas Laporan IFRS S1-S2

Narasumber:



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Fitria Leli
ESG Risk and Reporting Manager
PT PLN (Persero)



Prof. Juniati Gunawan, M.Si., Ph.D.
Head of Trisakti Sustainability Center



Jalal
Chairperson of Advisory Board
Social Investment Indonesia

Host:



Nur Astri Mufthia S.
Associate
Social Investment Indonesia

Jumat, 28 Agustus 2026

15.00 - 17.00 WIB

socialinvestment.id

0813-8808-511

Via zoom @SocialInvestment_Id

SIRD #103
SOCIAL INVESTMENT ROUNDTABLE DISCUSSION
Social Investment Indonesia

Kupas Tuntas Laporan IFRS S1-S2



Professional Experience:

- *ESG Risk & Reporting Manager PT PLN (Persero)*
- *Memiliki minat kuat dalam mengembangkan solusi terkait lingkungan dan perubahan iklim, khususnya di bidang konservasi keanekaragaman hayati dan solusi iklim berbasis alam.*
- *Berbekal pengalaman selama satu dekade dalam penilaian dampak lingkungan di sektor ketenagalistrikan, dengan fokus pada proyek energi terbarukan.*
- *Mahir dalam menjabarkan dan menerapkan Standar Internasional untuk Perlindungan Lingkungan (Environmental Safeguards), termasuk ADB SPS, World Bank ESF, dan standar IFC.*
- *Memiliki rekam jejak keberhasilan selama delapan tahun dalam memimpin, mengawasi, dan mengomunikasikan secara efektif penilaian dampak lingkungan yang kompleks sesuai dengan standar internasional yang ketat.*

Educational Experience

- *S1 – Sarjana Teknik Industri Universitas Mercu Buana (2020)*
- *S2 – Master of Biodiversity Conservation and Nature-Based Climate Solution, National University of Singapore (2024)*

Implementation of IFRS S1 & S2 in PT PLN (Persero)

August 28th, 2026

Fitria Leli N

Manager of ESG Risk & Disclosure

PT PLN (Persero)



PLN at Glance – Why Sustainability becomes one of our focus



Why It Matters

Investment Needs

Further details on investment needs for ARED/energy transition

Global Commitments (NDC)

Details regarding PLN's role in supporting national efforts to implement the NDCs

POJK Complience Aspects

An explanation of the obligation for every company to comply with regulations established by the government, including those related to the implementation of sustainability

Sustainability is no longer optional for PLN.

It's a strategic imperative to ensure long-term resilience, align with national goals, and meet stakeholder expectations



Security and quality of supply
Responding to climate risks andensuring reliability amidst disruptions.

Fair and affordable prices

Meeting national expectations onuniversal access and social equity

Environmental & social sustainability

Reducing CO_2, expanding renewables, andaddressing just transition

Sustainability anchors PLN's long-term strategy, because:

1. **Climate change affects our business fundamentals.** PLN must adapt to physical risks and stricter environmental standards.
2. **We must align with Indonesia's and global climate targets** and deliver public value through universal access to clean, reliable energy
3. **Stakeholders expect climate leadership and social inclusion** trough a just transition, empowering and engaging inclusively across regions.
4. **Financial strength is key** to deliver on all fronts — infrastructure, affordability, and environmental performance.

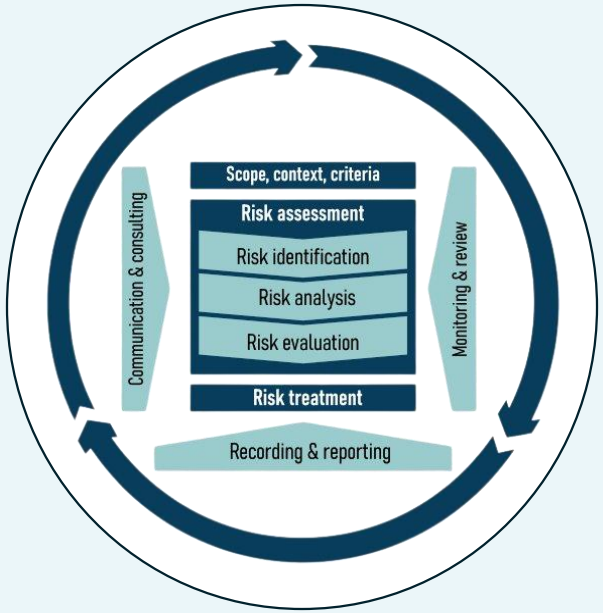


Risiko iklim dan dinamika transisi energi,

menjadi masukan utama bagi PLN dalam memperkuat ketahanan energi dan menavigasi jalur menuju Net Zero Emissions



Berfokus pada identifikasi serta pengelolaan risiko dan peluang dalam bisnis, strategi, dan perencanaan keuangan.



Melalui kebijakan strategis manajemen risiko terintegrasi (Peraturan Direksi No. 0016 Tahun 2023), PLN mengadopsi ISO 31000:2018.

Identifikasi Risiko

Risiko Fisik (*Physical Risk*)

- *Heavy Precipitation*
- *Heavy Wind*
- *Droughts*
- *High Sea Waves*
- *Heatwaves*
- *Sea Level Rises*
- *Wildfires*
- *Land slide*
- *Flood*
- *Lightning*

Risiko Transisi (*Transition Risk*)

- *Financial*
- *Technical*
- *Social & Environment*
- *Regulatory*

Risiko Keberlanjutan diintegrasikan dengan **Enterprise Risk Management** secara bertahap, untuk memperkuat ketahanan bisnis perusahaan

FY 2023



Foundation

Climate risk recognized as top corporate risk

FY 2024



ESG Expansion & Standard Alignment

- Expanded monitoring to include broader ESG risks
- Initiated alignment with IFRS sustainability-related requirements
- Developed the Climate Resilience Infrastructure Guidelines (CRIG)

FY 2026



Structured Integration (On-going)

- Development of a climate risk integration roadmap
- Conducting Climate and Disaster Risk Assessment
- Phased integration through cross-divisional collaboration

Future Plan



Full Integration

- Full integration of climate and ESG risks into corporate management
- Embedded into strategy, operations, and performance management
- Integration of climate considerations into the value framework and investment evaluation process

Continuous Progress



Membangun Sistem yang Tahan Banting: CRIG dan CDRA sebagai Instrumen Resiliensi Infrastruktur

1 Existing Assets



Climate Resilience Infrastructure Guideline



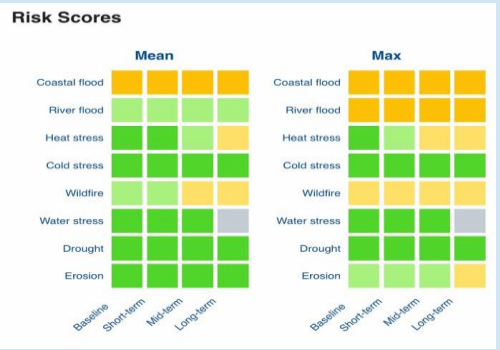
Climate Disaster Risk Assessment





Responsive action in generation, transmission, and distribution

2 Project Planning



Pilot Climate Risk Assessment Scoping Study for RE projects

3 Long Term Planning



Electricity Supply Business Plan (RUPTL)

NET ZERO

NZE PLN Strategy

Emisi dan Lingkungan Mendominasi: Topik ESG yang Paling Material bagi Sektor Kelistrikan

Highly Significant

- Climate Change
- Emissions, Effluents, Waste
- OHS
- Community Relation
- Water Stewardship

Significant

- Data Privacy & Cybersecurity
- Business Ethics
- Sustainable Supply Chain
- Human Capital
- Business Continuity Management
- Quality Management
- Land Use & Biodiversity

Dari Isu Material ke Metrik Kinerja: ESG Framework PLN yang Terhubung dengan Kerangka Pembiayaan

Sub-topics	Environmental metrics
1. Climate change management	1. Absolute greenhouse gas (GHG) emissions
	2. GHG emissions reduction
	3. GHG emissions intensity (Scope 1, 2, 3)
	4. Additional renewable capacity
	5. Sustainable financing ratio to total financing
2. Environmental management	1. Environmental Management System (EMS)
	2. Additional non-hazardous (domestic) waste (reduced-reused-recycled)
	3. Fly Ash and Bottom Ash (FABA) recycled
	4. Hazardous waste intensity
	5. Water discharged
	6. Non-GHG emissions
3. Resource management	1. Water withdrawal
	2. Water consumption
	3. Water recycled
4. Nature management	1. Reforestation coverage

Sub-topics	Social metrics
5. Community relations	1. CSR program contribution
	2. CSR beneficiaries
6. Occupational Health and Safety (OHS)	1. Number of accidents
	2. Employee fatality
	3. Contractor fatality
	4. Lost time injury frequency rate (LTIFR)
7. Human capital management	1. Sustainability-related training
	2 Turnover rate
	3. Employee engagement score
8. Gender Equality, Disability and Social Inclusion (GEDSI)	1. Women in management position
	2. Number of employees with disabilities

Sub-topics	Governance metrics
9. Product governance	1. System Average Interruption Duration Index (SAIDI)
	2. System Average Interruption Frequency Index (SAIFI)
	3. Transmission and distribution loss
	4. Customer satisfaction index (CSI)
	5. Electrification ratio
	6. Innovation development
	7. Smart grid
	8. Charging points for electric vehicle
10. Business ethics	1. Cyber incident handling
	2. Information Technology (IT) maturity level
	3. International Organization for Standardization (ISO) 27001 certification
	4. Enterprise Risk Management (ERM) level
	5. Good Corporate Governance (GCG) assessment score
	6. Corruption and bribery violation handled

Danantara Indonesia

PLN

80 tahun

PLN contributes to expanding electricity access across Indonesia in alignment with the mandate of the Fifth Principle of Pancasila, promoting social justice for all Indonesians

Great Place To Work. Certified Oct 2025 - Oct 2026 ID

Workplace Gender Equity EDGE Assess Certified

FORTUNE Global 500 2025











CDP Climate B Water A-

SUSTAINALYTICS "Medium Risk" 24.8

Keberlanjutan menjadi bagian dari strategi bisnis PLN untuk menjalankan mandat pelayanan public dan menciptakan nilai jangka panjang bagi perusahaan.

Number of (1) residential customers served (million customers)

2023	2024	2025
81,551,325	84,660,382	87,399,648

Number of (2) commercial customers served (million customers)

2023	2024	2025
4,806,141	5,246,454	5,643,068

Number of (3) industrial customers served (million customers)

2023	2024	2025
206,770	253,055	300,248

Number of public customers served (million customers)

2023	2024	2025
2,589,042	2,717,401	2,831,270

Total customers served (million customer)

2023	2024	2025
89,153,278	92,877,292	96,174,234

Electricity sales (Billion IDR)

2023	2024	2025
333,280	353,189	353,493

Connected capacity (MVA)

2023	2024	2025
169,677	182,026	192,621

Electrification Ratio

2023	2024	2025
99,63%	99,79%	99,83%

Electricity generated (owned) (GWH)

2023	2024	2025
179,605.52	184,622.24	185,335.99

Electricity generated (lease) (GWH)

2023	2024	2025
4,375.37	5,952.65	7,119.92

Wholesale electricity purchased (GWH)

2023	2024	2025
139,339.73	153,316.85	162,472.15

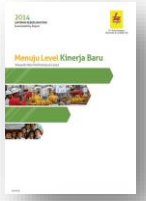
Total of Electricity Production (GWH)

2023	2024	2025
323,320.62	343,891.74	354,928.06

PLN has strengthened sustainability disclosures to support continuous ESG performance improvement while assisting raters in assessing PLN's ESG Risk Profile

2014-2022

2014



2015-2016



2017



2018-2020

2021

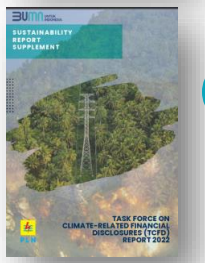
2023



Sustainability Report



ESG Performance Report



TCFD

2024



Sustainability Report



TNFD



EPR



CDR



TISFD

2025



Sustainability Report



TNFD



EPR



CDR

2026



Sustainability Report



TNFD



EPR



CDR

Abbreviation

CDR: Climate-related Disclosure Report
EPR: ESG Performance Report
TCFD: Task Force on Climate-related Financial Disclosures
TISFD: Taskforce on Inequality and Social-related Financial Disclosures
TNFD: Task Force on Nature-related Financial Disclosures

PLN chose "diversification" & "deep dive" (stand-alone) pathway to align Company disclosures with IFRS S1 & S2 standard

Incorporating GRI standards



Sustainability Report

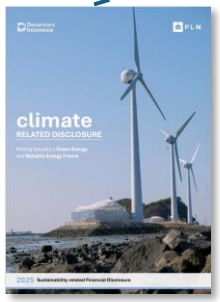
Primary report in sustainability disclosures in compliance with POJK 51

Incorporating IFRS standards



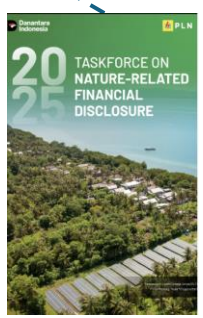
ESG Performance Report

Diversification of sustainability report using IFRS S1 & S2 Structures in compliance with PSPK 1 & 2 (*in place in 2027*)



Climate-Related Disclosure Report (CDR)

Stand alone report - deep dive about climate change management – IFRS S2.



Taskforce Nature-related Financial Disclosure (TNFD)

Stand alone report - deep dive about nature management.



Taskforce on Inequality and Social-related Financial Disclosure (TISFD)

Stand alone report – deep dive about social management

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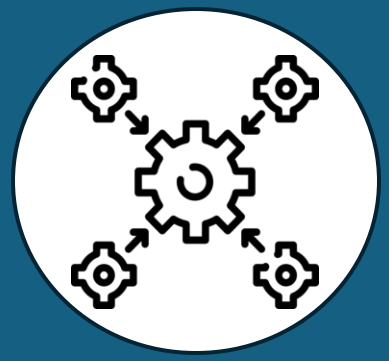
Basically, PLN suggest an integrated report, however diversification and deep dive (stand-alone) approach offers more benefit for PLN context.



Integrated

Advantages

- One source information

Disadvantages

- Risk of misalignment with standard
- Less comprehensive information

VS



Stand alone

Advantages

- More comprehensive information

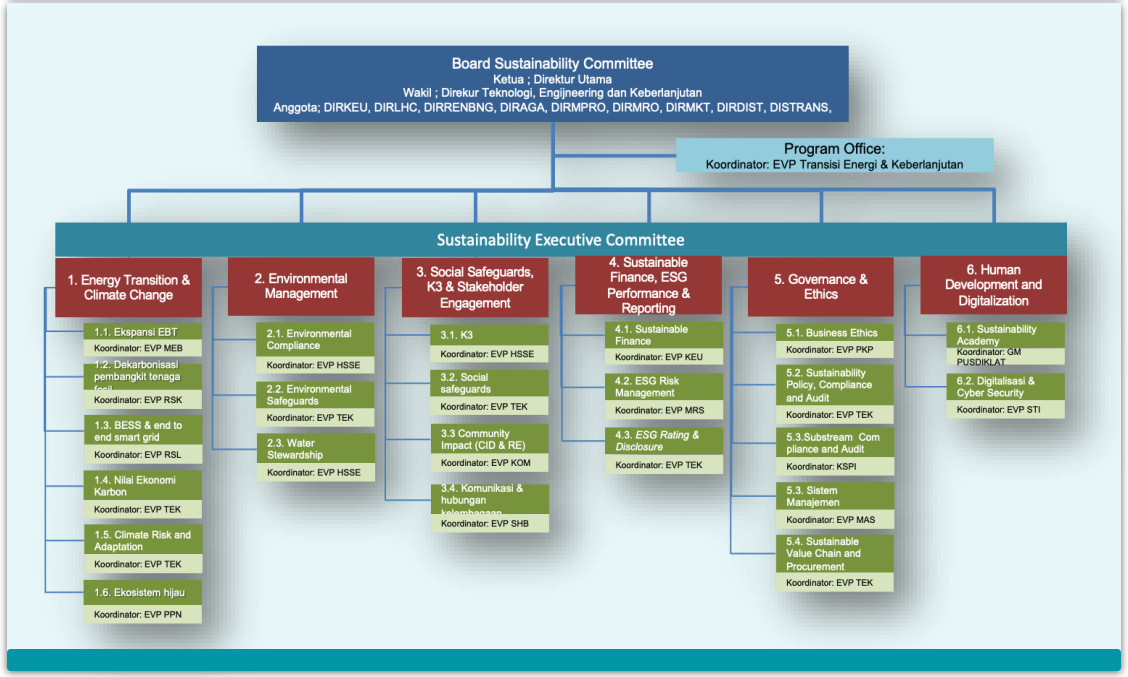
Disadvantages

- Risk of data inconsistency
- Requiring more resources

(IFRS S1) - diadopsi oleh PLN dalam penyusunan ESG Performance Report, dengan 3 bagian utama laporan.

Governance

Sustainability Committee Structure



Sustainability Risk

Highlights

- Adhere to ISO 31000: 3-lines of defense
- Double Materiality approach (outside-in, inside-out)
- Risk Management roadmap
- Identified risks across all 11 topics with time horizon, impacted area, and quantified risk levels

Metrics & Targets

Environmental	Water	Nature	OHS
ISO 14001, Hazardous Waste Intensity, NOx SOx reduction	Water consumption, Water recycling rate	Rehabilitated Area	Employee Fatality Rate, Contractor Fatality Rate

Community	Human Capital	GEDSI
CSR recipient, CSR programme, CSR Allocation	Training participants, Talent-related metrics	Woman in Management

Product Governance	Cyber Security	Business Ethics
SAIDI, SAIFI, T&D Losses	Total cyber-attacks, ISO 27001 Certifications	Whistleblowing reports, ISO 37001

(IFRS S2) - diadopsi oleh PLN dalam penyusunan Climate Disclosure Report Report, dengan 3 bagian utama laporan.

Governance

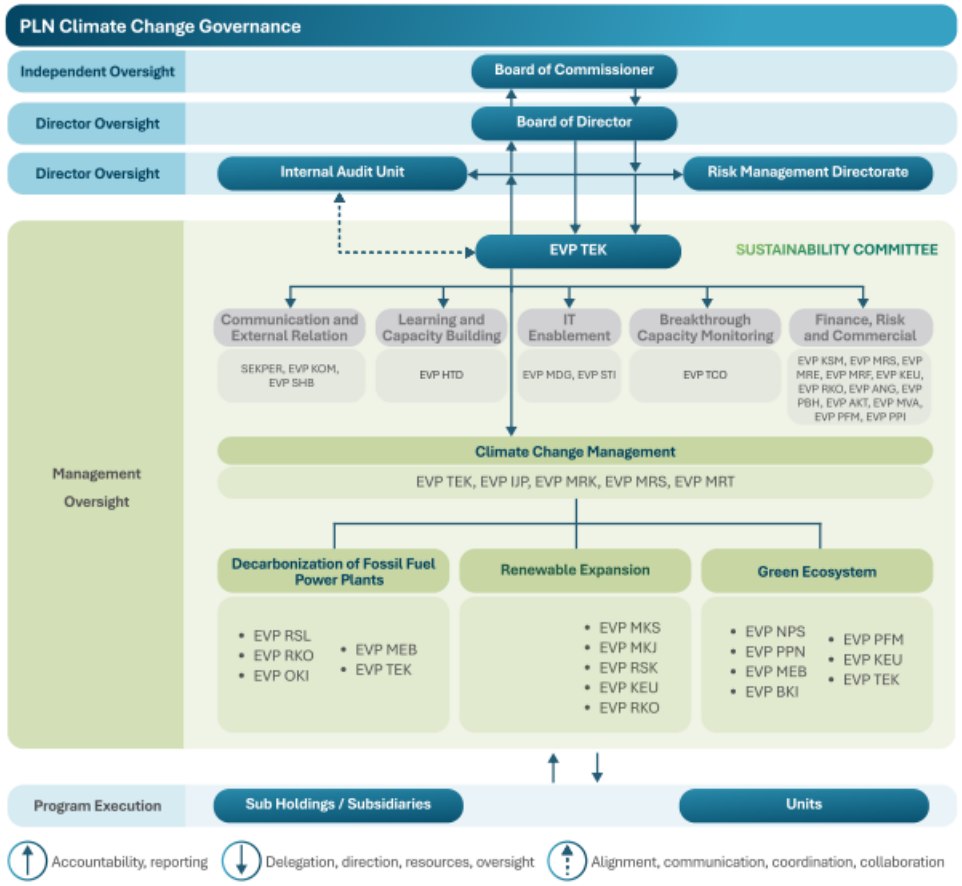


Figure 2 PLN Climate Change Governance

Climate Risk

Highlights

- Adhere to ISO 31000: 3-lines of defense
- Identification of both Physical & Transition Risk & Opportunities
- Financial quantification of Physical & Transition Risk
- Mitigation Strategies are mapped for each identified Risk

Metrics & Targets

- GHG Inventory (Scope 1,2,3)
- Carbon Intensity Targets
- Emission Reduction
- Internal Carbon Pricing
- Sustainable Financing Ratio
- Climate-related CAPEX
- Financial Resilience Indicator

Alignment Matrix is used to ensure standard alignment & consistency across PLN multiple reports

Sustainability Accounting Standards Board (SASB) Alignment

Topic	Metric	Category	Unit Of Measure	Code	Report Section			
					AR	SR	ESG Performance Report	Climate Disclosure Report
Greenhouse Gas Emissions & Energy Resource Planning	(1) Gross global Scope 1 emissions, percentage covered under (2) emissions-limiting regulations and (3) emissions-reporting regulations	Quantitative	Metric tons (t) CO2-e, Percentage (%)	IF-EU-110a.1	Information not disclosed in this report	1. Environmental Performance Highlights - GHG Emission Control Performance (Page 9) 2. GHG and Non-GHG Emission Control (Page 129-130)	Climate Change Management – Metric & Targets –	Total Carbon Emission
	Greenhouse gas (GHG) emissions associated with power deliveries	Quantitative	Metric tons (t) CO2-e	IF-EU-110a.2	Information not disclosed in this report	Results of GHG Emissions Calculation (Page 130)	We do not disclose in this report	Information not disclosed in this report
	Discussion of long- and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those target	Discussion and Analysis	N/A	IF-EU-110a.3	Information not disclosed in this report	Energy Transition Pillars (Page 51-55)	Climate Change Management – Strategy – GHG Reduction Program	PLN Climate-Focus Strategy
Air Quality	Air emissions of the following pollutants: (1) NOx (excluding N2O), (2) SOx, (3) PM10, (4) lead (Pb), and (5) mercury (Hg); percentage of each in or near areas of dense population	Quantitative	Metric tons (t) CO2-e, Percentage (%)	IF-EU-120a.1	Information not disclosed in this report	Non-GHG Emission Inventory (Page 142)	Environmental Management – Metric & Targets – Non GHG Air Emission	Information not disclosed in this report

ATTACHMENT

IFRS S2 Alignment

Main Elements	IFRS S2 Climate-related Disclosures	Pages
Governance	Describe the governance body for oversight of climate-related risks and opportunities	10
	Describe management's role in the governance processes, controls and procedures used to monitor, manage and oversee climate-related risks and opportunities	12
Strategy	Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term	29
	Describe business model and value chain based on climate-related risks and opportunities	34
	Describe strategy and decision-making based on how the entity responds to climate-related risks and opportunities	44
	Describe financial position, financial performance, and cash flows over the short, medium, and long-term (anticipated financial efects of climate-related risks and opportunities)	54
	Describe the entity climate resilience strategy, how and when the climate-related scenario analysis was carried out	31
Risk Management	Describe the process and related policies uses to identify, assess, prioritize, and monitor climate-related risks	19
	Describe the processes the entity uses to identify, assess, prioritizing, and monitor climate-related opportunities	29
	Describe how the processes for identifying, assessing, prioritising, and monitoring climate-related risks are integrated into organization's overall risk management	29
Metrics & Targets	Disclose about information relevant to the cross-industry metric categories (greenhouse gas (GHG), climate-related transition and physical risks and opportunities, capital deployment, internal carbon prices, and remuneration)	59 - 64
	Disclose industry-based metrics that are associated with the particular business models, activities, or other common features that characterise participation in an industry	45
	Disclose targets set by the entity including metrics uses by the management, target required to meet the regulation, mitigate, or adapt to climate-related risks and opportunities	65

Transition Task Force (TPT) Alignment

Sub Element	TPT's Disclosure Framework	Report Section
1.1 Strategic Ambition	An entity shall disclose the Strategic Ambition of its transition plan. This shall comprise the entity's objectives and priorities for responding and contributing to the transition towards a low-GHG emissions, climate-resilient economy, and set out whether and how the entity is pursuing these objectives and priorities in a manner that captures opportunities, avoids adverse impacts for stakeholders and society, and safeguards the natural environment.	Navigating Climate-related Opportunities, Strategic Decision-making , Our Climate Change Initiatives
1.2 Business model and value chain	An entity shall disclose a description of the current and anticipated implications of the entity's Strategic Ambition on its business model and value chain	Climate-related Effects On Business Model And Value Chain

Taskforce on Nature-related Financial Disclosures (TNFD) Alignment

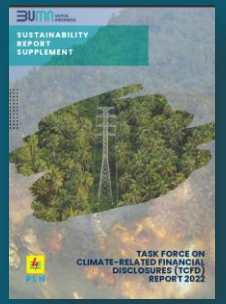
Theme	Recommended Disclosure	Report Sections
Governance	Describe the board's oversight of nature –related dependencies, impacts, risks and opportunities	Nature Management - Governance
	Describe management's role in assessing and managing nature-related dependencies, impacts, risks, and opportunities	
	Describe the organization's human right policies and engagement activities, and oversight by the board and management, with respect to Indigenous Peoples, Local Communities, affected and other stakeholders, in the organization's assessment of, and response to nature-related dependencies, impacts, risks, and opportunities	Nature Management - Social
Strategy	Describe the nature-related dependencies, impacts, risks and opportunities the organization has identified over the short, medium, and long term	Nature Management - Strategy
	Describe the effect nature-related dependencies, impacts, risks and opportunities have had on the organization's business model, value chain, strategy and financial planning, as well as any transition plans or analysis in place	Nature Management – Risk Management
	Describe the resilience of the organization's strategy to nature-related risks and opportunities, taking into consideration different scenarios	Nature Management - Strategy
	Disclose the locations of assets and/or activities in the organization's direct operations and, where possible, upstream and downstream value chains that meet the criteria for priority locations	
	Describe how processes for identifying, assessing, prioritizing and monitoring nature -related risks are integrated into and inform the organizations overall risk management processes.	Risk Management
Risk Management	Describe the organizations processes for identifying, assessing and prioritizing nature-related dependencies, impacts, risks and opportunities in its direct operations	Nature Management - Strategy
	Describe the organisations processes for identifying, assessing and prioritising nature-related dependencies, impacts, risks and opportunities in its upstream and downstream value chains	
	Describe the organizations processes for managing nature-related dependencies, impacts, risks and opportunities	
	Describe how processes for identifying, assessing, prioritizing and monitoring nature-related risks are integrated into and inform the organizations overall risk management processes.	Risk Management
Metrics and Targets	Disclose the metrics used by the organization to assess and manage material nature-related risks and opportunities in line with its strategy and risk management process	Nature Management-Metrics and Target
	Disclose the metrics used by the organization to assess and manage dependencies and impacts on nature.	
	Describe the targets and goals used by the organization to manage nature-related dependencies, impacts, risks and opportunities and its performance against these.	

PLN implemented “Kaizen” Principle

In Developing IFRS S1 & S2 based Report

FY 2022 | FY 2023 | FY 2024 | FY 2025

TCFD 2022



First inception of Climate-Related Financial Disclosures

EPR 2022



First inception of Materiality - based disclosure

Using Structure :

- Commitment
- Strategy
- Breakthrough
- Focal points

CDR 2023



Key improvements:

- Deeper elaboration on each section (Governance-Strategy-Risk Management-Metrics & Targets as per IFRS S2 requirement).
- Foundation for alignment with financial statement : Green assets & climate budget realization.

EPR 2023



Key improvements:

- Published after establishment of IFRS S1 & S2 standards
- Improved structure to Governance-Strategy-Risk Management-Metrics & Targets as per IFRS S1 requirement.
- Risk management quantification from academic point of view

CDR 2024



Key improvements:

- Released alongside Financial Report
- Risk management quantification combining academic point of view and company statistical data
- Integration of TPT Framework.
- Foundation for alignment with financial statement : Green assets, climate budget realization & climate finance.

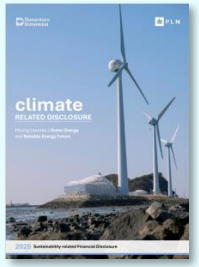
EPR 2024



Key improvements:

- Released alongside Financial Report
- Risk management quantification combining academic point of view and company statistical data
- Addition of narrative to adjust ESG rating agencies parameter.

CDR 2025



Key improvements:

- **New climate scenario and science-based stress-testing**
- Financial effects reframed on a comparable basis
- Emissions verification and ETS coverage scaled up significantly
- Stronger climate governance and crisis response

EPR 2025



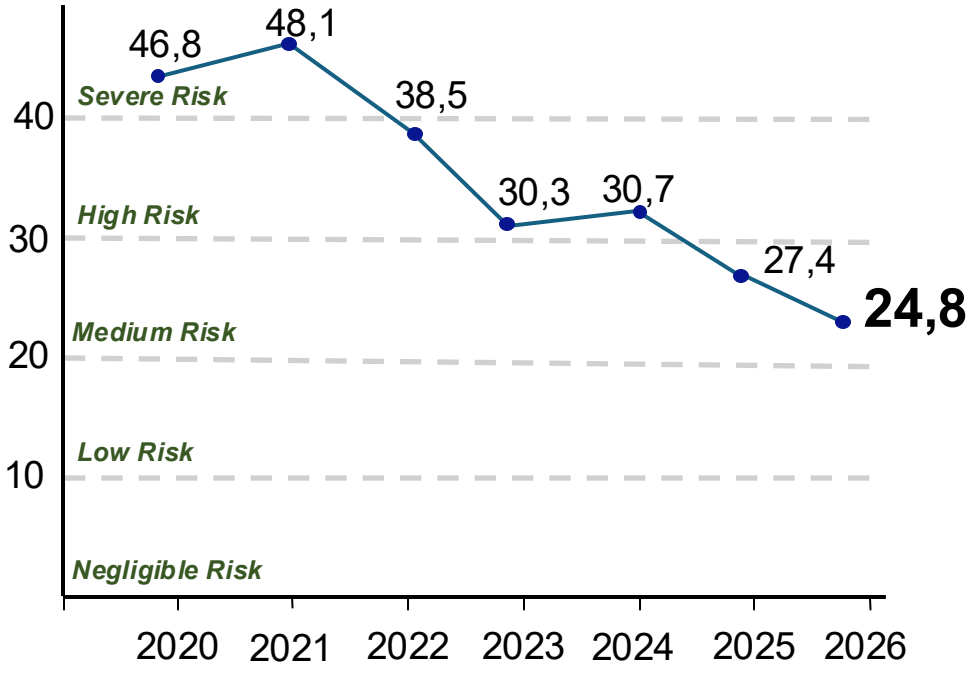
Key improvements:

- **Governance matured from placeholder to fully operational**
- Financial effects disclosure now IFRS S1-compliant
- GHG and climate targets made explicit and quantitative
- Risk scoring and biodiversity strategy substantially deepened

Continuous Improvement → **What's Next?**

*PLN has specific section called **“Future Plan”** in disclosures addressing PLN’s gap and future improvement.*

PLN considers IFRS S1 & S2 disclosures as an approach to improve the sustainability implementation



"Improvement in disclosure *significantly improves* PLN ESG Performance"

Significant improvements in PLN driven by implementing disclosures:

GHG Inventory



Establishment of internal GHG inventory procedure

Climate Click

PLNClimateClick

Developing internal apps for GHG inventory & carbon trading

Risk Management



Improvement in Climate Risk quantification

Value Chain



Development of Sustainable Value Chain

Climate Risk



On going : Incoporating climate risk into PLN's Power Plant & Substation Risk Rating Methodology

Climate Resilience



On going :
- Study : Developing Climate Resilience Guideline (Collaboration with LAPI ITB)

Easy Steps to Develop IFRS S1 & S2-based disclosures



Define Goals of Disclosures

Define the goal of disclosures :
- Compliance ?
- Investor interest?
- ESG Rating?



Compliance

Define mandatory contents in jurisdictional sustainability regulation:
- GHG emissions ?
- Scenario analysis?
- Risk & Opportunities?



Beyond Compliance

Improve necessary information:
- Investor Interest?
- ESG Rating?
- Corporate Image?

Advanced Framework Alignment with:

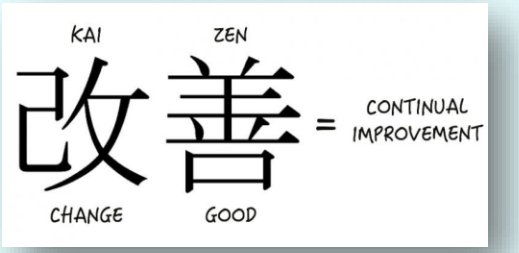


International Standards

SASB STANDARDS
Now part of IFRS Foundation

ESG Ratings

CDP



Entering Kaizen Cycle

Implement the continues improvement:
- Identify gap.
- Identify opportunity for improvement.
- Gradual improvement started from the easiest one.



“If PLN is able to develop IFRS S1 & S2-based disclosures from scratch with limited resources, so are *other companies*.”


PLN