

**RISK
BEYOND
2024**

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**Sustainable Symphony:
Echoes of Change)))**



Sustainability in Action: Preparing for a Changing World

Bali, December 5, 2024

Suroso Isnandar

Director of Risk Management PT PLN (Persero)



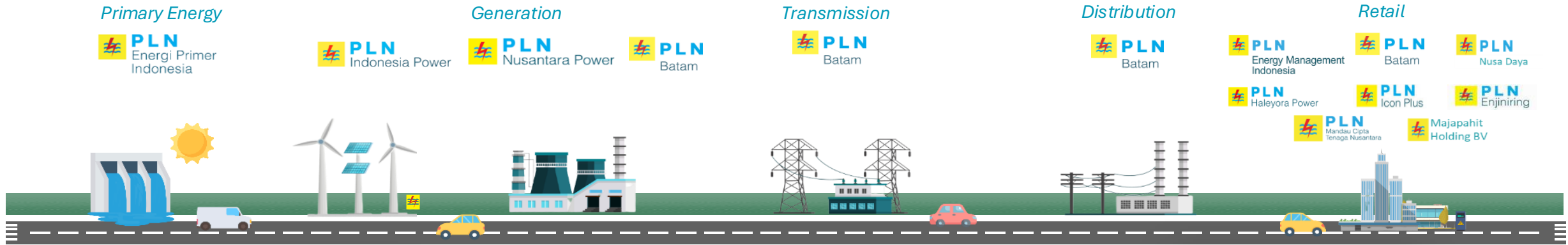
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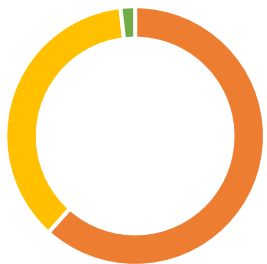


For more than 79 years, **PLN** has contributed to provide electricity in **Indonesia**... Encompassing the entire supply chain across Indonesia, from primary energy management to distribution and retail services.



75.478^{MW}

Generation Capacity



- PLN (46.504)
- IPP (27.447)
- Lease (1.526)

71.942^{kms}

Transmission line

168.327^{MVA}

Substation Capacity

2.382^{UNIT}

1.060.567^{kms}

Distribution Grid

68.542^{MVA}

Distribution Substation

571.086^{UNIT}

Electrification ratio
99,82%

Village electrification ratio
99,90%

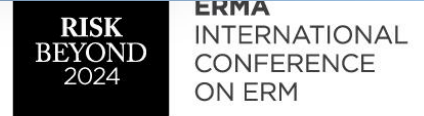
Customers
92+ Mn

Energy sold
288+ TWh

Revenue
USD >30 Bn

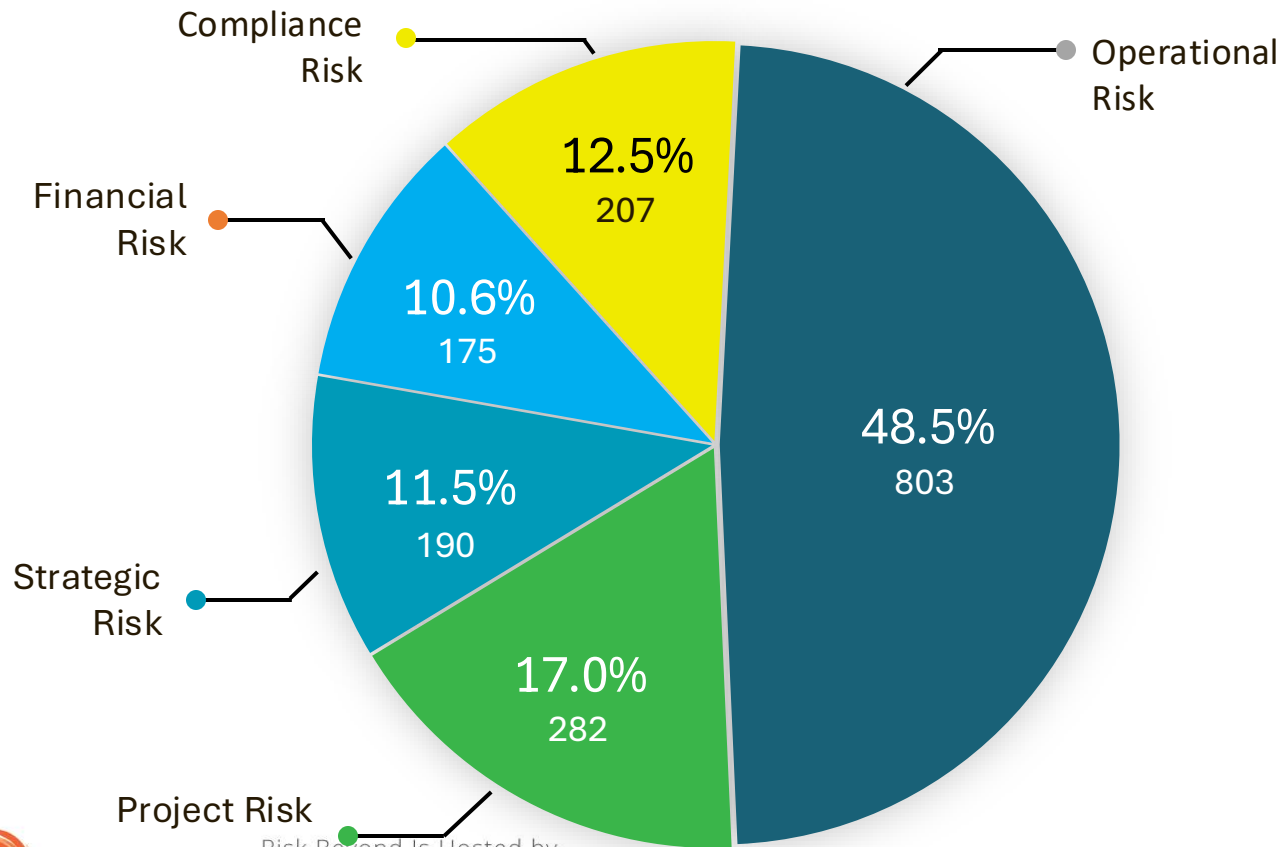


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Risk Spectrum

PLN's organization is expected to effectively manage not only strategic risks but also a wide range of other complex and significant risk exposures.



In 2024, PLN Group identified **1,657 risks**. In response, we have conducted an analysis and successfully developed at least **4,105 risk mitigation** measures throughout the value chain.

- 01 Distributions **1.388 mitigations**
- 02 Transmission **576 mitigations**
- 03 Construction **494 mitigations**
- 04 Power generation **189 mitigations**
- 05 Head Quarter **1.458 mitigations**



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In the next 2 years horizon, climate change will be prominent global risks to be anticipated in every business sector, especially utilities companies including PLN

Risk categories

- Economic
- Environmental
- Geopolitical
- Societal
- Technological

2 years



10 years



Source

World Economic Forum Global Risks
Perception Survey 2023-2024.



The Inauguration of the President of Indonesia
Mr. Prabowo Subianto

Under President Prabowo's Asta Cita vision:
Energy Self-sufficiency is one of 17 priority programs

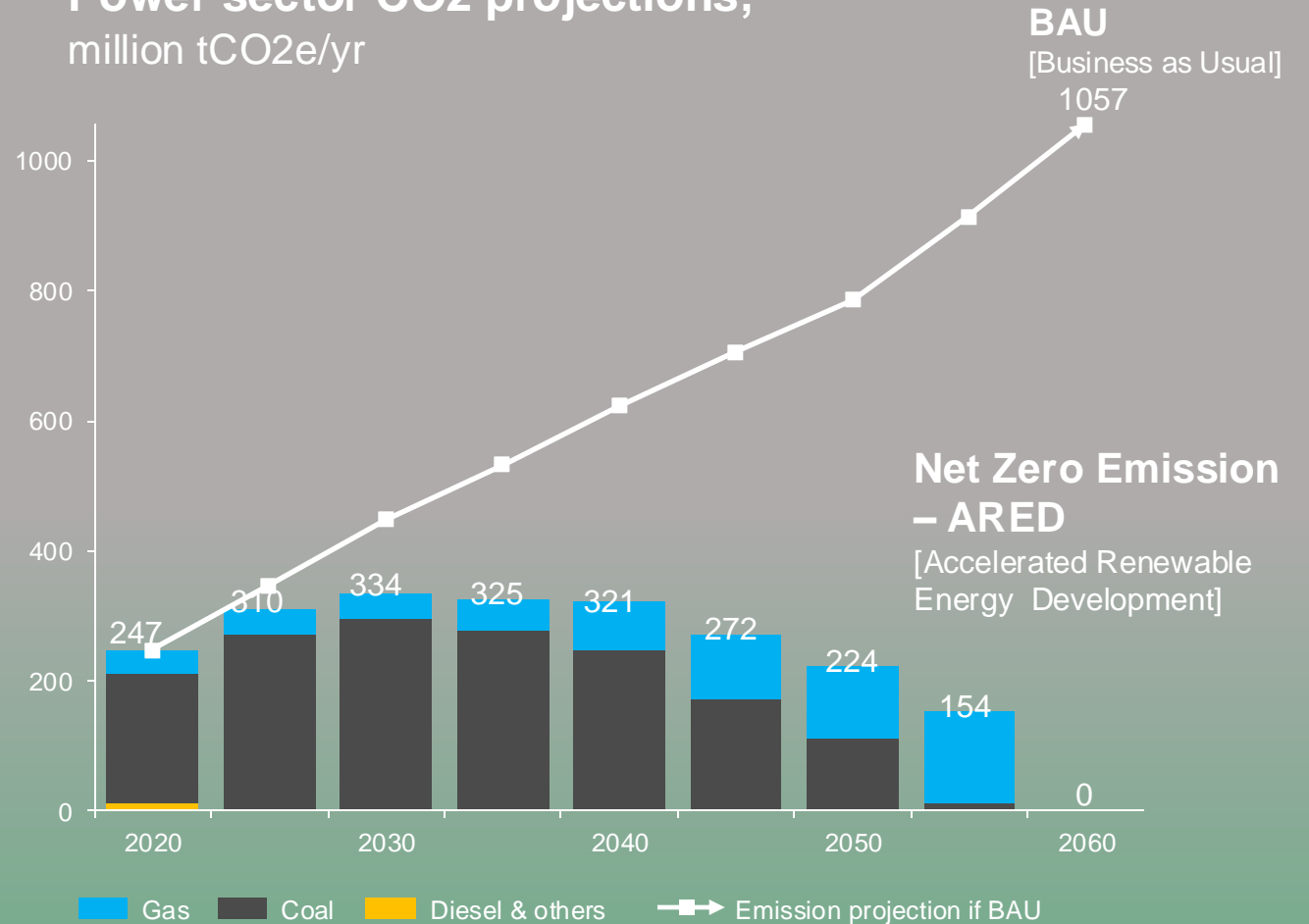
President Prabowo targets 8% Economic Growth in the Next Five Years

Indonesia will achieve energy self-sufficiency within 4-5 years. The statement also includes achieving energy sovereignty through the development of New Renewable Energy (NRE) by utilizing the abundance of energy resources.

PLN is committed
to reducing
greenhouse gas
emissions to
achieve **NZE 2060**

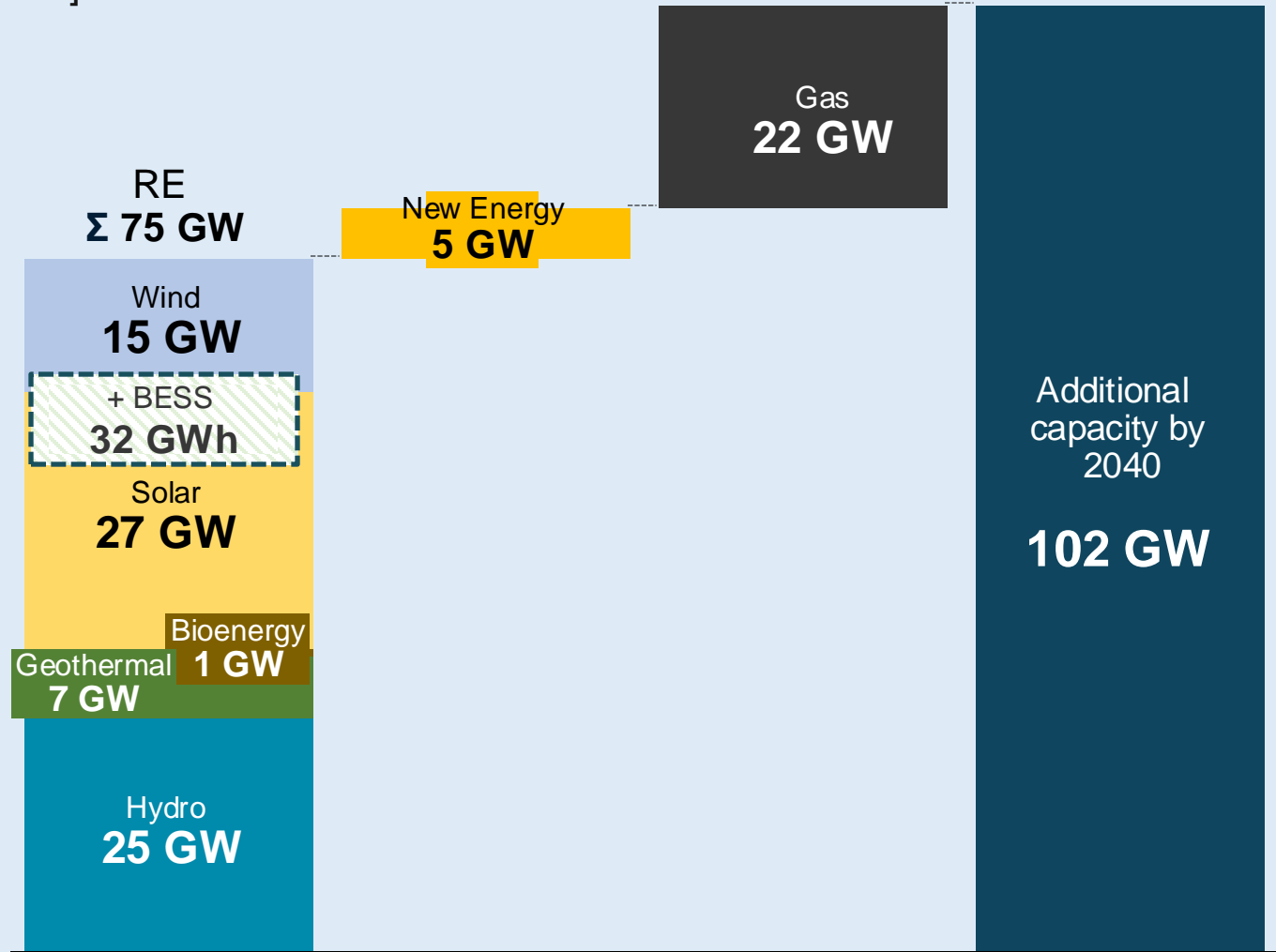
PLN has declared a roadmap towards Net
Zero Emission 2060 at COP26

Power sector CO2 projections,
million tCO2e/yr



Up until 2040, > 75% of additional capacity will come from **New Renewable Energy (NRE)¹** including **New Energy and BESS²**

Accelerated Renewable Energy with Coal Phase Down scenario³
[GW]



¹ Renewable Energy (RE), equipped with Battery Energy Storage System (BESS) for Variable RE (Wind and Solar)

² BESS capacity assuming LCOS, 4 cUSD/kWh

³ Indicative figure
Preliminary – for discussion

2024 - 2040



To support environmental sustainability, PLN is advancing a just Energy Transition by integrating Environmental, Social, and Governance (ESG) principles through various policies and instruments under the Greenest RUPTL. This approach prioritizes decarbonizing fossil fuel-based power plants and expanding renewable energy development.



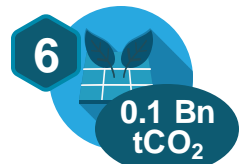
Cancellation of 13.3 GW new coal power plant planned in RUPTL 2019-2028



Biomass co-firing at 47 coal-fired power plants and up to 52 plants by 2025



Cancellation of 1.4 GW PPA of coal power plant under the Greenest RUPTL pipeline



1 GW De-dieselization program



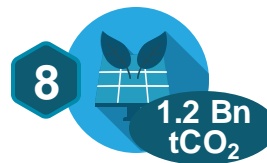
Replace 1.1 GW of coal with Renewable Energy



Implementation of carbon trading at 55 Coal-Fired Power Plant, trade volume ~5.26 million CO₂



Replace 800 MW of coal with gas power plant.



Plan and develop 21 GW renewables plants under the Greenest RUPTL

Total cumulative emissions reduction/avoidance

3.7 Miliar Ton CO₂

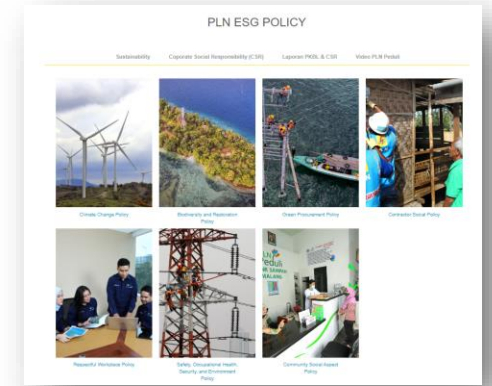
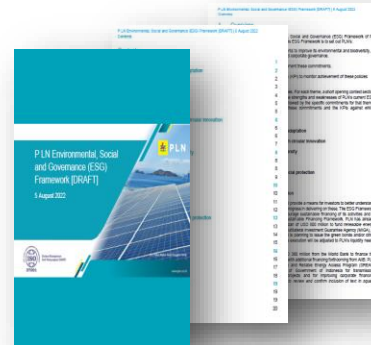
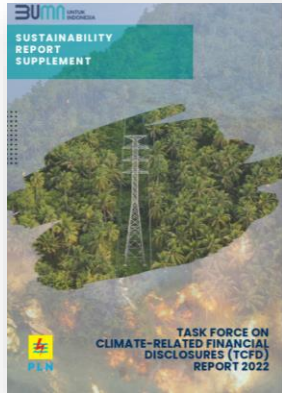
The implementation of ESG is reported to maintain transparency in alignment with international standards



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PLN produces and discloses sustainability-related reports to ensure transparency and product governance



Taskforce on Climate-related Financial Disclosure Report

A framework for **integrating climate change risks** into financial decision making. PLN is the **first SOE** (non-bank) who issued TCFD report

ESG Performance Report

A report to disclose **ESG commitments, strategies and initiative programs and performances** as a supplement of Sustainability Report

ESG Framework

Orchestrating the **ESG KPIs** based on materiality issues as **framework** to achieve sustainability roadmap

Environmental & Social Management System

Manual, governance, and guidelines to ensure project development comply with **international environmental and social standards and best practices**

Sustainability-related Policies

Disclose sustainability related policies, explaining **PLN's commitment** regarding **Climate Change, Land Use & Biodiversity, Green Procurement, Contractor Social Policy**, and others.



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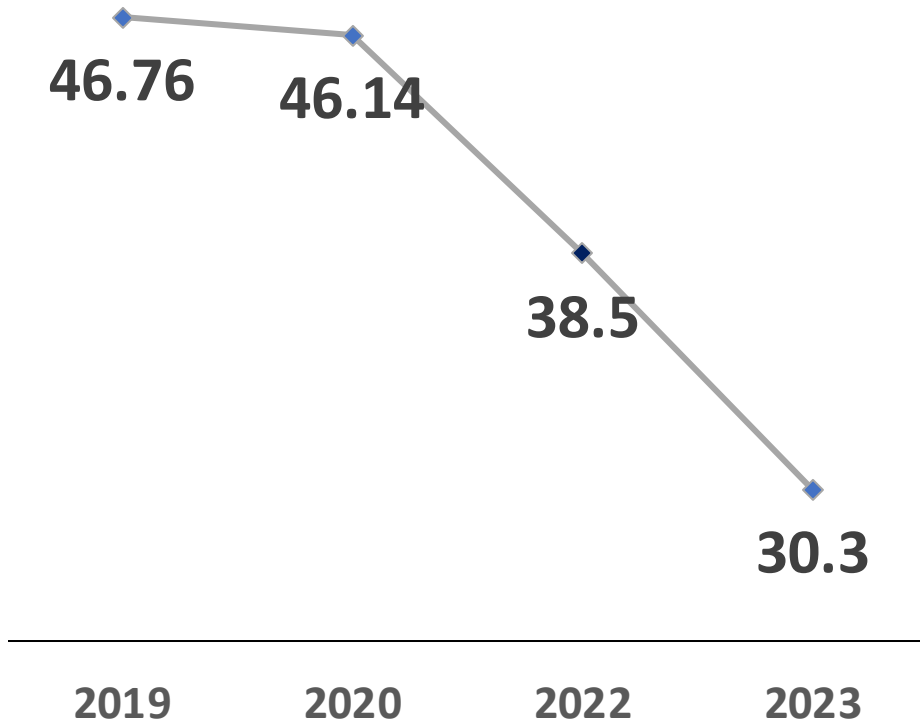
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Through the consistent implementation of ESG initiatives by its business process owners, PLN has achieved recognition as the **utility company with the highest ESG risk rating in ASEAN**

ESG Score Changes



ASEAN Electric utility companies' Risk Rating

Risk level		Risk rating	Ranking (among 703 utilities companies)
Negligible 0-10			
Low 10-20			
Medium 20-30			
High 30-40			
Severe 40+			
		30.3	328
		31.7	371
		32.4	384
		35.3	461
		43.0	590



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Note: The ESG risk rating by Sustainalytics as of 23 November 2023



Recognition in the ESG field as tangible proof of PLN's commitment to sustainability and achieving Net Zero Emissions



Awards in *Green Leadership*

PROPER Environmental Award Event and
Regional Environmental Management
Performance



Awards *Sustainable Leader of The Year in Energy Transition*

Lestari Award 2024
Furthermore, PLN received an award in the Waste
Management category and PLN Nusantara Power in
the Renewable Energy category.



Awards "*CEO of the Year*"

Best ESG (Environmental, Social, and Governance)
Campaign in Energy Sector. This award was given
to PLN for its corporate commitment in energy
transition initiatives and running business
processes that consider environmental, social, and
good governance aspects.

**We must ensure that the
future of the next generation
are better than ours...**



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Thank You



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