



PT PERTAMINA GEOTHERMAL ENERGY

2025 CDP Corporate Questionnaire 2025

Word version

Important: this export excludes unanswered questions

This document is an export of your organization's CDP questionnaire response. It contains all data points for questions that are answered or in progress. There may be questions or data points that you have been requested to provide, which are missing from this document because they are currently unanswered. Please note that it is your responsibility to verify that your questionnaire response is complete prior to submission. CDP will not be liable for any failure to do so.

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C1. Introduction

(1.1) In which language are you submitting your response?

Select from:

☒ English

(1.2) Select the currency used for all financial information disclosed throughout your response.

Select from:

☒ USD

(1.3) Provide an overview and introduction to your organization.

(1.3.2) Organization type

Select from:

☒ Publicly traded organization

(1.3.3) Description of organization

PT Pertamina Geothermal Energy (PGE), a wholly owned subsidiary of PT Pertamina established in 2006, is mandated with the development and utilization of geothermal energy resources across the Indonesian archipelago. The utilization of geothermal energy in Indonesia commenced in 1974 when Pertamina successfully identified approximately 70 geothermal prospects through intensive exploration and exploitation activities. This led to the establishment of the country's first geothermal power plant, Kamojang PLTP Unit I, which began commercial operations in 1983 with an installed capacity of 30 MW. PGE undertakes a comprehensive role in the geothermal power generation value chain, encompassing exploration, reservoir development, the construction of surface steam infrastructure, and power plant operations. In select instances, PGE collaborates with Independent Power Producers (IPPs), to whom it supplies steam, while the IPPs manage plant operations. The generated electricity is subsequently distributed to Indonesia's sole state-owned utility, PT Perusahaan Listrik Negara (PT PLN). Furthermore, PGE operates under a Joint Operation Contract (JOC) scheme in several working areas, whereby JOC contractors independently perform all operational activities and receive production entitlements in return. PGE manages 13 geothermal working areas, with a combined total installed capacity of 1,877 MW. This comprises 672 MW operated directly by PGE and 1,205 MW under JOC arrangements, collectively accounting for approximately 82% of the nation's total geothermal-based electricity generation. PGE is deeply committed to supporting Indonesia's climate objectives by promoting the transition to cleaner, low-emission energy sources. The energy sector remains one of the largest contributors to global greenhouse gas (GHG) emissions, primarily due to the extraction, processing, and combustion of fossil fuels. As a geothermal energy provider, PGE is strategically positioned to play a pivotal role in Indonesia's national decarbonization strategy, which targets a 29% GHG

emissions reduction by 2030 (41% with international support), as outlined in the country's Nationally Determined Contribution (NDC). With geothermal energy's inherently low-carbon characteristics, PGE is actively pursuing opportunities in carbon markets. As of 2022, the Company has developed seven carbon credit initiatives across both voluntary and compliance schemes, covering international and domestic markets. With the inauguration of Indonesia's Carbon Market on September 26th, 2023, PGE became the first carbon credit provider through its working unit, PGE Lahendong Area. These credits are available for offsetting emissions from other industries, thereby contributing to broader climate mitigation efforts. To support its strategic growth objectives, PGE has set an ambitious target to increase its owned installed capacity from 672 MW to 1 GW within the next two years. To finance this expansion, PGE successfully executed an Initial Public Offering (IPO) on February 24, 2023, and continues to secure green financing while maintaining a strong environmental, social, and governance (ESG) performance. Notably, PGE was awarded a Sustainalytics ESG Risk Rating of 9.3, indicating "Negligible Risk" and demonstrating exceptional corporate responsibility and sustainability performance. PGE is also expanding its focus beyond conventional electricity generation to include innovations such as green hydrogen production via water electrolysis powered by geothermal energy, and the conversion of CO₂ emissions into liquid CO₂ and green methanol. These initiatives serve the dual purpose of reducing the Company's own emissions footprint while maximizing the potential of geothermal resources. While geothermal energy generation is significantly cleaner than fossil fuel-based alternatives, PGE acknowledges that some GHG emissions are inherent in its operations. Accordingly, the Company is firmly committed to minimizing its environmental impact by implementing best practices in energy efficiency, resource management, and by embedding sustainability principles within its corporate strategy and operations. Through these endeavors, PGE is well-positioned to lead Indonesia's transition to a low-carbon, green energy future.

[Fixed row]

(1.4) State the end date of the year for which you are reporting data. For emissions data, indicate whether you will be providing emissions data for past reporting years.

(1.4.1) End date of reporting year

12/30/2024

(1.4.2) Alignment of this reporting period with your financial reporting period

Select from:

☒ Yes

(1.4.3) Indicate if you are providing emissions data for past reporting years

Select from:

☒ Yes

(1.4.4) Number of past reporting years you will be providing Scope 1 emissions data for

Select from:

☒ 2 years

(1.4.5) Number of past reporting years you will be providing Scope 2 emissions data for

Select from:

☒ 2 years

(1.4.6) Number of past reporting years you will be providing Scope 3 emissions data for

Select from:

☒ 2 years

[Fixed row]

(1.4.1) What is your organization's annual revenue for the reporting period?

407120000

(1.5) Provide details on your reporting boundary.

	Is your reporting boundary for your CDP disclosure the same as that used in your financial statements?
	Select from: ☒ Yes

[Fixed row]

(1.6) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

ISIN code - bond

(1.6.1) Does your organization use this unique identifier?

Select from:

☒ No

ISIN code - equity

(1.6.1) Does your organization use this unique identifier?

Select from:

☒ No

CUSIP number

(1.6.1) Does your organization use this unique identifier?

Select from:

☒ No

Ticker symbol

(1.6.1) Does your organization use this unique identifier?

Select from:

☒ Yes

(1.6.2) Provide your unique identifier

PGEO

SEDOL code

(1.6.1) Does your organization use this unique identifier?

Select from:

☒ No

LEI number

(1.6.1) Does your organization use this unique identifier?

Select from:

☒ No

D-U-N-S number

(1.6.1) Does your organization use this unique identifier?

Select from:

☒ No

Other unique identifier

(1.6.1) Does your organization use this unique identifier?

Select from:

☒ Yes

(1.6.2) Provide your unique identifier

Business Index Number (8120007912209)

[Add row]

(1.7) Select the countries/areas in which you operate.

Select all that apply

☒ Indonesia

(1.16) In which part of the electric utilities value chain does your organization operate?

Electric utilities value chain

☒ Electricity generation

(1.16.1) For your electricity generation activities, provide details of your nameplate capacity and electricity generation specifics for each technology employed.

Coal - Hard

(1.16.1.1) Own or control operations which use this power generation source

Select from:

☒ No

(1.16.1.5) Comment

Not Relevant

Lignite

(1.16.1.1) Own or control operations which use this power generation source

Select from:

☒ No

(1.16.1.5) Comment

Not Relevant

Oil

(1.16.1.1) Own or control operations which use this power generation source

Select from:

☒ No

(1.16.1.5) Comment

Not Relevant

Gas

(1.16.1.1) Own or control operations which use this power generation source

Select from:

☒ No

(1.16.1.5) Comment

Not Relevant

Sustainable biomass

(1.16.1.1) Own or control operations which use this power generation source

Select from:

☒ No

(1.16.1.5) Comment

Not Relevant

Other biomass

(1.16.1.1) Own or control operations which use this power generation source

Select from:

☒ No

(1.16.1.5) Comment

Not Relevant

Waste (non-biomass)

(1.16.1.1) Own or control operations which use this power generation source

Select from:

☒ No

(1.16.1.5) Comment

Not Relevant

Nuclear

(1.16.1.1) Own or control operations which use this power generation source

Select from:

☒ No

(1.16.1.5) Comment

Not Relevant

Fossil-fuel plants fitted with carbon capture and storage

(1.16.1.1) Own or control operations which use this power generation source

Select from:

☒ No

(1.16.1.5) Comment

Not Relevant

Geothermal

(1.16.1.1) Own or control operations which use this power generation source

Select from:

☒ Yes

(1.16.1.2) Nameplate capacity (MW)

673

(1.16.1.3) Gross electricity generation (GWh)

4973.6

(1.16.1.4) Net electricity generation (GWh)

4827.22

(1.16.1.5) Comment

Nameplate capacity increased from last year due to small-scale operations in the Lahendong area. Of the total 673 MW, 1 MW comes from a binary power plant used for internal consumption.

Hydropower

(1.16.1.1) Own or control operations which use this power generation source

Select from:

☒ No

(1.16.1.5) Comment

Not Relevant

Wind

(1.16.1.1) Own or control operations which use this power generation source

Select from:

☒ No

(1.16.1.5) Comment

Not Relevant

Solar

(1.16.1.1) Own or control operations which use this power generation source

Select from:

☒ No

(1.16.1.5) Comment

Not Relevant

Marine

(1.16.1.1) Own or control operations which use this power generation source

Select from:

☒ No

(1.16.1.5) Comment

Not Relevant

Other renewable

(1.16.1.1) Own or control operations which use this power generation source

Select from:

☒ No

(1.16.1.5) Comment

Not Relevant

Other non-renewable

(1.16.1.1) Own or control operations which use this power generation source

Select from:

☒ No

(1.16.1.5) Comment

Not Relevant

Total

(1.16.1.2) Nameplate capacity (MW)

673

(1.16.1.3) Gross electricity generation (GWh)

4973.6

(1.16.1.4) Net electricity generation (GWh)

4827.22

(1.16.1.5) Comment

Not Relevant

[Fixed row]

(1.24) Has your organization mapped its value chain?

(1.24.1) Value chain mapped

Select from:

☒ Yes, we have mapped or are currently in the process of mapping our value chain

(1.24.2) Value chain stages covered in mapping

Select all that apply

☒ Upstream value chain

(1.24.3) Highest supplier tier mapped

Select from:

☒ Tier 1 suppliers

(1.24.4) Highest supplier tier known but not mapped

Select from:

☒ All supplier tiers known have been mapped

(1.24.7) Description of mapping process and coverage

PGE has identified significant criteria. In the upstream value chain, there are purchases of goods and services, purchases of capital goods and services, and business travel. In the downstream value chain, PGE sells steam, which can be calculated.

[Fixed row]

(1.24.1) Have you mapped where in your direct operations or elsewhere in your value chain plastics are produced, commercialized, used, and/or disposed of?

	Plastics mapping	Value chain stages covered in mapping
	<i>Select from:</i> ☒ Yes, we have mapped or are currently in the process of mapping plastics in our value chain	<i>Select all that apply</i> ☒ Upstream value chain

[Fixed row]

C2. Identification, assessment, and management of dependencies, impacts, risks, and opportunities

(2.1) How does your organization define short-, medium-, and long-term time horizons in relation to the identification, assessment, and management of your environmental dependencies, impacts, risks, and opportunities?

Short-term

(2.1.1) From (years)

1

(2.1.3) To (years)

2

(2.1.4) How this time horizon is linked to strategic and/or financial planning

PGE designates short-term as a 1-2-year plan that includes identifying risks, opportunities, and strategies that arise in the 3-year strategic plan, which is updated annually.

Medium-term

(2.1.1) From (years)

3

(2.1.3) To (years)

6

(2.1.4) How this time horizon is linked to strategic and/or financial planning

PGE defines the medium-term timeframe as a planning horizon of three to six years, during which it identifies and addresses key risks, opportunities, and strategic initiatives aligned with national policy objectives. These include support for Indonesia's Nationally Determined Contribution (NDC), which targets a minimum contribution of 25% from renewable energy sources to the national energy mix by 2025, and a 30% reduction in greenhouse gas (GHG) emissions from the energy sector by 2030. As a renewable and low-carbon energy company, PGE is committed to contributing meaningfully to these national goals. In line with this commitment, the Company has adopted the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), incorporating insights from several key national frameworks, such as the National Electricity Supply Business Plan (RUPTL), the National Energy Policy (KEN), and the National Energy Transition roadmap.

Long-term

(2.1.1) From (years)

7

(2.1.2) Is your long-term time horizon open ended?

Select from:

☒ No

(2.1.3) To (years)

30

(2.1.4) How this time horizon is linked to strategic and/or financial planning

PGE defines the long-term outlook as a strategic planning horizon extending beyond seven years, focusing on the future of the energy sector in alignment with national policy objectives. This includes support for Indonesia's Nationally Determined Contribution (NDC), which envisions renewable energy comprising at least 30% of the national energy mix by 2050, along with the development of emerging technologies such as green hydrogen production, CO₂ extraction and liquefaction, green methanol, and Carbon Capture and Storage (CCS). These initiatives are part of the broader national commitment to achieve Net Zero Emissions by no later than 2060. In line with its sustainability vision, PGE has adopted the Task Force on Climate-related Financial Disclosures (TCFD) framework, incorporating short-, medium-, and long-term strategies to guide the Company's transition toward a low-carbon and resilient energy future.

[Fixed row]

(2.2) Does your organization have a process for identifying, assessing, and managing environmental dependencies and/or impacts?

	Process in place	Dependencies and/or impacts evaluated in this process
	Select from: ☒ Yes	Select from: ☒ Both dependencies and impacts

[Fixed row]

(2.2.1) Does your organization have a process for identifying, assessing, and managing environmental risks and/or opportunities?

	Process in place	Risks and/or opportunities evaluated in this process	Is this process informed by the dependencies and/or impacts process?
	Select from: ☒ Yes	Select from: ☒ Both risks and opportunities	Select from: ☒ Yes

[Fixed row]

(2.2.2) Provide details of your organization's process for identifying, assessing, and managing environmental dependencies, impacts, risks, and/or opportunities.

Row 1

(2.2.2.1) Environmental issue

Select all that apply

☒ Climate change

(2.2.2.2) Indicate which of dependencies, impacts, risks, and opportunities are covered by the process for this environmental issue

Select all that apply

- ☒ Risks
- ☒ Opportunities

(2.2.2.3) Value chain stages covered

Select all that apply

- ☒ Direct operations
- ☒ Upstream value chain
- ☒ Downstream value chain

(2.2.2.4) Coverage

Select from:

- ☒ Partial

(2.2.2.5) Supplier tiers covered

Select all that apply

- ☒ Tier 1 suppliers

(2.2.2.7) Type of assessment

Select from:

- ☒ Qualitative and quantitative

(2.2.2.8) Frequency of assessment

Select from:

- ☒ More than once a year

(2.2.2.9) Time horizons covered

Select all that apply

- ☒ Short-term
- ☒ Medium-term
- ☒ Long-term

(2.2.2.10) Integration of risk management process

Select from:

- ☒ Integrated into multi-disciplinary organization-wide risk management process

(2.2.2.11) Location-specificity used

Select all that apply

- ☒ Site-specific

(2.2.2.12) Tools and methods used

Commercially/publicly available tools

- ☒ Other commercially/publicly available tools, please specify :Task force on Climate-related Financial Disclosure (TCFD)

Enterprise Risk Management

- ☒ Enterprise Risk Management
- ☒ ISO 31000 Risk Management Standard

International methodologies and standards

- ☒ Environmental Impact Assessment
- ☒ IPCC Climate Change Projections
- ☒ ISO 14001 Environmental Management Standard
- ☒ Life Cycle Assessment

Other

- ☒ Materiality assessment

- ☑ Partner and stakeholder consultation/analysis

(2.2.2.13) Risk types and criteria considered

Acute physical

- ☑ Cyclones, hurricanes, typhoons
- ☑ Drought
- ☑ Heavy precipitation (rain, hail, snow/ice)
- ☑ Landslide
- ☑ Wildfires

Chronic physical

- ☑ Soil erosion
- ☑ Water stress
- ☑ Change in land-use
- ☑ Changing wind patterns
- ☑ Changing temperature (air, freshwater, marine water)
- ☑ Changing precipitation patterns and types (rain, hail, snow/ice)

Policy

- ☑ Carbon pricing mechanisms
- ☑ Changes to national legislation
- ☑ Increased difficulty in obtaining operations permits
- ☑ Poor coordination between regulatory bodies
- ☑ Other policy, please specify :Regulation of discharge quality/volumes

Market

- ☑ Uncertainty in the market signals
- ☑ Other market, please specify :Single buyer

Reputation

- ☑ Impact on human health

- ☒ Negative press coverage related to support of projects or activities with negative impacts on the environment (e.g. GHG emissions, deforestation & conversion, water stress)

Technology

- ☒ Transition to lower emissions technology and products
- ☒ Unsuccessful investment in new technologies
- ☒ Other technology, please specify :Transition to increasing renewable content

Liability

- ☒ Exposure to litigation

(2.2.2.14) Partners and stakeholders considered

Select all that apply

- | | |
|---|---|
| ☒ NGOs | ☒ Regulators |
| ☒ Customers | ☒ Local communities |
| ☒ Employees | ☒ Other, please specify : Water utilities at a local level |
| ☒ Investors | |
| ☒ Suppliers | |

(2.2.2.15) Has this process changed since the previous reporting year?

Select from:

- ☒ No

(2.2.2.16) Further details of process

PGE established the Task Force on Climate-related Financial Disclosures (TCFD) as part of its commitment to assessing and managing climate-related risks. Recognizing that effective climate change management requires strong leadership and engagement at all organizational levels, PGE reinforced this commitment by forming a Sustainability Committee and an Environmental, Social, and Governance (ESG) Management Team in the same year. These governance structures are tasked with overseeing the implementation of the Company's sustainability agenda, particularly its climate-related initiatives. PGE's climate strategy is fully embedded within its broader sustainability framework, which is anchored on four key pillars: Zero Emission, Nature, People & Socioeconomics, and Transformation Catalyst. Climate change mitigation specifically falls under the Zero Emission pillar, which sets ambitious goals for the Company to reduce its emissions intensity by 29% by 2030 and achieve net zero emissions by 2060. To realize these targets, PGE has developed a phased roadmap consisting of three strategic phases: Emerge (2024–

2026), Transform (2027–2030), and Sustain (2030 onward). Each phase outlines a series of progressive initiatives designed to drive the Company's transition to a low-carbon future. In support of these efforts, PGE has adopted an Enterprise Risk Management (ERM) framework aligned with ISO 31000:2018 on Risk Management. This framework provides a structured approach to the identification, analysis, evaluation, mitigation, and continuous monitoring of risks, including those related to climate change.

Row 2

(2.2.2.1) Environmental issue

Select all that apply

☒ Water

(2.2.2.2) Indicate which of dependencies, impacts, risks, and opportunities are covered by the process for this environmental issue

Select all that apply

☒ Risks

☒ Opportunities

(2.2.2.3) Value chain stages covered

Select all that apply

☒ Direct operations

☒ Upstream value chain

(2.2.2.4) Coverage

Select from:

☒ Full

(2.2.2.5) Supplier tiers covered

Select all that apply

☒ Tier 1 suppliers

(2.2.2.7) Type of assessment

Select from:

- ☒ Qualitative and quantitative

(2.2.2.8) Frequency of assessment

Select from:

- ☒ More than once a year

(2.2.2.9) Time horizons covered

Select all that apply

- ☒ Short-term
- ☒ Medium-term

(2.2.2.10) Integration of risk management process

Select from:

- ☒ Integrated into multi-disciplinary organization-wide risk management process

(2.2.2.11) Location-specificity used

Select all that apply

- ☒ Site-specific

(2.2.2.12) Tools and methods used

Commercially/publicly available tools

- ☒ WRI Aqueduct

Enterprise Risk Management

- ☒ Enterprise Risk Management
- ☒ ISO 31000 Risk Management Standard

International methodologies and standards

- ☒ ISO 14001 Environmental Management Standard
- ☒ Life Cycle Assessment
- ☒ Other international methodologies and standards, please specify :IPCC Climate Related Risk, Share Socioeconomic Pathways

Databases

- ☒ Other databases, please specify :WRI Aqueduct

Other

- ☒ Internal company methods
- ☒ Partner and stakeholder consultation/analysis

(2.2.2.13) Risk types and criteria considered

Acute physical

- ☒ Drought
- ☒ Heavy precipitation (rain, hail, snow/ice)
- ☒ Landslide
- ☒ Pollution incident

Chronic physical

- ☒ Changing precipitation patterns and types (rain, hail, snow/ice)
- ☒ Groundwater depletion
- ☒ Seasonal supply variability/interannual variability
- ☒ Water stress

Policy

- ☒ Changes to national legislation
- ☒ Increased difficulty in obtaining water withdrawals permit
- ☒ Increased pricing of water
- ☒ Limited or lack of river basin management

- ☒ Mandatory water efficiency, conservation, recycling, or process standards

Market

- ☒ Availability and/or increased cost of raw materials

Reputation

- ☒ Impact on human health
- ☒ Negative press coverage related to support of projects or activities with negative impacts on the environment (e.g. GHG emissions, deforestation & conversion, water stress)

Technology

- ☒ Transition to water efficient and low water intensity technologies and products

Liability

- ☒ Non-compliance with regulations

(2.2.2.14) Partners and stakeholders considered

Select all that apply

- ☒ Employees
- ☒ Local communities
- ☒ NGOs
- ☒ Regulators
- ☒ Water utilities at a local level

(2.2.2.15) Has this process changed since the previous reporting year?

Select from:

- ☒ No

(2.2.2.16) Further details of process

PGE manages water-related risks by employing the WRI Aqueduct to evaluate site-specific risks and future forecasts, in conjunction with the HIRADC methodology (ISO 14001 & 45001) and Life Cycle Analysis (LCA) to assess environmental impacts. They utilize the ERM framework (ISO 31000:2018) to manage significant risks. Various stakeholders, including employees, investors, local communities, regulators, and NGOs, are taken into account. Their decision-making process includes identifying risks, gathering stakeholder feedback, assessing risks, implementing mitigation strategies, monitoring outcomes, and fostering continuous improvement. Pertamina Geothermal Energy will do a risk assessment using Pertamina Water Tools, a tool developed internally by Pertamina, based on the GEMI and Alliance for Water Stewardship (AWS) Standards, World Resources Institute's (WRI) Aqueduct Water Risk Atlas, and hazard risk analysis to identify and mitigate the water risk in our Geothermal Plant site. Those risk assessments than will integrate with risk management guidelines refer to ISO 31000:2018. Pertamina identifies risk within 6 categories from Risk Intelligence Map (RIM) Ongoing Business which are: 1. Business Strategy 2. Financial Management 3. Operational 4. Business Environment 5. Corporate Image 6. Legal, Governance & Compliance The risk impact value is assessed based on a 5-level rating scale: 5-catastrophic, 4-significant, 3-moderate, 2-minor, 1-insignificant. The impact criteria used are: 1. Financial metric: the impact is measured based on reduction of net profit compare to risk limit for each function 2. Reputation metric: the impact is measured based on the scope of negative effect to company's reputation (internal to international) 3. Health & Safety metric: the impact is measured based on incident impact (multiple or single fatality or loss time injury) 4. Environment metric: the impact is measured based on area of environmental impact & the amount of oil spill 5. Workforce metric: the impact is measured based on decreasing of workers' morale 6. Legal metric: the impact is measured based on legal dispute and court verdict level 7. IT metric: the impact is measured based on days of IT disruption to operational The risk probability value is assessed based on a 5-level rating scale: 5-almost certain, 4-likely, 3-moderate, 2-unlikely, 1-rare The resulting risk score (impact scale x probability scale) plotted into a 5x5 risk map for inherent and residual risk (after considering effectiveness of mitigation) score. All risks that have an inherent risk score above 15 (for qualitative risks) or above mean inherent risk exposure (impact value x probability percentage) will become Top Risk candidates from bottom-up approach. On the other hand, top-down approach applied to identify risk related to strategic matters from Top Management perspective, including climate-related risk. The Top Risk candidates (bottom-up & top down) will be challenged and approved by the Risk Management Committee and monitored on a quarterly basis.

Row 3

(2.2.2.1) Environmental issue

Select all that apply

☒ Biodiversity

(2.2.2.2) Indicate which of dependencies, impacts, risks, and opportunities are covered by the process for this environmental issue

Select all that apply

☒ Risks

☒ Opportunities

(2.2.2.3) Value chain stages covered

Select all that apply

- ☒ Direct operations
- ☒ Upstream value chain

(2.2.2.4) Coverage

Select from:

- ☒ Full

(2.2.2.5) Supplier tiers covered

Select all that apply

- ☒ Tier 1 suppliers

(2.2.2.7) Type of assessment

Select from:

- ☒ Qualitative and quantitative

(2.2.2.8) Frequency of assessment

Select from:

- ☒ More than once a year

(2.2.2.9) Time horizons covered

Select all that apply

- ☒ Short-term
- ☒ Medium-term

(2.2.2.10) Integration of risk management process

Select from:

- ☒ Integrated into multi-disciplinary organization-wide risk management process

(2.2.2.11) Location-specificity used

Select all that apply

☒ Local

(2.2.2.12) Tools and methods used

Commercially/publicly available tools

☒ Other commercially/publicly available tools, please specify :Biodiversity Index, IUCN Red List

Enterprise Risk Management

☒ Enterprise Risk Management

☒ ISO 31000 Risk Management Standard

International methodologies and standards

☒ Environmental Impact Assessment

☒ ISO 14001 Environmental Management Standard

☒ Life Cycle Assessment

☒ Other international methodologies and standards, please specify :Biodiversity Action Plan

Databases

☒ Other databases, please specify :IUCN Red List

Other

☒ External consultants

☒ Partner and stakeholder consultation/analysis

(2.2.2.13) Risk types and criteria considered

Acute physical

☒ Other acute physical risk, please specify :illegal logging, illegal poaching

Chronic physical

- ☒ Change in land-use
- ☒ Declining ecosystem services
- ☒ Soil degradation

Policy

- ☒ Changes to international law and bilateral agreements
- ☒ Changes to national legislation
- ☒ Poor coordination between regulatory bodies
- ☒ Poor enforcement of environmental regulation

Market

- ☒ Changing customer behavior

Reputation

- ☒ Negative press coverage related to support of projects or activities with negative impacts on the environment (e.g. GHG emissions, deforestation & conversion, water stress)
- ☒ Stigmatization of sector

Technology

- ☒ Data access/availability or monitoring systems

Liability

- ☒ Non-compliance with regulations

(2.2.2.14) Partners and stakeholders considered

Select all that apply

- ☒ Employees
- ☒ Local communities
- ☒ NGOs
- ☒ Regulators

(2.2.2.15) Has this process changed since the previous reporting year?

Select from:

☒ No

(2.2.2.16) Further details of process

Many geothermal potentials in Indonesia are located within or adjacent to protected forests, including PGE's. Risks related to development in such a special place are carefully mitigated. A borrow-to-use forest area permit for protected forest areas from the Ministry of Environment and Forestry has to be obtained before the commencement of the activities, which regulates several obligations, including obligation to rehabilitate or to conserve critical land or watershed areas or non-forestry land as wide as (outside Java) or twice as wide as (within Java) protected forest usage to compensate for forest land use. PGE has also implemented biodiversity-conscious design into its production facilities, such as stacked pipelines to minimize land use, as well as piping loops and overpasses to enable wildlife crossing and to allow community mobility. PGE has also correspondingly conducted biodiversity protection programs in collaboration with the Conservation of Natural Resources agency, NGO, and local communities, ranging from: • Conservation of endangered/ critically endangered species such as conservation of Javanese Hawk Eagle (*Nisaetus bartelsi*, EN) at the Kamojang Eagle Conservation Center (PKEK) and conservation of Yaki monkey (*Macaca nigra*, CR), • Conservation, nursery and farming of endemic species, including in-situ conservation of endemic Lichen species in Kamojang • Breeding and cultivation of local endemic species, such as cultivation of Saburai Goat in Ulubelu and conservation of Kulo and Riri – the local endemic species of *Chrysanthemum* in Lahendong • Reforestation/ site rehabilitation and green belt planting, • Biodiversity monitoring programs especially in area located within or adjacent to protected forest, as well as • Social Forestry, aiming to improve community welfare while still adhering to the principles of forest sustainability. Moving forward, PGE plans to establish Biodiversity Action Programs, especially for areas located within or adjacent to protected forests, with 2023 Lumut Balai's Biodiversity Action Plan being the first Biodiversity Action Plan in PGE. The Biodiversity Action Plan, which contains baseline data on biodiversity, systematic consideration of threats to biodiversity beyond the company's business activities, implementation of the best-practice mitigation hierarchy, as well as monitoring and evaluation of mitigation strategies, will provide much clearer metrics and target linked to biodiversity.

[Add row]

(2.2.7) Are the interconnections between environmental dependencies, impacts, risks and/or opportunities assessed?

(2.2.7.1) Interconnections between environmental dependencies, impacts, risks and/or opportunities assessed

Select from:

☒ Yes

(2.2.7.2) Description of how interconnections are assessed

PGE is a low-carbon renewable energy company operating in the geothermal sector, positioning it as a strategic contributor to Indonesia's net zero emissions agenda. The Company has implemented a range of water and energy conservation programs across its operations. A significant portion of PGE's operational sites

are situated adjacent to, or within, protected forest areas—ecosystems that are recognized for their rich biodiversity. This is largely due to the geographic nature of geothermal resources, which are predominantly located in mountainous, biodiversity-rich regions. In line with its commitment to sustainable development, PGE conducts environmental studies to support the expansion of its operations through a low-carbon development approach, while actively working to minimize its impact on surrounding biodiversity. The Company engages local communities, non-governmental organizations (NGOs), and regulatory authorities in its flora and fauna conservation initiatives to ensure an inclusive and effective implementation. Moreover, PGE has developed and adopted a Biodiversity Action Plan (BAP), which serves as a strategic framework to guide the protection and enhancement of biodiversity in and around its operational areas.

[Fixed row]

(2.3) Have you identified priority locations across your value chain?

(2.3.1) Identification of priority locations

Select from:

☒ Yes, we have identified priority locations

(2.3.2) Value chain stages where priority locations have been identified

Select all that apply

☒ Direct operations

(2.3.3) Types of priority locations identified

Sensitive locations

☒ Areas important for biodiversity

☒ Areas of limited water availability, flooding, and/or poor quality of water

☒ Other sensitive location, please specify :Protected forests

Locations with substantive dependencies, impacts, risks, and/or opportunities

☒ Locations with substantive dependencies, impacts, risks, and/or opportunities relating to forests

☒ Locations with substantive dependencies, impacts, risks, and/or opportunities relating to water

☒ Locations with substantive dependencies, impacts, risks, and/or opportunities relating to biodiversity

(2.3.4) Description of process to identify priority locations

PGE ensures that the operational areas near protected areas have obtained a permit from the Ministry of the Environment and Forestry and implemented the mitigation hierarchy: avoid, minimize, restore, offset. In addition, the Company consistently identifies impacts and executes biodiversity management programs. All activities are carried out by involving authorized parties, including the Natural Resources Conservation Center and the local Environmental Agency. The Company also conducts monitoring and makes periodic reports. Based on the water stress area assessment using the Aqueduct Water Risk Atlas 2023, two PGE work areas, the Kamojang and Karaha areas, are included in the water stress area, considering that both areas are located in the densely populated island of Java. The Company remains committed to improving water use efficiency and reducing the release of wastewater or effluent into water bodies. In addition, the Company has set a target of a 4% reduction in the intensity of routine water use in 2023 for work areas in water stress areas.

(2.3.5) Will you be disclosing a list/spatial map of priority locations?

Select from:

☒ Yes, we will be disclosing the list/geospatial map of priority locations

(2.3.6) Provide a list and/or spatial map of priority locations

Lokasi Konservasi Alam PGE.pdf

[Fixed row]

(2.4) How does your organization define substantive effects on your organization?

Risks

(2.4.1) Type of definition

Select all that apply

☒ Quantitative

(2.4.2) Indicator used to define substantive effect

Select from:

☒ Capital expenditures

(2.4.3) Change to indicator

Select from:

- ☒ Absolute increase

(2.4.5) Absolute increase/ decrease figure

69582000

(2.4.6) Metrics considered in definition

Select all that apply

- ☒ Time horizon over which the effect occurs

(2.4.7) Application of definition

PGE has already adopted a low-carbon operational model, positioning the Company to grow in alignment with Indonesia's national emissions reduction targets. As outlined in the country's Net Zero Emissions (NZE) roadmap, the national target is to achieve a 23% reduction by 2030 and 30% by 2050. Given its existing low-carbon profile, PGE is well-placed to scale up its operations and contribute significantly to these national goals. To support this trajectory, PGE remains focused on continuously enhancing its low-carbon capacity through the development and implementation of innovative technologies and sustainable practices

Opportunities

(2.4.1) Type of definition

Select all that apply

- ☒ Quantitative

(2.4.2) Indicator used to define substantive effect

Select from:

- ☒ Capital expenditures

(2.4.3) Change to indicator

Select from:

- ☒ Absolute increase

(2.4.5) Absolute increase/ decrease figure

113340000

(2.4.6) Metrics considered in definition

Select all that apply

☒ Time horizon over which the effect occurs

(2.4.7) Application of definition

PGE has already adopted a low-carbon operational model, positioning the Company to grow in alignment with Indonesia's national emissions reduction targets. As outlined in the country's Net Zero Emissions (NZE) roadmap, the national target is to achieve a 23% reduction by 2030 and 30% by 2050. Given its existing low-carbon profile, PGE is well-placed to scale up its operations and contribute significantly to these national goals. To support this trajectory, PGE remains focused on continuously enhancing its low-carbon capacity through the development and implementation of innovative technologies and sustainable practices

Risks

(2.4.1) Type of definition

Select all that apply

☒ Quantitative

(2.4.2) Indicator used to define substantive effect

Select from:

☒ Other, please specify :Operating expenditure

(2.4.3) Change to indicator

Select from:

☒ Absolute decrease

(2.4.5) Absolute increase/ decrease figure

(2.4.6) Metrics considered in definition

Select all that apply

☒ Time horizon over which the effect occurs

(2.4.7) Application of definition

Operating expenditure calculation is a comparison between capital expenditure in 2022 and 2023.

Opportunities

(2.4.1) Type of definition

Select all that apply

☒ Quantitative

(2.4.2) Indicator used to define substantive effect

Select from:

☒ EBITDA

(2.4.3) Change to indicator

Select from:

☒ Absolute increase

(2.4.5) Absolute increase/ decrease figure

169184000

(2.4.6) Metrics considered in definition

Select all that apply

- ☒ Time horizon over which the effect occurs

(2.4.7) Application of definition

PGE has already adopted a low-carbon operational model, positioning the Company to grow in alignment with Indonesia's national emissions reduction targets. As outlined in the country's Net Zero Emissions (NZE) roadmap, the national target is to achieve a 23% reduction by 2030 and 30% by 2050. Given its existing low-carbon profile, PGE is well-placed to scale up its operations and contribute significantly to these national goals. To support this trajectory, PGE remains focused on continuously enhancing its low-carbon capacity through the development and implementation of innovative technologies and sustainable practices

Opportunities

(2.4.1) Type of definition

Select all that apply

- ☒ Quantitative

(2.4.2) Indicator used to define substantive effect

Select from:

- ☒ Revenue

(2.4.3) Change to indicator

Select from:

- ☒ Absolute increase

(2.4.5) Absolute increase/ decrease figure

832000

(2.4.6) Metrics considered in definition

Select all that apply

- ☒ Time horizon over which the effect occurs

(2.4.7) Application of definition

PGE has already adopted a low-carbon operational model, positioning the Company to grow in alignment with Indonesia's national emissions reduction targets. As outlined in the country's Net Zero Emissions (NZE) roadmap, the national target is to achieve a 23% reduction by 2030 and 30% by 2050. Given its existing low-carbon profile, PGE is well-placed to scale up its operations and contribute significantly to these national goals. To support this trajectory, PGE remains focused on continuously enhancing its low-carbon capacity through the development and implementation of innovative technologies and sustainable practices

[Add row]

(2.5) Does your organization identify and classify potential water pollutants associated with its activities that could have a detrimental impact on water ecosystems or human health?

(2.5.1) Identification and classification of potential water pollutants

Select from:

☒ Yes, we identify and classify our potential water pollutants

(2.5.2) How potential water pollutants are identified and classified

In regards to processed or produced fluids, PGE has implemented a so-called "closed loop" geothermal operations whereby once the steam has passed through the turbine and been turned into condensate, PGE re-injects the condensate and separated brine back into the geothermal reservoir, replenishing the reservoir, and after the geothermal fluid has been naturally reheated, PGE is able to again bring the geothermal fluid to the surface for use in a power plant. Ensuring the sustainability of the geothermal resource while avoiding pollution from the produced fluids and minimizing the environmental footprint. However, PGE is acknowledging that it is still producing domestic wastewater from its facilities. Each of PGE's operational areas is equipped with a Wastewater Treatment Plant (WWTP) to ensure that all domestic wastewater is treated in accordance with regulatory standards established by the government. The Company takes proactive measures to prevent the discharge of treated effluent into water bodies through high-pressure injection methods that could potentially harm the integrity of soil surfaces or the aquatic ecosystem. To ensure full compliance with environmental regulations, PGE has secured the necessary permits for domestic wastewater discharge from both the respective Regional Environmental Agencies and the Ministry of Environment and Forestry of the Republic of Indonesia currently referred to as the Ministry of Environment. PGE also regularly monitors the quality of groundwater and surface water around its operational areas to ensure that the discharge of domestic wastewater is still within the allowable content, hence likely does not harm the environment and surrounding communities.

[Fixed row]

(2.5.1) Describe how your organization minimizes the adverse impacts of potential water pollutants on water ecosystems or human health associated with your activities.

Row 1

(2.5.1.1) Water pollutant category

Select from:

- ☒ Inorganic pollutants

(2.5.1.2) Description of water pollutant and potential impacts

Several inorganic pollutants are regulated by the governance of the geothermal effluent standard, namely dissolved sulfide, ammonia, mercury, and arsenic. Water pollution can lead to severe health issues, such as gastrointestinal illnesses, respiratory difficulties, and cancer.

(2.5.1.3) Value chain stage

Select all that apply

- ☒ Direct operations
- ☒ Upstream value chain

(2.5.1.4) Actions and procedures to minimize adverse impacts

Select all that apply

- ☒ Water recycling
- ☒ Beyond compliance with regulatory requirements
- ☒ Industrial and chemical accidents prevention, preparedness, and response
- ☒ Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements
- ☒ Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience
- ☒ Other, please specify :Closed loop process on geothermal fluid/ produced water

(2.5.1.5) Please explain

1. PGE manages wastewater and ensures the quality of wastewater before it is discharged into the environment by conducting aerobic and anaerobic waste treatment. PGE monitors the quality of domestic wastewater both daily and monthly through parameter testing determined by applicable laws and regulations. 2. The Company is committed to continuously striving for improving efficiency of water usage and minimizing the discharge of wastewater or effluents into water bodies, and has set a target of reducing routine water usage intensity by 4% in Water Stress areas by 2030. 3. The Company consistently conducted water management as a part

of the Environment Management and Monitoring Program through three programs: water usage efficiency, brine or condensate generation management, and wastewater generation management. PGE made a list of quality standard parameters based on Minister of Environment and Forestry Regulation No. 68/2016 on Domestic Wastewater. 4. PGE has implemented a 'closed loop' geothermal operations whereby once the steam has passed through the turbine and been turned into condensate, PGE re-injects the condensate and separated brine back into the geothermal reservoir, replenishing the reservoir, and after the geothermal fluid has been naturally reheated, PGE is able to again bring the geothermal fluid to the surface for use in a power plant. Ensuring the sustainability of the resource, while avoiding pollution and minimizing the environmental footprint

Row 2

(2.5.1.1) Water pollutant category

Select from:

- ☒ Other nutrients and oxygen demanding pollutants

(2.5.1.2) Description of water pollutant and potential impacts

Nutrients and oxygen-demanding pollutants are regulated by the governance of the geothermal effluent standard, namely BOD, COD, oil and grease, and total coliform. Water pollution can lead to severe health issues, such as gastrointestinal illnesses, respiratory difficulties, and cancer.

(2.5.1.3) Value chain stage

Select all that apply

- ☒ Other, please specify :Domestic waste water

(2.5.1.4) Actions and procedures to minimize adverse impacts

Select all that apply

- ☒ Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience
- ☒ Industrial and chemical accidents prevention, preparedness, and response
- ☒ Provision of best practice instructions on product use
- ☒ Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

(2.5.1.5) Please explain

PGE manages the domestic wastewater by installing a wastewater treatment plant (WWTP) to treat wastewater from our supporting facilities, including domestic activities. The WWTP ensures that effluent meets the government's requirements. PGE also regularly monitors the quality of groundwater and surface water around its operational areas to ensure that the discharge of the wastewater is still within the allowable content and does not harm the environment and surrounding communities.

[Add row]

C3. Disclosure of risks and opportunities

(3.1) Have you identified any environmental risks which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future?

Climate change

(3.1.1) Environmental risks identified

Select from:

☒ Yes, both in direct operations and upstream/downstream value chain

Water

(3.1.1) Environmental risks identified

Select from:

☒ Yes, both in direct operations and upstream/downstream value chain

Plastics

(3.1.1) Environmental risks identified

Select from:

☒ No

(3.1.2) Primary reason why your organization does not consider itself to have environmental risks in your direct operations and/or upstream/downstream value chain

Select from:

☒ Environmental risks exist, but none with the potential to have a substantive effect on our organization

(3.1.3) Please explain

PGE has no operational processes that use or are associated with the use of plastics.
[Fixed row]

(3.1.1) Provide details of the environmental risks identified which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future.

Climate change

(3.1.1.1) Risk identifier

Select from:

☒ Risk1

(3.1.1.3) Risk types and primary environmental risk driver

Acute physical

☒ Landslide

(3.1.1.4) Value chain stage where the risk occurs

Select from:

☒ Direct operations

(3.1.1.6) Country/area where the risk occurs

Select all that apply

☒ Indonesia

(3.1.1.9) Organization-specific description of risk

Heavy rainfall is a cause of landslide risk at PGE. Landslides can have adverse impacts on PGE, including: 1. Causing damage to production facilities; 2. Cessation of operational activities; 3. Reduced company revenue; 4. Occurrence of work accidents; 5. Damage to public facilities that causes the public to complain, thus damaging the company's image.

(3.1.1.11) Primary financial effect of the risk

Select from:

☒ Increased capital expenditures

(3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

☒ Short-term

☒ Medium-term

(3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

☒ Likely

(3.1.1.14) Magnitude

Select from:

☒ High

(3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

Landslide risk impacts PGE's capital expenditure and operational expenditure in the short to medium term.

(3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

☒ Yes

(3.1.1.19) Anticipated financial effect figure in the short-term – minimum (currency)

6206627.97

(3.1.1.20) Anticipated financial effect figure in the short-term – maximum (currency)

8146271.19

(3.1.1.21) Anticipated financial effect figure in the medium-term – minimum (currency)

7352848.11

(3.1.1.22) Anticipated financial effect figure in the medium-term – maximum (currency)

8440830.62

(3.1.1.25) Explanation of financial effect figure

The costs incurred are loss revenue costs, claim costs, and estimated repair costs from the impact of the landslide.

(3.1.1.26) Primary response to risk

Engagement

☒ Other engagement, please specify :In collaboration with the Meteorology, Climatology and Geophysics Agency

(3.1.1.27) Cost of response to risk

499474.48

(3.1.1.28) Explanation of cost calculation

Costs incurred for cooperation with BMKG, these costs are long-term contract costs with BMKG.

(3.1.1.29) Description of response

Collaborate with BMKG to provide early warning of extreme weather and prepare procedures that must be carried out. Conduct geohazard assessments and monitoring in real-time.

Water

(3.1.1.1) Risk identifier

Select from:

☒ Risk2

(3.1.1.3) Risk types and primary environmental risk driver

Acute physical

☒ Drought

(3.1.1.4) Value chain stage where the risk occurs

Select from:

☒ Direct operations

(3.1.1.6) Country/area where the risk occurs

Select all that apply

☒ Indonesia

(3.1.1.7) River basin where the risk occurs

Select all that apply

☒ Other, please specify :Cimanuk River Basin

(3.1.1.9) Organization-specific description of risk

Drought hampers the drilling process due to a lack of water supply, which can result in operational disruptions and delays in project completion.

(3.1.1.11) Primary financial effect of the risk

Select from:

☒ Increased capital expenditures

(3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

☒ Medium-term

(3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

☒ Likely

(3.1.1.14) Magnitude

Select from:

☒ Medium-low

(3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

Drought risk has no financial impact, as the impact of the risk is more likely to cause drilling delays.

(3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

☒ Yes

(3.1.1.21) Anticipated financial effect figure in the medium-term – minimum (currency)

56998.29

(3.1.1.22) Anticipated financial effect figure in the medium-term – maximum (currency)

(3.1.1.25) Explanation of financial effect figure

The cost losses resulting from the risk of drought are from the standby costs of drilling rigs and related drilling mobilization, so that drilling cannot be carried out due to the unavailability of drilling water. In conclusion, there are always rental costs for equipment used in drilling activities, whether the equipment is used or not.

(3.1.1.26) Primary response to risk

Compliance, monitoring and targets

☒ Other compliance, monitoring or target, please specify :Adjust drilling schedules to seasonal and weather projections to optimize operations.

(3.1.1.27) Cost of response to risk

2102015.88

(3.1.1.28) Explanation of cost calculation

The calculation of the costs incurred is the cost of constructing an artesian well.

(3.1.1.29) Description of response

• Conducting drilling activities during the rainy season, especially in the Karaha area. • Implementing water efficiency measures in operational activities. • Mapping waterstressed areas using the Aqueduct Water Risk Atlas. • Recording water consumption. • Conducting water audits in the Kamojang, Ulubelu, Lahendong, and Karaha areas. • Planting trees in company operational areas, critical lands, and watershed areas

[Add row]

(3.1.2) Provide the amount and proportion of your financial metrics from the reporting year that are vulnerable to the substantive effects of environmental risks.

Climate change

(3.1.2.1) Financial metric

Select from:

☒ OPEX

(3.1.2.2) Amount of financial metric vulnerable to transition risks for this environmental issue (unit currency as selected in 1.2)

0

(3.1.2.3) % of total financial metric vulnerable to transition risks for this environmental issue

Select from:

☒ Less than 1%

(3.1.2.4) Amount of financial metric vulnerable to physical risks for this environmental issue (unit currency as selected in 1.2)

13818.95

(3.1.2.5) % of total financial metric vulnerable to physical risks for this environmental issue

Select from:

☒ Less than 1%

(3.1.2.7) Explanation of financial figures

The amount of operating expenses exposed to physical risk from this environmental issue, relative to the total operating expenses.

Water

(3.1.2.1) Financial metric

Select from:

☒ CAPEX

(3.1.2.2) Amount of financial metric vulnerable to transition risks for this environmental issue (unit currency as selected in 1.2)

0

(3.1.2.3) % of total financial metric vulnerable to transition risks for this environmental issue

Select from:

☒ Less than 1%

(3.1.2.4) Amount of financial metric vulnerable to physical risks for this environmental issue (unit currency as selected in 1.2)

4350

(3.1.2.5) % of total financial metric vulnerable to physical risks for this environmental issue

Select from:

☒ Less than 1%

(3.1.2.6) Amount of CAPEX in the reporting year deployed towards risks related to this environmental issue

4350

(3.1.2.7) Explanation of financial figures

The costs incurred from monitoring the quality of water bodies affected by wastewater discharge, wastewater quality standards, maintenance of wastewater treatment facilities, and reforestation programs around water bodies.

Climate change

(3.1.2.1) Financial metric

Select from:

☒ CAPEX

(3.1.2.2) Amount of financial metric vulnerable to transition risks for this environmental issue (unit currency as selected in 1.2)

545650.29

(3.1.2.3) % of total financial metric vulnerable to transition risks for this environmental issue

Select from:

☒ Less than 1%

(3.1.2.4) Amount of financial metric vulnerable to physical risks for this environmental issue (unit currency as selected in 1.2)

1562400

(3.1.2.5) % of total financial metric vulnerable to physical risks for this environmental issue

Select from:

☒ Less than 1%

(3.1.2.6) Amount of CAPEX in the reporting year deployed towards risks related to this environmental issue

1442752

(3.1.2.7) Explanation of financial figures

The costs incurred from land acquisition/change in land status.

Water

(3.1.2.1) Financial metric

Select from:

☒ OPEX

(3.1.2.2) Amount of financial metric vulnerable to transition risks for this environmental issue (unit currency as selected in 1.2)

0

(3.1.2.3) % of total financial metric vulnerable to transition risks for this environmental issue

Select from:

☒ Less than 1%

(3.1.2.4) Amount of financial metric vulnerable to physical risks for this environmental issue (unit currency as selected in 1.2)

4970.97

(3.1.2.5) % of total financial metric vulnerable to physical risks for this environmental issue

Select from:

☒ Less than 1%

(3.1.2.7) Explanation of financial figures

*The costs incurred from monitoring the quality of drinking water, production water, wastewater, and water bodies receiving wastewater runoff.
[Add row]*

(3.2) Within each river basin, how many facilities are exposed to substantive effects of water-related risks, and what percentage of your total number of facilities does this represent?

Row 1

(3.2.1) Country/Area & River basin

Indonesia

☒ Other, please specify :Cimanuk River Basin

(3.2.2) Value chain stages where facilities at risk have been identified in this river basin

Select all that apply

☒ Direct operations

(3.2.3) Number of facilities within direct operations exposed to water-related risk in this river basin

2

(3.2.4) % of your organization's total facilities within direct operations exposed to water-related risk in this river basin

Select from:

☒ 26-50%

(3.2.8) % organization's annual electricity generation that could be affected by these facilities

Select from:

☒ 51-75%

(3.2.10) % organization's total global revenue that could be affected

Select from:

☒ 31-40%

(3.2.11) Please explain

PGE and geothermal power generation businesses use geothermal fluids that do not depend on surface water supplies, unlike coal-fired power plants (PLTU) and gas-fired power plants (PLTG), which require a continuous flow of surface water as a source of steam. Therefore, the risk mitigation measures for water security programmed by PGE include monitoring the quality of domestic wastewater, receiving water bodies, and rivers, as well as regularly maintaining domestic wastewater treatment facilities in accordance with applicable regulations. There are two (2) PGE operation areas that are located in High-Risk Area based on WRI Aqueduct Water Risk Atlas; Kamojang and Karaha. Activities in Kamojang and Karaha are in the form of geothermal generation with a total capacity of 265 MW. This total

capacity is the total installed capacity in Kamojang and Karaha, where Kamojang operates two geothermal power plants, with unit 4 having a capacity of 60 MW and unit 5 having a capacity of 35 MW. Karaha operates one unit with a capacity of 30 MW.

[Add row]

(3.3) In the reporting year, was your organization subject to any fines, enforcement orders, and/or other penalties for water-related regulatory violations?

	Water-related regulatory violations	Comment
	Select from: ☒ No	During 2024, there were no cases of violations of regulations related to water.

[Fixed row]

(3.5) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

Select from:

☒ No, but we anticipate being regulated in the next three years

(3.5.4) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

The Indonesian government has issued directives and regulations related to climate change, such as Presidential Decree No 98 of 2019 on the Framework on Carbon Pricing and Ministry of Energy and Mineral Regulation No 16 of 2022 on the Procedures for Implementing Carbon Economic Value in the Power Generation Sub-Sector, which limit the CO₂ emissions of the coal power plant and enabling Indonesia's carbon market.- Indonesia's Electricity Business Plan (RUPTL) 2021-2030, showing up to 68% of electricity is still supplied from fossil fuel power plants. In addition, the Indonesian government through the Financial Services Authority issued Regulation of the Financial Services Authority of the Republic of Indonesia Number 14 Year 2023 on Carbon Trading Through Carbon Exchanges. Therefore, PGE sees an opportunity to expand its geothermal installed capacity from its current capacity of 672 MW to 1,272 MW in the next 5 years, monetize its emissions avoidance into carbon credit, and then sell the carbon credit in the domestic carbon market, which will provide PGE with additional revenue. As of 2022, PGE has 7 carbon credit projects, both voluntary and compliance carbon market: 5 CDM Gold Standard projects, 1 CDM project, and 1 VCS project. With the inauguration of Indonesian Carbon Exchange trading on September 26th, 2023, PGE became the first carbon credit provider through its working units, PGE Lahendong Units 5&6, and until now has successfully sold 1,223,961 tons of carbon credits. In 2023, PGE became the first company to distribute carbon credit in the Indonesian Carbon

Exchange trading, where 490,763 tons of CO2 have been sold from PGE's Units, namely Lahendong Units 5 & 6. Through the sales of carbon credits, PGE helped other companies to offset their emissions.

(3.6) Have you identified any environmental opportunities which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future?

	Environmental opportunities identified
Climate change	Select from: ☒ Yes, we have identified opportunities, and some/all are being realized
Water	Select from: ☒ Yes, we have identified opportunities, and some/all are being realized

[Fixed row]

(3.6.1) Provide details of the environmental opportunities identified which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future.

Climate change

(3.6.1.1) Opportunity identifier

Select from:

☒ Opp1

(3.6.1.3) Opportunity type and primary environmental opportunity driver

Energy source

☒ Other energy source opportunity, please specify :Brine to Power

(3.6.1.4) Value chain stage where the opportunity occurs

Select from:

- ☒ Direct operations

(3.6.1.5) Country/area where the opportunity occurs

Select all that apply

- ☒ Indonesia

(3.6.1.8) Organization specific description

Brine to Power which produces electricity from geothermal hot steam can reduce electricity consumption from PLN.

(3.6.1.9) Primary financial effect of the opportunity

Select from:

- ☒ Reduced indirect (operating) costs

(3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization

Select all that apply

- ☒ Short-term
☒ Medium-term
☒ Long-term

(3.6.1.11) Likelihood of the opportunity having an effect within the anticipated time horizon

Select from:

- ☒ Very likely (90–100%)

(3.6.1.12) Magnitude

Select from:

- ☒ Medium

(3.6.1.14) Anticipated effect of the opportunity on the financial position, financial performance and cash flows of the organization in the selected future time horizons

Brine to power has an impact on the company's indirect costs. Electricity was previously distributed by PLN, with brine to power, it can save costs due to reduced electricity consumption costs from PLN.

(3.6.1.15) Are you able to quantify the financial effects of the opportunity?

Select from:

☒ Yes

(3.6.1.17) Anticipated financial effect figure in the short-term - minimum (currency)

0

(3.6.1.18) Anticipated financial effect figure in the short-term – maximum (currency)

4686.93

(3.6.1.19) Anticipated financial effect figure in the medium-term - minimum (currency)

22412.88

(3.6.1.20) Anticipated financial effect figure in the medium-term - maximum (currency)

44825.77

(3.6.1.21) Anticipated financial effect figure in the long-term - minimum (currency)

4015999.06

(3.6.1.22) Anticipated financial effect figure in the long-term – maximum (currency)

5528693.39

(3.6.1.23) Explanation of financial effect figures

The cost savings from brine-to-power opportunities represent the estimated expenses reduced over the short to long term.

(3.6.1.24) Cost to realize opportunity

2474175

(3.6.1.25) Explanation of cost calculation

The actual cost is obtained by combining the construction expenses with the costs of adding operational facilities and infrastructure.

(3.6.1.26) Strategy to realize opportunity

Implementing Brine to Power for 40 years has the potential to reduce emissions by up to 10.54 gr CO2/kWh.

Water

(3.6.1.1) Opportunity identifier

Select from:

☒ Opp2

(3.6.1.3) Opportunity type and primary environmental opportunity driver

Resource efficiency

☒ Other resource efficiency opportunity, please specify :Sanitation and drainage

(3.6.1.4) Value chain stage where the opportunity occurs

Select from:

☒ Direct operations

(3.6.1.5) Country/area where the opportunity occurs

Select all that apply

☒ Indonesia

(3.6.1.6) River basin where the opportunity occurs

Select all that apply

☒ Other, please specify :Cimanuk River Basin

(3.6.1.8) Organization specific description

Sanitation and drainage is a form of PGE's compliance in complying with wastewater management policies in accordance with PP 22 of 2021 concerning Environmental Protection and Management Organizers article 517 points 1 to 3. If PGE discharges wastewater exceeding quality standards, it will be subject to sanctions according to the law in the amount of USD 202,702.70

(3.6.1.9) Primary financial effect of the opportunity

Select from:

☒ Other, please specify :Increase company value

(3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization

Select all that apply

☒ The opportunity has already had a substantive effect on our organization in the reporting year

(3.6.1.12) Magnitude

Select from:

☒ Medium-high

(3.6.1.13) Effect of the opportunity on the financial position, financial performance and cash flows of the organization in the reporting period

Sanitation and drainage have an impact on operational expenditure because the cost used is the cost of measuring and analyzing wastewater quality by conducting laboratory tests.

(3.6.1.15) Are you able to quantify the financial effects of the opportunity?

Select from:

☒ Yes

(3.6.1.16) Financial effect figure in the reporting year (currency)

183262

(3.6.1.23) Explanation of financial effect figures

Based on the wastewater management policy in accordance with PP 22 of 2021 concerning Environmental Protection and Management Article 517 paragraphs 1 to 3, if PGE discharges wastewater that exceeds quality standards, it will be subject to sanctions in accordance with the law of USD 183,262.

(3.6.1.24) Cost to realize opportunity

183262.06

(3.6.1.25) Explanation of cost calculation

The costs incurred are for the construction of wastewater treatment plants and monitoring of wastewater quality to ensure that the quality of wastewater meets the quality standards.

(3.6.1.26) Strategy to realize opportunity

To realize opportunities from sanitation and drainage, PGE conducts planning and monitoring and evaluates the effectiveness of wastewater management, permits for waste disposal in accordance with applicable regulations.

[Add row]

(3.6.2) Provide the amount and proportion of your financial metrics in the reporting year that are aligned with the substantive effects of environmental opportunities.

Climate change

(3.6.2.1) Financial metric

Select from:

☒ OPEX

(3.6.2.2) Amount of financial metric aligned with opportunities for this environmental issue (unit currency as selected in 1.2)

2368998.86

(3.6.2.3) % of total financial metric aligned with opportunities for this environmental issue

Select from:

☒ Less than 1%

(3.6.2.4) Explanation of financial figures

The costs affect operating expenses because they are used to finance green power technologies, which are taken from the total operating expenses for 2024.

Water

(3.6.2.1) Financial metric

Select from:

☒ OPEX

(3.6.2.2) Amount of financial metric aligned with opportunities for this environmental issue (unit currency as selected in 1.2)

143256.01

(3.6.2.3) % of total financial metric aligned with opportunities for this environmental issue

Select from:

☒ Less than 1%

(3.6.2.4) Explanation of financial figures

The costs incurred to test the quality of drinking water, operational water, domestic wastewater, and wastewater receiving bodies to meet the quality criteria stipulated in environmental legislation.

[Add row]

C4. Governance

(4.1) Does your organization have a board of directors or an equivalent governing body?

(4.1.1) Board of directors or equivalent governing body

Select from:

☒ Yes

(4.1.2) Frequency with which the board or equivalent meets

Select from:

☒ More frequently than quarterly

(4.1.3) Types of directors your board or equivalent is comprised of

Select all that apply

☒ Executive directors or equivalent

(4.1.4) Board diversity and inclusion policy

Select from:

☒ Yes, and it is publicly available

(4.1.5) Briefly describe what the policy covers

This policy reflects PT PGE Tbk's commitment to social sustainability by integrating the values of diversity and inclusion across all stages of the employment lifecycle. It covers the protection of freedom of association, the implementation of fair and equitable recruitment processes, non-discriminatory job placements, and equal access to compensation, benefits, and career development opportunities. Promotions are carried out based on meritocracy, supported by employee retention efforts through the creation of a decent and inclusive working environment. The company also ensures the availability of training and development programs for all employees, regardless of background. Succession planning is conducted in a transparent and equitable manner, grounded in objective assessments of individual qualifications and capabilities relevant to the respective roles. All aspects of this policy are designed and implemented in line with the principles of equality, fairness, and professionalism, as part of the company's social responsibility to foster an inclusive and sustainable workplace.

(4.1.6) Attach the policy (optional)

Diversity Policy PT PGE Tbk.pdf
[Fixed row]

(4.1.1) Is there board-level oversight of environmental issues within your organization?

	Board-level oversight of this environmental issue
Climate change	Select from: ☒ Yes
Water	Select from: ☒ Yes
Biodiversity	Select from: ☒ Yes

[Fixed row]

(4.1.2) Identify the positions (do not include any names) of the individuals or committees on the board with accountability for environmental issues and provide details of the board's oversight of environmental issues.

Climate change

(4.1.2.1) Positions of individuals or committees with accountability for this environmental issue

Select all that apply

☒ Director on board

☒ Other C-Suite Officer

☒ Board-level committee

☒ Chief Operating Officer (COO)

- ☒ Chief Executive Officer (CEO)
- ☒ Chief Financial Officer (CFO)

(4.1.2.2) Positions' accountability for this environmental issue is outlined in policies applicable to the board

Select from:

- ☒ Yes

(4.1.2.3) Policies which outline the positions' accountability for this environmental issue

Select all that apply

- ☒ Individual role descriptions

(4.1.2.4) Frequency with which this environmental issue is a scheduled agenda item

Select from:

- ☒ Scheduled agenda item in every board meeting (standing agenda item)

(4.1.2.5) Governance mechanisms into which this environmental issue is integrated

Select all that apply

- ☒ Reviewing and guiding annual budgets
- ☒ Overseeing and guiding scenario analysis
- ☒ Overseeing the setting of corporate targets
- ☒ Monitoring progress towards corporate targets
- ☒ Approving corporate policies and/or commitments
- ☒ Monitoring the implementation of a climate transition plan
- ☒ Overseeing and guiding the development of a business strategy
- ☒ Monitoring supplier compliance with organizational requirements
- ☒ Overseeing and guiding the development of a climate transition plan
- ☒ Reviewing and guiding the assessment process for dependencies, impacts, risks, and opportunities

(4.1.2.7) Please explain

The Board of Directors (BoD) plays an active role in overseeing climate change issues through integrated governance mechanisms embedded in the company's strategic decision-making. This includes reviewing climate scenario analyses, climate-related risk and opportunity assessments, and approving key policies and decarbonization commitments. The Board monitors progress toward climate targets and ensures alignment with policies through quarterly reports from Directors and Business Unit Heads. While KPIs related to renewable energy, emission reductions, and TCFD/ESG implementation are delegated to operational management, oversight remains with the Board. Climate issues are regularly discussed in Board meetings, including evaluations of emission performance, ESG ratings, government environmental assessments (PROPER), CDP scores, and decarbonization investments. The Board also approves budgets for energy efficiency projects and considers trade-offs between low-emission technology costs and long-term benefits such as operational efficiency, corporate reputation, and clean energy market positioning.

Water

(4.1.2.1) Positions of individuals or committees with accountability for this environmental issue

Select all that apply

- ☒ Director on board
- ☒ Other C-Suite Officer
- ☒ Board-level committee
- ☒ Chief Executive Officer (CEO)
- ☒ Chief Financial Officer (CFO)
- ☒ Chief Operating Officer (COO)

(4.1.2.2) Positions' accountability for this environmental issue is outlined in policies applicable to the board

Select from:

- ☒ Yes

(4.1.2.3) Policies which outline the positions' accountability for this environmental issue

Select all that apply

- ☒ Individual role descriptions

(4.1.2.4) Frequency with which this environmental issue is a scheduled agenda item

Select from:

- ☒ Scheduled agenda item in every board meeting (standing agenda item)

(4.1.2.5) Governance mechanisms into which this environmental issue is integrated

Select all that apply

- ☒ Overseeing and guiding scenario analysis
- ☒ Overseeing the setting of corporate targets
- ☒ Monitoring progress towards corporate targets
- ☒ Approving corporate policies and/or commitments
- ☒ Monitoring the implementation of a climate transition plan
- ☒ Overseeing and guiding the development of a business strategy
- ☒ Monitoring supplier compliance with organizational requirements
- ☒ Overseeing and guiding the development of a climate transition plan
- ☒ Reviewing and guiding the assessment process for dependencies, impacts, risks, and opportunities

(4.1.2.7) Please explain

Water-related issues are directly overseen by the Board of Directors through integrated governance mechanisms to ensure operational sustainability and compliance with environmental regulations. The Board regularly reviews and provides direction on the assessment of water dependencies, impacts, risks, and opportunities—particularly in the context of geothermal operations where water plays a critical role in steam production and reinjection. Based on these assessments, the Board approves company policies and commitments on water management, including responsible withdrawal, wastewater treatment, reuse, and discharge in accordance with national regulations and best practices. It also monitors compliance across all operational units and tracks progress on corporate targets related to water efficiency and discharge quality. Supplier performance, especially for key partners like drilling contractors or fluid handlers, is also scrutinized to ensure environmental requirements are met. Water performance reports are submitted quarterly by operational leaders and discussed at the Board level, including any deviations, corrective plans, or innovation opportunities. In addition, the Board reviews and guides the integration of water-related initiatives into the annual budgeting process to ensure adequate resource allocation for water conservation, infrastructure improvements, and environmental reporting systems. Through this oversight, the Board ensures responsible water management is embedded in strategic decisions and operational planning, while actively considering trade-offs between production efficiency and sustainable water use—especially in ecologically sensitive or water-stressed areas.

Biodiversity

(4.1.2.1) Positions of individuals or committees with accountability for this environmental issue

Select all that apply

- ☒ Director on board
- ☒ Chief Operating Officer (COO)
- ☒ Other C-Suite Officer

- ☒ Board-level committee
- ☒ Chief Executive Officer (CEO)
- ☒ Chief Financial Officer (CFO)

(4.1.2.2) Positions' accountability for this environmental issue is outlined in policies applicable to the board

Select from:

- ☒ Yes

(4.1.2.3) Policies which outline the positions' accountability for this environmental issue

Select all that apply

- ☒ Individual role descriptions

(4.1.2.4) Frequency with which this environmental issue is a scheduled agenda item

Select from:

- ☒ Scheduled agenda item in every board meeting (standing agenda item)

(4.1.2.5) Governance mechanisms into which this environmental issue is integrated

Select all that apply

- ☒ Overseeing and guiding scenario analysis
- ☒ Overseeing the setting of corporate targets
- ☒ Monitoring progress towards corporate targets
- ☒ Approving corporate policies and/or commitments
- ☒ Monitoring the implementation of a climate transition plan
- ☒ Overseeing and guiding the development of a business strategy
- ☒ Monitoring supplier compliance with organizational requirements
- ☒ Overseeing and guiding the development of a climate transition plan
- ☒ Reviewing and guiding the assessment process for dependencies, impacts, risks, and opportunities

(4.1.2.7) Please explain

The company has conducted a Biodiversity Action Plan assessment as the basis for designing biodiversity programs in operational areas located within high-biodiversity zones, with biodiversity issues being directly overseen by the Board of Directors through integrated governance mechanisms to ensure that environmental impacts—including on ecosystems surrounding geothermal operation sites—are managed responsibly, as the Board reviews and provides direction on the identification of the company’s dependencies, impacts, risks, and opportunities related to biodiversity, especially in ecologically sensitive areas such as protected forests, water catchment zones, or habitats of endemic flora and fauna, and based on these assessments, the Board approves corporate policies and commitments for the conservation of endangered and rare species, restricts land clearing to essential needs, and supports reforestation efforts, while also receiving regular performance and progress reports from operational teams on biodiversity programs, including any on-ground challenges or strategy adjustments needed, guiding the integration of biodiversity initiatives into the annual budgeting process to ensure funding for rehabilitation, ecological studies, and partnerships with conservation agencies or local communities, thereby embedding biodiversity conservation principles into strategic corporate decision-making and actively weighing trade-offs between operational needs and long-term ecosystem protection.

[Fixed row]

(4.2) Does your organization’s board have competency on environmental issues?

Climate change

(4.2.1) Board-level competency on this environmental issue

Select from:

☒ Yes

(4.2.2) Mechanisms to maintain an environmentally competent board

Select all that apply

- ☒ Engaging regularly with external stakeholders and experts on environmental issues
- ☒ Having at least one board member with expertise on this environmental issue
- ☒ Other, please specify :Training for Directors on enviromental issues but not regular

(4.2.3) Environmental expertise of the board member

Additional training

- ☒ Training in an environmental subject by a certified organization, please specify :Such as: Indonesia International Geothermal Convention & Exhibition (IIGCE) 2024 by Indonesian Geothermal Association

Other

☒ Other, please specify :Board of Directors as a speakers at 29th United Nations Climate Change Conference (COP 29)

Water

(4.2.1) Board-level competency on this environmental issue

Select from:

☒ Yes

(4.2.2) Mechanisms to maintain an environmentally competent board

Select all that apply

☒ Engaging regularly with external stakeholders and experts on environmental issues

[Fixed row]

(4.3) Is there management-level responsibility for environmental issues within your organization?

	Management-level responsibility for this environmental issue
Climate change	Select from: ☒ Yes
Water	Select from: ☒ Yes
Biodiversity	Select from: ☒ Yes

[Fixed row]

(4.3.1) Provide the highest senior management-level positions or committees with responsibility for environmental issues (do not include the names of individuals).

Climate change

(4.3.1.1) Position of individual or committee with responsibility

Executive level

- ☒ Chief Executive Officer (CEO)

(4.3.1.2) Environmental responsibilities of this position

Policies, commitments, and targets

- ☒ Monitoring compliance with corporate environmental policies and/or commitments
- ☒ Setting corporate environmental policies and/or commitments
- ☒ Setting corporate environmental targets

Strategy and financial planning

- ☒ Developing a business strategy which considers environmental issues
- ☒ Developing a climate transition plan

(4.3.1.4) Reporting line

Select from:

- ☒ Other, please specify :Shareholder and the Board of Comissioner

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

- ☒ More frequently than quarterly

(4.3.1.6) Please explain

The CEO reports directly to the Shareholders and the Board of Commissioners, placing environmental oversight at the highest governance level within the organization. This ensures that environmental dependencies, risks, and opportunities are considered alongside financial and strategic priorities. The committee is informed on these issues through regular sustainability performance reports, climate risk and scenario analysis, and progress reviews on environmental targets and transition planning prepared by the management team, including the CEO, CSO, and relevant functions. Updates are provided on a quarterly basis during Board meetings, with additional ad hoc reporting when significant environmental developments arise. The procedures and controls used to manage environmental issues are fully integrated into enterprise risk management, financial planning, annual budgeting, mergers and acquisitions assessments, R&D prioritization, and operational reviews, ensuring that environmental considerations are embedded across core business functions and decision-making processes.

Water

(4.3.1.1) Position of individual or committee with responsibility

Executive level

- ☒ Chief Executive Officer (CEO)

(4.3.1.2) Environmental responsibilities of this position

Policies, commitments, and targets

- ☒ Monitoring compliance with corporate environmental policies and/or commitments
- ☒ Setting corporate environmental policies and/or commitments
- ☒ Setting corporate environmental targets

Strategy and financial planning

- ☒ Developing a business strategy which considers environmental issues
- ☒ Developing a climate transition plan

(4.3.1.4) Reporting line

Select from:

- ☒ Other, please specify :Shareholder and the Board of Commissioner

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☒ More frequently than quarterly

(4.3.1.6) Please explain

The CEO plays a strategic role in managing water-related issues as part of the company's sustainability commitment by ensuring compliance with corporate water management policies and commitments, setting relevant targets for water efficiency and conservation, evidenced by PGE's achievement of saving 63.58 megaliters of water across all operational areas in 2024, while also developing business strategies that account for water-related dependencies and risks, including the formulation and execution of transition plans that safeguard water availability and quality, participating in investment decisions such as procuring wastewater treatment facilities that meet government quality standards and ensuring hazardous waste (B3) is managed to prevent contamination of water sources, and at the governance level, reporting water-related developments and risks directly to the Board of Directors and shareholders, integrating water management responsibilities into audit processes, corporate reporting, and employee incentive systems, thereby ensuring that water is managed in a holistic, efficient, and compliant manner while strengthening the company's long-term business resilience to water availability challenges.

Biodiversity

(4.3.1.1) Position of individual or committee with responsibility

Executive level

☒ Chief Executive Officer (CEO)

(4.3.1.2) Environmental responsibilities of this position

Policies, commitments, and targets

☒ Monitoring compliance with corporate environmental policies and/or commitments

☒ Setting corporate environmental policies and/or commitments

☒ Setting corporate environmental targets

Strategy and financial planning

☒ Developing a business strategy which considers environmental issues

☒ Developing a climate transition plan

(4.3.1.4) Reporting line

Select from:

☒ Other, please specify :Shareholder and the Board of Commissioner

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☒ More frequently than quarterly

(4.3.1.6) Please explain

The CEO plays a strategic role in managing biodiversity issues as part of the company's commitment to sustainable development by ensuring compliance with environmental policies related to ecosystem protection and restoration, setting targets that support biodiversity conservation within operational areas, developing business strategies that account for the company's dependencies and impacts on natural ecosystems, and formulating and implementing transition plans that integrate biodiversity protection into business decision-making, while also allocating investments for conservation initiatives such as biodiversity action plan assessments, habitat rehabilitation, protection of endangered species, and management of high conservation value areas, and at the corporate governance level, reporting biodiversity-related developments and risks to the Board of Directors and shareholders, ensuring biodiversity considerations are embedded into corporate reporting, environmental audits, and incentive policies, thereby enabling the company not only to meet regulatory requirements but also to actively contribute to ecosystem balance and long-term sustainability.

Climate change

(4.3.1.1) Position of individual or committee with responsibility

Executive level

☒ Chief Financial Officer (CFO)

(4.3.1.2) Environmental responsibilities of this position

Strategy and financial planning

☒ Managing annual budgets related to environmental issues

Other

☒ Other, please specify :Review of the sustainability reporting (SR) related to TCFD

(4.3.1.4) Reporting line

Select from:

☒ Other, please specify :CEO, Shareholder and the Board of Commissioner

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☒ More frequently than quarterly

(4.3.1.6) Please explain

The CFO plays a key role in aligning the company's annual budget with its climate commitments by ensuring sufficient allocation of funds to support energy efficiency programs, emission reduction efforts, and investments in low-carbon technologies, reviewing each budget item with consideration of the potential climate transition risks and opportunities to the company's operations and finances, ensuring efficient and accountable budget execution through internal evaluation and oversight processes, and being responsible for delivering verified and transparent sustainability reports to stakeholders, thereby supporting the company's financial sustainability while ensuring the structured and target-aligned implementation of its climate agenda.

Water

(4.3.1.1) Position of individual or committee with responsibility

Executive level

☒ Chief Financial Officer (CFO)

(4.3.1.2) Environmental responsibilities of this position

Strategy and financial planning

☒ Managing annual budgets related to environmental issues

Other

☒ Other, please specify :Review of the sustainability reporting (SR) related to TCFD

(4.3.1.4) Reporting line

Select from:

☒ Other, please specify :CEO, Shareholder and the Board of Commissioner

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☒ More frequently than quarterly

(4.3.1.6) Please explain

The CFO holds strategic responsibility for ensuring that the company's annual budget supports sustainable water resource management by allocating funds for water conservation, improving water use efficiency, and constructing and maintaining wastewater treatment facilities that meet regulatory standards, while also assessing potential financial risks arising from water scarcity or increasingly stringent water quality regulations and integrating these considerations into long-term financial planning, in addition to being accountable for providing transparent and reliable sustainability reports to stakeholders, thereby ensuring that water-related initiatives are implemented effectively, efficiently, and in alignment with the company's environmental targets through structured budget management.

Biodiversity

(4.3.1.1) Position of individual or committee with responsibility

Executive level

☒ Chief Financial Officer (CFO)

(4.3.1.2) Environmental responsibilities of this position

Strategy and financial planning

☒ Managing annual budgets related to environmental issues

Other

☒ Other, please specify :Review of the sustainability reporting (SR) related to TCFD

(4.3.1.4) Reporting line

Select from:

☒ Other, please specify :CEO, Shareholders and Board of Commissioner

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☒ More frequently than quarterly

(4.3.1.6) Please explain

The CFO plays a key role in ensuring that the company's budget supports biodiversity protection and restoration, particularly in operational areas with high ecosystem risk, by allocating funds for ecological impact studies, habitat rehabilitation, wildlife monitoring, and the implementation of environmentally friendly operational practices, while also considering potential costs associated with the loss of ecosystem services or legal liabilities related to biodiversity and proactively integrating these risks into budget planning, and being responsible for delivering transparent and accountable sustainability reports to stakeholders, thereby promoting a finance-driven approach that balances ecological sustainability with business performance.

Climate change

(4.3.1.1) Position of individual or committee with responsibility

Executive level

☒ Chief Operating Officer (COO)

(4.3.1.2) Environmental responsibilities of this position

Engagement

☒ Managing public policy engagement related to environmental issues

Strategy and financial planning

☒ Implementing the business strategy related to environmental issues

☒ Managing major capital and/or operational expenditures relating to environmental issues

(4.3.1.4) Reporting line

Select from:

- ☒ Reports to the Chief Executive Officer (CEO)

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

- ☒ More frequently than quarterly

(4.3.1.6) Please explain

The COO is responsible for overseeing the implementation of business strategies that support the transition to a low-carbon economy, including supervising the execution of climate transition plans across all operational areas, improving energy efficiency, reducing greenhouse gas emissions, and adopting environmentally friendly technologies. The COO also ensures operational compliance with the company's climate policies and targets, adjusts operational processes based on climate scenario analyses, and manages operational budgets and capital investments to align with the company's climate change objectives.

Water

(4.3.1.1) Position of individual or committee with responsibility

Executive level

- ☒ Chief Operating Officer (COO)

(4.3.1.2) Environmental responsibilities of this position

Engagement

- ☒ Managing public policy engagement related to environmental issues

Strategy and financial planning

- ☒ Implementing the business strategy related to environmental issues
- ☒ Managing major capital and/or operational expenditures relating to environmental issues

(4.3.1.4) Reporting line

Select from:

- ☒ Reports to the Chief Executive Officer (CEO)

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

- ☒ More frequently than quarterly

(4.3.1.6) Please explain

The COO ensures efficient water use in operations, compliance with wastewater quality standards, monitoring of wastewater parameters and thresholds, as well as the implementation of water conservation policies and their associated budgets. Responsibilities include overseeing water reuse and infiltration system projects, integrating water management into environmental audits and performance metrics, and adjusting operational activities through adaptive planning to address water availability risks.

Biodiversity

(4.3.1.1) Position of individual or committee with responsibility

Executive level

- ☒ Chief Operating Officer (COO)

(4.3.1.2) Environmental responsibilities of this position

Engagement

- ☒ Managing public policy engagement related to environmental issues

Strategy and financial planning

- ☒ Implementing the business strategy related to environmental issues
- ☒ Managing major capital and/or operational expenditures relating to environmental issues

(4.3.1.4) Reporting line

Select from:

- ☒ Reports to the Chief Executive Officer (CEO)

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

- ☒ More frequently than quarterly

(4.3.1.6) Please explain

The COO ensures that operational activities do not harm ecosystems and natural habitats, with responsibilities including the integration of conservation measures into projects, responsible land management, and the rehabilitation of affected areas. The COO also ensures that biodiversity targets are reflected in operational processes and project investments, oversees compliance with biodiversity protection regulations, and manages activities impacting species and habitats through mitigation approaches and continuous monitoring.

Climate change

(4.3.1.1) Position of individual or committee with responsibility

Executive level

- ☒ Other C-Suite Officer, please specify :Director of Exploration and Development

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

- ☒ Assessing environmental dependencies, impacts, risks, and opportunities

Strategy and financial planning

- ☒ Conducting environmental scenario analysis
- ☒ Developing a business strategy which considers environmental issues
- ☒ Developing a climate transition plan
- ☒ Implementing the business strategy related to environmental issues

(4.3.1.4) Reporting line

Select from:

- ☒ Reports to the Chief Executive Officer (CEO)

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

- ☒ More frequently than quarterly

(4.3.1.6) Please explain

The Director of Exploration and Development is responsible for assessing project dependencies on natural resources and the environmental impacts of exploration activities, including greenhouse gas emissions. This role also involves identifying and managing climate-related risks—both physical and transitional—and integrating them into feasibility studies and early-stage project planning. Additional responsibilities include conducting environmental scenario analysis to evaluate potential impacts on operations, developing business strategies that consider environmental factors, and formulating a climate transition plan through the adoption of adaptive technologies, enhanced operational efficiency, and climate-resilient infrastructure design.

Water

(4.3.1.1) Position of individual or committee with responsibility

Executive level

- ☒ Other C-Suite Officer, please specify :Director of Exploration and Development

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

- ☒ Assessing environmental dependencies, impacts, risks, and opportunities

Strategy and financial planning

- ☒ Conducting environmental scenario analysis

- ☒ Developing a business strategy which considers environmental issues
- ☒ Developing a climate transition plan

(4.3.1.4) Reporting line

Select from:

- ☒ Reports to the Chief Executive Officer (CEO)

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

- ☒ More frequently than quarterly

(4.3.1.6) Please explain

The Director of Exploration and Development is responsible for assessing project dependencies on water resources and the impact of exploration activities on water quality and availability. This role also involves identifying and managing water-related risks—such as supply limitations, shifting precipitation patterns, and tightening water quality regulations—and integrating them into project feasibility studies and planning. Additionally, the director ensures that opportunities to improve water-use efficiency are fully leveraged through technological innovation, climate-adaptive infrastructure design, and the development of water conservation strategies aligned with the company's climate transition plan.

Biodiversity

(4.3.1.1) Position of individual or committee with responsibility

Executive level

- ☒ Other C-Suite Officer, please specify :Director of Exploration and Development

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

- ☒ Assessing environmental dependencies, impacts, risks, and opportunities

Strategy and financial planning

- ☒ Conducting environmental scenario analysis
- ☒ Developing a business strategy which considers environmental issues
- ☒ Developing a climate transition plan

(4.3.1.4) Reporting line

Select from:

- ☒ Reports to the Chief Executive Officer (CEO)

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

- ☒ More frequently than quarterly

(4.3.1.6) Please explain

The Director of Exploration and Development is responsible for assessing project dependencies on ecosystems and the impacts of exploration activities on biodiversity. This includes identifying and managing risks to habitats, protected species, and ecosystem services affected by project operations, and integrating these considerations into feasibility studies and project design. The director also ensures that conservation opportunities are fully leveraged through the adoption of environmentally friendly technologies, habitat restoration efforts, and the development of low-impact exploration infrastructure aligned with the company's climate transition plan.

Climate change

(4.3.1.1) Position of individual or committee with responsibility

Committee

- ☒ Sustainability committee

(4.3.1.2) Environmental responsibilities of this position

Strategy and financial planning

☒ Implementing the business strategy related to environmental issues

(4.3.1.4) Reporting line

Select from:

☒ Other, please specify :Board Directly, Shareholder and the Board of Commissioner

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☒ More frequently than quarterly

(4.3.1.6) Please explain

Duties, responsibilities, and general authority of the Sustainability committee include, but are not limited to: 1. Overseeing, establishing, and providing directives on ambitions, strategies, roadmaps, policies, initiatives, and performance metrics related to sustainability aspects. 2. Monitoring the achievement of targets and deliverables in implementing sustainability aspects within specified timelines. 3. Monitoring the Company's sustainability performance based on third-party assessments, including but not limited to ESG Ratings. 4. Directing and monitoring external communications related to sustainability aspects. 5. Providing guidance on the implementation of the Company's external financing based on sustainability, including but not limited to Sustainability Linked Financing, Green Financing, Transition Financing, and others. 6. Coordinating with the Board of Commissioners, Holding or Subsidiaries in implementing sustainability aspects.

Water

(4.3.1.1) Position of individual or committee with responsibility

Committee

☒ Sustainability committee

(4.3.1.2) Environmental responsibilities of this position

Strategy and financial planning

☒ Implementing the business strategy related to environmental issues

(4.3.1.4) Reporting line

Select from:

☒ Other, please specify :Board Directly, Shareholder and the Board of Commissioner

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☒ More frequently than quarterly

(4.3.1.6) Please explain

The Sustainability Committee is responsible for directing and overseeing the company's sustainability agenda related to water management. This includes setting ambitions, strategies, roadmaps, policies, and performance indicators concerning water use efficiency, conservation, and wastewater management. The committee monitors the achievement of targets and progress in implementing these aspects within the designated timelines, while also evaluating company performance through third-party sustainability assessments such as ESG ratings. In addition, the committee provides direction on external communications related to water management and environmental performance, and guidance on the implementation of sustainable financing mechanisms relevant to water initiatives—such as green financing or sustainability-linked financing. The committee also ensures coordination with the Board of Commissioners, the holding company, and subsidiaries to ensure integrated and consistent implementation of water-related sustainability efforts across the organization.

Biodiversity

(4.3.1.1) Position of individual or committee with responsibility

Committee

☒ Sustainability committee

(4.3.1.2) Environmental responsibilities of this position

Strategy and financial planning

☒ Implementing the business strategy related to environmental issues

(4.3.1.4) Reporting line

Select from:

☒ Other, please specify :Board Directly, Shareholder and the Board of Commissioner

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☒ More frequently than quarterly

(4.3.1.6) Please explain

The Sustainability Committee is responsible for overseeing, formulating, and providing direction on the Company's ambitions, strategies, roadmaps, policies, initiatives, and performance metrics related to biodiversity conservation and ecosystem protection. This includes monitoring the achievement of biodiversity-related targets within specified timelines, and evaluating the Company's biodiversity performance through third-party assessments. The Committee also directs and monitors external communications concerning the Company's biodiversity commitments, and provides guidance on the implementation of external financing mechanisms—such as green or transition financing—that support biodiversity protection and habitat restoration efforts. Furthermore, the Committee coordinates with the Board of Commissioners, Holding, or Subsidiaries to ensure that biodiversity considerations are integrated into all relevant Company operations and policies.

Climate change

(4.3.1.1) Position of individual or committee with responsibility

Committee

☒ Safety, Health, Environment and Quality committee

(4.3.1.2) Environmental responsibilities of this position

Strategy and financial planning

☒ Implementing the business strategy related to environmental issues

(4.3.1.4) Reporting line

Select from:

☒ Other, please specify :Board Directly, Shareholder and the Board of Commissioner

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

- ☒ More frequently than quarterly

(4.3.1.6) Please explain

Duties, responsibilities, and general authority of the Safety, Health, Environment and Quality Committee include, but are not limited to: 1. Overseeing, establishing, and providing directives on ambitions, strategies, roadmaps, policies, initiatives, and performance metrics related to sustainability aspects. 2. Monitoring the achievement of targets and deliverables in implementing sustainability aspects within specified timelines. 3. Monitoring the Company's sustainability performance based on third-party assessments, including but not limited to ESG Ratings. 4. Directing and monitoring external communications related to sustainability aspects. 5. Providing guidance on the implementation of the Company's external financing based on sustainability, including but not limited to Sustainability Linked Financing, Green Financing, Transition Financing, and others. 6. Coordinating with the Board of Commissioners, Holding or Subsidiaries in implementing sustainability aspects. 7. Implementing the functions of the Social and Environmental Responsibility Committee (TJSL) of State-Owned Enterprises (SOEs) as regulated in the Regulation of the Minister of State-Owned Enterprises of the Republic of Indonesia No. PER-1/MBU/03/2023 dated March 24, 2023, 8. Complying with and participating in the CDP rating assessment.

Water

(4.3.1.1) Position of individual or committee with responsibility

Committee

- ☒ Safety, Health, Environment and Quality committee

(4.3.1.2) Environmental responsibilities of this position

Strategy and financial planning

- ☒ Implementing the business strategy related to environmental issues

(4.3.1.4) Reporting line

Select from:

- ☒ Other, please specify :Board Directly, Shareholder and the Board of Commissioner

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

- ☒ More frequently than quarterly

(4.3.1.6) Please explain

Duties, responsibilities, and general authority of the Safety, Health, Environment and Quality Committee include, but are not limited to: 1. Overseeing, establishing, and providing directives on ambitions, strategies, roadmaps, policies, initiatives, and performance metrics related to sustainability aspects. 2. Monitoring the achievement of targets and deliverables in implementing sustainability aspects within specified timelines. 3. Monitoring the Company's sustainability performance based on third-party assessments, including but not limited to ESG Ratings. 4. Directing and monitoring external communications related to sustainability aspects. 5. Providing guidance on the implementation of the Company's external financing based on sustainability, including but not limited to Sustainability Linked Financing, Green Financing, Transition Financing, and others. 6. Coordinating with the Board of Commissioners, Holding or Subsidiaries in implementing sustainability aspects. 7. Implementing the functions of the Social and Environmental Responsibility Committee (TJSL) of State-Owned Enterprises (SOEs) as regulated in the Regulation of the Minister of State-Owned Enterprises of the Republic of Indonesia No. PER-1/MBU/03/2023 dated March 24, 2023, 8. Complying with and participating in the CDP rating assessment.

Biodiversity

(4.3.1.1) Position of individual or committee with responsibility

Committee

- ☒ Safety, Health, Environment and Quality committee

(4.3.1.2) Environmental responsibilities of this position

Strategy and financial planning

- ☒ Implementing the business strategy related to environmental issues

(4.3.1.4) Reporting line

Select from:

- ☒ Other, please specify :Board Directly, Shareholder and the Board of Commissioner

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

- ☒ More frequently than quarterly

(4.3.1.6) Please explain

Duties, responsibilities, and general authority of the Safety, Health, Environment and Quality Committee include, but are not limited to: 1. Overseeing, establishing, and providing directives on ambitions, strategies, roadmaps, policies, initiatives, and performance metrics related to sustainability aspects. 2. Monitoring the achievement of targets and deliverables in implementing sustainability aspects within specified timelines. 3. Monitoring the Company's sustainability performance based on third-party assessments, including but not limited to ESG Ratings. 4. Directing and monitoring external communications related to sustainability aspects. 5. Providing guidance on the implementation of the Company's external financing based on sustainability, including but not limited to Sustainability Linked Financing, Green Financing, Transition Financing, and others. 6. Coordinating with the Board of Commissioners, Holding or Subsidiaries in implementing sustainability aspects. 7. Implementing the functions of the Social and Environmental Responsibility Committee (TJSL) of State-Owned Enterprises (SOEs) as regulated in the Regulation of the Minister of State-Owned Enterprises of the Republic of Indonesia No. PER-1/MBU/03/2023 dated March 24, 2023, 8. Complying with and participating in the CDP rating assessment.

Climate change

(4.3.1.1) Position of individual or committee with responsibility

Other

- ☒ Other, please specify :General Manager Area

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

- ☒ Managing environmental dependencies, impacts, risks, and opportunities

Policies, commitments, and targets

- ☒ Monitoring compliance with corporate environmental policies and/or commitments
- ☒ Measuring progress towards environmental corporate targets

Strategy and financial planning

- ☒ Implementing the business strategy related to environmental issues
- ☒ Managing annual budgets related to environmental issues
- ☒ Managing major capital and/or operational expenditures relating to environmental issues

(4.3.1.4) Reporting line

Select from:

- ☒ Reports to the Chief Operating Officer (COO)

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

- ☒ More frequently than quarterly

(4.3.1.6) Please explain

The General Manager Area is responsible for identifying and managing operational dependencies and risks related to climate change, such as increased extreme temperatures, including monitoring emission levels from Geothermal Power Plant (PLTP) operations, and unpredictable rainfall, which may affect infrastructure and occupational safety. The General Manager Area ensures the implementation of mitigation efforts, such as fuel efficiency and emission reduction from heavy equipment, as well as adaptation measures through regular assessments of the operational area's vulnerability and the application of anticipatory actions, including improvements to drainage systems and asset protection. This approach ensures that operations remain resilient to climate impacts while supporting the achievement of the company's climate targets.

Water

(4.3.1.1) Position of individual or committee with responsibility

Other

- ☒ Other, please specify :General Manager Area

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

☒ Managing environmental dependencies, impacts, risks, and opportunities

Policies, commitments, and targets

☒ Monitoring compliance with corporate environmental policies and/or commitments

☒ Measuring progress towards environmental corporate targets

Strategy and financial planning

☒ Implementing the business strategy related to environmental issues

☒ Managing annual budgets related to environmental issues

☒ Managing major capital and/or operational expenditures relating to environmental issues

(4.3.1.4) Reporting line

Select from:

☒ Reports to the Chief Operating Officer (COO)

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☒ More frequently than quarterly

(4.3.1.6) Please explain

The General Manager Area plays a key role in managing operational dependencies on water resources by ensuring efficient usage, monitoring quality, managing wastewater in compliance with environmental standards, and securing the validity of wastewater management permits. The General Manager Area periodically evaluates risks related to water availability and quality through annual water audits and coordinates corrective actions in the event of potential pollution or inefficiencies. Through responsible water management, the General Manager Area helps safeguard operational sustainability while minimizing negative impacts on the environment and surrounding communities.

Biodiversity

(4.3.1.1) Position of individual or committee with responsibility

Other

☒ Other, please specify :General Manager Area

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

☒ Managing environmental dependencies, impacts, risks, and opportunities

Policies, commitments, and targets

☒ Monitoring compliance with corporate environmental policies and/or commitments

☒ Measuring progress towards environmental corporate targets

Strategy and financial planning

☒ Implementing the business strategy related to environmental issues

☒ Managing annual budgets related to environmental issues

☒ Managing major capital and/or operational expenditures relating to environmental issues

(4.3.1.4) Reporting line

Select from:

☒ Reports to the Chief Operating Officer (COO)

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☒ More frequently than quarterly

(4.3.1.6) Please explain

The General Manager Area is responsible for assessing and controlling the impacts of operational activities on biodiversity, particularly in areas located near critical habitats or protected zones. The General Manager Area ensures the identification of potential impacts on local flora and fauna, the implementation of biodiversity action plan studies, and the application of mitigation measures such as restricting activities in sensitive zones, habitat rehabilitation, and regular monitoring. In this way, the General Manager Area safeguards ecological value while ensuring that operational activities remain aligned with the company's conservation commitments.

Climate change

(4.3.1.1) Position of individual or committee with responsibility

Other

- ☒ Other, please specify :VP Health, Safety, Security and Environment

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

- ☒ Assessing environmental dependencies, impacts, risks, and opportunities
- ☒ Assessing future trends in environmental dependencies, impacts, risks, and opportunities

Engagement

- ☒ Managing public policy engagement related to environmental issues

Policies, commitments, and targets

- ☒ Monitoring compliance with corporate environmental policies and/or commitments
- ☒ Measuring progress towards environmental corporate targets

Strategy and financial planning

- ☒ Conducting environmental scenario analysis
- ☒ Managing annual budgets related to environmental issues
- ☒ Managing environmental reporting, audit, and verification processes
- ☒ Managing major capital and/or operational expenditures relating to environmental issues

(4.3.1.4) Reporting line

Select from:

- ☒ Other, please specify :CEO, Shareholder and the Board of Commissioner

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

- ☒ More frequently than quarterly

(4.3.1.6) Please explain

The Vice President of Health, Safety, Security and Environment (HSSE), in collaboration with the ESG Environmental Stream Leader, is responsible for reviewing and monitoring the implementation of climate change strategies and action plans at the business unit level. The outcomes of these reviews are regularly reported to the Board of Directors through periodic meetings and formal reports. To ensure that climate action management is aligned with established targets, the Board of Directors, in its capacity as the Sustainability Committee, convenes weekly meetings attended by the entire ESG Management Team along with other supporting functions. These meetings serve as a platform to evaluate progress on sustainability implementation, including the execution of climate change initiatives and the advancement of innovation programs aimed at emission reduction and energy efficiency.

Water

(4.3.1.1) Position of individual or committee with responsibility

Other

- ☒ Other, please specify :VP Health, Safety, Security and Enviroment

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

- ☒ Assessing environmental dependencies, impacts, risks, and opportunities
- ☒ Assessing future trends in environmental dependencies, impacts, risks, and opportunities

Engagement

- ☒ Managing public policy engagement related to environmental issues

Policies, commitments, and targets

- ☒ Monitoring compliance with corporate environmental policies and/or commitments
- ☒ Measuring progress towards environmental corporate targets

Strategy and financial planning

- ☒ Conducting environmental scenario analysis

- ☒ Managing annual budgets related to environmental issues
- ☒ Managing environmental reporting, audit, and verification processes
- ☒ Managing major capital and/or operational expenditures relating to environmental issues

(4.3.1.4) Reporting line

Select from:

- ☒ Other, please specify :CEO, Shareholder and the Board of Commissioner

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

- ☒ More frequently than quarterly

(4.3.1.6) Please explain

The Vice President of Health, Safety, Security, and Environment (HSSE), together with the ESG Environmental Stream Leader, is responsible for reviewing and monitoring the implementation of water management strategies and initiatives at the business unit level. This includes overseeing the integration of water efficiency measures, water-related risk mitigation, and sustainable water resource management into operational activities. Progress and performance are reported to the Board of Directors through regular meetings and periodic reports. To ensure that implementation remains aligned with established targets, the Board of Directors, in its capacity as the Sustainability Committee, convenes weekly meetings attended by the entire ESG Management Team and other supporting functions. These meetings serve to discuss sustainability performance, including initiatives on water use efficiency, enhanced water recycling and reuse, innovation programs to optimize water use in production, and efforts to minimize impacts on water availability and quality within surrounding ecosystems.

Biodiversity

(4.3.1.1) Position of individual or committee with responsibility

Other

- ☒ Other, please specify :VP Health, Safety, Security and Environment

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

- ☒ Assessing environmental dependencies, impacts, risks, and opportunities
- ☒ Assessing future trends in environmental dependencies, impacts, risks, and opportunities

Engagement

- ☒ Managing public policy engagement related to environmental issues

Policies, commitments, and targets

- ☒ Monitoring compliance with corporate environmental policies and/or commitments
- ☒ Measuring progress towards environmental corporate targets

Strategy and financial planning

- ☒ Conducting environmental scenario analysis
- ☒ Managing annual budgets related to environmental issues
- ☒ Managing environmental reporting, audit, and verification processes
- ☒ Managing major capital and/or operational expenditures relating to environmental issues

(4.3.1.4) Reporting line

Select from:

- ☒ Other, please specify :CEO, Shareholder and the Board of Commissioner

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

- ☒ More frequently than quarterly

(4.3.1.6) Please explain

The Vice President of Health, Safety, Security and Environment (HSSE), in collaboration with the ESG Environmental Stream Leader, is responsible for reviewing and monitoring the implementation of biodiversity-related strategies and initiatives at the business unit level. This includes ensuring the integration of biodiversity protection principles into company operations, such as minimizing impacts on natural habitats, safeguarding ecosystem services, and complying with relevant environmental standards. Progress and performance are reported to the Board of Directors through regular meetings and periodic reports. To ensure alignment with biodiversity conservation targets, the Board of Directors, in its capacity as the Sustainability Committee, holds weekly meetings attended by the entire ESG

Management Team and other supporting functions. These meetings serve to evaluate sustainability implementation, including efforts to maintain ecological integrity, support habitat restoration, and promote the responsible use of land and resources across operations.

Climate change

(4.3.1.1) Position of individual or committee with responsibility

Other

☒ Other, please specify :VP Business Development

(4.3.1.2) Environmental responsibilities of this position

Strategy and financial planning

☒ Managing major capital and/or operational expenditures relating to environmental issues

(4.3.1.4) Reporting line

Select from:

☒ Other, please specify :Shareholder and Board of Commissioner

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☒ More frequently than quarterly

(4.3.1.6) Please explain

The Vice President of Business Development is responsible for driving innovation in low-carbon products and services to support the transition toward a low-emission economy. This includes the development of research and development (R&D) initiatives focused on energy efficiency, greenhouse gas emission reduction, and the adoption of environmentally friendly technologies. This role ensures that the company's business strategy remains adaptive to climate change risks and aligned with long-term decarbonization targets.

Water

(4.3.1.1) Position of individual or committee with responsibility

Other

☒ Other, please specify :VP Business Development

(4.3.1.2) Environmental responsibilities of this position

Strategy and financial planning

☒ Managing priorities related to innovation/low-environmental impact products or services (including R&D)

(4.3.1.4) Reporting line

Select from:

☒ Other, please specify :Shareholder and Board of Commisioner

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☒ More frequently than quarterly

(4.3.1.6) Please explain

In the area of water management, the Vice President of Business Development leads the development of products, services, or technologies that support water use efficiency and the conservation of water resources. The main focus is on innovations that minimize impacts on water quality and availability, while creating added value through sustainable solutions for water treatment or recycling within business processes. These initiatives are integrated into the business strategy to enhance the company's resilience to water-related risks.

Biodiversity

(4.3.1.1) Position of individual or committee with responsibility

Other

☒ Other, please specify :VP Business Development

(4.3.1.2) Environmental responsibilities of this position

Strategy and financial planning

☒ Managing priorities related to innovation/low-environmental impact products or services (including R&D)

(4.3.1.4) Reporting line

Select from:

☒ Other, please specify :Shareholder and Board of Commissioner

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☒ More frequently than quarterly

(4.3.1.6) Please explain

The Vice President of Business Development plays a key role in initiating and managing the development of products or services that take biodiversity protection into account. This includes integrating conservation principles into innovation processes, particularly through R&D that minimizes impacts on natural habitats and critical ecosystems. The VP is also responsible for ensuring that the business approach supports the responsible use of natural resources and aligns with the company's biodiversity protection commitments.

[Add row]

(4.5) Do you provide monetary incentives for the management of environmental issues, including the attainment of targets?

Climate change

(4.5.1) Provision of monetary incentives related to this environmental issue

Select from:

☒ Yes

(4.5.2) % of total C-suite and board-level monetary incentives linked to the management of this environmental issue

6

(4.5.3) Please explain

The criteria included in the climate change achievement incentive are ESG rating score, CDP Rating score, Emission Reduction, Electricity Volume Produced, HSSE Excellence, Geothermal Development, Hydrogen Project Initiative, Carbon Credit Realization, and Additional Installed Capacity.

Water

(4.5.1) Provision of monetary incentives related to this environmental issue

Select from:

☒ Yes

(4.5.2) % of total C-suite and board-level monetary incentives linked to the management of this environmental issue

33

(4.5.3) Please explain

The criteria included in the water achievement incentive are ESG rating score, CDP Rating score, Water efficiency, HSSE Excellence, Geothermal Development, Hydrogen Project Initiative, Wastewater reduction
[Fixed row]

(4.5.1) Provide further details on the monetary incentives provided for the management of environmental issues (do not include the names of individuals).

Climate change

(4.5.1.1) Position entitled to monetary incentive

Board or executive level

☒ Chief Executive Officer (CEO)

(4.5.1.2) Incentives

Select all that apply

☒ Bonus - % of salary

☒ Other, please specify :Variabel Pay

(4.5.1.3) Performance metrics

Targets

☒ Progress towards environmental targets

☒ Achievement of environmental targets

☒ Organization performance against an environmental sustainability index

☒ Reduction in absolute emissions in line with net-zero target

Strategy and financial planning

☒ Board approval of climate transition plan

Emission reduction

☒ Reduction in emissions intensity

☒ Reduction in absolute emissions

Resource use and efficiency

☒ Energy efficiency improvement

☒ Reduction in total energy consumption

Pollution

☒ Reduction or phase out of hazardous substances

☒ Increase in discharge treatment compliance and meeting regulatory requirements – direct operations

☒ Reduction/elimination of environmental incidents and/or environmental notices (notices of violation)

Engagement

- ☒ Increased engagement with suppliers on environmental issues
- ☒ Implementation of employee awareness campaign or training program on environmental issues

(4.5.1.4) Incentive plan the incentives are linked to

Select from:

- ☒ The incentives are not linked to an incentive plan, or equivalent (e.g. discretionary bonus in the reporting year)

(4.5.1.5) Further details of incentives

Incentives are given to all employees by looking at KPIs that are first assessed by the supervisor of each division (for team members). It is a variable pay that is not necessarily the same every year. There are other awards given by PGE for employees who achieve certain milestones

(4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

Contributions from (position) provide support for environmental initiatives carried out by the Company by participating in the fulfillment of KPIs that need to be achieved by each position.

Water

(4.5.1.1) Position entitled to monetary incentive

Board or executive level

- ☒ Chief Executive Officer (CEO)

(4.5.1.2) Incentives

Select all that apply

- ☒ Bonus - % of salary
- ☒ Other, please specify :Variable Pay

(4.5.1.3) Performance metrics

Targets

- ☒ Progress towards environmental targets
- ☒ Achievement of environmental targets
- ☒ Organization performance against an environmental sustainability index

Resource use and efficiency

- ☒ Reduction of water withdrawals – direct operations
- ☒ Reduction in water consumption volumes – direct operations
- ☒ Improvements in water efficiency – direct operations

Pollution

- ☒ Reduction of water pollution incidents
- ☒ Reduction or phase out of hazardous substances
- ☒ Increase in discharge treatment compliance and meeting regulatory requirements – direct operations
- ☒ Reduction/elimination of environmental incidents and/or environmental notices (notices of violation)

Engagement

- ☒ Increased engagement with suppliers on environmental issues
- ☒ Implementation of employee awareness campaign or training program on environmental issues

(4.5.1.4) Incentive plan the incentives are linked to

Select from:

- ☒ The incentives are not linked to an incentive plan, or equivalent (e.g. discretionary bonus in the reporting year)

(4.5.1.5) Further details of incentives

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(4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

Contributions from (position) provide support for environmental initiatives carried out by the Company by participating in the fulfillment of KPIs that need to be achieved by each position.

Climate change

(4.5.1.1) Position entitled to monetary incentive

Board or executive level

☒ Chief Financial Officer (CFO)

(4.5.1.2) Incentives

Select all that apply

☒ Bonus - % of salary

☒ Other, please specify :Variable Pay

(4.5.1.3) Performance metrics

Targets

☒ Progress towards environmental targets

☒ Achievement of environmental targets

☒ Organization performance against an environmental sustainability index

☒ Reduction in absolute emissions in line with net-zero target

Strategy and financial planning

☒ Board approval of climate transition plan

Emission reduction

☒ Reduction in emissions intensity

☒ Reduction in absolute emissions

Resource use and efficiency

- ☒ Energy efficiency improvement
- ☒ Reduction in total energy consumption

Pollution

- ☒ Reduction or phase out of hazardous substances
- ☒ Increase in discharge treatment compliance and meeting regulatory requirements – direct operations
- ☒ Reduction/elimination of environmental incidents and/or environmental notices (notices of violation)

Engagement

- ☒ Increased engagement with suppliers on environmental issues
- ☒ Implementation of employee awareness campaign or training program on environmental issues

(4.5.1.4) Incentive plan the incentives are linked to

Select from:

- ☒ The incentives are not linked to an incentive plan, or equivalent (e.g. discretionary bonus in the reporting year)

(4.5.1.5) Further details of incentives

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(4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

Contributions from (position) provide support for environmental initiatives carried out by the Company by participating in the fulfillment of KPIs that need to be achieved by each position.

Water

(4.5.1.1) Position entitled to monetary incentive

Board or executive level

☒ Chief Financial Officer (CFO)

(4.5.1.2) Incentives

Select all that apply

☒ Bonus - % of salary

☒ Other, please specify :Variable Pay

(4.5.1.3) Performance metrics

Targets

☒ Progress towards environmental targets

☒ Achievement of environmental targets

☒ Organization performance against an environmental sustainability index

Resource use and efficiency

☒ Reduction of water withdrawals – direct operations

☒ Reduction in water consumption volumes – direct operations

☒ Improvements in water efficiency – direct operations

Pollution

☒ Reduction of water pollution incidents

☒ Reduction or phase out of hazardous substances

☒ Increase in discharge treatment compliance and meeting regulatory requirements – direct operations

☒ Reduction/elimination of environmental incidents and/or environmental notices (notices of violation)

Engagement

☒ Increased engagement with suppliers on environmental issues

☒ Implementation of employee awareness campaign or training program on environmental issues

(4.5.1.4) Incentive plan the incentives are linked to

Select from:

- ☒ The incentives are not linked to an incentive plan, or equivalent (e.g. discretionary bonus in the reporting year)

(4.5.1.5) Further details of incentives

Incentives are given to all employees by looking at KPIs that are first assessed by the supervisor of each division (for team members). It is a variable pay that is not necessarily the same every year. There are other awards given by PGE for employees who achieve certain milestones.

(4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

Contributions from (position) provide support for environmental initiatives carried out by the Company by participating in the fulfillment of KPIs that need to be achieved by each position.

Climate change

(4.5.1.1) Position entitled to monetary incentive

Board or executive level

- ☒ Chief Operating Officer (COO)

(4.5.1.2) Incentives

Select all that apply

- ☒ Bonus - % of salary
☒ Other, please specify :Variable Pay

(4.5.1.3) Performance metrics

Targets

- ☒ Progress towards environmental targets

- ☒ Achievement of environmental targets
- ☒ Organization performance against an environmental sustainability index
- ☒ Reduction in absolute emissions in line with net-zero target

Strategy and financial planning

- ☒ Board approval of climate transition plan

Emission reduction

- ☒ Reduction in emissions intensity
- ☒ Reduction in absolute emissions

Resource use and efficiency

- ☒ Energy efficiency improvement
- ☒ Reduction in total energy consumption

Pollution

- ☒ Reduction or phase out of hazardous substances
- ☒ Increase in discharge treatment compliance and meeting regulatory requirements – direct operations
- ☒ Reduction/elimination of environmental incidents and/or environmental notices (notices of violation)

Engagement

- ☒ Increased engagement with suppliers on environmental issues
- ☒ Implementation of employee awareness campaign or training program on environmental issues

(4.5.1.4) Incentive plan the incentives are linked to

Select from:

- ☒ The incentives are not linked to an incentive plan, or equivalent (e.g. discretionary bonus in the reporting year)

(4.5.1.5) Further details of incentives

Incentives are given to all employees by looking at KPIs that are first assessed by the supervisor of each division (for team members). It is a variable pay that is not necessarily the same every year. There are other awards given by PGE for employees who achieve certain milestones.

(4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

Contributions from (position) provide support for environmental initiatives carried out by the Company by participating in the fulfillment of KPIs that need to be achieved by each position.

Water

(4.5.1.1) Position entitled to monetary incentive

Board or executive level

☒ Chief Operating Officer (COO)

(4.5.1.2) Incentives

Select all that apply

☒ Bonus - % of salary

☒ Other, please specify :Variable Pay

(4.5.1.3) Performance metrics

Targets

☒ Progress towards environmental targets

☒ Achievement of environmental targets

☒ Organization performance against an environmental sustainability index

Resource use and efficiency

☒ Reduction of water withdrawals – direct operations

☒ Reduction in water consumption volumes – direct operations

☒ Improvements in water efficiency – direct operations

Pollution

☒ Reduction of water pollution incidents

- ☒ Reduction or phase out of hazardous substances
- ☒ Increase in discharge treatment compliance and meeting regulatory requirements – direct operations
- ☒ Reduction/elimination of environmental incidents and/or environmental notices (notices of violation)

Engagement

- ☒ Increased engagement with suppliers on environmental issues
- ☒ Implementation of employee awareness campaign or training program on environmental issues

(4.5.1.4) Incentive plan the incentives are linked to

Select from:

- ☒ The incentives are not linked to an incentive plan, or equivalent (e.g. discretionary bonus in the reporting year)

(4.5.1.5) Further details of incentives

Incentives are given to all employees by looking at KPIs that are first assessed by the supervisor of each division (for team members). It is a variable pay that is not necessarily the same every year. There are other awards given by PGE for employees who achieve certain milestones.

(4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

Contributions from (position) provide support for environmental initiatives carried out by the Company by participating in the fulfillment of KPIs that need to be achieved by each position.

Climate change

(4.5.1.1) Position entitled to monetary incentive

Board or executive level

- ☒ Other C-Suite Officer, please specify :Director of Exploration and Development

(4.5.1.2) Incentives

Select all that apply

- ☒ Bonus - % of salary
- ☒ Other, please specify :Variable Pay

(4.5.1.3) Performance metrics

Targets

- ☒ Progress towards environmental targets
- ☒ Achievement of environmental targets
- ☒ Organization performance against an environmental sustainability index
- ☒ Reduction in absolute emissions in line with net-zero target

Strategy and financial planning

- ☒ Board approval of climate transition plan

Emission reduction

- ☒ Reduction in emissions intensity
- ☒ Reduction in absolute emissions

Resource use and efficiency

- ☒ Energy efficiency improvement
- ☒ Reduction in total energy consumption

Pollution

- ☒ Reduction or phase out of hazardous substances
- ☒ Increase in discharge treatment compliance and meeting regulatory requirements – direct operations
- ☒ Reduction/elimination of environmental incidents and/or environmental notices (notices of violation)

Engagement

- ☒ Increased engagement with suppliers on environmental issues
- ☒ Implementation of employee awareness campaign or training program on environmental issues

(4.5.1.4) Incentive plan the incentives are linked to

Select from:

- ☒ The incentives are not linked to an incentive plan, or equivalent (e.g. discretionary bonus in the reporting year)

(4.5.1.5) Further details of incentives

Incentives are given to all employees by looking at KPIs that are first assessed by the supervisor of each division (for team members). It is a variable pay that is not necessarily the same every year. There are other awards given by PGE for employees who achieve certain milestones.

(4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

Contributions from (position) provide support for environmental initiatives carried out by the Company by participating in the fulfillment of KPIs that need to be achieved by each position.

Water

(4.5.1.1) Position entitled to monetary incentive

Board or executive level

- ☒ Other C-Suite Officer, please specify :Director of Exploration and Development

(4.5.1.2) Incentives

Select all that apply

- ☒ Bonus - % of salary
☒ Other, please specify :Variable Pay

(4.5.1.3) Performance metrics

Targets

- ☒ Progress towards environmental targets

- ☒ Achievement of environmental targets
- ☒ Organization performance against an environmental sustainability index

Resource use and efficiency

- ☒ Reduction of water withdrawals – direct operations
- ☒ Reduction in water consumption volumes – direct operations
- ☒ Improvements in water efficiency – direct operations

Pollution

- ☒ Reduction of water pollution incidents
- ☒ Reduction or phase out of hazardous substances
- ☒ Increase in discharge treatment compliance and meeting regulatory requirements – direct operations
- ☒ Reduction/elimination of environmental incidents and/or environmental notices (notices of violation)

Engagement

- ☒ Increased engagement with suppliers on environmental issues
- ☒ Implementation of employee awareness campaign or training program on environmental issues

(4.5.1.4) Incentive plan the incentives are linked to

Select from:

- ☒ The incentives are not linked to an incentive plan, or equivalent (e.g. discretionary bonus in the reporting year)

(4.5.1.5) Further details of incentives

Incentives are given to all employees by looking at KPIs that are first assessed by the supervisor of each division (for team members). It is a variable pay that is not necessarily the same every year. There are other awards given by PGE for employees who achieve certain milestones.

(4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

Contributions from (position) provide support for environmental initiatives carried out by the Company by participating in the fulfillment of KPIs that need to be achieved by each position.

Climate change

(4.5.1.1) Position entitled to monetary incentive

Facility/Unit/Site management

- ☒ Other facility/unit/site manager, please specify :VP Health, Safety, Security and Enviroment

(4.5.1.2) Incentives

Select all that apply

- ☒ Bonus - % of salary
- ☒ Other, please specify :Variable Pay

(4.5.1.3) Performance metrics

Targets

- ☒ Progress towards environmental targets
- ☒ Achievement of environmental targets
- ☒ Organization performance against an environmental sustainability index
- ☒ Reduction in absolute emissions in line with net-zero target

Strategy and financial planning

- ☒ Board approval of climate transition plan

Emission reduction

- ☒ Reduction in emissions intensity
- ☒ Reduction in absolute emissions

Resource use and efficiency

- ☒ Energy efficiency improvement
- ☒ Reduction in total energy consumption

Pollution

- ☒ Reduction or phase out of hazardous substances
- ☒ Increase in discharge treatment compliance and meeting regulatory requirements – direct operations
- ☒ Reduction/elimination of environmental incidents and/or environmental notices (notices of violation)

Engagement

- ☒ Increased engagement with suppliers on environmental issues
- ☒ Implementation of employee awareness campaign or training program on environmental issues

(4.5.1.4) Incentive plan the incentives are linked to

Select from:

- ☒ The incentives are not linked to an incentive plan, or equivalent (e.g. discretionary bonus in the reporting year)

(4.5.1.5) Further details of incentives

Incentives are given to all employees by looking at KPIs that are first assessed by the supervisor of each division (for team members). It is a variable pay that is not necessarily the same every year. There are other awards given by PGE for employees who achieve certain milestones.

(4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

Contributions from (position) provide support for environmental initiatives carried out by the Company by participating in the fulfillment of KPIs that need to be achieved by each position.

Water

(4.5.1.1) Position entitled to monetary incentive

Facility/Unit/Site management

- ☒ Other facility/unit/site manager, please specify :VP Health, Safety, Security and Environment

(4.5.1.2) Incentives

Select all that apply

- ☒ Bonus - % of salary
- ☒ Other, please specify :Variable Pay

(4.5.1.3) Performance metrics

Targets

- ☒ Progress towards environmental targets
- ☒ Achievement of environmental targets
- ☒ Organization performance against an environmental sustainability index

Resource use and efficiency

- ☒ Reduction of water withdrawals – direct operations
- ☒ Reduction in water consumption volumes – direct operations
- ☒ Improvements in water efficiency – direct operations

Pollution

- ☒ Reduction of water pollution incidents
- ☒ Reduction or phase out of hazardous substances
- ☒ Increase in discharge treatment compliance and meeting regulatory requirements – direct operations
- ☒ Reduction/elimination of environmental incidents and/or environmental notices (notices of violation)

Engagement

- ☒ Increased engagement with suppliers on environmental issues
- ☒ Implementation of employee awareness campaign or training program on environmental issues

(4.5.1.4) Incentive plan the incentives are linked to

Select from:

- ☒ The incentives are not linked to an incentive plan, or equivalent (e.g. discretionary bonus in the reporting year)

(4.5.1.5) Further details of incentives

Incentives are given to all employees by looking at KPIs that are first assessed by the supervisor of each division (for team members). It is a variable pay that is not necessarily the same every year. There are other awards given by PGE for employees who achieve certain milestones.

(4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

Contributions from (position) provide support for environmental initiatives carried out by the Company by participating in the fulfillment of KPIs that need to be achieved by each position.

Climate change

(4.5.1.1) Position entitled to monetary incentive

Facility/Unit/Site management

☒ Other facility/unit/site manager, please specify :General Manager Area

(4.5.1.2) Incentives

Select all that apply

☒ Bonus - % of salary

☒ Other, please specify :Variable Pay

(4.5.1.3) Performance metrics

Targets

☒ Progress towards environmental targets

☒ Achievement of environmental targets

☒ Organization performance against an environmental sustainability index

☒ Reduction in absolute emissions in line with net-zero target

Strategy and financial planning

☒ Board approval of climate transition plan

Emission reduction

- ☒ Reduction in emissions intensity
- ☒ Reduction in absolute emissions

Resource use and efficiency

- ☒ Energy efficiency improvement
- ☒ Reduction in total energy consumption

Pollution

- ☒ Reduction or phase out of hazardous substances
- ☒ Increase in discharge treatment compliance and meeting regulatory requirements – direct operations
- ☒ Reduction/elimination of environmental incidents and/or environmental notices (notices of violation)

Engagement

- ☒ Increased engagement with suppliers on environmental issues
- ☒ Implementation of employee awareness campaign or training program on environmental issues

(4.5.1.4) Incentive plan the incentives are linked to

Select from:

- ☒ The incentives are not linked to an incentive plan, or equivalent (e.g. discretionary bonus in the reporting year)

(4.5.1.5) Further details of incentives

Incentives are given to all employees by looking at KPIs that are first assessed by the supervisor of each division (for team members). It is a variable pay that is not necessarily the same every year. There are other awards given by PGE for employees who achieve certain milestones.

(4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

Contributions from (position) provide support for environmental initiatives carried out by the Company by participating in the fulfillment of KPIs that need to be achieved by each position.

Water

(4.5.1.1) Position entitled to monetary incentive

Facility/Unit/Site management

- ☒ Other facility/unit/site manager, please specify :General Manager Area

(4.5.1.2) Incentives

Select all that apply

- ☒ Bonus - % of salary
- ☒ Other, please specify :Variable Pay

(4.5.1.3) Performance metrics

Targets

- ☒ Progress towards environmental targets
- ☒ Achievement of environmental targets
- ☒ Organization performance against an environmental sustainability index

Resource use and efficiency

- ☒ Reduction of water withdrawals – direct operations
- ☒ Reduction in water consumption volumes – direct operations
- ☒ Improvements in water efficiency – direct operations

Pollution

- ☒ Reduction of water pollution incidents
- ☒ Reduction or phase out of hazardous substances
- ☒ Increase in discharge treatment compliance and meeting regulatory requirements – direct operations
- ☒ Reduction/elimination of environmental incidents and/or environmental notices (notices of violation)

Engagement

- ☒ Increased engagement with suppliers on environmental issues
- ☒ Implementation of employee awareness campaign or training program on environmental issues

(4.5.1.4) Incentive plan the incentives are linked to

Select from:

- ☒ The incentives are not linked to an incentive plan, or equivalent (e.g. discretionary bonus in the reporting year)

(4.5.1.5) Further details of incentives

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(4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

Contributions from (position) provide support for environmental initiatives carried out by the Company by participating in the fulfillment of KPIs that need to be achieved by each position.

Climate change

(4.5.1.1) Position entitled to monetary incentive

Facility/Unit/Site management

- ☒ Other facility/unit/site manager, please specify :VP Business Development

(4.5.1.2) Incentives

Select all that apply

- ☒ Bonus - % of salary
- ☒ Other, please specify :Variable Pay

(4.5.1.3) Performance metrics

Targets

- ☒ Progress towards environmental targets
- ☒ Achievement of environmental targets
- ☒ Organization performance against an environmental sustainability index
- ☒ Reduction in absolute emissions in line with net-zero target

Strategy and financial planning

- ☒ Board approval of climate transition plan

Emission reduction

- ☒ Reduction in emissions intensity
- ☒ Reduction in absolute emissions

Resource use and efficiency

- ☒ Energy efficiency improvement
- ☒ Reduction in total energy consumption

Pollution

- ☒ Reduction or phase out of hazardous substances
- ☒ Increase in discharge treatment compliance and meeting regulatory requirements – direct operations
- ☒ Reduction/elimination of environmental incidents and/or environmental notices (notices of violation)

Engagement

- ☒ Increased engagement with suppliers on environmental issues
- ☒ Implementation of employee awareness campaign or training program on environmental issues

(4.5.1.4) Incentive plan the incentives are linked to

Select from:

- ☒ The incentives are not linked to an incentive plan, or equivalent (e.g. discretionary bonus in the reporting year)

(4.5.1.5) Further details of incentives

Incentives are given to all employees by looking at KPIs that are first assessed by the supervisor of each division (for team members). It is a variable pay that is not necessarily the same every year. There are other awards given by PGE for employees who achieve certain milestones.

(4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

Contributions from (position) provide support for environmental initiatives carried out by the Company by participating in the fulfillment of KPIs that need to be achieved by each position.

Water

(4.5.1.1) Position entitled to monetary incentive

Facility/Unit/Site management

☒ Other facility/unit/site manager, please specify :VP Business Development

(4.5.1.2) Incentives

Select all that apply

☒ Bonus - % of salary

☒ Other, please specify :Variable Pay

(4.5.1.3) Performance metrics

Targets

☒ Progress towards environmental targets

☒ Achievement of environmental targets

☒ Organization performance against an environmental sustainability index

Resource use and efficiency

☒ Reduction of water withdrawals – direct operations

- ☒ Reduction in water consumption volumes – direct operations
- ☒ Improvements in water efficiency – direct operations

Pollution

- ☒ Reduction of water pollution incidents
- ☒ Reduction or phase out of hazardous substances
- ☒ Increase in discharge treatment compliance and meeting regulatory requirements – direct operations
- ☒ Reduction/elimination of environmental incidents and/or environmental notices (notices of violation)

Engagement

- ☒ Increased engagement with suppliers on environmental issues
- ☒ Implementation of employee awareness campaign or training program on environmental issues

(4.5.1.4) Incentive plan the incentives are linked to

Select from:

- ☒ The incentives are not linked to an incentive plan, or equivalent (e.g. discretionary bonus in the reporting year)

(4.5.1.5) Further details of incentives

Incentives are given to all employees by looking at KPIs that are first assessed by the supervisor of each division (for team members). It is a variable pay that is not necessarily the same every year. There are other awards given by PGE for employees who achieve certain milestones.

(4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

Contributions from (position) provide support for environmental initiatives carried out by the Company by participating in the fulfillment of KPIs that need to be achieved by each position.

Climate change

(4.5.1.1) Position entitled to monetary incentive

Sustainability specialist

☒ Other sustainability specialist, please specify :ESG Management

(4.5.1.2) Incentives

Select all that apply

☒ Bonus - % of salary

☒ Other, please specify :Variable Pay

(4.5.1.3) Performance metrics

Targets

☒ Progress towards environmental targets

☒ Achievement of environmental targets

☒ Organization performance against an environmental sustainability index

☒ Reduction in absolute emissions in line with net-zero target

Strategy and financial planning

☒ Board approval of climate transition plan

Emission reduction

☒ Reduction in emissions intensity

☒ Reduction in absolute emissions

Resource use and efficiency

☒ Energy efficiency improvement

☒ Reduction in total energy consumption

Pollution

☒ Reduction or phase out of hazardous substances

☒ Increase in discharge treatment compliance and meeting regulatory requirements – direct operations

☒ Reduction/elimination of environmental incidents and/or environmental notices (notices of violation)

Engagement

- ☒ Increased engagement with suppliers on environmental issues
- ☒ Implementation of employee awareness campaign or training program on environmental issues

(4.5.1.4) Incentive plan the incentives are linked to

Select from:

- ☒ The incentives are not linked to an incentive plan, or equivalent (e.g. discretionary bonus in the reporting year)

(4.5.1.5) Further details of incentives

Incentives are given to all employees by looking at KPIs that are first assessed by the supervisor of each division (for team members). It is a variable pay that is not necessarily the same every year. There are other awards given by PGE for employees who achieve certain milestones.

(4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

Contributions from (position) provide support for environmental initiatives carried out by the Company by participating in the fulfillment of KPIs that need to be achieved by each position.

Water

(4.5.1.1) Position entitled to monetary incentive

Sustainability specialist

- ☒ Other sustainability specialist, please specify :ESG Management

(4.5.1.2) Incentives

Select all that apply

- ☒ Bonus - % of salary
- ☒ Other, please specify :Variable Pay

(4.5.1.3) Performance metrics

Targets

- ☒ Progress towards environmental targets
- ☒ Achievement of environmental targets
- ☒ Organization performance against an environmental sustainability index

Resource use and efficiency

- ☒ Reduction of water withdrawals – direct operations
- ☒ Reduction in water consumption volumes – direct operations
- ☒ Improvements in water efficiency – direct operations

Pollution

- ☒ Reduction of water pollution incidents
- ☒ Reduction or phase out of hazardous substances
- ☒ Increase in discharge treatment compliance and meeting regulatory requirements – direct operations
- ☒ Reduction/elimination of environmental incidents and/or environmental notices (notices of violation)

Engagement

- ☒ Increased engagement with suppliers on environmental issues
- ☒ Implementation of employee awareness campaign or training program on environmental issues

(4.5.1.4) Incentive plan the incentives are linked to

Select from:

- ☒ The incentives are not linked to an incentive plan, or equivalent (e.g. discretionary bonus in the reporting year)

(4.5.1.5) Further details of incentives

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(4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

Contributions from (position) provide support for environmental initiatives carried out by the Company by participating in the fulfillment of KPIs that need to be achieved by each position.

Climate change

(4.5.1.1) Position entitled to monetary incentive

Sustainability specialist

☒ Other sustainability specialist, please specify :Senior Analyst Environmental Sustainability

(4.5.1.2) Incentives

Select all that apply

☒ Bonus - % of salary

☒ Other, please specify :Variable Pay

(4.5.1.3) Performance metrics

Targets

☒ Progress towards environmental targets

☒ Achievement of environmental targets

☒ Organization performance against an environmental sustainability index

☒ Reduction in absolute emissions in line with net-zero target

Strategy and financial planning

☒ Board approval of climate transition plan

Emission reduction

☒ Reduction in emissions intensity

☒ Reduction in absolute emissions

Resource use and efficiency

- ☒ Energy efficiency improvement
- ☒ Reduction in total energy consumption

Pollution

- ☒ Reduction or phase out of hazardous substances
- ☒ Increase in discharge treatment compliance and meeting regulatory requirements – direct operations
- ☒ Reduction/elimination of environmental incidents and/or environmental notices (notices of violation)

Engagement

- ☒ Increased engagement with suppliers on environmental issues
- ☒ Implementation of employee awareness campaign or training program on environmental issues

(4.5.1.4) Incentive plan the incentives are linked to

Select from:

- ☒ The incentives are not linked to an incentive plan, or equivalent (e.g. discretionary bonus in the reporting year)

(4.5.1.5) Further details of incentives

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(4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

Contributions from (position) provide support for environmental initiatives carried out by the Company by participating in the fulfillment of KPIs that need to be achieved by each position.

Water

(4.5.1.1) Position entitled to monetary incentive

Sustainability specialist

☒ Other sustainability specialist, please specify :Senior Analyst Environmental Sustainability

(4.5.1.2) Incentives

Select all that apply

☒ Bonus - % of salary

☒ Other, please specify :Variable Pay

(4.5.1.3) Performance metrics

Targets

☒ Progress towards environmental targets

☒ Achievement of environmental targets

☒ Organization performance against an environmental sustainability index

Resource use and efficiency

☒ Reduction of water withdrawals – direct operations

☒ Improvements in water efficiency – direct operations

Pollution

☒ Improvements in wastewater quality – direct operations

☒ Reduction of water pollution incidents

☒ Reduction or phase out of hazardous substances

☒ Increase in discharge treatment compliance and meeting regulatory requirements – direct operations

☒ Reduction/elimination of environmental incidents and/or environmental notices (notices of violation)

Engagement

☒ Increased engagement with suppliers on environmental issues

☒ Implementation of employee awareness campaign or training program on environmental issues

(4.5.1.4) Incentive plan the incentives are linked to

Select from:

- ☒ The incentives are not linked to an incentive plan, or equivalent (e.g. discretionary bonus in the reporting year)

(4.5.1.5) Further details of incentives

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(4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

Contributions from (position) provide support for environmental initiatives carried out by the Company by participating in the fulfillment of KPIs that need to be achieved by each position.

Climate change

(4.5.1.1) Position entitled to monetary incentive

Senior-mid management

- ☒ Environment/Sustainability manager

(4.5.1.2) Incentives

Select all that apply

- ☒ Bonus - % of salary
☒ Other, please specify :Variable Pay

(4.5.1.3) Performance metrics

Targets

- ☒ Progress towards environmental targets

- ☒ Achievement of environmental targets
- ☒ Organization performance against an environmental sustainability index
- ☒ Reduction in absolute emissions in line with net-zero target

Strategy and financial planning

- ☒ Board approval of climate transition plan

Emission reduction

- ☒ Reduction in emissions intensity
- ☒ Reduction in absolute emissions

Resource use and efficiency

- ☒ Energy efficiency improvement
- ☒ Reduction in total energy consumption

Pollution

- ☒ Reduction or phase out of hazardous substances
- ☒ Increase in discharge treatment compliance and meeting regulatory requirements – direct operations
- ☒ Reduction/elimination of environmental incidents and/or environmental notices (notices of violation)

Engagement

- ☒ Increased engagement with suppliers on environmental issues
- ☒ Implementation of employee awareness campaign or training program on environmental issues

(4.5.1.4) Incentive plan the incentives are linked to

Select from:

- ☒ The incentives are not linked to an incentive plan, or equivalent (e.g. discretionary bonus in the reporting year)

(4.5.1.5) Further details of incentives

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(4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

Contributions from (position) provide support for environmental initiatives carried out by the Company by participating in the fulfillment of KPIs that need to be achieved by each position.

Water

(4.5.1.1) Position entitled to monetary incentive

Senior-mid management

☒ Environment/Sustainability manager

(4.5.1.2) Incentives

Select all that apply

☒ Bonus - % of salary

☒ Other, please specify :Variable Pay

(4.5.1.3) Performance metrics

Targets

☒ Progress towards environmental targets

☒ Achievement of environmental targets

☒ Organization performance against an environmental sustainability index

Resource use and efficiency

☒ Reduction of water withdrawals – direct operations

☒ Improvements in water efficiency – direct operations

Pollution

☒ Improvements in wastewater quality – direct operations

☒ Reduction of water pollution incidents

- ☒ Reduction or phase out of hazardous substances
- ☒ Increase in discharge treatment compliance and meeting regulatory requirements – direct operations
- ☒ Reduction/elimination of environmental incidents and/or environmental notices (notices of violation)

Engagement

- ☒ Increased engagement with suppliers on environmental issues
- ☒ Implementation of employee awareness campaign or training program on environmental issues

(4.5.1.4) Incentive plan the incentives are linked to

Select from:

- ☒ The incentives are not linked to an incentive plan, or equivalent (e.g. discretionary bonus in the reporting year)

(4.5.1.5) Further details of incentives

Incentives are given to all employees by looking at KPIs that are first assessed by the supervisor of each division (for team members). It is a variable pay that is not necessarily the same every year. There are other awards given by PGE for employees who achieve certain milestones.

(4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

Contributions from (position) provide support for environmental initiatives carried out by the Company by participating in the fulfillment of KPIs that need to be achieved by each position.

[Add row]

(4.6) Does your organization have an environmental policy that addresses environmental issues?

	Does your organization have any environmental policies?
	Select from: ☒ Yes

[Fixed row]

(4.6.1) Provide details of your environmental policies.

Row 1

(4.6.1.1) Environmental issues covered

Select all that apply

- ☒ Climate change
- ☒ Water
- ☒ Biodiversity

(4.6.1.2) Level of coverage

Select from:

- ☒ Organization-wide

(4.6.1.3) Value chain stages covered

Select all that apply

- ☒ Upstream value chain
- ☒ Downstream value chain

(4.6.1.4) Explain the coverage

The scope of PGE's environmental policy commitments includes all companies to participate in supporting the commitments made by PGE.

(4.6.1.5) Environmental policy content

Environmental commitments

- ✓ Commitment to Net Positive Gain
- ✓ Commitment to respect legally designated protected areas
- ✓ Commitment to comply with regulations and mandatory standards
- ✓ Commitment to take environmental action beyond regulatory compliance
- ✓ Commitment to avoidance of negative impacts on threatened and protected species
- ✓ Commitment to stakeholder engagement and capacity building on environmental issues
- ✓ Commitment to implementation of nature-based solutions that support landscape restoration and long-term protection of natural ecosystems

Climate-specific commitments

- ✓ Commitment to net-zero emissions
- ✓ Other climate-related commitment, please specify :Commitment to develop renewable energy, comitment to working with partners and suppliers to ensure sustainable, eco-friendly procurement

Water-specific commitments

- ✓ Commitment to reduce or phase out hazardous substances
- ✓ Commitment to control/reduce/eliminate water pollution
- ✓ Commitment to reduce water consumption volumes
- ✓ Commitment to reduce water withdrawal volumes

Social commitments

- ✓ Adoption of the UN International Labour Organization principles
- ✓ Commitment to promote gender equality and women's empowerment
- ✓ Commitment to respect and protect the customary rights to land, resources, and territory of Indigenous Peoples and Local Communities
- ✓ Commitment to respect internationally recognized human rights
- ✓ Commitment to secure Free, Prior, and Informed Consent (FPIC) of indigenous people and local communities

Additional references/Descriptions

- ✓ Description of biodiversity-related performance standards

- ☒ Description of impacts on natural resources and ecosystems
- ☒ Description of grievance/whistleblower mechanism to monitor non-compliance with the environmental policy and raise/address/escalate any other greenwashing concerns
- ☒ Description of membership and financial support provided to organizations that seek to influence public policy
- ☒ Reference to timebound environmental milestones and targets

(4.6.1.6) Indicate whether your environmental policy is in line with global environmental treaties or policy goals

Select all that apply

- ☒ Yes, in line with the Paris Agreement
- ☒ Yes, in line with Sustainable Development Goal 6 on Clean Water and Sanitation

(4.6.1.7) Public availability

Select from:

- ☒ Publicly available

(4.6.1.8) Attach the policy

SR PGE 2024.pdf

[Add row]

(4.10) Are you a signatory or member of any environmental collaborative frameworks or initiatives?

(4.10.1) Are you a signatory or member of any environmental collaborative frameworks or initiatives?

Select from:

- ☒ Yes

(4.10.2) Collaborative framework or initiative

Select all that apply

- ☒ UN Global Compact

(4.10.3) Describe your organization's role within each framework or initiative

UNGC = Pertamina Geothermal Energy (PGE) membership in the UN Global Compact under the membership of PT Pertamina (Persero), as the parent company of PGE. Pertamina (Persero) has been registered as a member of the UN Global Compact since August 19, 2021. PGE is currently in the process of having its own membership on behalf of PGE.

[Fixed row]

(4.11) In the reporting year, did your organization engage in activities that could directly or indirectly influence policy, law, or regulation that may (positively or negatively) impact the environment?

(4.11.1) External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the environment

Select all that apply

☒ Yes, we engaged directly with policy makers

(4.11.2) Indicate whether your organization has a public commitment or position statement to conduct your engagement activities in line with global environmental treaties or policy goals

Select from:

☒ Yes, we have a public commitment or position statement in line with global environmental treaties or policy goals

(4.11.3) Global environmental treaties or policy goals in line with public commitment or position statement

Select all that apply

☒ Paris Agreement

☒ Sustainable Development Goal 6 on Clean Water and Sanitation

(4.11.4) Attach commitment or position statement

SR PGE 2024.pdf

(4.11.5) Indicate whether your organization is registered on a transparency register

Select from:

☒ No

(4.11.8) Describe the process your organization has in place to ensure that your external engagement activities are consistent with your environmental commitments and/or transition plan

In terms of policy participation, PGE participates in the Indonesian Geothermal Association so that through the association, PGE channels aspirations, expectations in the framework of geothermal development in Indonesia. PGE actively attends FGD agendas and coordination meetings with relevant ministries (The Ministry of Environment, The Ministry of Forestry, The Ministry of Energy and Mineral Resources, Directorate General of New, Renewable Energy and Energy Conservation (EBTKE/ESDM), Indonesia Financial Services Authority (OJK)).

[Fixed row]

(4.11.1) On what policies, laws, or regulations that may (positively or negatively) impact the environment has your organization been engaging directly with policy makers in the reporting year?

Row 1

(4.11.1.1) Specify the policy, law, or regulation on which your organization is engaging with policy makers

PP No. 22 of 2021 on environmental management aspects affects the fulfillment of standards (environmental permit management, wastewater quality standards, ambient air quality standards, emission quality standards, processing of hazardous waste generation), Permen LH No. 1 of 2021 concerning PROPER (Public Disclosure Program for Environmental Compliance)

(4.11.1.2) Environmental issues the policy, law, or regulation relates to

Select all that apply

☒ Climate change

☒ Water

(4.11.1.3) Focus area of policy, law, or regulation that may impact the environment

Environmental impacts and pressures

☒ Emissions – CO2

☒ Water pollution

☒ Emissions – other GHGs

- ☒ Water availability
- ☒ Emissions – methane
- ☒ Hazardous substances

(4.11.1.4) Geographic coverage of policy, law, or regulation

Select from:

- ☒ National

(4.11.1.5) Country/area/region the policy, law, or regulation applies to

Select all that apply

- ☒ Indonesia

(4.11.1.6) Your organization's position on the policy, law, or regulation

Select from:

- ☒ Support with no exceptions

(4.11.1.8) Type of direct engagement with policy makers on this policy, law, or regulation

Select all that apply

- ☒ Participation in working groups organized by policy makers

(4.11.1.9) Funding figure your organization provided to policy makers in the reporting year relevant to this policy, law, or regulation (currency)

0

(4.11.1.10) Explain the relevance of this policy, law, or regulation to the achievement of your environmental commitments and/or transition plan, how this has informed your engagement, and how you measure the success of your engagement

Mechanisms for applying for environmental permits (providing assistance so that the licensing stages can be realized, involving consultants to support permit applications), including permits for wastewater, emissions, hazardous waste (B3), and the management of environmental parameters; quality standards (emissions, wastewater) (updating suggestions for environmental management facilities so that the effluent released meets or passes the quality standards set by the government); and hazardous waste management (providing assistance and socialization so that hazardous waste management is in accordance with established regulations).

(4.11.1.11) Indicate if you have evaluated whether your organization's engagement on this policy, law, or regulation is aligned with global environmental treaties or policy goals

Select from:

☒ Yes, we have evaluated, and it is aligned

(4.11.1.12) Global environmental treaties or policy goals aligned with your organization's engagement on this policy, law or regulation

Select all that apply

☒ Paris Agreement

☒ Sustainable Development Goal 6 on Clean Water and Sanitation

Row 2

(4.11.1.1) Specify the policy, law, or regulation on which your organization is engaging with policy makers

PP No. 22 of 2021 on environmental management aspects affects the fulfillment of standards (environmental permit management, wastewater quality standards, ambient air quality standards, emission quality standards, processing of hazardous waste generation), Permen LH No. 1 of 2021 concerning PROPER (Public Disclosure Program for Environmental Compliance)

(4.11.1.2) Environmental issues the policy, law, or regulation relates to

Select all that apply

☒ Climate change

☒ Water

(4.11.1.3) Focus area of policy, law, or regulation that may impact the environment

Environmental protection and management procedures

- ☒ Environmental registries
- ☒ Environmental protection requirements
- ☒ Operations permits

(4.11.1.4) Geographic coverage of policy, law, or regulation

Select from:

- ☒ National

(4.11.1.5) Country/area/region the policy, law, or regulation applies to

Select all that apply

- ☒ Indonesia

(4.11.1.6) Your organization's position on the policy, law, or regulation

Select from:

- ☒ Support with no exceptions

(4.11.1.8) Type of direct engagement with policy makers on this policy, law, or regulation

Select all that apply

- ☒ Participation in working groups organized by policy makers

(4.11.1.9) Funding figure your organization provided to policy makers in the reporting year relevant to this policy, law, or regulation (currency)

0

(4.11.1.10) Explain the relevance of this policy, law, or regulation to the achievement of your environmental commitments and/or transition plan, how this has informed your engagement, and how you measure the success of your engagement

Mechanisms for applying for environmental permits (providing assistance so that the licensing stages can be realized, involving consultants to support permit applications), including permits for wastewater, emissions, hazardous waste (B3), and the management of environmental parameters; quality standards (emissions, wastewater) (updating suggestions for environmental management facilities so that the effluent released meets or passes the quality standards set by the government); and hazardous waste management (providing assistance and socialization so that hazardous waste management is in accordance with established regulations).

(4.11.1.11) Indicate if you have evaluated whether your organization's engagement on this policy, law, or regulation is aligned with global environmental treaties or policy goals

Select from:

☒ Yes, we have evaluated, and it is aligned

(4.11.1.12) Global environmental treaties or policy goals aligned with your organization's engagement on this policy, law or regulation

Select all that apply

☒ Paris Agreement

☒ Sustainable Development Goal 6 on Clean Water and Sanitation

Row 3

(4.11.1.1) Specify the policy, law, or regulation on which your organization is engaging with policy makers

PP No. 22 of 2021 on environmental management aspects affects the fulfillment of standards (environmental permit management, wastewater quality standards, ambient air quality standards, emission quality standards, processing of hazardous waste generation), Permen LH No. 1 of 2021 concerning PROPER (Public Disclosure Program for Environmental Compliance)

(4.11.1.2) Environmental issues the policy, law, or regulation relates to

Select all that apply

☒ Climate change

☒ Water

(4.11.1.3) Focus area of policy, law, or regulation that may impact the environment

Financial mechanisms (e.g., taxes, subsidies, etc.)

☒ Emissions trading schemes

(4.11.1.4) Geographic coverage of policy, law, or regulation

Select from:

☒ National

(4.11.1.5) Country/area/region the policy, law, or regulation applies to

Select all that apply

☒ Indonesia

(4.11.1.6) Your organization's position on the policy, law, or regulation

Select from:

☒ Support with no exceptions

(4.11.1.8) Type of direct engagement with policy makers on this policy, law, or regulation

Select all that apply

☒ Participation in working groups organized by policy makers

(4.11.1.9) Funding figure your organization provided to policy makers in the reporting year relevant to this policy, law, or regulation (currency)

0

(4.11.1.10) Explain the relevance of this policy, law, or regulation to the achievement of your environmental commitments and/or transition plan, how this has informed your engagement, and how you measure the success of your engagement

Mechanisms for applying for environmental permits (providing assistance so that the licensing stages can be realized, involving consultants to support permit applications), including permits for wastewater, emissions, hazardous waste (B3), and the management of environmental parameters; quality standards (emissions, wastewater) (updating suggestions for environmental management facilities so that the effluent released meets or passes the quality standards set by the

government); and hazardous waste management (providing assistance and socialization so that hazardous waste management is in accordance with established regulations).

(4.11.1.11) Indicate if you have evaluated whether your organization's engagement on this policy, law, or regulation is aligned with global environmental treaties or policy goals

Select from:

☒ Yes, we have evaluated, and it is aligned

(4.11.1.12) Global environmental treaties or policy goals aligned with your organization's engagement on this policy, law or regulation

Select all that apply

☒ Paris Agreement

☒ Sustainable Development Goal 6 on Clean Water and Sanitation

[\[Add row\]](#)

(4.12) Have you published information about your organization's response to environmental issues for this reporting year in places other than your CDP response?

Select from:

☒ Yes

(4.12.1) Provide details on the information published about your organization's response to environmental issues for this reporting year in places other than your CDP response. Please attach the publication.

Row 1

(4.12.1.1) Publication

Select from:

☒ In mainstream reports, in line with environmental disclosure standards or frameworks

(4.12.1.2) Standard or framework the report is in line with

Select all that apply

- ☒ GRI
- ☒ IFRS
- ☒ Other, please specify :INDEX OF FINANCIAL SERVICES AUTHORITY REGULATION (POJK) NO. 51/POJK.3/2017 - SEOJK NO. 16/SEOJK.04/2021

(4.12.1.3) Environmental issues covered in publication

Select all that apply

- ☒ Climate change
- ☒ Water
- ☒ Biodiversity

(4.12.1.4) Status of the publication

Select from:

- ☒ Complete

(4.12.1.5) Content elements

Select all that apply

- ☒ Strategy
- ☒ Governance
- ☒ Emission targets
- ☒ Emissions figures
- ☒ Risks & Opportunities
- ☒ Water accounting figures

(4.12.1.6) Page/section reference

(Governance) p. 349-379 (Risk & Opportunities) p. 380-392 (Strategy) p.88-87, 392-401 (Emissions Figure) p. 204-206 (Emissions Targets) p. 243-245 (Water Accounting Figures) 156-169

(4.12.1.7) Attach the relevant publication

(4.12.1.8) Comment

Reporting related to environmental information, including climate change, water, and biodiversity for 2024 has been published and is publicly accessible.
(<https://www.pge.pertamina.com/id/strategi>)

[Add row]

C5. Business strategy

(5.1) Does your organization use scenario analysis to identify environmental outcomes?

Climate change

(5.1.1) Use of scenario analysis

Select from:

☒ Yes

(5.1.2) Frequency of analysis

Select from:

☒ Annually

Water

(5.1.1) Use of scenario analysis

Select from:

☒ Yes

(5.1.2) Frequency of analysis

Select from:

☒ Annually

[Fixed row]

(5.1.1) Provide details of the scenarios used in your organization's scenario analysis.

Climate change

(5.1.1.1) Scenario used

Physical climate scenarios

☒ RCP 2.6

(5.1.1.2) Scenario used SSPs used in conjunction with scenario

Select from:

☒ SSP1

(5.1.1.3) Approach to scenario

Select from:

☒ Qualitative

(5.1.1.4) Scenario coverage

Select from:

☒ Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

☒ Acute physical

☒ Chronic physical

☒ Policy

☒ Market

☒ Reputation

(5.1.1.6) Temperature alignment of scenario

Select from:

☒ 1.6°C - 1.9°C

(5.1.1.7) Reference year

2024

(5.1.1.8) Timeframes covered

Select all that apply

- ☒ 2025
- ☒ 2030
- ☒ 2040
- ☒ 2050
- ☒ 2060

(5.1.1.9) Driving forces in scenario

Stakeholder and customer demands

- ☒ Other stakeholder and customer demands driving forces, please specify :Stakeholder expectations to see the analysis scenario

Regulators, legal and policy regimes

- ☒ Global targets

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

PGE has developed a decarbonization scenario aligned with the national NZE 2060 target and stakeholder expectations, including those of Pertamina (Persero). Key assumptions include continued government policies supporting energy transition, stricter emissions regulations, development of a domestic carbon market, and incentives for low-carbon technologies. From a macroeconomic perspective, national economic growth is assumed to remain stable, with increasing energy demand and investments in environmentally friendly solutions. Regionally, the scenario considers geothermal resource availability, geographical conditions of operational areas, as well as climate variables and disaster risks that could affect operations. On the technology front, PGE assumes that readiness and affordability will continue to improve, covering generation efficiency, electric vehicles, co-generation, methanol, CCS, and nature-based solutions (NBS). The national energy mix is expected to increase the share of renewable energy, supporting the use of geothermal electricity for internal needs and reducing indirect emissions. The emission intensity reduction target of 29% refers to directives from the Major Energy Equipment and will be achieved through nine key initiatives, to be implemented gradually starting in 2024: co-generation (brine to power), energy efficiency, electric vehicles, geothermal electricity utilization, drilling fuel substitution, methanol development, NBS, CO₂ liquefaction, and CCS. However, challenges remain, including access to green financing, large-scale technology readiness, regulatory dynamics, and operational and social barriers. This scenario covers all of PGE's operational areas, both production and development units, and will be periodically reviewed in line with internal and external developments.

(5.1.1.11) Rationale for choice of scenario

Applying RCP and SSP is considered because these methods are aligned with Indonesia's character. Indonesia faces climate change challenges but is also vulnerable to social issues such as dependence on fossil fuels and socioeconomic development. RCP provides an in-depth view of potential physical risks, while SSP assists the Company in gaining perspective on potential transition risks.

Water

(5.1.1.1) Scenario used

Water scenarios

☒ WRI Aqueduct

(5.1.1.3) Approach to scenario

Select from:

☒ Qualitative

(5.1.1.4) Scenario coverage

Select from:

☒ Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

☒ Chronic physical

☒ Policy

☒ Reputation

☒ Technology

(5.1.1.7) Reference year

2024

(5.1.1.8) Timeframes covered

Select all that apply

☒ 2025

☒ 2030

(5.1.1.9) Driving forces in scenario

Stakeholder and customer demands

☒ Other stakeholder and customer demands driving forces, please specify :Stakeholder expectations to see the analysis scenario

Regulators, legal and policy regimes

☒ Global targets

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

PGE applies scenario analysis based on the World Resources Institute's (WRI) Aqueduct Water Risk Atlas to identify areas at risk of water stress, referencing the years 2030 and 2040. The WRI Aqueduct provides indicators on water demand and availability, water stress levels, and seasonal variability, which are used to assess risks to geothermal operations across PGE's working areas. Key assumptions include projected increases in water stress driven by population growth, climate change, and cross-sector competition for water use. Main risks assessed include reduced freshwater availability during prolonged dry seasons, river flow changes, and climate-related impacts on physical assets and infrastructure. This scenario supports PGE's adaptation strategies to climate-related physical risks, assuming significantly increasing water stress, especially in regions categorized as medium to very high risk. To enhance analysis validity, PGE has planned collaboration with the Meteorology, Climatology, and Geophysics Agency (BMKG) since 2023 to monitor weather and climate conditions potentially affecting field operations. The initial assessment of climate physical risks across PGE's business areas has produced a mapping of exposure levels and adaptive capacity, forming the basis for strategic recommendations to the Board of Directors, which have been approved for further action. Uncertainties in this scenario include the spatial accuracy of WRI data relative to PGE's actual working areas, limited historical local data, and unpredictable external water usage dynamics. Challenges may also arise from the need for additional investments in water conservation systems, water efficiency technologies, and improved wastewater treatment infrastructure. This scenario applies to all PGE operational units and serves as a basis for adaptation measures, water resource monitoring, and long-term conservation planning.

(5.1.1.11) Rationale for choice of scenario

Related to the situation and conditions in Indonesia.

Climate change

(5.1.1.1) Scenario used

Physical climate scenarios

☒ RCP 2.6

(5.1.1.2) Scenario used SSPs used in conjunction with scenario

Select from:

☒ SSP5

(5.1.1.3) Approach to scenario

Select from:

☒ Qualitative

(5.1.1.4) Scenario coverage

Select from:

☒ Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

☒ Acute physical

☒ Chronic physical

☒ Policy

☒ Market

☒ Reputation

(5.1.1.6) Temperature alignment of scenario

Select from:

☒ 1.6°C - 1.9°C

(5.1.1.7) Reference year

2024

(5.1.1.8) Timeframes covered

Select all that apply

- ☒ 2025
- ☒ 2030
- ☒ 2040
- ☒ 2050
- ☒ 2060

(5.1.1.9) Driving forces in scenario

Stakeholder and customer demands

- ☒ Other stakeholder and customer demands driving forces, please specify :Stakeholder expectations to see the analysis scenario

Regulators, legal and policy regimes

- ☒ Global targets

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

PGE has developed a decarbonization scenario aligned with the national NZE 2060 target and stakeholder expectations, including those of Pertamina (Persero). Key assumptions include continued government policies supporting energy transition, stricter emissions regulations, development of a domestic carbon market, and incentives for low-carbon technologies. From a macroeconomic perspective, national economic growth is assumed to remain stable, with increasing energy demand and investments in environmentally friendly solutions. Regionally, the scenario considers geothermal resource availability, geographical conditions of operational areas, as well as climate variables and disaster risks that could affect operations. On the technology front, PGE assumes that readiness and affordability will continue to improve, covering generation efficiency, electric vehicles, co-generation, methanol, CCS, and nature-based solutions (NBS). The national energy mix is expected to increase the share of renewable energy, supporting the use of geothermal electricity for internal needs and reducing indirect emissions. The emission intensity reduction target of 29% refers to directives from the Major Energy Equipment and will be achieved through nine key initiatives, to be implemented gradually starting in 2024: co-generation (brine to power), energy efficiency, electric vehicles, geothermal electricity utilization, drilling fuel substitution, methanol development, NBS, CO₂ liquefaction, and CCS. However, challenges remain, including access to green financing, large-scale technology readiness, regulatory dynamics, and operational and social barriers. This scenario covers all of PGE's operational areas, both production and development units, and will be periodically reviewed in line with internal and external developments.

(5.1.1.11) Rationale for choice of scenario

Applying RCP and SSP is considered because these methods are aligned with Indonesia's character. Indonesia faces climate change challenges but is also vulnerable to social issues such as dependence on fossil fuels and socioeconomic development. RCP provides an in-depth view of potential physical risks, while SSP assists the Company in gaining perspective on potential transition risks.

Climate change

(5.1.1.1) Scenario used

Physical climate scenarios

☒ RCP 4.5

(5.1.1.2) Scenario used SSPs used in conjunction with scenario

Select from:

☒ SSP1

(5.1.1.3) Approach to scenario

Select from:

☒ Qualitative

(5.1.1.4) Scenario coverage

Select from:

☒ Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

☒ Acute physical

☒ Chronic physical

☒ Policy

- ☒ Market
- ☒ Reputation

(5.1.1.6) Temperature alignment of scenario

Select from:

- ☒ 1.6°C - 1.9°C

(5.1.1.7) Reference year

2024

(5.1.1.8) Timeframes covered

Select all that apply

- ☒ 2025
- ☒ 2030
- ☒ 2040
- ☒ 2050
- ☒ 2060

(5.1.1.9) Driving forces in scenario

Stakeholder and customer demands

- ☒ Other stakeholder and customer demands driving forces, please specify :Stakeholder expectations to see the analysis scenario

Regulators, legal and policy regimes

- ☒ Global targets

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

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incentives for low-carbon technologies. From a macroeconomic perspective, national economic growth is assumed to remain stable, with increasing energy demand and investments in environmentally friendly solutions. Regionally, the scenario considers geothermal resource availability, geographical conditions of operational areas, as well as climate variables and disaster risks that could affect operations. On the technology front, PGE assumes that readiness and affordability will continue to improve, covering generation efficiency, electric vehicles, co-generation, methanol, CCS, and nature-based solutions (NBS). The national energy mix is expected to increase the share of renewable energy, supporting the use of geothermal electricity for internal needs and reducing indirect emissions. The emission intensity reduction target of 29% refers to directives from the Major Energy Equipment and will be achieved through nine key initiatives, to be implemented gradually starting in 2024: co-generation (brine to power), energy efficiency, electric vehicles, geothermal electricity utilization, drilling fuel substitution, methanol development, NBS, CO₂ liquefaction, and CCS. However, challenges remain, including access to green financing, large-scale technology readiness, regulatory dynamics, and operational and social barriers. This scenario covers all of PGE's operational areas, both production and development units, and will be periodically reviewed in line with internal and external developments.

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(5.1.1.1) Scenario used

Physical climate scenarios

☒ RCP 4.5

(5.1.1.2) Scenario used SSPs used in conjunction with scenario

Select from:

☒ SSP5

(5.1.1.3) Approach to scenario

Select from:

☒ Qualitative

(5.1.1.4) Scenario coverage

Select from:

☒ Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

☒ Acute physical

☒ Chronic physical

☒ Policy

☒ Market

☒ Reputation

(5.1.1.6) Temperature alignment of scenario

Select from:

☒ 1.6°C - 1.9°C

(5.1.1.7) Reference year

2024

(5.1.1.8) Timeframes covered

Select all that apply

☒ 2025

☒ 2030

☒ 2040

☒ 2050

☒ 2060

(5.1.1.9) Driving forces in scenario

Stakeholder and customer demands

☒ Other stakeholder and customer demands driving forces, please specify :Stakeholder expectations to see the analysis scenario

Regulators, legal and policy regimes

☒ Global targets

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

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Climate change

(5.1.1.1) Scenario used

Physical climate scenarios

☒ RCP 8.5

(5.1.1.2) Scenario used SSPs used in conjunction with scenario

Select from:

☒ SSP1

(5.1.1.3) Approach to scenario

Select from:

☒ Qualitative

(5.1.1.4) Scenario coverage

Select from:

☒ Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

☒ Acute physical

☒ Chronic physical

☒ Policy

☒ Market

☒ Reputation

(5.1.1.6) Temperature alignment of scenario

Select from:

☒ 3.5°C - 3.9°C

(5.1.1.7) Reference year

2024

(5.1.1.8) Timeframes covered

Select all that apply

☒ 2025

- ☒ 2030
- ☒ 2040
- ☒ 2050
- ☒ 2060

(5.1.1.9) Driving forces in scenario

Stakeholder and customer demands

- ☒ Other stakeholder and customer demands driving forces, please specify :Stakeholder expectations to see the analysis scenario

Regulators, legal and policy regimes

- ☒ Global targets

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

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Climate change

(5.1.1.1) Scenario used

Physical climate scenarios

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(5.1.1.2) Scenario used SSPs used in conjunction with scenario

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☒ SSP5

(5.1.1.3) Approach to scenario

Select from:

☒ Qualitative

(5.1.1.4) Scenario coverage

Select from:

☒ Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

☒ Acute physical

☒ Chronic physical

☒ Policy

☒ Market

☒ Reputation

(5.1.1.6) Temperature alignment of scenario

Select from:

☒ 3.5°C - 3.9°C

(5.1.1.7) Reference year

2024

(5.1.1.8) Timeframes covered

Select all that apply

- ☒ 2025
- ☒ 2030
- ☒ 2040
- ☒ 2050
- ☒ 2060

(5.1.1.9) Driving forces in scenario

Stakeholder and customer demands

- ☒ Other stakeholder and customer demands driving forces, please specify :Stakeholder expectations to see the analysis scenario

Regulators, legal and policy regimes

- ☒ Global targets

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

PGE has developed a decarbonization scenario aligned with the national NZE 2060 target and stakeholder expectations, including those of Pertamina (Persero). Key assumptions include continued government policies supporting energy transition, stricter emissions regulations, development of a domestic carbon market, and incentives for low-carbon technologies. From a macroeconomic perspective, national economic growth is assumed to remain stable, with increasing energy demand and investments in environmentally friendly solutions. Regionally, the scenario considers geothermal resource availability, geographical conditions of operational areas, as well as climate variables and disaster risks that could affect operations. On the technology front, PGE assumes that readiness and affordability will continue to improve, covering generation efficiency, electric vehicles, co-generation, methanol, CCS, and nature-based solutions (NBS). The national energy mix is expected to increase the share of renewable energy, supporting the use of geothermal electricity for internal needs and reducing indirect emissions. The emission intensity reduction target of 29% refers to directives from the Major Energy Equipment and will be achieved through nine key initiatives, to be implemented gradually starting in 2024: co-generation (brine to power), energy efficiency, electric vehicles, geothermal electricity utilization, drilling fuel substitution, methanol development, NBS, CO₂ liquefaction, and CCS. However, challenges remain, including access to green financing, large-scale technology readiness, regulatory dynamics, and operational and social barriers. This scenario covers all of PGE's operational areas, both production and development units, and will be periodically reviewed in line with internal and external developments.

(5.1.1.11) Rationale for choice of scenario

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[Add row]

(5.1.2) Provide details of the outcomes of your organization's scenario analysis.

Climate change

(5.1.2.1) Business processes influenced by your analysis of the reported scenarios

Select all that apply

- ☒ Risk and opportunities identification, assessment and management
- ☒ Strategy and financial planning

(5.1.2.2) Coverage of analysis

Select from:

- ☒ Organization-wide

(5.1.2.3) Summarize the outcomes of the scenario analysis and any implications for other environmental issues

Geothermal energy does produce a small amount of emissions due to the presence of non-condensable gases (NCG), primarily composed of CO₂, within geothermal fluids. During the electricity generation process, these gases are released into the atmosphere when the geothermal fluid is cooled in the cooling tower. Nevertheless, the amount of CO₂ emissions from geothermal power plants is significantly lower compared to those from fossil fuel-based power plants. To calculate the volume of emissions avoided, the UNFCCC has established a standard methodology, namely ACM 002 Grid-connected Electricity Generation from Renewable Sources, which calculates emission avoidance as the difference between the baseline emissions from fossil fuel power generation and the actual emissions from the geothermal project. Currently, PGE has seven carbon credit projects registered under both the voluntary and compliance carbon markets, with total avoided emissions reaching 4,051,167.79 tons of CO₂e for the current reporting year.

Water

(5.1.2.1) Business processes influenced by your analysis of the reported scenarios

Select all that apply

- ☒ Risk and opportunities identification, assessment and management
- ☒ Strategy and financial planning

(5.1.2.2) Coverage of analysis

Select from:

- ☒ Organization-wide

(5.1.2.3) Summarize the outcomes of the scenario analysis and any implications for other environmental issues

PGE is committed to managing water use responsibly and ensuring the sustainability of water availability, quality, and accessibility—not only to support the company’s operational activities but also for the benefit of local communities who share the use of these water resources. Water-related issues have been integrated into PGE’s long-term business goals, including: (1) reducing the water and environmental footprint through optimized power generation and water consumption efficiency; (2) supporting global and national decarbonization agendas by expanding installed capacity of green energy; (3) planning the optimization of existing geothermal resources through the development of Binary Cycle Power Plants, which utilize the enthalpy of previously untapped hot brine, and Low-Pressure Power Plants, which make use of existing low-pressure wells. These programs also serve as water conservation efforts, as they allow for expanded installed capacity without the need for new well drilling, which typically requires large amounts of freshwater; and (4) adapting to new conditions and regulations, while minimizing environmental impacts on local ecosystems.

[Fixed row]

(5.2) Does your organization’s strategy include a climate transition plan?

(5.2.1) Transition plan

Select from:

- ☒ Yes, we have a climate transition plan which aligns with a 1.5°C world

(5.2.3) Publicly available climate transition plan

Select from:

- ☒ Yes

(5.2.4) Plan explicitly commits to cease all spending on, and revenue generation from, activities that contribute to fossil fuel expansion

Select from:

☒ No, but we plan to add an explicit commitment within the next two years

(5.2.6) Explain why your organization does not explicitly commit to cease all spending on and revenue generation from activities that contribute to fossil fuel expansion

Fully engaged with renewable energy, so no revenue. Spending fossil fuel is still needed for operational support activities, such as vehicles and emergency diesel.

(5.2.7) Mechanism by which feedback is collected from shareholders on your climate transition plan

Select from:

☒ Our climate transition plan is voted on at Annual General Meetings (AGMs)

(5.2.10) Description of key assumptions and dependencies on which the transition plan relies

PGE faces operational challenges such as land acquisition, complex permitting processes, and competition in the energy market. To address these, PGE adopts a proactive approach by maintaining communication with government, legal authorities, and stakeholders, while strengthening community engagement to secure support. The company focuses on project scale-up to enhance economic value and competitiveness, alongside implementing cost efficiency, resource optimization, energy-saving technologies, and streamlined processes. In line with government policies on energy transition, PGE promotes geothermal as a clean energy source and reinforces good corporate governance, particularly in managing environmental, social, and governance (ESG) risks. As part of Pertamina Holding, PGE ensures transparent communication on renewable projects and long-term sustainability targets, while safeguarding its reputation through media collaboration, campaigns, and stakeholder engagement with investors, customers, policymakers, and communities.

(5.2.11) Description of progress against transition plan disclosed in current or previous reporting period

Using the SSP scenario, the Company considers transition risks in terms of policy and law, market, and corporate reputation.

(5.2.12) Attach any relevant documents which detail your climate transition plan (optional)

SR PGE 2024.pdf

(5.2.13) Other environmental issues that your climate transition plan considers

Select all that apply

☒ Water

(5.2.14) Explain how the other environmental issues are considered in your climate transition plan

Water withdrawals are sourced from various origins, including groundwater, surface water, and third-party suppliers. Measurements are conducted using water flowmeters. In 2024, total water withdrawal reached 393.23 megaliters, representing a 32% increase compared to the previous year. This increase was primarily driven by intensified drilling activities in the Kamojang Area. Meanwhile, routine water withdrawals for supporting operational and domestic activities remained relatively consistent with 2023 levels.

[Fixed row]

(5.3) Have environmental risks and opportunities affected your strategy and/or financial planning?

(5.3.1) Environmental risks and/or opportunities have affected your strategy and/or financial planning

Select from:

☒ Yes, both strategy and financial planning

(5.3.2) Business areas where environmental risks and/or opportunities have affected your strategy

Select all that apply

☒ Investment in R&D

☒ Operations

[Fixed row]

(5.3.1) Describe where and how environmental risks and opportunities have affected your strategy.

Investment in R&D

(5.3.1.1) Effect type

Select all that apply

☒ Opportunities

(5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

☒ Climate change

(5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

The expectations of stakeholders and Pertamina (PERSERO) align with global targets to achieve carbon neutrality by 2060. Based on PBE's initial and mid-term targets, a 29% reduction in emission intensity is aimed. To support the achievement of this target, PGE has prepared nine strategic measures to reduce emissions by 2030. These measures will be implemented gradually starting in 2024 and evaluated regularly. The initiatives include: (1) continuing the existing co-generation (brine to power) program, (2) implementing energy efficiency measures, (3) replacing operational vehicles with electric vehicles, (4) using geothermal electricity for internal needs, (5) replacing drilling fuel with more environmentally friendly or green energy, (6) implementing further co-generation plans such as methanol production, (7) applying nature-based solutions (NBS), (8) developing CO₂ liquefaction technologies, and (9) implementing carbon capture and storage (CCS) technologies.

Operations

(5.3.1.1) Effect type

Select all that apply

☒ Opportunities

(5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

☒ Climate change

(5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

Climate-related opportunities have been integrated into PGE's operational strategy through various programs. One key initiative is the implementation of a closed-loop geothermal system, where after steam is used to drive turbines and turns into condensate, PGE reinjects both condensate and brine back into the geothermal reservoir. This process maintains the sustainability of the resource by allowing the geothermal fluid to be naturally reheated before reuse. The operation is supported by proper reservoir management to ensure the continuity of geothermal reserves. PGE also assesses production facilities to ensure smooth geothermal power plant (PLTP) operations and conducts geohazard studies to identify landslide risks and mitigation strategies, as most geothermal areas in Indonesia—including PGE's—are located in mountainous regions with high rainfall. In terms of water conservation, PGE promotes the reuse of geothermal fluids for well-drilling activities as part of its water risk mitigation strategy. The company is also developing low-carbon energy programs, such as installing solar panels to power office buildings and improving energy efficiency through the Brines to Power project—constructing a 500 kW Binary Cycle Power Plant that utilizes brine enthalpy. The electricity generated is used

to operate injection pumps, replacing electricity from the national grid and reducing Scope 2 emissions. In 2024, PGE successfully produced 4,827 GWh of steam and electricity, an increase of 1.9% from 2023 (4,735 GWh), driven by plant optimization and more efficient maintenance scheduling. This achievement exceeded the 2024 Corporate Work Plan (RKAP) target of 4,611.82 GWh.

[Add row]

(5.3.2) Describe where and how environmental risks and opportunities have affected your financial planning.

Row 1

(5.3.2.1) Financial planning elements that have been affected

Select all that apply

- ☒ Revenues
- ☒ Capital expenditures

(5.3.2.2) Effect type

Select all that apply

- ☒ Opportunities

(5.3.2.3) Environmental issues relevant to the risks and/or opportunities that have affected these financial planning elements

Select all that apply

- ☒ Climate change

(5.3.2.4) Describe how environmental risks and/or opportunities have affected these financial planning elements

Capital Expenditure: By implementing nature-based solutions (NBS), PGE can process forest resources as carbon offsets to achieve Net Zero Emissions (NZE) by 2060. Implementing NBS for 20 years has the potential to reduce emissions by up to 2.82 gr CO2/kWh. Revenue: Brine to Power which produces electricity from geothermal hot steam can reduce electricity consumption from PLN. Implementing Brine to Power for 40 years has the potential to reduce emissions by up to 10.54 gr CO2/kWh.

[Add row]

(5.4) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's climate transition?

	Identification of spending/revenue that is aligned with your organization's climate transition	Methodology or framework used to assess alignment with your organization's climate transition
	Select from: ☒ Yes	Select all that apply ☒ Other methodology or framework

[Fixed row]

(5.4.1) Quantify the amount and percentage share of your spending/revenue that is aligned with your organization's climate transition.

Row 1

(5.4.1.1) Methodology or framework used to assess alignment

Select from:

☒ Other, please specify :Taksonomi Keuangan Berkelanjutan Indonesia (TKBI)

(5.4.1.5) Financial metric

Select from:

☒ CAPEX

(5.4.1.6) Amount of selected financial metric that is aligned in the reporting year (currency)

98798000

(5.4.1.7) Percentage share of selected financial metric aligned in the reporting year (%)

(5.4.1.8) Percentage share of selected financial metric planned to align in 2025 (%)

72

(5.4.1.9) Percentage share of selected financial metric planned to align in 2030 (%)

86

(5.4.1.12) Details of the methodology or framework used to assess alignment with your organization's climate transition

Methodology used by PGE to estimate CAPEX is by applying Indonesian Statement of Financial Accounting Standard (SFAS), which complies with IFRS. CAPEX should cover costs that are recognised according to: 1. SFAS 16 Property, Plant, and Equipment; 2. SFAS 73 Lease.

[Add row]

(5.5) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?**(5.5.1) Investment in low-carbon R&D**

Select from:

☒ Yes

(5.5.2) Comment

Transitioning to technology through the advancement of environmentally friendly geothermal business technologies. This includes the utilization of solar panel energy and the use of geothermal electricity (own use) to support production utility activities. Currently, PGE is also developing CO₂ liquefaction technology as well as carbon capture and storage (CCS) solutions.

[Fixed row]

(5.5.7) Provide details of your organization's investments in low-carbon R&D for your sector activities over the last three years.

Row 1

(5.5.7.1) Technology area

Select from:

☒ Carbon capture, utilization, and storage (CCUS)

(5.5.7.2) Stage of development in the reporting year

Select from:

☒ Applied research and development

(5.5.7.3) Average % of total R&D investment over the last 3 years

0

(5.5.7.4) R&D investment figure in the reporting year (unit currency as selected in 1.2) (optional)

0

(5.5.7.5) Average % of total R&D investment planned over the next 5 years

0

(5.5.7.6) Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

PGE is currently undergoing a debottlenecking process to address the increase in CO₂ emissions. As a response, the company is developing various initiatives such as Carbon Capture, Utilization, and Storage (CCUS) technology, CO₂ liquefaction, the utilization of solar energy, green methanol, CoGen and the expansion of installed geothermal capacity as a source of clean energy.

Row 2

(5.5.7.1) Technology area

Select from:

☒ Solar energy generation

(5.5.7.2) Stage of development in the reporting year

Select from:

☒ Full/commercial-scale demonstration

(5.5.7.3) Average % of total R&D investment over the last 3 years

0.01

(5.5.7.4) R&D investment figure in the reporting year (unit currency as selected in 1.2) (optional)

177540

(5.5.7.5) Average % of total R&D investment planned over the next 5 years

0.01

(5.5.7.6) Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

PGE is currently undergoing a debottlenecking process to address the increase in CO₂ emissions. As a response, the company is developing various initiatives such as Carbon Capture, Utilization, and Storage (CCUS) technology, CO₂ liquefaction, the utilization of solar energy, green methanol, CoGen and the expansion of installed geothermal capacity as a source of clean energy.

Row 3

(5.5.7.1) Technology area

Select from:

☒ Other, please specify :CO2 liquifaction

(5.5.7.2) Stage of development in the reporting year

Select from:

☒ Applied research and development

(5.5.7.3) Average % of total R&D investment over the last 3 years

0

(5.5.7.4) R&D investment figure in the reporting year (unit currency as selected in 1.2) (optional)

0

(5.5.7.5) Average % of total R&D investment planned over the next 5 years

0.86

(5.5.7.6) Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

PGE is currently undergoing a debottlenecking process to address the increase in CO₂ emissions. As a response, the company is developing various initiatives such as Carbon Capture, Utilization, and Storage (CCUS) technology, CO₂ liquefaction, the utilization of solar energy, green methanol, CoGen and the expansion of installed geothermal capacity as a source of clean energy.

Row 4

(5.5.7.1) Technology area

Select from:

☒ Other, please specify :Debottlenecking well

(5.5.7.2) Stage of development in the reporting year

Select from:

☒ Full/commercial-scale demonstration

(5.5.7.3) Average % of total R&D investment over the last 3 years

1.69

(5.5.7.4) R&D investment figure in the reporting year (unit currency as selected in 1.2) (optional)

9250472

(5.5.7.5) Average % of total R&D investment planned over the next 5 years

1.69

(5.5.7.6) Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

PGE is currently undergoing a debottlenecking process to address the increase in CO₂ emissions. As a response, the company is developing various initiatives such as Carbon Capture, Utilization, and Storage (CCUS) technology, CO₂ liquefaction, the utilization of solar energy, green methanol, CoGen and the expansion of installed geothermal capacity as a source of clean energy.

Row 5

(5.5.7.1) Technology area

Select from:

☒ Other, please specify :Install capacity geothermal

(5.5.7.2) Stage of development in the reporting year

Select from:

☒ Full/commercial-scale demonstration

(5.5.7.3) Average % of total R&D investment over the last 3 years

20.5

(5.5.7.4) R&D investment figure in the reporting year (unit currency as selected in 1.2) (optional)

72765528

(5.5.7.5) Average % of total R&D investment planned over the next 5 years

73.96

(5.5.7.6) Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

PGE is currently undergoing a debottlenecking process to address the increase in CO₂ emissions. As a response, the company is developing various initiatives such as Carbon Capture, Utilization, and Storage (CCUS) technology, CO₂ liquefaction, the utilization of solar energy, green methanol, CoGen and the expansion of installed geothermal capacity as a source of clean energy.

Row 6

(5.5.7.1) Technology area

Select from:

☒ Other, please specify :Green Methanol

(5.5.7.2) Stage of development in the reporting year

Select from:

☒ Applied research and development

(5.5.7.3) Average % of total R&D investment over the last 3 years

0

(5.5.7.4) R&D investment figure in the reporting year (unit currency as selected in 1.2) (optional)

0

(5.5.7.5) Average % of total R&D investment planned over the next 5 years

0.49

(5.5.7.6) Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

PGE is currently undergoing a debottlenecking process to address the increase in CO₂ emissions. As a response, the company is developing various initiatives such as Carbon Capture, Utilization, and Storage (CCUS) technology, CO₂ liquefaction, the utilization of solar energy, green methanol, CoGen and the expansion of installed geothermal capacity as a source of clean energy.

Row 7

(5.5.7.1) Technology area

Select from:

☒ Other, please specify :CoGen

(5.5.7.2) Stage of development in the reporting year

Select from:

☒ Applied research and development

(5.5.7.3) Average % of total R&D investment over the last 3 years

0

(5.5.7.4) R&D investment figure in the reporting year (unit currency as selected in 1.2) (optional)

0

(5.5.7.5) Average % of total R&D investment planned over the next 5 years

16.5

(5.5.7.6) Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

PGE is currently undergoing a debottlenecking process to address the increase in CO₂ emissions. As a response, the company is developing various initiatives such as Carbon Capture, Utilization, and Storage (CCUS) technology, CO₂ liquefaction, the utilization of solar energy, green methanol, CoGen and the expansion of installed geothermal capacity as a source of clean energy.

[Add row]

(5.7) Break down, by source, your organization's CAPEX in the reporting year and CAPEX planned over the next 5 years.

Coal – hard

(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

0

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

(5.7.5) Explain your CAPEX calculations, including any assumptions

PGE only calculates geothermal as a business unit. The solar calculation is a PGE initiative conducted for internal purposes (not for sale).

Lignite

(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

0

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

(5.7.5) Explain your CAPEX calculations, including any assumptions

PGE only calculates geothermal as a business unit. The solar calculation is a PGE initiative conducted for internal purposes (not for sale).

Oil

(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

0

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

(5.7.5) Explain your CAPEX calculations, including any assumptions

PGE only calculates geothermal as a business unit. The solar calculation is a PGE initiative conducted for internal purposes (not for sale).

Gas

(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

0

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

(5.7.5) Explain your CAPEX calculations, including any assumptions

PGE only calculates geothermal as a business unit. The solar calculation is a PGE initiative conducted for internal purposes (not for sale).

Sustainable biomass

(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

0

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

(5.7.5) Explain your CAPEX calculations, including any assumptions

PGE only calculates geothermal as a business unit. The solar calculation is a PGE initiative conducted for internal purposes (not for sale).

Other biomass

(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

0

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

(5.7.5) Explain your CAPEX calculations, including any assumptions

PGE only calculates geothermal as a business unit. The solar calculation is a PGE initiative conducted for internal purposes (not for sale).

Waste (non-biomass)

(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

0

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

(5.7.5) Explain your CAPEX calculations, including any assumptions

PGE only calculates geothermal as a business unit. The solar calculation is a PGE initiative conducted for internal purposes (not for sale).

Nuclear

(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

0

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

(5.7.5) Explain your CAPEX calculations, including any assumptions

PGE only calculates geothermal as a business unit. The solar calculation is a PGE initiative conducted for internal purposes (not for sale).

Geothermal

(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

13.28

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

73.96

(5.7.4) Most recent year in which a new power plant using this source was approved for development

2024

(5.7.5) Explain your CAPEX calculations, including any assumptions

Capital expenditure (CAPEX) or investment is focused on developing additional capacity in the Company's Working Areas, currently carried out through conventional development and the application of co-generation technology. CAPEX is also allocated to the development of digital capabilities, analytics, and reservoir management to support excellence in production, operations, and maintenance. CAPEX for solar energy is allocated for internal use (not for commercial purposes). The percentage of CAPEX allocated to solar energy in the reporting year is 0.032%.

Hydropower

(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

0

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

(5.7.5) Explain your CAPEX calculations, including any assumptions

PGE only calculates geothermal as a business unit. The solar calculation is a PGE initiative conducted for internal purposes (not for sale).

Wind

(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

0

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

(5.7.5) Explain your CAPEX calculations, including any assumptions

PGE only calculates geothermal as a business unit. The solar calculation is a PGE initiative conducted for internal purposes (not for sale).

Solar

(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

58050

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0.01

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0.01

(5.7.4) Most recent year in which a new power plant using this source was approved for development

2024

(5.7.5) Explain your CAPEX calculations, including any assumptions

Capital expenditure (CAPEX) or investment is focused on developing additional capacity in the Company's Working Areas, currently carried out through conventional development and the application of co-generation technology. CAPEX is also allocated to the development of digital capabilities, analytics, and reservoir management to support excellence in production, operations, and maintenance. CAPEX for solar energy is allocated for internal use (not for commercial purposes). The percentage of CAPEX allocated to solar energy in the reporting year is 0.032%.

Marine

(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

0

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

(5.7.5) Explain your CAPEX calculations, including any assumptions

PGE only calculates geothermal as a business unit. The solar calculation is a PGE initiative conducted for internal purposes (not for sale).

Fossil-fuel plants fitted with CCS

(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

0

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

(5.7.5) Explain your CAPEX calculations, including any assumptions

PGE only calculates geothermal as a business unit. The solar calculation is a PGE initiative conducted for internal purposes (not for sale).

Other renewable (e.g. renewable hydrogen)

(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

0

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

(5.7.5) Explain your CAPEX calculations, including any assumptions

PGE only calculates geothermal as a business unit. The solar calculation is a PGE initiative conducted for internal purposes (not for sale).

Other non-renewable (e.g. non-renewable hydrogen)

(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

0

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

(5.7.5) Explain your CAPEX calculations, including any assumptions

PGE only calculates geothermal as a business unit. The solar calculation is a PGE initiative conducted for internal purposes (not for sale).

[Fixed row]

(5.7.1) Break down your total planned CAPEX in your current CAPEX plan for products and services (e.g. smart grids, digitalization, etc.).

Row 1

(5.7.1.1) Products and services

Select from:

☒ Electric vehicles

(5.7.1.2) Description of product/service

Electric vehicles are provided through a three-year operational vehicle leasing scheme as part of the company's decarbonization efforts.

(5.7.1.3) CAPEX planned for product/service

177540

(5.7.1.4) Percentage of total CAPEX planned for products and services

0.03

(5.7.1.5) End year of CAPEX plan

2025

Row 2

(5.7.1.1) Products and services

Select from:

☒ Other, please specify :Energy Generation

(5.7.1.2) Description of product/service

Electricity generation is the core business of the Company, which includes providing energy sourced from geothermal power and the sale of steam to customers.

(5.7.1.3) CAPEX planned for product/service

(5.7.1.4) Percentage of total CAPEX planned for products and services

13.28

(5.7.1.5) End year of CAPEX plan

2025

[Add row]

(5.9) What is the trend in your organization's water-related capital expenditure (CAPEX) and operating expenditure (OPEX) for the reporting year, and the anticipated trend for the next reporting year?

(5.9.1) Water-related CAPEX (+/- % change)

-5.63

(5.9.2) Anticipated forward trend for CAPEX (+/- % change)

-5

(5.9.3) Water-related OPEX (+/- % change)

-5.63

(5.9.4) Anticipated forward trend for OPEX (+/- % change)

-5

(5.9.5) Please explain

Changes were influenced by inflation; however, there was no increase or decrease in investment costs for the Wastewater Treatment Plant (WWTP). Capital expenditure (CAPEX) and operating expenditure (OPEX) were allocated to finance maintenance activities, monitoring of domestic wastewater treatment facilities, and laboratory testing to ensure that wastewater quality complies with the established standards.
[Fixed row]

(5.10) Does your organization use an internal price on environmental externalities?

(5.10.1) Use of internal pricing of environmental externalities

Select from:

☒ No, and we do not plan to in the next two years

(5.10.3) Primary reason for not pricing environmental externalities

Select from:

☒ Judged to be unimportant or not relevant

(5.10.4) Explain why your organization does not price environmental externalities

In accordance with regulations in Indonesia, only water utilities are authorized to set water tariffs, while industrial and manufacturing companies are not permitted to determine their own water prices. Meanwhile, carbon pricing is not relevant at this stage as the company is not yet engaged in internal carbon credit trading activities.
[Fixed row]

(5.11) Do you engage with your value chain on environmental issues?

	Engaging with this stakeholder on environmental issues	Environmental issues covered
Suppliers	Select from: ☒ Yes	Select all that apply ☒ Climate change

	Engaging with this stakeholder on environmental issues	Environmental issues covered
		☒ Water
Customers	<i>Select from:</i> ☒ Yes	<i>Select all that apply</i> ☒ Climate change ☒ Water
Investors and shareholders	<i>Select from:</i> ☒ Yes	<i>Select all that apply</i> ☒ Climate change ☒ Water
Other value chain stakeholders	<i>Select from:</i> ☒ Yes	<i>Select all that apply</i> ☒ Climate change ☒ Water

[Fixed row]

(5.11.1) Does your organization assess and classify suppliers according to their dependencies and/or impacts on the environment?

Climate change

(5.11.1.1) Assessment of supplier dependencies and/or impacts on the environment

Select from:

☒ Yes, we assess the dependencies and/or impacts of our suppliers

(5.11.1.2) Criteria for assessing supplier dependencies and/or impacts on the environment

Select all that apply

- ☒ Contribution to supplier-related Scope 3 emissions
- ☒ Impact on pollution levels

(5.11.1.3) % Tier 1 suppliers assessed

Select from:

- ☒ 100%

(5.11.1.4) Define a threshold for classifying suppliers as having substantive dependencies and/or impacts on the environment

Suppliers performing work categorized as medium to high risk are required to undergo assessments due to their contributions to water use and emissions. The provisions regarding the assessment of environmental management implementation by suppliers are regulated by PGE through the Contractor Safety Management System (CSMS) guidelines.

(5.11.1.5) % Tier 1 suppliers meeting the threshold for substantive dependencies and/or impacts on the environment

Select from:

- ☒ 51-75%

(5.11.1.6) Number of Tier 1 suppliers meeting the thresholds for substantive dependencies and/or impacts on the environment

134

Water

(5.11.1.1) Assessment of supplier dependencies and/or impacts on the environment

Select from:

- ☒ Yes, we assess the dependencies and/or impacts of our suppliers

(5.11.1.2) Criteria for assessing supplier dependencies and/or impacts on the environment

Select all that apply

- ☒ Contribution to supplier-related Scope 3 emissions
- ☒ Impact on pollution levels

(5.11.1.3) % Tier 1 suppliers assessed

Select from:

- ☒ 100%

(5.11.1.4) Define a threshold for classifying suppliers as having substantive dependencies and/or impacts on the environment

Suppliers performing work categorized as medium to high risk are required to undergo assessments due to their contributions to water use and emissions. The provisions regarding the assessment of environmental management implementation by suppliers are regulated by PGE through the Contractor Safety Management System (CSMS) guidelines.

(5.11.1.5) % Tier 1 suppliers meeting the threshold for substantive dependencies and/or impacts on the environment

Select from:

- ☒ 51-75%

(5.11.1.6) Number of Tier 1 suppliers meeting the thresholds for substantive dependencies and/or impacts on the environment

134

[Fixed row]

(5.11.2) Does your organization prioritize which suppliers to engage with on environmental issues?

Climate change

(5.11.2.1) Supplier engagement prioritization on this environmental issue

Select from:

- ☒ Yes, we prioritize which suppliers to engage with on this environmental issue

(5.11.2.2) Criteria informing which suppliers are prioritized for engagement on this environmental issue

Select all that apply

- ☒ Procurement spend
☒ Product lifecycle
☒ Product safety and compliance
☒ Supplier performance improvement

(5.11.2.4) Please explain

Suppliers performing work categorized as medium- and high-risk are required to undergo assessments, as their activities contribute to water use and emissions aspects. Provisions regarding the assessment of suppliers' environmental management implementation have been regulated by PGE through the Contractor Safety Management System (CSMS) guidelines.

Water

(5.11.2.1) Supplier engagement prioritization on this environmental issue

Select from:

- ☒ Yes, we prioritize which suppliers to engage with on this environmental issue

(5.11.2.2) Criteria informing which suppliers are prioritized for engagement on this environmental issue

Select all that apply

- ☒ Procurement spend
☒ Product lifecycle
☒ Product safety and compliance
☒ Supplier performance improvement

(5.11.2.4) Please explain

Suppliers performing work categorized as medium- and high-risk are required to undergo assessments, as their activities contribute to water use and emissions aspects. Provisions regarding the assessment of suppliers' environmental management implementation have been regulated by PGE through the Contractor Safety Management System (CSMS) guidelines.

[Fixed row]

(5.11.5) Do your suppliers have to meet environmental requirements as part of your organization's purchasing process?

Climate change

(5.11.5.1) Suppliers have to meet specific environmental requirements related to this environmental issue as part of the purchasing process

Select from:

☒ Yes, environmental requirements related to this environmental issue are included in our supplier contracts

(5.11.5.2) Policy in place for addressing supplier non-compliance

Select from:

☒ Yes, we have a policy in place for addressing non-compliance

(5.11.5.3) Comment

Sanctions are imposed on suppliers who do not comply with the provisions in the contract. PGE implements the Contractor Safety Management System (CSMS) contract to ensure that contractors adhere to regulations related to Occupational Health and Safety (OHS) and environmental aspects, including emissions and water. The progress of the work is thoroughly monitored from start to completion. If any violations or non-conformities are found during the process, sanctions will be applied. Conversely, if the contract is carried out in accordance with the provisions, suppliers will be rewarded with increased scores or rankings, which can give them priority in future projects. Every year, PGE also holds a vendor award for suppliers with the highest scores in OHS and environmental management.

Water

(5.11.5.1) Suppliers have to meet specific environmental requirements related to this environmental issue as part of the purchasing process

Select from:

☒ Yes, environmental requirements related to this environmental issue are included in our supplier contracts

(5.11.5.2) Policy in place for addressing supplier non-compliance

Select from:

☒ Yes, we have a policy in place for addressing non-compliance

(5.11.5.3) Comment

Sanctions are imposed on suppliers who do not comply with the provisions in the contract. PGE implements the Contractor Safety Management System (CSMS) contract to ensure that contractors adhere to regulations related to Occupational Health and Safety (OHS) and environmental aspects, including emissions and water. The progress of the work is thoroughly monitored from start to completion. If any violations or non-conformities are found during the process, sanctions will be applied. Conversely, if the contract is carried out in accordance with the provisions, suppliers will be rewarded with increased scores or rankings, which can give them priority in future projects. Every year, PGE also holds a vendor award for suppliers with the highest scores in OHS and environmental management.

[Fixed row]

(5.11.6) Provide details of the environmental requirements that suppliers have to meet as part of your organization's purchasing process, and the compliance measures in place.

Climate change

(5.11.6.1) Environmental requirement

Select from:

☒ Disclosure of GHG emissions to your organization (Scope 1 and 2)

(5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply

☒ Fines and penalties

☒ Other, please specify :Audit Work in Progress

(5.11.6.3) % tier 1 suppliers by procurement spend required to comply with this environmental requirement

Select from:

☒ 100%

(5.11.6.4) % tier 1 suppliers by procurement spend in compliance with this environmental requirement

Select from:

☒ 51-75%

(5.11.6.7) % tier 1 supplier-related scope 3 emissions attributable to the suppliers required to comply with this environmental requirement

Select from:

☒ 26-50%

(5.11.6.8) % tier 1 supplier-related scope 3 emissions attributable to the suppliers in compliance with this environmental requirement

Select from:

☒ 26-50%

(5.11.6.9) Response to supplier non-compliance with this environmental requirement

Select from:

☒ Exclude

(5.11.6.12) Comment

Tier 1 suppliers required to comply with PGE's environmental management policies are those classified as medium- to high-risk, particularly those conducting physical work within PGE's operational areas. These suppliers must adhere to all applicable environmental protection regulations, including but not limited to carbon emission reductions, water withdrawal limits, air pollution thresholds, and biodiversity preservation efforts. In addition, they are expected to implement best industry practices in line with the principles outlined in PGE's Health, Safety, and Environment (HSE) Policy and Sustainability Policy, which cover areas such as renewable energy promotion, energy efficiency, waste management, and emissions reduction. Each supplier is obligated to prepare an HSE Plan covering water and wastewater management, occupational safety, and the handling of both hazardous and non-hazardous waste. Supplier performance in fulfilling these obligations is monitored and evaluated through a system of sanctions and incentives, where well-performing suppliers may be prioritized for future projects.

Water

(5.11.6.1) Environmental requirement

Select from:

- ☒ Provision of fully-functioning, safely managed WASH services to all employees

(5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply

- ☒ Fines and penalties
- ☒ Other, please specify :Audit Work in Progress

(5.11.6.3) % tier 1 suppliers by procurement spend required to comply with this environmental requirement

Select from:

- ☒ 100%

(5.11.6.4) % tier 1 suppliers by procurement spend in compliance with this environmental requirement

Select from:

- ☒ 51-75%

(5.11.6.5) % tier 1 suppliers with substantive environmental dependencies and/or impacts related to this environmental issue required to comply with this environmental requirement

Select from:

- ☒ 51-75%

(5.11.6.6) % tier 1 suppliers with substantive environmental dependencies and/or impacts related to this environmental issue that are in compliance with this environmental requirement

Select from:

- ☒ 51-75%

(5.11.6.9) Response to supplier non-compliance with this environmental requirement

Select from:

☒ Exclude

(5.11.6.12) Comment

Tier 1 suppliers required to comply with PGE's environmental management policies are those categorized as medium to high risk, particularly for physical work conducted within PGE's operational areas. Meanwhile, low-risk work refers to document-based activities such as consultancy services and goods procurement. Suppliers are obliged to adhere to all applicable environmental protection regulations, including but not limited to carbon emission reductions, water withdrawal limitations, air pollution thresholds, and biodiversity protection efforts. Furthermore, suppliers must uphold good industry practices by implementing the principles outlined in PGE's Health, Safety, and Environment (HSE) Policy and Sustainability Policy, which address climate-related issues such as promotion of renewable energy, energy efficiency, waste management, and emission reduction. Suppliers are required to prepare an HSE Plan in accordance with the contract documents, covering occupational safety, water and wastewater management, emission reduction, and both hazardous and non-hazardous waste management. A system of incentives and penalties is applied based on each contractor's performance in fulfilling these requirements.

Water

(5.11.6.1) Environmental requirement

Select from:

☒ Setting and monitoring water pollution-related targets

(5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply

☒ Fines and penalties

☒ Other, please specify :Audit Work in Progress

(5.11.6.3) % tier 1 suppliers by procurement spend required to comply with this environmental requirement

Select from:

☒ 100%

(5.11.6.4) % tier 1 suppliers by procurement spend in compliance with this environmental requirement

Select from:

☒ 51-75%

(5.11.6.5) % tier 1 suppliers with substantive environmental dependencies and/or impacts related to this environmental issue required to comply with this environmental requirement

Select from:

☒ 51-75%

(5.11.6.6) % tier 1 suppliers with substantive environmental dependencies and/or impacts related to this environmental issue that are in compliance with this environmental requirement

Select from:

☒ 51-75%

(5.11.6.9) Response to supplier non-compliance with this environmental requirement

Select from:

☒ Exclude

(5.11.6.12) Comment

Tier 1 suppliers required to comply with PGE's environmental management policies are those categorized as medium to high risk, particularly for physical work conducted within PGE's operational areas. Meanwhile, low-risk work refers to document-based activities such as consultancy services and goods procurement. Suppliers are obliged to adhere to all applicable environmental protection regulations, including but not limited to carbon emission reductions, water withdrawal limitations, air pollution thresholds, and biodiversity protection efforts. Furthermore, suppliers must uphold good industry practices by implementing the principles outlined in PGE's Health, Safety, and Environment (HSE) Policy and Sustainability Policy, which address climate-related issues such as promotion of renewable energy, energy efficiency, waste management, and emission reduction. Suppliers are required to prepare an HSE Plan in accordance with the contract documents, covering occupational safety, water and wastewater management, emission reduction, and both hazardous and non-hazardous waste management. A system of incentives and penalties is applied based on each contractor's performance in fulfilling these requirements.

Climate change

(5.11.6.1) Environmental requirement

Select from:

- ☒ Substitution of hazardous substances with less harmful substances

(5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply

- ☒ Fines and penalties
- ☒ Other, please specify :Audit Work in Progress

(5.11.6.3) % tier 1 suppliers by procurement spend required to comply with this environmental requirement

Select from:

- ☒ 100%

(5.11.6.4) % tier 1 suppliers by procurement spend in compliance with this environmental requirement

Select from:

- ☒ 51-75%

(5.11.6.7) % tier 1 supplier-related scope 3 emissions attributable to the suppliers required to comply with this environmental requirement

Select from:

- ☒ 26-50%

(5.11.6.8) % tier 1 supplier-related scope 3 emissions attributable to the suppliers in compliance with this environmental requirement

Select from:

- ☒ 26-50%

(5.11.6.9) Response to supplier non-compliance with this environmental requirement

Select from:

☒ Exclude

(5.11.6.12) Comment

Tier 1 suppliers required to comply with PGE's environmental management policies are those categorized as medium to high risk, particularly for physical work conducted within PGE's operational areas. Meanwhile, low-risk work refers to document-based activities such as consultancy services and goods procurement. Suppliers are obliged to adhere to all applicable environmental protection regulations, including but not limited to carbon emission reductions, water withdrawal limitations, air pollution thresholds, and biodiversity protection efforts. Furthermore, suppliers must uphold good industry practices by implementing the principles outlined in PGE's Health, Safety, and Environment (HSE) Policy and Sustainability Policy, which address climate-related issues such as promotion of renewable energy, energy efficiency, waste management, and emission reduction. Suppliers are required to prepare an HSE Plan in accordance with the contract documents, covering occupational safety, water and wastewater management, emission reduction, and both hazardous and non-hazardous waste management. A system of incentives and penalties is applied based on each contractor's performance in fulfilling these requirements.

[Add row]

(5.11.7) Provide further details of your organization's supplier engagement on environmental issues.

Climate change

(5.11.7.2) Action driven by supplier engagement

Select from:

☒ Emissions reduction

(5.11.7.3) Type and details of engagement

Capacity building

☒ Provide training, support and best practices on how to measure GHG emissions

☒ Provide training, support and best practices on how to mitigate environmental impact

Information collection

☒ Collect GHG emissions data at least annually from suppliers

(5.11.7.4) Upstream value chain coverage

Select all that apply

☒ Tier 1 suppliers

(5.11.7.5) % of tier 1 suppliers by procurement spend covered by engagement

Select from:

☒ 51-75%

(5.11.7.6) % of tier 1 supplier-related scope 3 emissions covered by engagement

Select from:

☒ 26-50%

(5.11.7.9) Describe the engagement and explain the effect of your engagement on the selected environmental action

As a geothermal energy company, PGE extracts heat from geothermal fluids to generate green electricity and reinjects the fluids back into the reservoir to ensure sustainability, enabling their reuse after being naturally reheated. With minimal routine material consumption, PGE primarily engages with contractors such as drilling, EPCC, and turbine overhaul services, all of whom are subject to the Contractor Safety Management System (CSMS) that regulates safety, environmental obligations, and emission reporting. PGE also enforces a Green Procurement Policy requiring suppliers to comply with environmental regulations, including carbon reduction, water management, renewable energy use, and limits on emissions, noise, and waste. These provisions apply to around 134 out of 228 high- and medium-risk suppliers, who are scored 10%–30% based on environmental management quality to ensure only the best are selected. During service execution, contractors must implement measures on waste, emissions, air, and water management as outlined in contracts, with performance evaluated through a reward-and-sanction system.

(5.11.7.10) Engagement is helping your tier 1 suppliers meet an environmental requirement related to this environmental issue

Select from:

☒ Yes, please specify the environmental requirement :Audit Work in Progress as a process to verified Contractor Safety Management System has been conducted

(5.11.7.11) Engagement is helping your tier 1 suppliers engage with their own suppliers on the selected action

Select from:

☒ Unknown

Water

(5.11.7.2) Action driven by supplier engagement

Select from:

- ☒ Other, please specify :Fulfillment of Wastewater Quality Standards

(5.11.7.3) Type and details of engagement

Information collection

- ☒ Collect water quality information at least annually from suppliers (e.g., discharge quality, pollution incidents, hazardous substances)
- ☒ Collect water quantity information at least annually from suppliers (e.g., withdrawal and discharge volumes)

(5.11.7.4) Upstream value chain coverage

Select all that apply

- ☒ Tier 1 suppliers

(5.11.7.5) % of tier 1 suppliers by procurement spend covered by engagement

Select from:

- ☒ 51-75%

(5.11.7.7) % tier 1 suppliers with substantive impacts and/or dependencies related to this environmental issue covered by engagement

Select from:

- ☒ 51-75%

(5.11.7.9) Describe the engagement and explain the effect of your engagement on the selected environmental action

Information is collected from medium- and high-risk suppliers operating at PGE's sites who may potentially cause water-related issues. They are required to report to PGE on the volume of water withdrawal and discharge at least once a year, while suppliers that use or discharge water from PGE's sites are monitored on a daily, weekly, or monthly basis. PGE collaborates with suppliers to support water management at its operational sites. Based on regular monitoring and assessments, no

suppliers were found to have a substantive impact on water resources. PGE's contractors routinely report their water use, including withdrawals and discharges, and PGE conducts verification to ensure compliance with requirements. This engagement helps PGE develop water efficiency strategies and evaluate the effectiveness of water reduction programs in achieving the established efficiency targets.

(5.11.7.10) Engagement is helping your tier 1 suppliers meet an environmental requirement related to this environmental issue

Select from:

☒ Yes, please specify the environmental requirement :Audit Work in Process as a process to verified Contractor Safety Management System has been conducted

(5.11.7.11) Engagement is helping your tier 1 suppliers engage with their own suppliers on the selected action

Select from:

☒ Unknown

Climate change

(5.11.7.2) Action driven by supplier engagement

Select from:

☒ Substitution of hazardous substances with less harmful substances

(5.11.7.3) Type and details of engagement

Capacity building

- ☒ Provide training, support and best practices on how to measure GHG emissions
- ☒ Provide training, support and best practices on how to mitigate environmental impact

Information collection

- ☒ Collect GHG emissions data at least annually from suppliers

(5.11.7.4) Upstream value chain coverage

Select all that apply

☒ Tier 1 suppliers

(5.11.7.5) % of tier 1 suppliers by procurement spend covered by engagement

Select from:

☒ 51-75%

(5.11.7.6) % of tier 1 supplier-related scope 3 emissions covered by engagement

Select from:

☒ 26-50%

(5.11.7.9) Describe the engagement and explain the effect of your engagement on the selected environmental action

As a geothermal energy company, PGE extracts heat from geothermal fluids to generate green electricity and reinjects the fluids back into the reservoir to ensure sustainability, enabling their reuse after being naturally reheated. With minimal routine material consumption, PGE primarily engages with contractors such as drilling, EPCC, and turbine overhaul services, all of whom are subject to the Contractor Safety Management System (CSMS) that regulates safety, environmental obligations, and emission reporting. PGE also enforces a Green Procurement Policy requiring suppliers to comply with environmental regulations, including carbon reduction, water management, renewable energy use, and limits on emissions, noise, and waste. These provisions apply to around 134 out of 228 high- and medium-risk suppliers, who are scored 10%–30% based on environmental management quality to ensure only the best are selected. During service execution, contractors must implement measures on waste, emissions, air, and water management as outlined in contracts, with performance evaluated through a reward-and-sanction system.

(5.11.7.10) Engagement is helping your tier 1 suppliers meet an environmental requirement related to this environmental issue

Select from:

☒ Yes, please specify the environmental requirement :Audit Work in Process as a process to verified Contractor Safety Management System has been conducted

(5.11.7.11) Engagement is helping your tier 1 suppliers engage with their own suppliers on the selected action

Select from:

☒ Unknown

[Add row]

(5.11.9) Provide details of any environmental engagement activity with other stakeholders in the value chain.

Climate change

(5.11.9.1) Type of stakeholder

Select from:

☒ Customers

(5.11.9.2) Type and details of engagement

Other

☒ Other, please specify :Invite the PLN as the sole state-owned utility company, to develop renewable plant

(5.11.9.3) % of stakeholder type engaged

Select from:

☒ 100%

(5.11.9.4) % stakeholder-associated scope 3 emissions

Select from:

☒ None

(5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

In accordance with the company's target, hope for medium and long-term target of net zero emission

(5.11.9.6) Effect of engagement and measures of success

Increase power capacity, increase electricity absorption, better electricity wattage, increase electricity tariffs

Water

(5.11.9.1) Type of stakeholder

Select from:

☒ Other value chain stakeholder, please specify :The Ministry of Environment, The Ministry of Forestry, Directorate General of New, Renewable Energy, and Energy Conservation

(5.11.9.2) Type and details of engagement

Innovation and collaboration

☒ Engage with stakeholders to advocate for policy or regulatory change

(5.11.9.3) % of stakeholder type engaged

Select from:

☒ 100%

(5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

Make innovations for environmental conservation program, water use efficiency in operational activities, reinjection of brand and condensate back into geothermal wells to maintain reservoir pressure.

(5.11.9.6) Effect of engagement and measures of success

Increase energy generation developed by PGE, in order to reduce surface water consumption with the 4R program and reinjection.

Climate change

(5.11.9.1) Type of stakeholder

Select from:

☒ Investors and shareholders

(5.11.9.2) Type and details of engagement

Education/Information sharing

- ☒ Share information on environmental initiatives, progress and achievements
- ☒ Other education/information sharing, please specify :AGM discussion related to the environment

(5.11.9.3) % of stakeholder type engaged

Select from:

- ☒ 100%

(5.11.9.4) % stakeholder-associated scope 3 emissions

Select from:

- ☒ None

(5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

Encouraging PGE to become an environmentally friendly generation company that can realize the target, to become NZE 2060

(5.11.9.6) Effect of engagement and measures of success

Attracting a wider range of investors both in terms of number of investors and capital.

Climate change

(5.11.9.1) Type of stakeholder

Select from:

- ☒ Other value chain stakeholder, please specify :The Ministry of Environment, The Ministry of Forestry, Directorate General of New, Renewable Energy, and Energy Conservation

(5.11.9.2) Type and details of engagement

Innovation and collaboration

- ☒ Engage with stakeholders to advocate for policy or regulatory change

(5.11.9.3) % of stakeholder type engaged

Select from:

☒ 100%

(5.11.9.4) % stakeholder-associated scope 3 emissions

Select from:

☒ None

(5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

Make innovations for environmental conservation programs, especially for climate change (e.g. CO2 liquifaction, debottlenecking).

(5.11.9.6) Effect of engagement and measures of success

Increase energy generation developed by PGE.

[Add row]

C6. Environmental Performance - Consolidation Approach

(6.1) Provide details on your chosen consolidation approach for the calculation of environmental performance data.

Climate change

(6.1.1) Consolidation approach used

Select from:

☒ Operational control

(6.1.2) Provide the rationale for the choice of consolidation approach

Based on the operational approach, the management of environmental issues and the reporting of environmental data covering climate, water, and biodiversity are derived from operational activities directly controlled by the Company. The reported data include 15 Geothermal Working Areas (WKP), consisting of 12 Working Areas under Business License status and 3 Working Areas under Geothermal Permit status, located across Sumatra, Java, Bali, and Sulawesi.

Water

(6.1.1) Consolidation approach used

Select from:

☒ Operational control

(6.1.2) Provide the rationale for the choice of consolidation approach

Based on the operational approach, the management of environmental issues and the reporting of environmental data covering climate, water, and biodiversity are derived from operational activities directly controlled by the Company. The reported data include 15 Geothermal Working Areas (WKP), consisting of 12 Working Areas under Business License status and 3 Working Areas under Geothermal Permit status, located across Sumatra, Java, Bali, and Sulawesi.

Plastics

(6.1.1) Consolidation approach used

Select from:

☒ Other, please specify :Not Collected

(6.1.2) Provide the rationale for the choice of consolidation approach

Plastic waste is not specifically collected as it is considered not relevant to PGE's business operations. PGE's geothermal power plants use chemicals such as caustic soda and biocide in steam condensate treatment to adjust pH levels and prevent fouling in the closed cooling system. These chemicals are packaged in large bulk containers that are classified as hazardous waste (B3). PGE has implemented supplier responsibility clauses in chemical procurement contracts, whereby used containers must be returned to suppliers for reuse. In 2024, this supplier responsibility mechanism enabled PGE to avoid the generation of up to 15.3 tons of hazardous waste, equivalent to 54.05% of the company's total annual hazardous waste. In addition, PGE also generates domestic waste such as paper and plastic. To manage domestic waste and promote the circular economy, PGE collaborates with local Waste Banks. Through this recycling program, PGE successfully reduced domestic waste by 13.66 tons, equivalent to 61.08% of total domestic waste generated.

Biodiversity

(6.1.1) Consolidation approach used

Select from:

☒ Operational control

(6.1.2) Provide the rationale for the choice of consolidation approach

Based on the operational approach, the management of environmental issues and the reporting of environmental data covering climate, water, and biodiversity are derived from operational activities directly controlled by the Company. The reported data include 15 Geothermal Working Areas (WKP), consisting of 12 Working Areas under Business License status and 3 Working Areas under Geothermal Permit status, located across Sumatra, Java, Bali, and Sulawesi."
[Fixed row]

C7. Environmental performance - Climate Change

(7.1) Is this your first year of reporting emissions data to CDP?

Select from:

☒ No

(7.1.1) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

	Has there been a structural change?
	Select all that apply ☒ No

[Fixed row]

(7.1.2) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

(7.1.2.1) Change(s) in methodology, boundary, and/or reporting year definition?

Select all that apply

☒ Yes, a change in boundary

☒ No, but we have discovered significant errors in our previous response(s)

(7.1.2.2) Details of methodology, boundary, and/or reporting year definition change(s)

In 2023, emissions from drilling activities were accounted for under Category 1: Purchased Goods and Services. In 2024, following an internal evaluation, the Company reclassified these emissions into Category 2: Capital Goods. In addition, PGE also reclassified Scope 3 Category 15 (Investments from development projects) into Scope 1 emissions. Furthermore, a correction was made to last year's disclosure, particularly regarding the Scope 3 emissions baseline. The Company has only established a baseline for Scope 3 under Category 11: Use of Sold Products.
[Fixed row]

(7.1.3) Have your organization's base year emissions and past years' emissions been recalculated as a result of any changes or errors reported in 7.1.1 and/or 7.1.2?

(7.1.3.1) Base year recalculation

Select from:

☒ No, because the impact does not meet our significance threshold

(7.1.3.3) Base year emissions recalculation policy, including significance threshold

There was an error in our previous year's disclosure, particularly regarding the Scope 3 baseline. The newly established Scope 3 baseline applies to the Use of Sold Products category. This baseline was determined based on a comprehensive calculation of emission loads that has been conducted since 2020.

(7.1.3.4) Past years' recalculation

Select from:

☒ Yes

[Fixed row]

(7.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

Select all that apply

☒ American Petroleum Institute Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Natural Gas Industry, 2009

☒ Other, please specify :US EPA 2022, ACM 0002, & Decree of Director General of Climate Change Control No. SK.38/PPI/IGAS/PPI.2/11/2020 for scope 1 emissions. The scope 2 based on the emission factors published by Ministry of Energy and Mineral Resources of Indonesia

(7.3) Describe your organization's approach to reporting Scope 2 emissions.

(7.3.1) Scope 2, location-based

Select from:

☒ We are reporting a Scope 2, location-based figure

(7.3.2) Scope 2, market-based

Select from:

☒ We have no operations where we are able to access electricity supplier emission factors or residual emissions factors and are unable to report a Scope 2, market-based figure

(7.3.3) Comment

PGE's Scope 2 emissions are derived from electricity consumption supplied by PT Perusahaan Listrik Negara (PLN) as a third party, for supporting activities such as street lighting and office buildings in several areas. Meanwhile, in the Kamojang and Lahendong areas, this electricity source has been replaced with solar cells (PLTS).

[Fixed row]

(7.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure?

Select from:

☒ No

(7.5) Provide your base year and base year emissions.

Scope 1

(7.5.1) Base year end

12/30/2020

(7.5.2) Base year emissions (metric tons CO2e)

109701.16

(7.5.3) Methodological details

• *Scope 1 emissions, derived from: - Operational emissions of electricity generation due to venting of Non-Condensable Gases (NCGs) naturally contained in geothermal fluids from all operation areas. Calculations using primary data from NCG tests and steam production. The calculation methodology refers to ACM 0002 and Decree of Director General of Climate Change Control No. SK.38/PPI/IGAS/PPI.2/11/2020 - Use of fuel for operational vehicles and Emergency Diesel Generators (EDG) from all activities of the operational area, projects and head office. The fuel specifications used refer to the local emission factors of fuel products sold in Indonesia. CO2 emission factors refer to Table 4-4 (API Compendium), and CH4, N2O refer to Table 4-6 (API Compendium).*

Scope 2 (location-based)

(7.5.1) Base year end

12/30/2020

(7.5.2) Base year emissions (metric tons CO2e)

3266.67

(7.5.3) Methodological details

Scope 2 emissions: Derived from electricity consumption supplied by PLN as a third-party. From PLN's electricity usage records, the GHG emissions factor refers to the 2019 DJK Grid Emission Factor

Scope 3 category 11: Use of sold products

(7.5.1) Base year end

12/30/2020

(7.5.2) Base year emissions (metric tons CO2e)

(7.5.3) Methodological details

There was an error in our previous year's disclosure, particularly regarding the Scope 3 baseline. The newly established Scope 3 baseline applies to the Use of Sold Products category. This baseline was determined based on a comprehensive calculation of emission loads conducted since 2020. The calculation for Category 11 is derived from emissions related to the sales of geothermal steam to PLN. The calculation used primary data from NCG test results and steam production, with the methodology referring to ACM 0002 and the Decree of the Director General of Climate Change Control No. SK.38/PPI/IGAS/PPI.2/11/2020.
[Fixed row]

(7.6) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Reporting year

(7.6.1) Gross global Scope 1 emissions (metric tons CO2e)

92222.91

(7.6.3) Methodological details

Scope 1 emissions, derived from: - Operational emissions of electricity generation due to venting of Non-Condensable Gases (NCGs) naturally contained in geothermal fluids from all operation areas. Calculations using primary data from NCG tests and steam production. The calculation methodology refers to ACM 0002 and Decree of Director General of Climate Change Control No. SK.38/PPI/IGAS/PPI.2/11/2020 - Use of fuel for operational vehicles and Emergency Diesel Generators (EDG) from all activities of the operational area, projects and head office. The fuel specifications used refer to the local emission factors of fuel products sold in Indonesia. CO2 emission factors refer to Table 4-4 (API Compendium), and CH4, N2O refer to Table 4-6 (API Compendium).

Past year 1

(7.6.1) Gross global Scope 1 emissions (metric tons CO2e)

89567.05

(7.6.2) End date

12/30/2023

(7.6.3) Methodological details

Scope 1 emissions, derived from: - Operational emissions of electricity generation due to venting of Non-Condensable Gases (NCGs) naturally contained in geothermal fluids from all operation areas. Calculations using primary data from NCG tests and steam production. The calculation methodology refers to ACM 0002 and Decree of Director General of Climate Change Control No. SK.38/PPI/IGAS/PPI.2/11/2020 - Use of fuel for operational vehicles and Emergency Diesel Generators (EDG) from all activities of the operational area, projects and head office. The fuel specifications used refer to the local emission factors of fuel products sold in Indonesia. CO2 emission factors refer to Table 4-4 (API Compendium), and CH4, N2O refer to Table 4-6 (API Compendium).

Past year 2

(7.6.1) Gross global Scope 1 emissions (metric tons CO2e)

119143.41

(7.6.2) End date

12/30/2022

(7.6.3) Methodological details

Scope 1 emissions, derived from: - Operational emissions of electricity generation due to venting of Non-Condensable Gases (NCGs) naturally contained in geothermal fluids from all operation areas. Calculations using primary data from NCG tests and steam production. The calculation methodology refers to ACM 0002 and Decree of Director General of Climate Change Control No. SK.38/PPI/IGAS/PPI.2/11/2020 - Use of fuel for operational vehicles and Emergency Diesel Generators (EDG) from all activities of the operational area, projects and head office. The fuel specifications used refer to the local emission factors of fuel products sold in Indonesia. CO2 emission factors refer to Table 4-4 (API Compendium), and CH4, N2O refer to Table 4-6 (API Compendium).
[Fixed row]

(7.7) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

(7.7.1) Gross global Scope 2, location-based emissions (metric tons CO2e)

2294.86

(7.7.4) Methodological details

Scope 2 emissions: Derived from electricity consumption supplied by PLN as a third-party. From PLN's electricity usage records, the GHG emissions factor refers to the 2019 DJK Grid Emission Factor.

Past year 1

(7.7.1) Gross global Scope 2, location-based emissions (metric tons CO2e)

1854.82

(7.7.3) End date

12/30/2023

(7.7.4) Methodological details

Scope 2 emissions: Derived from electricity consumption supplied by PLN as a third-party. From PLN's electricity usage records, the GHG emissions factor refers to the 2019 DJK Grid Emission Factor.

Past year 2

(7.7.1) Gross global Scope 2, location-based emissions (metric tons CO2e)

2752.19

(7.7.3) End date

12/30/2022

(7.7.4) Methodological details

Scope 2 emissions: Derived from electricity consumption supplied by PLN as a third-party. From PLN's electricity usage records, the GHG emissions factor refers to the 2019 DJK Grid Emission Factor.

[Fixed row]

(7.8) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

(7.8.1) Evaluation status

Select from:

☒ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO₂e)

180.33

(7.8.3) Emissions calculation methodology

Select all that apply

☒ Fuel-based method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

Category 1: Emissions from the procurement of goods and services for operational activities exceeding USD10,000. The emission factors used refer to the US EPA 2022 GHG Emission Factors for Purchase of Goods & Services, with the type of goods and services purchased being close. Calculation for this category started in 2024. The data used does not originate from third-party sources. For Category 1, the data is derived from contract agreements.

Capital goods

(7.8.1) Evaluation status

Select from:

☒ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

14977.72

(7.8.3) Emissions calculation methodology

Select all that apply

- ☒ Fuel-based method
- ☒ Distance-based method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

Category 2: Emissions from purchasing services and goods above USD10 thousand such as purchasing activities for drilling/well workover services, EPCC activities, and capital materials. The emission factors used refer to the GHG Emission Factors for purchasing goods & services of the US EPA 2022, with the types of purchases of goods and services that are close. The data used does not originate from third-party sources. For Category 2 (Capital Goods) the data is based on flow meter measurements

Fuel-and-energy-related activities (not included in Scope 1 or 2)

(7.8.1) Evaluation status

Select from:

- ☒ Not relevant, explanation provided

(7.8.5) Please explain

Based on PGE's estimated calculations, scope 3 emissions from Fuel-and-energy-related activities (not included in Scope 1 or 2) are not significant.

Upstream transportation and distribution

(7.8.1) Evaluation status

Select from:

☒ Not relevant, explanation provided

(7.8.5) Please explain

Based on PGE's estimated calculations, scope 3 emissions from upstream transportation and distribution are not significant. This is because PGE has not conducted activities that require transportation costs in operational activities.

Waste generated in operations

(7.8.1) Evaluation status

Select from:

☒ Not relevant, explanation provided

(7.8.5) Please explain

PGE has not calculated Waste generated in operations as scope 3 emissions to date because it is not significant.

Business travel

(7.8.1) Evaluation status

Select from:

☒ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

1131.07

(7.8.3) Emissions calculation methodology

Select all that apply

☒ Distance-based method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

Category 6: Emissions from employee business travel. Items calculated are GHG emissions from aircraft and hotel use. Aircraft Emissions Calculation: distance based, flight emission factor based on US EPA 2022 GHG Factor hub, flight distance refers to ICAO. For hotel emissions: Data on days of stay from the Company's official travel records, and hotel electricity consumption according to stars based on a survey of specific energy consumption in Office Buildings, Ministry of Energy and Mineral Resources - United Nation Development Program (KESDM-UNDP) 2019, and multiplied by the GHG Emission Factor of the Electricity System according to the grid by Directorate General of Electricity-Ministry of Energy and Mineral Resources. The data used does not originate from third-party sources. For Category 6 (Business Travel), the data is collected from PGE's internal system.

Employee commuting

(7.8.1) Evaluation status

Select from:

☒ Not relevant, explanation provided

(7.8.5) Please explain

PGE has not calculated up to employee commuting for scope 3 emissions.

Upstream leased assets

(7.8.1) Evaluation status

Select from:

☒ Not relevant, explanation provided

(7.8.5) Please explain

PGE does not account for Upstream leased assets, as it is not involved in leasing.

Downstream transportation and distribution

(7.8.1) Evaluation status

Select from:

☒ Not relevant, explanation provided

(7.8.5) Please explain

PGE has not calculated Downstream transportation and distribution as scope 3 emissions to date because it is not significant.

Processing of sold products

(7.8.1) Evaluation status

Select from:

☒ Not relevant, explanation provided

(7.8.5) Please explain

PGE provides a product in the form of electricity that can be directly consumed by consumers, without any further processing.

Use of sold products

(7.8.1) Evaluation status

Select from:

☒ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO₂e)

103845.79

(7.8.3) Emissions calculation methodology

Select all that apply

☒ Other, please specify :NCG Method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

Category 11: Emissions from the sales of geothermal steam to PLN. Calculations used primary data from NCG test results and steam production. The calculation methodology refers to ACM 0002 and Decree of Director General of Climate Change Control No. SK.38/PPI/IGAS/PPI.2/11/2020. The data used does not originate from third-party sources. For Category 11 (Use of Sold Products) the data is based on flow meter measurements.

End of life treatment of sold products

(7.8.1) Evaluation status

Select from:

☒ Not relevant, explanation provided

(7.8.5) Please explain

PGE has not calculated End of life treatment of sold products as scope 3 emissions to date because it is not significant.

Downstream leased assets

(7.8.1) Evaluation status

Select from:

☒ Not relevant, explanation provided

(7.8.5) Please explain

PGE does not account for upstream leasing assets, as PGE is not involved in leasing assets with customers.

Franchises

(7.8.1) Evaluation status

Select from:

☒ Not relevant, explanation provided

(7.8.5) Please explain

PGE does not account for franchises, as it is not involved in any franchises.

Investments

(7.8.1) Evaluation status

Select from:

☒ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO₂e)

0

(7.8.3) Emissions calculation methodology

Select all that apply

☒ Fuel-based method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

Category 15: Emissions from company activities where some of the shares are owned by PGE at over 10% and are outside the company's control.

Other (upstream)

(7.8.1) Evaluation status

Select from:

☒ Not relevant, explanation provided

(7.8.5) Please explain

PGE has not calculated Other (upstream) as scope 3 emissions to date because it is not significant.

Other (downstream)

(7.8.1) Evaluation status

Select from:

☒ Not relevant, explanation provided

(7.8.5) Please explain

PGE has not calculated Other (downstream) as scope 3 emissions to date because it is not significant.

[Fixed row]

(7.8.1) Disclose or restate your Scope 3 emissions data for previous years.

Past year 1

(7.8.1.1) End date

12/30/2023

(7.8.1.2) Scope 3: Purchased goods and services (metric tons CO2e)

0

(7.8.1.3) Scope 3: Capital goods (metric tons CO2e)

11765.74

(7.8.1.7) Scope 3: Business travel (metric tons CO2e)

953.18

(7.8.1.12) Scope 3: Use of sold products (metric tons CO2e)

105820.73

(7.8.1.16) Scope 3: Investments (metric tons CO2e)

0

(7.8.1.19) Comment

Scope 3 emissions relevant to PGE are: - Category 1: Emissions from the procurement of goods and services for operational activities exceeding USD10,000. The emission factors used refer to the US EPA 2022 GHG Emission Factors for Purchase of Goods & Services, with the type of goods and services purchased being close. Calculation for this category started in 2024. - Category 2: Emissions from purchasing services and goods above USD10 thousand such as purchasing activities for drilling/well workover services, EPCC activities, and capital materials. The emission factors used refer to the GHG Emission Factors for purchasing goods & services of the US EPA 2022, with the types of purchases of goods and services that are close. - Category 6: Emissions from employee business travel. Items calculated are GHG emissions from aircraft and hotel use. Aircraft Emissions Calculation: distance based, flight emission factor based on US EPA 2022 GHG Factor hub, flight distance refers to ICAO. For hotel emissions: Data on days of stay from the Company's official travel records, and hotel electricity consumption according to stars based on a survey of specific energy consumption in Office Buildings, Ministry of Energy and Mineral Resources - United Nation Development Program (KESDM-UNDP) 2019, and multiplied by the GHG Emission Factor of the Electricity System according to the grid by Directorate General of Electricity-Ministry of Energy and Mineral Resources. - Category 11: Emissions from the sales of geothermal steam to PLN. Calculations used primary data from NCG test results and steam production. The calculation methodology refers to ACM 0002 and Decree of Director General of Climate Change Control No. SK.38/PPI/IGAS/PPI.2/11/2020 • Category 15: Emissions from company activities where some of the shares are owned by PGE at over 10% and are outside the company's control. In 2023, emissions from drilling activities were accounted for under Category 1: Purchased Goods and Services. In 2024, following an internal evaluation, the Company reclassified these emissions into Category 2: Capital Goods. In addition, PGE also reclassified Scope 3 Category 15 (Investments from development projects) into Scope 1 emissions.

Past year 2

(7.8.1.1) End date

12/30/2022

(7.8.1.2) Scope 3: Purchased goods and services (metric tons CO2e)

0

(7.8.1.3) Scope 3: Capital goods (metric tons CO2e)

368.56

(7.8.1.7) Scope 3: Business travel (metric tons CO2e)

0

(7.8.1.12) Scope 3: Use of sold products (metric tons CO2e)

71577.27

(7.8.1.16) Scope 3: Investments (metric tons CO2e)

0

(7.8.1.19) Comment

Scope 3 emissions relevant to PGE are: - Category 1: Emissions from the procurement of goods and services for operational activities exceeding USD10,000. The emission factors used refer to the US EPA 2022 GHG Emission Factors for Purchase of Goods & Services, with the type of goods and services purchased being close. Calculation for this category started in 2024. - Category 2: Emissions from purchasing services and goods above USD10 thousand such as purchasing activities for drilling/well workover services, EPCC activities, and capital materials. The emission factors used refer to the GHG Emission Factors for purchasing goods & services of the US EPA 2022, with the types of purchases of goods and services that are close. - Category 6: Emissions from employee business travel. Items calculated are GHG emissions from aircraft and hotel use. Aircraft Emissions Calculation: distance based, flight emission factor based on US EPA 2022 GHG Factor hub, flight distance refers to ICAO. For hotel emissions: Data on days of stay from the Company's official travel records, and hotel electricity consumption according to stars based on a survey of specific energy consumption in Office Buildings, Ministry of Energy and Mineral Resources - United Nation Development Program (KESDM-UNDP) 2019, and multiplied by the GHG Emission Factor of the Electricity System according to the grid by Directorate General of Electricity-Ministry of Energy and Mineral Resources. - Category 11: Emissions from the sales of geothermal steam to PLN. Calculations used primary data from NCG test results and steam production. The calculation methodology refers to ACM 0002 and Decree of Director General of Climate Change Control No. SK.38/PPI/IGAS/PPI.2/11/2020 • Category 15: Emissions from company activities where some of the shares are owned by PGE at over 10% and are outside the company's control.

[Fixed row]

(7.9) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	<i>Select from:</i> ☒ Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	<i>Select from:</i> ☒ Third-party verification or assurance process in place
Scope 3	<i>Select from:</i> ☒ Third-party verification or assurance process in place

[Fixed row]

(7.9.1) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Row 1

(7.9.1.1) Verification or assurance cycle in place

Select from:

☒ Annual process

(7.9.1.2) Status in the current reporting year

Select from:

☒ Complete

(7.9.1.3) Type of verification or assurance

Select from:

☒ Moderate assurance

(7.9.1.4) Attach the statement

SR PGE 20 Mei LR.pdf

(7.9.1.5) Page/section reference

The company engaged an independent licensed assurance provider to review its 2024 Sustainability Report. The engagement assessed PGE's adherence to all four AA1000 Accountability Principles and the reliability of selected sustainability data, in line with AA1000AS v3 Type 2 Moderate Assurance. The assurance statement is presented on pages 430–433 of the report.

(7.9.1.6) Relevant standard

Select from:

☒ AA1000AS

(7.9.1.7) Proportion of reported emissions verified (%)

100

[Add row]

(7.9.2) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Row 1

(7.9.2.1) Scope 2 approach

Select from:

☒ Scope 2 location-based

(7.9.2.2) Verification or assurance cycle in place

Select from:

☒ Annual process

(7.9.2.3) Status in the current reporting year

Select from:

☒ Complete

(7.9.2.4) Type of verification or assurance

Select from:

☒ Moderate assurance

(7.9.2.5) Attach the statement

SR PGE 20 Mei LR.pdf

(7.9.2.6) Page/ section reference

The company engaged an independent licensed assurance provider to review its 2024 Sustainability Report. The engagement assessed PGE’s adherence to all four AA1000 Accountability Principles and the reliability of selected sustainability data, in line with AA1000AS v3 Type 2 Moderate Assurance. The assurance statement is presented on pages 430–433 of the report.

(7.9.2.7) Relevant standard

Select from:

☒ AA1000AS

(7.9.2.8) Proportion of reported emissions verified (%)

100
[Add row]

(7.9.3) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Row 1

(7.9.3.1) Scope 3 category

Select all that apply

- ☒ Scope 3: Purchased goods and services
- ☒ Scope 3: Capital goods
- ☒ Scope 3: Business travel
- ☒ Scope 3: Investments
- ☒ Scope 3: Use of sold products

(7.9.3.2) Verification or assurance cycle in place

Select from:

- ☒ Annual process

(7.9.3.3) Status in the current reporting year

Select from:

- ☒ Complete

(7.9.3.4) Type of verification or assurance

Select from:

- ☒ Moderate assurance

(7.9.3.5) Attach the statement

SR PGE 20 Mei LR.pdf,SR PGE 20 Mei LR.pdf,SR PGE 20 Mei LR.pdf,SR PGE 20 Mei LR.pdf

(7.9.3.6) Page/section reference

The company engaged an independent licensed assurance provider to review its 2024 Sustainability Report. The engagement assessed PGE's adherence to all four AA1000 Accountability Principles and the reliability of selected sustainability data, in line with AA1000AS v3 Type 2 Moderate Assurance. The assurance statement is presented on pages 430–433 of the report.

(7.9.3.7) Relevant standard

Select from:

☒ AA1000AS

(7.9.3.8) Proportion of reported emissions verified (%)

100

[Add row]

(7.10) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Select from:

☒ Increased

(7.10.1) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

Change in boundary

(7.10.1.1) Change in emissions (metric tons CO2e)

3095.9

(7.10.1.2) Direction of change in emissions

Select from:

☒ Increased

(7.10.1.3) Emissions value (percentage)

3.39

(7.10.1.4) Please explain calculation

Scope 1 emissions in 2024 amounted to 92,222.91 tons of CO₂eq, a 5% increase from the previous year. This rise is directly proportional to the increased production levels. Meanwhile, scope 2 emissions reached 2,294.86 tons of CO₂eq, marking a 24% increase from 2023. The rise was due to higher PLN electricity consumption at the Lahandong Area, following repairs to the 500 kW Binary Power Plant, which supplies electricity for injection pumps, and the recent inclusion of emissions from activities at the Head Office this year. Therefore, the total emissions of scopes 1 and 2 in 2024 were recorded at 94,517.77 tons of CO₂eq, an increase of 3.39% compared to 2023, which was 91,421.87 tons of CO₂eq.

Change in physical operating conditions

(7.10.1.1) Change in emissions (metric tons CO₂e)

1171.81

(7.10.1.2) Direction of change in emissions

Select from:

☒ Decreased

(7.10.1.3) Emissions value (percentage)

12.47

(7.10.1.4) Please explain calculation

The largest source of emissions in electricity generation from geothermal power originates from the Non-Condensable Gases (NCG) content naturally contained in geothermal fluids. The Company conducted an interconnection program for low-pressure production wells with low NCG levels (debottlenecking) in the Ulubelu Area, which not only reduced NCG levels, decreasing CO₂ emissions by 15% or 11168.57 ton CO₂eq compared to the previous year, but also improved the efficiency of the electricity production process. In addition, in 2024, as part of its decarbonization program, PGE replaced the Board of Directors' and management's operational vehicles with electric and hybrid-based ones. This step reduces emissions generated by vehicle fuel use by up to 3.4% or 3.24 ton CO₂eq. Therefore, from this initiative, the total emission reduction was recorded at 1171.81 tons CO₂eq or reducing emissions by 12.47% compared to the previous year.
[Fixed row]

(7.12) Are carbon dioxide emissions from biogenic carbon relevant to your organization?

Select from:

☒ No

(7.15) Does your organization break down its Scope 1 emissions by greenhouse gas type?

Select from:

☒ Yes

(7.15.1) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used global warming potential (GWP).

Row 1

(7.15.1.1) Greenhouse gas

Select from:

☒ CO2

(7.15.1.2) Scope 1 emissions (metric tons of CO2e)

85385.32

(7.15.1.3) GWP Reference

Select from:

☒ IPCC Sixth Assessment Report (AR6 - 100 year)

Row 2

(7.15.1.1) Greenhouse gas

Select from:

☒ CH4

(7.15.1.2) Scope 1 emissions (metric tons of CO2e)

6834.63

(7.15.1.3) GWP Reference

Select from:

☒ IPCC Sixth Assessment Report (AR6 - 100 year)

Row 3

(7.15.1.1) Greenhouse gas

Select from:

☒ N2O

(7.15.1.2) Scope 1 emissions (metric tons of CO2e)

2.73

(7.15.1.3) GWP Reference

Select from:

☒ IPCC Sixth Assessment Report (AR6 - 100 year)

[Add row]

(7.15.3) Break down your total gross global Scope 1 emissions from electric utilities value chain activities by greenhouse gas type.

Fugitives

(7.15.3.1) Gross Scope 1 CO2 emissions (metric tons CO2)

0

(7.15.3.2) Gross Scope 1 methane emissions (metric tons CH4)

0

(7.15.3.3) Gross Scope 1 SF6 emissions (metric tons SF6)

0

(7.15.3.4) Total gross Scope 1 emissions (metric tons CO2e)

0

(7.15.3.5) Comment

Scope 1 emissions, derived from: - Operational emissions of electricity generation due to venting of Non-Condensable Gases (NCGs) naturally contained in geothermal fluids from all operation areas. Calculations using primary data from NCG tests and steam production. The calculation methodology refers to ACM 0002 and Decree of Director General of Climate Change Control No. SK.38/PPI/IGAS/PPI.2/11/2020 - Use of fuel for operational vehicles and Emergency Diesel Generators (EDG) from all activities of the operational area, projects and head office. The fuel specifications used refer to the local emission factors of fuel products sold in Indonesia. CO2 emission factors refer to Table 4-4 (API Compendium), and CH4, N2O refer to Table 4-6 (API Compendium).

Combustion (Electric utilities)

(7.15.3.1) Gross Scope 1 CO2 emissions (metric tons CO2)

1672.72

(7.15.3.2) Gross Scope 1 methane emissions (metric tons CH4)

0.07

(7.15.3.3) Gross Scope 1 SF6 emissions (metric tons SF6)

0

(7.15.3.4) Total gross Scope 1 emissions (metric tons CO2e)

1674.68

(7.15.3.5) Comment

Use of fuel for operational vehicles and Emergency Diesel Generators (EDG) from all activities of the operational area, projects and head office. The fuel specifications used refer to the local emission factors of fuel products sold in Indonesia. CO2 emission factors refer to Table 4-4 (API Compendium), and CH4, N2O refer to Table 4-6 (API Compendium). Total gross scope 1 CO2 emissions include N2O emissions.

Combustion (Gas utilities)

(7.15.3.1) Gross Scope 1 CO2 emissions (metric tons CO2)

0

(7.15.3.2) Gross Scope 1 methane emissions (metric tons CH4)

0

(7.15.3.3) Gross Scope 1 SF6 emissions (metric tons SF6)

0

(7.15.3.4) Total gross Scope 1 emissions (metric tons CO2e)

0

(7.15.3.5) Comment

Scope 1 emissions, derived from: - Operational emissions of electricity generation due to venting of Non-Condensable Gases (NCGs) naturally contained in geothermal fluids from all operation areas. Calculations using primary data from NCG tests and steam production. The calculation methodology refers to ACM 0002 and Decree of Director General of Climate Change Control No. SK.38/PPI/IGAS/PPI.2/11/2020 - Use of fuel for operational vehicles and Emergency Diesel Generators (EDG) from all activities of the operational area, projects and head office. The fuel specifications used refer to the local emission factors of fuel products sold in Indonesia. CO2 emission factors refer to Table 4-4 (API Compendium), and CH4, N2O refer to Table 4-6 (API Compendium).

Combustion (Other)

(7.15.3.1) Gross Scope 1 CO2 emissions (metric tons CO2)

0

(7.15.3.2) Gross Scope 1 methane emissions (metric tons CH4)

0

(7.15.3.3) Gross Scope 1 SF6 emissions (metric tons SF6)

0

(7.15.3.4) Total gross Scope 1 emissions (metric tons CO2e)

0

(7.15.3.5) Comment

Scope 1 emissions, derived from: - Operational emissions of electricity generation due to venting of Non-Condensable Gases (NCGs) naturally contained in geothermal fluids from all operation areas. Calculations using primary data from NCG tests and steam production. The calculation methodology refers to ACM 0002 and Decree of Director General of Climate Change Control No. SK.38/PPI/IGAS/PPI.2/11/2020 - Use of fuel for operational vehicles and Emergency Diesel Generators (EDG) from all activities of the operational area, projects and head office. The fuel specifications used refer to the local emission factors of fuel products sold in Indonesia. CO2 emission factors refer to Table 4-4 (API Compendium), and CH4, N2O refer to Table 4-6 (API Compendium).

Emissions not elsewhere classified

(7.15.3.1) Gross Scope 1 CO2 emissions (metric tons CO2)

83715.59

(7.15.3.2) Gross Scope 1 methane emissions (metric tons CH4)

229.28

(7.15.3.3) Gross Scope 1 SF6 emissions (metric tons SF6)

0

(7.15.3.4) Total gross Scope 1 emissions (metric tons CO2e)

(7.15.3.5) Comment

Operational emissions of electricity generation due to venting of Non-Condensable Gases (NCGs) naturally contained in geothermal fluids from all operation areas. Calculations using primary data from NCG tests and steam production. The calculation methodology refers to ACM 0002 and Decree of Director General of Climate Change Control No. SK.38/PPI/IGAS/PPI.2/11/2020

[Fixed row]

(7.16) Break down your total gross global Scope 1 and 2 emissions by country/area.

	Scope 1 emissions (metric tons CO2e)
Indonesia	92222.91

[Fixed row]

(7.17) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

Select all that apply

☒ By business division

☒ By facility

☒ By activity

(7.17.1) Break down your total gross global Scope 1 emissions by business division.

	Business division	Scope 1 emissions (metric ton CO2e)
Row 1	Geothermal Power Plant	92222.91

[Add row]

(7.17.2) Break down your total gross global Scope 1 emissions by business facility.

Row 1

(7.17.2.1) Facility

PGE Area Kamojang

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

31742.75

(7.17.2.3) Latitude

-7.140832

(7.17.2.4) Longitude

107.78786

Row 2

(7.17.2.1) Facility

PGE Area Ulubelu

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

23879.11

(7.17.2.3) Latitude

-5.305137

(7.17.2.4) Longitude

104.577673

Row 3

(7.17.2.1) Facility

PGE Area Lahendong

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

5200.31

(7.17.2.3) Latitude

1.174739

(7.17.2.4) Longitude

124.796238

Row 4

(7.17.2.1) Facility

PGE Area Karaha

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

28399.36

(7.17.2.3) Latitude

-7.14839

(7.17.2.4) Longitude

108.08382

Row 5

(7.17.2.1) Facility

PGE Area Lumutbalai

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

2750.6

(7.17.2.3) Latitude

-4.19698

(7.17.2.4) Longitude

103.647892

Row 6

(7.17.2.1) Facility

PGE Area Hululais

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

178.77

(7.17.2.3) Latitude

-3.2325

(7.17.2.4) Longitude

102.3136

Row 7

(7.17.2.1) Facility

PGE Head Office

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

72.01

(7.17.2.3) Latitude

-6.1776

(7.17.2.4) Longitude

106.8329

[Add row]

(7.17.3) Break down your total gross global Scope 1 emissions by business activity.

	Activity	Scope 1 emissions (metric tons CO2e)
Row 1	<i>Combustion (Electric Utilities)</i>	1674.68
Row 2	<i>Emissions not elsewhere classified</i>	90548.24

[Add row]

(7.19) Break down your organization’s total gross global Scope 1 emissions by sector production activity in metric tons CO2e.

Electric utility activities

(7.19.1) Gross Scope 1 emissions, metric tons CO2e

92222.91

(7.19.3) Comment

PGE is a steam and electricity provider for power plants. By the end of 2024, the Company managed 15 Geothermal Working Areas (WKP) with a total installed capacity of 1,878 MW, consisting of 673 MW from Own Operations and 1,205 MW from Joint Operation Contracts (KOB). This capacity accounts for more than 80% of the total installed capacity of Geothermal Power Plants (PLTP) nationwide. PGE serves 100% of the domestic market, with PT Perusahaan Listrik Negara (Persero) as the sole off-taker. The Company’s products include steam (upstream project scheme), electricity (total project scheme), and carbon credits. In line with the Regulation of the Minister of Environment and Forestry No. P.15/2019 on Emission Standards for Thermal Power Plants, PGE has set emission boundaries for Scopes 1, 2, and 3, covering activities in its Operational Areas, Projects, and Corporate Headquarters. Furthermore, in July 2025, PGE increased its production capacity by 55 MW at the Lumut Balai Area.

[Fixed row]

(7.22) Break down your gross Scope 1 and Scope 2 emissions between your consolidated accounting group and other entities included in your response.

Consolidated accounting group

(7.22.1) Scope 1 emissions (metric tons CO2e)

92222.91

(7.22.2) Scope 2, location-based emissions (metric tons CO2e)

2294.86

(7.22.4) Please explain

PGE has two subsidiaries, PT Geothermal Energi Seulawah and PT Pertamina Geothermal Energy Kotamobagu. In 2024, PT Geothermal Energi Seulawah was in the infrastructure preparation stage for exploration, while PT Pertamina Geothermal Energy Kotamobagu was in the feasibility study preparation stage for exploration. Therefore, PGE's total emissions data do not yet include these entities.

All other entities

(7.22.1) Scope 1 emissions (metric tons CO2e)

0

(7.22.2) Scope 2, location-based emissions (metric tons CO2e)

0

(7.22.4) Please explain

PGE has two subsidiaries, PT Geothermal Energi Seulawah and PT Pertamina Geothermal Energy Kotamobagu. In 2024, PT Geothermal Energi Seulawah was in the infrastructure preparation stage for exploration, while PT Pertamina Geothermal Energy Kotamobagu was in the feasibility study preparation stage for exploration. Therefore, PGE's total emissions data do not yet include these entities.

[Fixed row]

(7.23) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?

Select from:

☒ Yes

(7.23.1) Break down your gross Scope 1 and Scope 2 emissions by subsidiary.

Row 1

(7.23.1.1) Subsidiary name

PT Pertamina Geothermal Energy Tbk

(7.23.1.2) Primary activity

Select from:

☒ Geothermal generation

(7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☒ Ticker symbol

☒ Other unique identifier, please specify :Nomor Induk Berusaha/Business Index Number

(7.23.1.7) Ticker symbol

PGEO

(7.23.1.11) Other unique identifier

8120007912209

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

92222.91

(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

2294.86

(7.23.1.15) Comment

PGE main business activity are geothermal energy exploration and electricity generation.

Row 2

(7.23.1.1) Subsidiary name

PT Geothermal Energi Seulawah

(7.23.1.2) Primary activity

Select from:

☒ Geothermal generation

(7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☒ No unique identifier

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

0

(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

0

(7.23.1.15) Comment

PGE has two subsidiaries, PT Geothermal Energi Seulawah and PT Pertamina Geothermal Energy Kotamobagu. In 2024, PT Geothermal Energi Seulawah was in the infrastructure preparation stage for exploration, while PT Pertamina Geothermal Energy Kotamobagu was in the feasibility study preparation stage for exploration. Therefore, PGE's total emissions data do not yet include these entities.

Row 3

(7.23.1.1) Subsidiary name

PT Pertamina Geothermal Energy Kotamobagu

(7.23.1.2) Primary activity

Select from:

☒ Geothermal generation

(7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☒ No unique identifier

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

0

(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

0

(7.23.1.15) Comment

PGE has two subsidiaries, PT Geothermal Energi Seulawah and PT Pertamina Geothermal Energy Kotamobagu. In 2024, PT Geothermal Energi Seulawah was in the infrastructure preparation stage for exploration, while PT Pertamina Geothermal Energy Kotamobagu was in the feasibility study preparation stage for exploration. Therefore, PGE's total emissions data do not yet include these entities.

[Add row]

(7.29) What percentage of your total operational spend in the reporting year was on energy?

Select from:

☒ More than 0% but less than or equal to 5%

(7.30) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	<i>Select from:</i> ☒ Yes
Consumption of purchased or acquired electricity	<i>Select from:</i> ☒ Yes
Consumption of purchased or acquired heat	<i>Select from:</i> ☒ No
Consumption of purchased or acquired steam	<i>Select from:</i> ☒ No
Consumption of purchased or acquired cooling	<i>Select from:</i> ☒ No
Generation of electricity, heat, steam, or cooling	<i>Select from:</i> ☒ Yes

[Fixed row]

(7.30.1) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

Consumption of fuel (excluding feedstock)

(7.30.1.1) Heating value

Select from:

☒ LHV (lower heating value)

(7.30.1.2) MWh from renewable sources

0

(7.30.1.3) MWh from non-renewable sources

6672.82

(7.30.1.4) Total (renewable + non-renewable) MWh

6672.82

Consumption of purchased or acquired electricity

(7.30.1.1) Heating value

Select from:

☒ Unable to confirm heating value

(7.30.1.2) MWh from renewable sources

0

(7.30.1.3) MWh from non-renewable sources

2656.23

(7.30.1.4) Total (renewable + non-renewable) MWh

2656.23

Consumption of self-generated non-fuel renewable energy

(7.30.1.1) Heating value

Select from:

☒ Unable to confirm heating value

(7.30.1.2) MWh from renewable sources

146503.66

(7.30.1.4) Total (renewable + non-renewable) MWh

146503.66

Total energy consumption

(7.30.1.1) Heating value

Select from:

☒ Unable to confirm heating value

(7.30.1.2) MWh from renewable sources

146503.66

(7.30.1.3) MWh from non-renewable sources

9329.05

(7.30.1.4) Total (renewable + non-renewable) MWh

155832.71

[Fixed row]

(7.30.6) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	<i>Select from:</i> ☒ Yes
Consumption of fuel for the generation of heat	<i>Select from:</i> ☒ No
Consumption of fuel for the generation of steam	<i>Select from:</i> ☒ No
Consumption of fuel for the generation of cooling	<i>Select from:</i> ☒ No
Consumption of fuel for co-generation or tri-generation	<i>Select from:</i> ☒ No

[Fixed row]

(7.30.7) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Sustainable biomass

(7.30.7.1) Heating value

Select from:

☒ Unable to confirm heating value

(7.30.7.2) Total fuel MWh consumed by the organization

0

(7.30.7.3) MWh fuel consumed for self-generation of electricity

0

(7.30.7.4) MWh fuel consumed for self-generation of heat

0

(7.30.7.8) Comment

The only fuel types used by PGE are gasoline and diesel.

Other biomass

(7.30.7.1) Heating value

Select from:

☒ Unable to confirm heating value

(7.30.7.2) Total fuel MWh consumed by the organization

0

(7.30.7.3) MWh fuel consumed for self-generation of electricity

0

(7.30.7.4) MWh fuel consumed for self-generation of heat

0

(7.30.7.8) Comment

The only fuel types used by PGE are gasoline and diesel.

Other renewable fuels (e.g. renewable hydrogen)

(7.30.7.1) Heating value

Select from:

☒ Unable to confirm heating value

(7.30.7.2) Total fuel MWh consumed by the organization

0

(7.30.7.3) MWh fuel consumed for self-generation of electricity

0

(7.30.7.4) MWh fuel consumed for self-generation of heat

0

(7.30.7.8) Comment

The only fuel types used by PGE are gasoline and diesel.

Coal

(7.30.7.1) Heating value

Select from:

☒ Unable to confirm heating value

(7.30.7.2) Total fuel MWh consumed by the organization

0

(7.30.7.3) MWh fuel consumed for self-generation of electricity

0

(7.30.7.4) MWh fuel consumed for self-generation of heat

0

(7.30.7.8) Comment

The only fuel types used by PGE are gasoline and diesel.

Oil

(7.30.7.1) Heating value

Select from:

☒ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

6672.82

(7.30.7.3) MWh fuel consumed for self-generation of electricity

6672.82

(7.30.7.4) MWh fuel consumed for self-generation of heat

0

(7.30.7.8) Comment

The only fuel types used by PGE are gasoline and diesel.

Gas

(7.30.7.1) Heating value

Select from:

☒ Unable to confirm heating value

(7.30.7.2) Total fuel MWh consumed by the organization

0

(7.30.7.3) MWh fuel consumed for self-generation of electricity

0

(7.30.7.4) MWh fuel consumed for self-generation of heat

0

(7.30.7.8) Comment

The only fuel types used by PGE are gasoline and diesel.

Other non-renewable fuels (e.g. non-renewable hydrogen)

(7.30.7.1) Heating value

Select from:

☒ Unable to confirm heating value

(7.30.7.2) Total fuel MWh consumed by the organization

0

(7.30.7.3) MWh fuel consumed for self-generation of electricity

0

(7.30.7.4) MWh fuel consumed for self-generation of heat

0

(7.30.7.8) Comment

The only fuel types used by PGE are gasoline and diesel.

Total fuel

(7.30.7.1) Heating value

Select from:

☒ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

6672.82

(7.30.7.3) MWh fuel consumed for self-generation of electricity

6672.82

(7.30.7.4) MWh fuel consumed for self-generation of heat

0

(7.30.7.8) Comment

The only fuel types used by PGE are gasoline and diesel.

[Fixed row]

(7.30.16) Provide a breakdown by country/area of your electricity/heat/steam/cooling consumption in the reporting year.

Indonesia

(7.30.16.1) Consumption of purchased electricity (MWh)

2656.23

(7.30.16.2) Consumption of self-generated electricity (MWh)

146503.66

(7.30.16.4) Consumption of purchased heat, steam, and cooling (MWh)

0

(7.30.16.5) Consumption of self-generated heat, steam, and cooling (MWh)

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

149159.89

[Fixed row]

(7.33) Does your electric utility organization have a transmission and distribution business?

Select from:

☒ No

(7.45) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Row 1

(7.45.1) Intensity figure

0.00023

(7.45.2) Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

94517.77

(7.45.3) Metric denominator

Select from:

☒ unit total revenue

(7.45.4) Metric denominator: Unit total

407120000

(7.45.5) Scope 2 figure used

Select from:

☒ Location-based

(7.45.6) % change from previous year

3.85

(7.45.7) Direction of change

Select from:

☒ Increased

(7.45.8) Reasons for change

Select all that apply

☒ Change in output

(7.45.9) Please explain

Scope 1 emissions in 2024 amounted to 92,222.91 tons of CO₂eq, a 5% increase from the previous year. This rise is directly proportional to the increased production levels. Meanwhile, scope 2 emissions reached 2,294.86 tons of CO₂eq, marking a 24% increase from 2023. The rise was due to higher PLN electricity consumption at the Lahendong Area, following repairs to the 500 kW Binary Power Plant, which supplies electricity for injection pumps, and the recent inclusion of emissions from activities at the Head Office this year. Therefore, the total emissions of scopes 1 and 2 in 2024 were recorded at 94,517.77 tons of CO₂eq, an increase of 3.39% compared to 2023, which was 91,421.87 tons of CO₂eq.

[Add row]

(7.46) For your electric utility activities, provide a breakdown of your Scope 1 emissions and emissions intensity relating to your total power plant capacity and generation during the reporting year by source.

Geothermal

(7.46.1) Absolute scope 1 emissions (metric tons CO2e)

92222.91

(7.46.2) Emissions intensity based on gross or net electricity generation

Select from:

☒ Gross

(7.46.3) Scope 1 emissions intensity (Gross generation)

18.54

(7.46.4) Scope 1 emissions intensity (Net generation)

19.10

Total

(7.46.1) Absolute scope 1 emissions (metric tons CO2e)

92222.91

(7.46.2) Emissions intensity based on gross or net electricity generation

Select from:

☒ Gross

(7.46.3) Scope 1 emissions intensity (Gross generation)

18.54
[Fixed row]

(7.52) Provide any additional climate-related metrics relevant to your business.

Row 1

(7.52.1) Description

Select from:

☒ Energy usage

(7.52.2) Metric value

0.04

(7.52.3) Metric numerator

MWh/MWh

(7.52.4) Metric denominator (intensity metric only)

Total Production

(7.52.5) % change from previous year

0

(7.52.6) Direction of change

Select from:

☒ No change

(7.52.7) Please explain

In the PGE Sustainability Policy, which was ratified on July 19, 2024, as well as the Environmental Management Plan – Environmental Monitoring Plan (RKL-RPL), the policy is applied across all PGE working areas and forms part of the Company’s Key Performance Indicator (KPI) achievement. The implementation of this policy is part of the Company’s target to reduce energy intensity by 2030 to 0.02 MWh/MWh, from the 2020 baseline of 0.03 MWh/MWh. This target will be achieved through energy efficiency innovation programs, both in operational and supporting activities. In 2024, PGE’s total energy intensity was recorded at 0.041 MWh/MWh, which remained the same as the previous year at 0.04 MWh/MWh.

Row 2

(7.52.1) Description

Select from:

☒ Other, please specify :waste reduce, reuse, recycle, and recovery

(7.52.2) Metric value

57.13

(7.52.3) Metric numerator

Percentage

(7.52.5) % change from previous year

4.73

(7.52.6) Direction of change

Select from:

☒ Increased

(7.52.7) Please explain

In 2024, the Company initiated the Waste Integration System Enhancement (WISE), a development of existing waste management programs in PGE work areas aimed at establishing a culture of managing waste more wisely at the workplace and in society. WISE, an integrated waste management program from upstream to downstream that engages waste management stakeholders, has been implemented at the head office and will be applied to all work areas of PGE by 2030. With the implementation of WISE initiative, which is part of the Company’s sustainability strategy, it is expected that more than 75% of waste in all of PGE’s work areas can be

recycled. This program also covers dissemination to increase waste management knowledge and skills of PGE’s employees and work partners. With the WISE implementation, the 4R waste management increased by 2.72% in 2024. Moreover, a more accurate recording of waste generation, sorting, and further management stages can be achieved. The volume of hazardous waste (B3) treated through the 4R process in 2024 was 15.30 tons. Meanwhile, non-hazardous waste treated through the 4R process amounted to 13.66 tons. The total waste treated through 4R reached 28.96 tons, representing 57.13% of the total waste generated, which was 50.69 tons. The 4R initiatives for both hazardous and non-hazardous waste contributed to a reduction of 6.41 tons of total waste in 2024 compared to 57.10 tons in 2023.

[Add row]

(7.53) Did you have an emissions target that was active in the reporting year?

Select all that apply

☒ Intensity target

(7.53.2) Provide details of your emissions intensity targets and progress made against those targets.

Row 1

(7.53.2.1) Target reference number

Select from:

☒ Int 1

(7.53.2.2) Is this a science-based target?

Select from:

☒ No, but we anticipate setting one in the next two years

(7.53.2.5) Date target was set

12/31/2022

(7.53.2.6) Target coverage

Select from:

☒ Organization-wide

(7.53.2.7) Greenhouse gases covered by target

Select all that apply

- ☒ Carbon dioxide (CO2)
- ☒ Methane (CH4)
- ☒ Nitrous oxide (N2O)

(7.53.2.8) Scopes

Select all that apply

- ☒ Scope 1
- ☒ Scope 2
- ☒ Scope 3

(7.53.2.9) Scope 2 accounting method

Select from:

- ☒ Location-based

(7.53.2.10) Scope 3 categories

Select all that apply

- ☒ Category 11: Use of sold products

(7.53.2.11) Intensity metric

Select from:

- ☒ Metric tons CO2e per megawatt hour (MWh)

(7.53.2.12) End date of base year

12/30/2020

(7.53.2.13) Intensity figure in base year for Scope 1

0.02317

(7.53.2.14) Intensity figure in base year for Scope 2

0.00069

(7.53.2.25) Intensity figure in base year for Scope 3, Category 11: Use of sold products

0.01853

(7.53.2.32) Intensity figure in base year for total Scope 3

0.0185300000

(7.53.2.33) Intensity figure in base year for all selected Scopes

0.0423900000

(7.53.2.34) % of total base year emissions in Scope 1 covered by this Scope 1 intensity figure

100

(7.53.2.35) % of total base year emissions in Scope 2 covered by this Scope 2 intensity figure

100

(7.53.2.46) % of total base year emissions in Scope 3, Category 11: Use of sold products covered by this Scope 3, Category 11: Use of sold products intensity figure

100

(7.53.2.53) % of total base year emissions in Scope 3 (in all Scope 3 categories) covered by this total Scope 3 intensity figure

100

(7.53.2.54) % of total base year emissions in all selected Scopes covered by this intensity figure

100

(7.53.2.55) End date of target

12/30/2030

(7.53.2.56) Targeted reduction from base year (%)

29

(7.53.2.57) Intensity figure at end date of target for all selected Scopes

0.0300969000

(7.53.2.58) % change anticipated in absolute Scope 1+2 emissions

34

(7.53.2.59) % change anticipated in absolute Scope 3 emissions

22

(7.53.2.60) Intensity figure in reporting year for Scope 1

0.019104762

(7.53.2.61) Intensity figure in reporting year for Scope 2

0.0004754

(7.53.2.72) Intensity figure in reporting year for Scope 3, Category 11: Use of sold products

0.021512541

(7.53.2.79) Intensity figure in reporting year for total Scope 3

0.0215125410

(7.53.2.80) Intensity figure in reporting year for all selected Scopes

0.0410927030

(7.53.2.81) Land-related emissions covered by target

Select from:

☒ No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

(7.53.2.82) % of target achieved relative to base year

10.55

(7.53.2.83) Target status in reporting year

Select from:

☒ Underway

(7.53.2.85) Explain target coverage and identify any exclusions

PGE has set an emissions intensity reduction target of 29%, from a 2020 baseline of 44 g CO₂/kWh (Scopes 1, 2, and 3 from steam sales) to 31 g CO₂/kWh by 2030. This target will be achieved through various initiatives integrated into the Company's business processes. Since 2020, the Company has conducted a comprehensive calculation of its emission burden, establishing a baseline of 200,681.06 tons CO₂e. The target applies company-wide, encompassing PGE and its subsidiaries, and covers 100% of Scope 1, Scope 2, and Scope 3 Category 11: Use of sold products.

(7.53.2.86) Target objective

PGE has established an emissions intensity reduction target of 29%, aiming to decrease from a 2020 baseline of 44 g CO₂/kWh (Scopes 1, 2, and 3 from steam sales) to 31 g CO₂/kWh by 2030. This target will be pursued through a range of initiatives embedded across the Company's business processes. Since 2020, PGE has undertaken a comprehensive assessment of its emission burden, determining a baseline of 200,681.06 tons CO₂e. The target is aligned with those set by its parent company, PT Pertamina, and majority shareholder, Pertamina New and Renewable Energy (PNRE), and supports the Net Zero Emissions (NZE) goal for 2060. It also reflects PGE's contribution to Indonesia's commitment to achieve net zero by 2060, as outlined in its Nationally Determined Contribution (NDC).

(7.53.2.87) Plan for achieving target, and progress made to the end of the reporting year

PGE established an emissions intensity reduction target of 29%, from the 2020 baseline of 44 g CO₂/kWh (Scopes 1, 2, and 3 of steam sales) to 31 g CO₂/kWh in 2030, which will be achieved through various initiatives in the business process. The Company has conducted a comprehensive calculation of its emission burden since 2020, which is used as the baseline for a total emission of 200,681.06 tons CO₂e. In 2024, Scopes 1, 2, and 3 emissions rose proportionally to the increase in electricity production and steam sales. Meanwhile, the emissions intensity reached 41.09 g CO₂e/kWh, with this year's emissions intensity per revenue amounting to 0.49 ton CO₂e per thousand USD. This represents a 6.61% decrease from the baseline, supported by the implementation of the Company's decarbonization program. The emissions intensity figure is significantly lower than the thresholds set by the European Taxonomy and the Indonesian Taxonomy for Sustainable Finance, which is 100 g CO₂e/kWh.

(7.53.2.88) Target derived using a sectoral decarbonization approach

Select from:

☒ No

[Add row]

(7.54) Did you have any other climate-related targets that were active in the reporting year?

Select all that apply

☒ Targets to increase or maintain low-carbon energy consumption or production

☒ Net-zero targets

(7.54.1) Provide details of your targets to increase or maintain low-carbon energy consumption or production.

Row 1

(7.54.1.1) Target reference number

Select from:

☒ Low 1

(7.54.1.2) Date target was set

12/31/2022

(7.54.1.3) Target coverage

Select from:

☒ Organization-wide

(7.54.1.4) Target type: energy carrier

Select from:

☒ Electricity

(7.54.1.5) Target type: activity

Select from:

☒ Consumption

(7.54.1.6) Target type: energy source

Select from:

☒ Renewable energy source(s) only

(7.54.1.7) End date of base year

12/30/2023

(7.54.1.8) Consumption or production of selected energy carrier in base year (MWh)

146827.81

(7.54.1.9) % share of low-carbon or renewable energy in base year

94.29

(7.54.1.10) End date of target

12/30/2030

(7.54.1.11) % share of low-carbon or renewable energy at end date of target

96

(7.54.1.12) % share of low-carbon or renewable energy in reporting year

94.01

(7.54.1.13) % of target achieved relative to base year

-16.37

(7.54.1.14) Target status in reporting year

Select from:

☒ Underway

(7.54.1.16) Is this target part of an emissions target?

Yes. This target is part of the emission reduction target specified in 7.53.2.

(7.54.1.17) Is this target part of an overarching initiative?

Select all that apply

☒ No, it's not part of an overarching initiative

(7.54.1.19) Explain target coverage and identify any exclusions

Energy consumption remains PGE's main priority in driving energy efficiency. The Company targets achieving a 96% share of new and renewable energy (NRE) in its operational energy mix by 2030 (2024: 94.01%), including operations within its subsidiaries. PGE consistently works to maximize the use of NRE, with the ambition of sustaining business growth while contributing positively to environmental preservation and climate change mitigation. Going forward, PGE plans to increase the use of electric, hybrid, and hydrogen-powered vehicles in its operations. This commitment also reflects PGE's support for Indonesia's Net Zero Emission (NZE) goal by 2060.

(7.54.1.20) Target objective

PGE places energy consumption at the forefront of its energy efficiency initiatives. By 2030, the Company aims for new and renewable energy (NRE) to account for 96% of its operational energy mix (2024: 94.13%), covering both parent company and subsidiary operations. Efforts to expand NRE utilization are also supported by plans to adopt electric, hybrid, and hydrogen-powered vehicles across operations. This strategy underscores PGE’s alignment with Indonesia’s Net Zero Emission (NZE) target for 2060. Beyond contributing to the national energy transition, PGE envisions becoming a fully zero-emission enterprise by integrating green energy into every aspect of its business activities.

(7.54.1.21) Plan for achieving target, and progress made to the end of the reporting year

PGE utilizes a combination of renewable and nonrenewable (fossil fuel-based) energy sources to support its internal energy consumption. The Company's renewable energy sources include electricity generated from its own Geothermal Power Plants (PLTP), including Binary Power Plants, as well as Solar Power Plants (PLTS). In addition to renewable sources, PGE also consumes fuel oil (BBM) and electricity supplied by PT Perusahaan Listrik Negara (PLN). In 2024, the Company’s total energy consumption reached 155,832.70 MWh, with NRE use accounting for 94.01% of the energy mix—remaining relatively stable compared to the previous year. In 2024, renewable energy consumption reached 146,503.66 MWh, compared to 146,827.81 MWh in 2023. Going forward, PGE plans to increase the use of electric, hybrid, and hydrogen-powered vehicles in its operations. This initiative aims to support the Company’s renewable energy mix target of 96% by 2030.
[Add row]

(7.54.3) Provide details of your net-zero target(s).

Row 1

(7.54.3.1) Target reference number

Select from:
☒ NZ1

(7.54.3.2) Date target was set

12/31/2022

(7.54.3.3) Target Coverage

Select from:
☒ Organization-wide

(7.54.3.4) Targets linked to this net zero target

Select all that apply

☒ Int1

(7.54.3.5) End date of target for achieving net zero

12/30/2060

(7.54.3.6) Is this a science-based target?

Select from:

☒ No, but we anticipate setting one in the next two years

(7.54.3.8) Scopes

Select all that apply

☒ Scope 1

☒ Scope 2

☒ Scope 3

(7.54.3.9) Greenhouse gases covered by target

Select all that apply

☒ Carbon dioxide (CO2)

☒ Methane (CH4)

☒ Nitrous oxide (N2O)

(7.54.3.10) Explain target coverage and identify any exclusions

The target applies across the organization, encompassing PGE and its subsidiaries, including PT Geothermal Energi Seilawah and PT Pertamina Geothermal Energy Kotamobagu. While these subsidiaries were not yet operational by the end of 2024, they had already contributed to Scope 3 emissions, particularly from business travel activities. Through this commitment, PGE reinforces its alignment with the Pertamina Group's net zero emission agenda and Indonesia's national target of achieving net zero emissions by 2060.

(7.54.3.11) Target objective

PGE's sustainability strategy is built upon four pillars of growth: Nature, Zero Emission, People & Socioeconomics, and Transformation Catalyst. Each pillar contains clear ambitions, strategies, and initiatives that will be carried out from 2024 to 2030, supported by periodic reviews to drive continuous improvement. Within the Zero Emission pillar, PGE is committed to achieving net zero emissions by 2060 while mitigating the impacts of climate change. To realize this ambition, the Company focuses on managing energy consumption through initiatives that prioritize the use of renewable energy and enhance energy efficiency. One of our key milestones is to reduce emissions intensity by 29% by 2030, forming part of our pathway toward the Net Zero Emissions (NZE) target by 2060. This commitment also reflects our role as a subsidiary of PT Pertamina (Persero) in supporting its aspiration to become a world-class national energy company with the vision of "Energizing People and Planet with Green Energy." Our sustainability strategy and targets are fully aligned with Pertamina (Persero)'s NZE agenda, ensuring that our business growth is in harmony with both national and global climate goals.

(7.54.3.12) Do you intend to neutralize any residual emissions with permanent carbon removals at the end of the target?

Select from:

☒ Yes

(7.54.3.13) Do you plan to mitigate emissions beyond your value chain?

Select from:

☒ Yes, and we have already acted on this in the reporting year

(7.54.3.14) Do you intend to purchase and cancel carbon credits for neutralization and/or beyond value chain mitigation?

Select all that apply

☒ No, we do not plan to purchase and cancel carbon credits for neutralization and/or beyond value chain mitigation

(7.54.3.15) Planned milestones and/or near-term investments for neutralization at the end of the target

In 2023, PGE formulated a roadmap for the implementation of its sustainability strategy, which commenced in 2024. From 2030 onward, PGE plans to develop CO₂ liquefaction, methanol development, and carbon capture projects to support the achievement of the NZE target by 2060.

(7.54.3.16) Describe the actions to mitigate emissions beyond your value chain

PGE has implemented the Rangers App, a local youth empowerment program in the Ibun District that utilizes a multi-service transportation application operated with electric motorcycles powered directly by a geothermal power plant. Through this program, an emissions reduction of 1.83 tons of CO₂e was recorded in 2024. In addition, the PGE Ulubelu Area pioneered the "Melon Menantang Alam" (Melons Defying Nature) program, introducing a geothermal greenhouse innovation to enhance both the quality and yield of melon cultivation. This initiative represents a breakthrough in modern agriculture, enabling melons—traditionally unsuited for high-altitude regions—to thrive in the cold mountainous climate of Ulubelu. The Company utilizes a geothermal greenhouse equipped with brine geothermal pipe

heating systems to maintain an optimal temperature range for melon growth. This innovation has not only transformed local agriculture but also increased community awareness of the immense potential of geothermal energy to improve daily life. In 2024, the program achieved an emissions reduction of 37.45 tons of CO₂e.

(7.54.3.17) Target status in reporting year

Select from:

☒ Underway

(7.54.3.19) Process for reviewing target

In 2023, PGE formulated its sustainability strategy and targets, with a strong focus on climate change mitigation. One of the key targets is to reduce emissions intensity by 29% by 2030, as part of the Company’s pathway to achieving Net Zero Emissions (NZE) by 2060. This commitment is in line with PT Pertamina (Persero)’s vision of becoming a World Class National Energy Company — Energizing People and Planet with Green Energy — and supports Indonesia’s national NZE target. PGE’s NZE commitment builds on its role as a geothermal energy producer and its previous decarbonization initiatives, which are implemented annually to progressively lower emissions. The Health, Safety, Security, and Environment (HSSE) Function and Sustainability Committee are responsible for monitoring the decarbonization program as part of its KPIs, while the program’s performance is also embedded in the President Director’s KPIs. This ensures that the NZE agenda is integrated across all levels of management.
[Add row]

(7.55) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Select from:

☒ Yes

(7.55.1) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO₂e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e
Under investigation	5	<i>`Numeric input</i>
To be implemented	2	2000.34
Implementation commenced	3	25.13
Implemented	7	4063105.43
Not to be implemented	0	<i>`Numeric input</i>

[Fixed row]

(7.55.2) Provide details on the initiatives implemented in the reporting year in the table below.

Row 1

(7.55.2.1) Initiative category & Initiative type

Low-carbon energy consumption

☒ Geothermal

(7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

1161.83

(7.55.2.3) Scope(s) or Scope 3 category(ies) where emissions savings occur

Select all that apply

☒ Scope 2 (location-based)

(7.55.2.4) Voluntary/Mandatory

Select from:

☒ Voluntary

(7.55.2.5) Annual monetary savings (unit currency – as specified in 1.2)

8625

(7.55.2.6) Investment required (unit currency – as specified in 1.2)

2162162

(7.55.2.7) Payback period

Select from:

☒ >25 years

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☒ 16-20 years

(7.55.2.9) Comment

The Company installed the Binary Power Plant in the Lahendong Area in December 2022. Through this ongoing program, the electricity generated from the Brines to Power unit is used for the operations of reinjection pumps in the Lahendong Area, replacing electricity from third party.

Row 2

(7.55.2.1) Initiative category & Initiative type

Energy efficiency in buildings

☒ Motors and drives

(7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

171.81

(7.55.2.3) Scope(s) or Scope 3 category(ies) where emissions savings occur

Select all that apply

☒ Scope 1

(7.55.2.4) Voluntary/Mandatory

Select from:

☒ Voluntary

(7.55.2.5) Annual monetary savings (unit currency – as specified in 1.2)

37500

(7.55.2.6) Investment required (unit currency – as specified in 1.2)

30

(7.55.2.7) Payback period

Select from:

☒ <1 year

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☒ >30 years

(7.55.2.9) Comment

PGE successfully reduced its scope 1 emissions by 171.81 tons of CO₂e in 2024 through a strategic initiative that involved optimizing pump operations. This involved reducing the working hours of the reinjection pump by adding a gravity pump.

Row 3

(7.55.2.1) Initiative category & Initiative type

Low-carbon energy generation

☒ Geothermal

(7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

11168.57

(7.55.2.3) Scope(s) or Scope 3 category(ies) where emissions savings occur

Select all that apply

☒ Scope 1

(7.55.2.4) Voluntary/Mandatory

Select from:

☒ Voluntary

(7.55.2.5) Annual monetary savings (unit currency – as specified in 1.2)

4300223

(7.55.2.6) Investment required (unit currency – as specified in 1.2)

9250472

(7.55.2.7) Payback period

Select from:

☒ 4-10 years

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☒ >30 years

(7.55.2.9) Comment

The Ulubelu Debottlenecking Project is a modification of the Steam Above Ground System (SAGS), involving modifications and/or the addition of two-phase (steam and brine) piping. The objective is to maximize the utilization of low-pressure geothermal steam clusters to be integrated into the generator system. This project is expected to channel additional steam from Cluster J and re-operationalize wells from Cluster I, thereby increasing the power supply for Ulubelu Geothermal Power Plant Units 1, 2, 3, and 4 by approximately 18 MW – 27 MW.

Row 4

(7.55.2.1) Initiative category & Initiative type

Low-carbon energy generation

☒ Solar PV

(7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

61.66

(7.55.2.3) Scope(s) or Scope 3 category(ies) where emissions savings occur

Select all that apply

☒ Scope 2 (location-based)

(7.55.2.4) Voluntary/Mandatory

Select from:

☒ Voluntary

(7.55.2.5) Annual monetary savings (unit currency – as specified in 1.2)

1073

(7.55.2.6) Investment required (unit currency – as specified in 1.2)

6510

(7.55.2.7) Payback period

Select from:

☒ 4-10 years

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☒ 16-20 years

(7.55.2.9) Comment

The Company installed Solar PV in the Komperta Kamojang Area in May 2022. The construction of solar PV is also used for office and residential complex power sources in Kamojang Area and Lahendong Area, which reduced emissions scope 2. initiative aligns with the Company's unwavering commitment to continuously reduce emissions scope 2 by 61.66 Tons of CO₂eq.

Row 5

(7.55.2.1) Initiative category & Initiative type

Transportation

☒ Company fleet vehicle replacement

(7.55.2.2) Estimated annual CO₂e savings (metric tonnes CO₂e)

62.37

(7.55.2.3) Scope(s) or Scope 3 category(ies) where emissions savings occur

Select all that apply

☒ Scope 1

(7.55.2.4) Voluntary/Mandatory

Select from:

☒ Voluntary

(7.55.2.5) Annual monetary savings (unit currency – as specified in 1.2)

0

(7.55.2.6) Investment required (unit currency – as specified in 1.2)

161404

(7.55.2.7) Payback period

Select from:

☒ No payback

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☒ 3-5 years

(7.55.2.9) Comment

Transition from conventional operational vehicles to hybrid vehicles with lower environmental impact.

Row 6

(7.55.2.1) Initiative category & Initiative type

Transportation

☒ Other, please specify :Battery & EV Ecosystem

(7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

3.24

(7.55.2.3) Scope(s) or Scope 3 category(ies) where emissions savings occur

Select all that apply

☒ Scope 1

(7.55.2.4) Voluntary/Mandatory

Select from:

☒ Voluntary

(7.55.2.5) Annual monetary savings (unit currency – as specified in 1.2)

0

(7.55.2.6) Investment required (unit currency – as specified in 1.2)

75258

(7.55.2.7) Payback period

Select from:

☒ No payback

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☒ 3-5 years

(7.55.2.9) Comment

Transition of the Company's Directors' official vehicles to Electric Vehicles as part of Pertamina Geothermal Energy's decarbonization initiative.

Row 7

(7.55.2.1) Initiative category & Initiative type

Low-carbon energy generation

☒ Geothermal

(7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

4051167.79

(7.55.2.3) Scope(s) or Scope 3 category(ies) where emissions savings occur

Select all that apply

☒ Scope 2 (location-based)

(7.55.2.4) Voluntary/Mandatory

Select from:

☒ Mandatory

(7.55.2.5) Annual monetary savings (unit currency – as specified in 1.2)

407120000

(7.55.2.6) Investment required (unit currency – as specified in 1.2)

2997402000

(7.55.2.7) Payback period

Select from:

☒ 11-15 years

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☒ >30 years

(7.55.2.9) Comment

Emission avoidance from Pertamina Geothermal Energy's (PGE) geothermal power generation activities is achieved through the operation of five power plant units located in the Lumut Balai, Karaha, Kamojang, Ulubelu, and Lahendong Areas. Geothermal power generation represents the core business of PT Pertamina Geothermal Energy Tbk.

[Add row]

(7.55.3) What methods do you use to drive investment in emissions reduction activities?

Row 1

(7.55.3.1) Method

Select from:

☒ Dedicated budget for low-carbon product R&D

(7.55.3.2) Comment

In 2023, PGE formulated a sustainability strategy roadmap, which began implementation in 2024. Starting in 2030, the Company plans to develop CO2 liquefaction, methanol production, and carbon capture projects as part of its long-term pathway to achieve the NZE target by 2060.

Row 2

(7.55.3.1) Method

Select from:

☒ Compliance with regulatory requirements/standards

(7.55.3.2) Comment

Row 2 Method Compliance with regulatory requirements/standards Dedicated budget for energy efficiency Dedicated budget for low-carbon product R&D Dedicated budget for other emissions reduction activities Employee engagement Financial optimization calculations Internal price on carbon Internal incentives/recognition programs Internal finance mechanisms Lower return on investment (ROI) specification Marginal abatement cost curve Partnering with governments on technology development Other Comment As a company operating in Indonesia, PGE participates annually in the Company Performance Rating Program in Environmental Management (PROPER), administered by the Ministry of Environment (KLH). In line with Ministerial Regulation No. 1 of 2021 on the Public Disclosure Program for Environmental Compliance, PGE is required to implement mandatory programs covering water pollution control, water resource conservation, air pollution control, hazardous and non-hazardous waste management, land use control, and general waste management. Beyond compliance, PGE also carries out voluntary initiatives such as life cycle assessment, implementation of environmental management systems, and resource optimization programs—including energy efficiency, emission reduction, water and wastewater efficiency, hazardous and non-hazardous waste reduction and utilization, and biodiversity conservation. Additional efforts include community empowerment, disaster response, and social innovation. Through these mandatory and voluntary PROPER-related activities, supported by capital expenditures for emission reduction initiatives, PGE demonstrates its ongoing commitment to environmental stewardship, emission reduction, and the transition toward a low-carbon economy.

Row 3

(7.55.3.1) Method

Select from:

☒ Employee engagement

(7.55.3.2) Comment

The Continuous Improvement Program (CIP) serves as a platform to empower employees in addressing operational challenges they encounter in their daily work. Rooted in scientific problem-solving methods, the program fosters a culture of continuous improvement across all business functions. CIP initiatives typically focus on energy efficiency, process optimization, waste reduction, and emission reduction. Employees are actively encouraged to submit their ideas and collaborate in cross-functional teams, ensuring diverse perspectives contribute to innovative solutions. The most impactful projects are evaluated, recognized, and rewarded, further motivating participation. Beyond its operational benefits, CIP plays a key role in strengthening employee engagement at PGE. By involving employees directly in the company's sustainability journey, the program builds ownership, raises awareness of environmental impacts, and encourages behavioral changes that extend beyond the workplace. This engagement not only enhances the effectiveness of emission reduction initiatives but also reinforces a shared commitment among employees to support PGE's long-term sustainability and decarbonization goals.

Row 4

(7.55.3.1) Method

Select from:

☒ Internal incentives/recognition programs

(7.55.3.2) Comment

The Continuous Improvement Program (CIP) is designed to empower employees to identify and solve operational challenges in their daily work. Inspired by structured problem-solving methods, the program fosters continuous improvement across all functions, with strong emphasis on energy efficiency, process optimization, and emission reduction. To encourage active participation, PGE provides structured recognition and incentives. Employees are invited to submit ideas, and proposals that demonstrate measurable impact, particularly those contributing to emission reductions, are prioritized for implementation.

[Add row]

(7.58) Describe your organization's efforts to reduce methane emissions from your activities.

Scope 1 emissions, derived from:

- Operational emissions of electricity generation due to venting of Non-Condensable Gases (NCGs) naturally contained in geothermal fluids from all operation areas. Calculations use primary data from NCG tests and steam production. The calculation methodology refers to ACM 0002 and Decree of Director General of Climate Change Control No. SK.38/PPI/IGAS/PPI.2/11/2020.
- Use of fuel for operational vehicles and Emergency Diesel Generators (EDG) from all activities of the operational area, projects, and head office. The fuel specifications used refer to the local emission factors of fuel products sold in Indonesia. CO₂ emission factors refer to Table 4-4 (API Compendium), and CH₄, N₂O refer to Table 4-6 (API Compendium). In 2024, PGE's Scope 1 emissions were recorded at 92,222.91 tons CO₂e, consisting of 85,385.32 tons CO₂e from CO₂, 6,834.63 tons CO₂e from CH₄, and 2.73 tons CO₂e from N₂O. The methane (CH₄) generated from PGE's operations is very limited, as methane by-products from geothermal activities are naturally low. Therefore, PGE does not currently have a specific program dedicated to methane emission reduction.

(7.74) Do you classify any of your existing goods and/or services as low-carbon products?

Select from:

☒ Yes

(7.74.1) Provide details of your products and/or services that you classify as low-carbon products.

Row 1

(7.74.1.1) Level of aggregation

Select from:

☒ Product or service

(7.74.1.2) Taxonomy used to classify product(s) or service(s) as low-carbon

Select from:

- ☒ The EU Taxonomy for environmentally sustainable economic activities

(7.74.1.3) Type of product(s) or service(s)

Power

- ☒ Geothermal electricity

(7.74.1.4) Description of product(s) or service(s)

PGE runs its business and activities in the geothermal sector as outlined in the Company's Articles of Association. Pursuant to Article 3 of the Articles of Association, the Company was established with the aim of conducting business in the geothermal sector from the upstream and/or downstream sides, both domestically and internationally, as well as engaging in other business activities related to or supporting the geothermal sector, while applying the Company's principles. The products generated by the Company from its business activities consist of: steam (upstream project scheme), electricity (total project scheme), and carbon credit. Throughout 2024, PGE, with its low-carbon energy generation, optimized electricity production to 4,827,220.00 MWh and contributed to avoiding 4,051,167.79 tons of CO₂e emissions, with emissions 95.23% lower compared to those generated by fossil fuel power plants.

(7.74.1.5) Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Select from:

- ☒ Yes

(7.74.1.6) Methodology used to calculate avoided emissions

Select from:

- ☒ Other, please specify :UNFCCC Standard Methodology: ACM 002 Grid-connected Electricity Generation from Renewable Sources

(7.74.1.7) Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Select from:

- ☒ Cradle-to-gate

(7.74.1.8) Functional unit used

The total amount in ton of CO2 emission avoided due to geothermal electricity production replacing an equivalent amount of energy produced from fossil fuel power plants in the same grid.

(7.74.1.9) Reference product/service or baseline scenario used

Avoided CO2 is calculated by assuming that if the PGE's geothermal power plant is not built, a fossil fuels power plant will be necessary to supply the energy demand. The baseline emissions are the product of the electricity generated from fossil fuels and the grid-emissions factor. Indonesia's Electricity Directorate has issued grid-emissions factors that are location-based.

(7.74.1.10) Life cycle stage(s) covered for the reference product/service or baseline scenario

Select from:

☒ Cradle-to-gate

(7.74.1.11) Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

4051167.79

(7.74.1.12) Explain your calculation of avoided emissions, including any assumptions

Geothermal energy, while producing minor emissions due to non-condensable gases (NCG), offers a significantly cleaner alternative to fossil fuel power plants. NCG, primarily composed of CO2, is released into the atmosphere during geothermal electricity production. However, these emissions are substantially lower than those from fossil fuel-fired plants. The emissions avoidance achieved by geothermal power plants can be monetized through carbon credits. The United Nations Framework Convention on Climate Change (UNFCCC) has established a standard methodology, ACM 002, for calculating this avoidance. It compares the baseline emissions of fossil fuel power plants to the emissions from geothermal projects. Throughout 2024, PGE with low carbon energy generation has optimized electricity production up to 4,827,220.00 MWh, and contributed to efforts to avoid Greenhouse Gas (GHG) emissions of 4,051,167.79 Tons of CO2eq, with emissions produced 95.23% lower compared to emissions generated by fossil fuel power plant.

(7.74.1.13) Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

100

[Add row]

(7.79) Has your organization retired any project-based carbon credits within the reporting year?

Select from:

☒ Yes

(7.79.1) Provide details of the project-based carbon credits retired by your organization in the reporting year.

Row 1

(7.79.1.1) Project type

Select from:

☒ Geothermal

(7.79.1.2) Type of mitigation activity

Select from:

☒ Emissions reduction

(7.79.1.3) Project description

On 26 September 2023, along with the establishment of the Indonesia Carbon Exchange (IDX Carbon), the Company became the first company to provide carbon on the Exchange. Trading on this IDX Carbon involves the Lahendong project (Units 5 and 6), which is the result of PGE's collaboration with Pertamina NRE since April 2023. The Lahendong Units 5 & 6 have capacity 2 x 20 MW. PGE has several projects registered in the international carbon market, namely the Lumut balai (Units 1 & 2), Ulubelu (Units 3 & 4), Kamojang (Units 5 & 6), and Karaha (Unit 1) projects. By the end of 2024, PGE's carbon credits sold on IDXCcarbon reached 863,295 tons of CO₂eq Verified Carbon Unit (VCU) out of a total of 864,209 tons of CO₂eq VCU issued.

(7.79.1.4) Credits retired by your organization from this project in the reporting year (metric tons CO₂e)

863295

(7.79.1.5) Purpose of retirement

Select from:

☒ Voluntary offsetting

(7.79.1.6) Are you able to report the vintage of the credits at retirement?

Select from:

☒ Yes

(7.79.1.7) Vintage of credits at retirement

2020

(7.79.1.8) Were these credits issued to or purchased by your organization?

Select from:

☒ Issued

(7.79.1.9) Carbon-crediting program by which the credits were issued

Select from:

☒ Other regulatory carbon crediting program, please specify :National Registry System for Climate Change Control (Sistem Registri Nasional Pengendalian Perubahan Iklim/SRN PPI)

(7.79.1.10) Method the program uses to assess additionality for this project

Select all that apply

☒ Investment analysis

☒ Barrier analysis

(7.79.1.11) Approaches by which the selected program requires this project to address reversal risk

Select all that apply

☒ No risk of reversal

(7.79.1.12) Potential sources of leakage the selected program requires this project to have assessed

Select all that apply

☒ Not assessed

(7.79.1.13) Provide details of other issues the selected program requires projects to address

PGE's carbon credits have previously been verified with CDM using investment analysis and barrier analysis methods. Then, the carbon credit was verified again with SRN PPI (National Registry System for Climate Change Control) to be sold in the domestic market. SRN PPI is a web-based system for managing, providing data and information on actions and resources for Climate Change Mitigation, Climate Change Adaptation, and Carbon Economic Value in Indonesia as stipulated in Perpres 98/2021. SRN PPI is the basis for government recognition of the contribution of Carbon Economic Value implementation in achieving NDC targets. The SRN PPI also aims to avoid double counting of mitigation actions or double claims, transfer tracking materials, and further operational policy considerations as needed. PGE also refers to SK.38/PPI/IGAS/PPI.2/11 of 2020 in the calculation of emission reductions and/or increased GHG uptake used in the SRN PPI verification.

(7.79.1.14) Please explain

The sales of carbon credits are carried out by Pertamina NRE as the Power & New Renewable Energy (PNRE) Subholding, with PGE acting as the carbon supply provider. The sales of carbon credits serve not only as a new revenue stream for PGE, but also seek to support the targets of companies, industries, and the Government in reducing greenhouse gas emissions to achieve net zero emissions by 2060. On 26 September 2023, along with the establishment of the Indonesia Carbon Exchange (IDX Carbon), the Company became the first company to provide carbon on the Exchange. Trading on this IDX Carbon involves the Lahendong project (Units 5 and 6), which is the result of PGE's collaboration with Pertamina NRE since April 2023. By the end of 2024, PGE's carbon credits sold on IDXCarbon reached 863,295 tons of CO₂eq Verified Carbon Unit (VCU) out of a total of 864,209 tons of CO₂eq VCU issued.
[Add row]

C9. Environmental performance - Water security

(9.1) Are there any exclusions from your disclosure of water-related data?

Select from:

☒ No

(9.2) Across all your operations, what proportion of the following water aspects are regularly measured and monitored?

Water withdrawals – total volumes

(9.2.1) % of sites/facilities/operations

Select from:

☒ 100%

(9.2.2) Frequency of measurement

Select from:

☒ Monthly

(9.2.3) Method of measurement

Flow meters to measure how much water is withdrawn.

(9.2.4) Please explain

PGE's water withdrawal activities are generally non-routine in nature, primarily supporting drilling operations as well as domestic and operational requirements. The company upholds a strong commitment to the responsible use of water resources, ensuring no adverse impact on surrounding communities. Each operational site guarantees that local water sources remain accessible for public use. PGE actively engages with local communities, employees, and relevant authorities to address and mitigate potential challenges related to shared water resources. According to the Aqueduct Water Risk Atlas, two of PGE's operational areas are identified as being under high water stress. The company regularly discloses its water withdrawal data through its sustainability reporting mechanisms.

Water withdrawals – volumes by source

(9.2.1) % of sites/facilities/operations

Select from:

☒ 100%

(9.2.2) Frequency of measurement

Select from:

☒ Monthly

(9.2.3) Method of measurement

Flow meters to measure how much water is withdrawn.

(9.2.4) Please explain

PGE's Sustainability Report provides a detailed disclosure of water withdrawals based on the source, including surface water (such as rivers), groundwater, and water obtained from third-party providers. Furthermore, water withdrawal data is routinely submitted to the relevant regulatory authorities. As identified by the Aqueduct Water Risk Atlas, two of PGE's operational sites are located in areas categorized as experiencing high water stress.

Water withdrawals quality

(9.2.1) % of sites/facilities/operations

Select from:

☒ 100%

(9.2.2) Frequency of measurement

Select from:

☒ Other, please specify :Twice a Year

(9.2.3) Method of measurement

Water withdrawal quality is monitored at the site level using water samplers and lab testing. Parameters measured such as COD, BOD, TDS, pH, temperature, microbiology analysis, as well as inorganic and nutrient substances.

(9.2.4) Please explain

PGE makes use of freshwater primarily for domestic needs, to support power generation processes such as filling cooling tower basins, and for non-routine activities including geothermal well drilling and workover operations. Throughout the entire project lifecycle, PGE conducts regular monitoring of both surface and groundwater quality, in accordance with the provisions set out in its Environmental Impact Assessment (EIA).

Water discharges – total volumes

(9.2.1) % of sites/facilities/operations

Select from:

☒ 100%

(9.2.2) Frequency of measurement

Select from:

☒ Daily

(9.2.3) Method of measurement

Flow meters to measure water discharge volumes.

(9.2.4) Please explain

PGE is firmly committed to responsible water resource management by enhancing water use efficiency and reducing effluent discharge into natural water bodies. Effluents originate from various sources, including domestic wastewater, laboratory effluents, and surface runoff. To ensure compliance with regulatory quality standards, each operational site is equipped with a Wastewater Treatment Plant (WWTP). Through closed-loop geothermal operations—specifically the reinjection of condensate and brine into the reservoir—PGE effectively minimizes its environmental impact. The company implements stringent monitoring and management of water use and liquid waste. Both the volume and quality of discharged water are regularly tracked and reported to the relevant authorities, in line with the requirements set forth in the Environmental Impact Assessment (EIA). Additionally, the Sustainability Report discloses water discharge data disaggregated by source.

Water discharges – volumes by destination

(9.2.1) % of sites/facilities/operations

Select from:

☒ 100%

(9.2.2) Frequency of measurement

Select from:

☒ Daily

(9.2.3) Method of measurement

Flow meters are used to measure water discharge volumes.

(9.2.4) Please explain

Water discharge volumes are monitored on a daily basis or through third-party data, in accordance with the requirements of the Water Discharge Permit. Discharge destinations include surface water bodies, groundwater sources, and third-party treatment facilities. PGE consistently monitors both the quantity and quality of discharged water, with results reported to the appropriate regulatory agencies as stipulated in the project's Environmental Impact Assessment (EIA). Furthermore, the Sustainability Report provides detailed disclosures on water discharge volumes and quality metrics.

Water discharges – volumes by treatment method

(9.2.1) % of sites/facilities/operations

Select from:

☒ 100%

(9.2.2) Frequency of measurement

Select from:

☒ Daily

(9.2.3) Method of measurement

The flow meter is used to measure the water volume transferred to its stage treatment, and we do the laboratory analysis to measure the quality of water discharge.

(9.2.4) Please explain

Each PGE site is equipped with a Wastewater Treatment Plant (WWTP) that implements both primary and secondary treatment processes. Drainage runoff is treated using physical methods, while domestic wastewater undergoes a combination of biological and physical treatment. Laboratory wastewater is subjected to both chemical and physical treatment processes. The quality of effluent discharged from the WWTP is routinely monitored to ensure compliance with national environmental regulations and the specific requirements of applicable permits. Monitoring includes key parameters such as temperature, pH, biological and chemical oxygen demand, total phosphorus, arsenic content, and suspended solids.

Water discharge quality – by standard effluent parameters

(9.2.1) % of sites/facilities/operations

Select from:

☒ 100%

(9.2.2) Frequency of measurement

Select from:

☒ Monthly

(9.2.3) Method of measurement

Water quality is carried out by direct measurement and analyzed in a certified laboratory.

(9.2.4) Please explain

Effluent quality is monitored in accordance with applicable regulatory standards and permit conditions, with key parameters measured including temperature, pH, biological and chemical oxygen demand, total phosphorus, arsenic, suspended solids, oil, and grease. PGE conducts routine monitoring of discharge water quality and reports the results to the relevant authorities, as mandated by its effluent discharge permits and the Environmental Impact Assessment (EIA) throughout the entire project lifecycle.

Water discharge quality – emissions to water (nitrates, phosphates, pesticides, and/or other priority substances)

(9.2.1) % of sites/facilities/operations

Select from:

☒ Not relevant

(9.2.4) Please explain

Water discharge quality – emissions to water (nitrates, phosphates, pesticides, and/or other priority substances) are not relevant to PGE operations.

Water discharge quality – temperature

(9.2.1) % of sites/facilities/operations

Select from:

☒ 100%

(9.2.2) Frequency of measurement

Select from:

☒ Monthly

(9.2.3) Method of measurement

Water quality is carried out by direct measurement.

(9.2.4) Please explain

Effluent quality is monitored against national regulations and permit requirements, measuring parameters such as temperature, pH, oxygen demand, chemical demand, total phosphorus, arsenic, and suspended solids.

Water consumption – total volume

(9.2.1) % of sites/facilities/operations

Select from:

☒ 100%

(9.2.2) Frequency of measurement

Select from:

☒ Monthly

(9.2.3) Method of measurement

Water consumption is calculated using a water balance, considering both water withdrawals and discharges.

(9.2.4) Please explain

PGE utilizes water for various purposes, including domestic use, support for power generation activities such as cooling tower basin filling, and non-routine operations such as geothermal well drilling and workover. Information on water consumption is transparently disclosed in the PGE Sustainability Report.

Water recycled/reused

(9.2.1) % of sites/facilities/operations

Select from:

☒ 100%

(9.2.2) Frequency of measurement

Select from:

☒ Yearly

(9.2.3) Method of measurement

The measurement method will vary depending on the sites and recycling initiatives. Some sites use flow meters, some use the calculation from measured data/flow from the reduction initiative.

(9.2.4) Please explain

PGE implements various water conservation initiatives, including the use of condensate water for filling cooling tower basins during power plant startup, as well as the reuse of brine and condensate for geothermal well drilling and workover operations. As a renewable energy source, geothermal energy can be sustainably utilized through effective resource management. PGE adopts a closed-loop geothermal system, whereby steam that has passed through the turbine is condensed, and both

the resulting condensate and separated brine are re-injected into the geothermal reservoir. This process helps replenish the reservoir, enabling the geothermal fluid to naturally reheat and be reused in subsequent power generation cycles.

The provision of fully-functioning, safely managed WASH services to all workers

(9.2.1) % of sites/facilities/operations

Select from:

☒ 100%

(9.2.2) Frequency of measurement

Select from:

☒ Other, please specify :Twice a year

(9.2.3) Method of measurement

Water quality is carried out by direct measurement and analyzed in a certified laboratory, moreover internal and external health and safety audits are used to ensure the necessary resources are in place to provide a safe and healthy workplace for all employees and ensure legal compliance.

(9.2.4) Please explain

PGE is dedicated to ensuring the provision of safe water, sanitation, and hygiene (WASH) facilities across all its workplaces. In compliance with ISO 14001, ISO 45001, and applicable national regulations, the company maintains fully functional and safely managed WASH infrastructure for all employees. Located primarily in upstream watershed areas, PGE benefits from generally high natural water quality. To comply with Indonesian health standards, PGE exclusively utilizes commercially available drinking water that has been certified by the Food and Drug Administration (BPOM). By securing access to clean drinking water and adequate sanitation, the company demonstrates its strong commitment to protecting the health and well-being of its workforce. PGE also conducts regular monitoring of surface and groundwater quality in line with national environmental regulations and its Environmental Impact Assessment (EIA). Monitoring data are reported to the relevant government authorities throughout t
[Fixed row]

(9.2.2) What are the total volumes of water withdrawn, discharged, and consumed across all your operations, how do they compare to the previous reporting year, and how are they forecasted to change?

Total withdrawals

(9.2.2.1) Volume (megaliters/year)

399.15

(9.2.2.2) Comparison with previous reporting year

Select from:

☒ Much higher

(9.2.2.3) Primary reason for comparison with previous reporting year

Select from:

☒ Increase/decrease in business activity

(9.2.2.4) Five-year forecast

Select from:

☒ Higher

(9.2.2.5) Primary reason for forecast

Select from:

☒ Increase/decrease in business activity

(9.2.2.6) Please explain

In 2024, total water withdrawal reached 399.15 megaliters, an increase of 32% compared to the previous year due to drilling activities in the Kamojang, Karaha, and Lahendong areas. In 2024, this was to increase production capacity. In the process, PGE ensures that the process of water withdrawal and utilization does not harm the surrounding community by ensuring sufficient water availability across all PGE operational areas. The company also regularly conducts mitigation processes through communication with local authorities, such as village heads, district heads, and relevant regional agencies.

Total discharges

(9.2.2.1) Volume (megaliters/year)

(9.2.2.2) Comparison with previous reporting year

Select from:

☒ Lower**(9.2.2.3) Primary reason for comparison with previous reporting year**

Select from:

☒ Increase/decrease in efficiency**(9.2.2.4) Five-year forecast**

Select from:

☒ Lower**(9.2.2.5) Primary reason for forecast**

Select from:

☒ Increase/decrease in efficiency**(9.2.2.6) Please explain**

In 2024, water consumption decreased from the previous year, but disposal decreased in 2024 due to a review of process technology, namely reinjection of brine and condensate fluids from geothermal power plant activities. In addition, the effectiveness of water conservation programs or efforts was improved.

Total consumption**(9.2.2.1) Volume (megaliters/year)**

393.23

(9.2.2.2) Comparison with previous reporting year

Select from:

☒ Much higher

(9.2.2.3) Primary reason for comparison with previous reporting year

Select from:

☒ Increase/decrease in business activity

(9.2.2.4) Five-year forecast

Select from:

☒ Much higher

(9.2.2.5) Primary reason for forecast

Select from:

☒ Increase/decrease in business activity

(9.2.2.6) Please explain

In 2024, total water consumption reached 393.23 megaliters, an increase of 26% compared to the previous year due to drilling activities in the Kamojang, Karaha, and Lahendong areas. In 2024, this was due to an increase in production capacity requirements. In the process, PGE ensured that the water disposal process did not harm the surrounding community. The company also regularly conducts mitigation processes through communication with local authorities, such as village heads, district heads, and relevant regional agencies.

[Fixed row]

(9.2.4) Indicate whether water is withdrawn from areas with water stress, provide the volume, how it compares with the previous reporting year, and how it is forecasted to change.

(9.2.4.1) Withdrawals are from areas with water stress

Select from:

☒ Yes

(9.2.4.2) Volume withdrawn from areas with water stress (megaliters)

239.1

(9.2.4.3) Comparison with previous reporting year

Select from:

☒ Higher

(9.2.4.4) Primary reason for comparison with previous reporting year

Select from:

☒ Increase/decrease in business activity

(9.2.4.5) Five-year forecast

Select from:

☒ Higher

(9.2.4.6) Primary reason for forecast

Select from:

☒ Increase/decrease in business activity

(9.2.4.7) % of total withdrawals that are withdrawn from areas with water stress

59.90

(9.2.4.8) Identification tool

Select all that apply

☒ WRI Aqueduct

(9.2.4.9) Please explain

In 2024, based on WRI Aqueduct data, there were two PGE areas classified as water-stressed areas, namely Karaha and Kamojang. The increase in water withdrawal was caused by the opening of geothermal sources in the Kamojang area, as well as drilling activities in the Kamojang and Karaha areas. There was a two-stage turnaround activity in the Karaha area that required repeated filling of the cooling tower basin. Although there was an increase in water withdrawal, this did not result in water shortages in the surrounding environment. This is because the Company has taken mitigation measures to prevent water shortages, including conducting drilling activities during the rainy season and utilizing condensate and brine water to reduce the use of surface water.
[Fixed row]

(9.2.7) Provide total water withdrawal data by source.

Fresh surface water, including rainwater, water from wetlands, rivers, and lakes

(9.2.7.1) Relevance

Select from:

☒ Relevant

(9.2.7.2) Volume (megaliters/year)

372.48

(9.2.7.3) Comparison with previous reporting year

Select from:

☒ Much higher

(9.2.7.4) Primary reason for comparison with previous reporting year

Select from:

☒ Increase/decrease in business activity

(9.2.7.5) Please explain

The increase in surface water withdrawal in 2024 compared to 2023 is due to drilling activities and the opening of new wells (drilling). In 2024, based on WRI Aqueduct data, there are two PGE areas classified as areas experiencing water stress, namely Karaha and Kamojang. The increase in water withdrawal is caused by the development of geothermal sources in the Kamojang area, as well as drilling activities in the Kamojang and Karaha areas. There are two-stage turnaround activities in the Karaha area that require repeated filling of the cooling tower basin. Although there has been an increase in water withdrawal, this has not resulted in water shortages in the surrounding environment. This is because the Company has taken mitigation measures to prevent water shortages, including conducting drilling activities during the rainy season and utilizing condensate and brine to reduce the use of surface water.

Brackish surface water/Seawater

(9.2.7.1) Relevance

Select from:

☒ Not relevant

(9.2.7.5) Please explain

Water consumption, water withdrawal, and wastewater (effluent) originate solely from surface water, groundwater renewable, and water from third parties.

Groundwater – renewable

(9.2.7.1) Relevance

Select from:

☒ Relevant

(9.2.7.2) Volume (megaliters/year)

18.03

(9.2.7.3) Comparison with previous reporting year

Select from:

☒ Lower

(9.2.7.4) Primary reason for comparison with previous reporting year

Select from:

☒ Increase/decrease in efficiency

(9.2.7.5) Please explain

The decrease in groundwater withdrawal is due to the 4R program, especially sanitation and the use of recycled water, thus reducing groundwater consumption. In 2024, drilling activities will utilize Aerated Drilling Utility technology to reduce groundwater use in drilling activities.

Groundwater – non-renewable

(9.2.7.1) Relevance

Select from:

☒ Not relevant

(9.2.7.5) Please explain

Water consumption, water withdrawal, and wastewater (effluent) originate solely from surface water, groundwater renewable, and water from third parties.

Produced/Entrained water

(9.2.7.1) Relevance

Select from:

☒ Not relevant

(9.2.7.5) Please explain

Water consumption, water withdrawal, and wastewater (effluent) originate solely from surface water, groundwater renewable, and water from third parties.

Third party sources

(9.2.7.1) Relevance

Select from:

☒ Relevant

(9.2.7.2) Volume (megaliters/year)

8.63

(9.2.7.3) Comparison with previous reporting year

Select from:

☒ Higher

(9.2.7.4) Primary reason for comparison with previous reporting year

Select from:

☒ Increase/decrease in business activity

(9.2.7.5) Please explain

The decrease in water collection from third parties is due to the 4R program for operational and domestic activities.
[Fixed row]

(9.2.8) Provide total water discharge data by destination.

Fresh surface water

(9.2.8.1) Relevance

Select from:

☒ Relevant

(9.2.8.2) Volume (megaliters/year)

5.9

(9.2.8.3) Comparison with previous reporting year

Select from:

☒ Lower

(9.2.8.4) Primary reason for comparison with previous reporting year

Select from:

☒ Increase/decrease in efficiency

(9.2.8.5) Please explain

The increase in surface water discharge in 2024 compared to 2023 is due to drilling activities and the opening of new wells (drilling).

Brackish surface water/seawater

(9.2.8.1) Relevance

Select from:

☒ Not relevant

(9.2.8.5) Please explain

Water consumption, water withdrawal, and wastewater (effluent) originate solely from surface water, groundwater renewable, and water from third parties.

Groundwater

(9.2.8.1) Relevance

Select from:

☒ Relevant

(9.2.8.2) Volume (megaliters/year)

0.01

(9.2.8.3) Comparison with previous reporting year

Select from:

☒ Lower

(9.2.8.4) Primary reason for comparison with previous reporting year

Select from:

☒ Increase/decrease in efficiency

(9.2.8.5) Please explain

The increase in groundwater discharge in 2024 compared to 2023 is due to drilling activities and the opening of new wells (drilling).

Third-party destinations

(9.2.8.1) Relevance

Select from:

☒ Relevant

(9.2.8.2) Volume (megaliters/year)

0

(9.2.8.3) Comparison with previous reporting year

Select from:

☒ About the same

(9.2.8.4) Primary reason for comparison with previous reporting year

Select from:

☒ Investment in water-smart technology/process

(9.2.8.5) Please explain

As all of our operational sites are already equipped with wastewater treatment plants for domestic wastewater, there is currently no discharge to third parties. Nevertheless, maintaining this practice remains important, considering ongoing drilling activities and potential future projects that may require the discharge of domestic wastewater to external parties.

[Fixed row]

(9.2.9) Within your direct operations, indicate the highest level(s) to which you treat your discharge.

Tertiary treatment

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☒ Not relevant

(9.2.9.6) Please explain

“Not relevant” because all directly operating facilities only apply Secondary treatment, Primary treatment, and Discharge to a third party without treatment.

Secondary treatment

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☒ Relevant

(9.2.9.2) Volume (megaliters/year)

5.91

(9.2.9.3) Comparison of treated volume with previous reporting year

Select from:

☒ Lower

(9.2.9.4) Primary reason for comparison with previous reporting year

Select from:

☒ Increase/decrease in efficiency

(9.2.9.5) % of your sites/facilities/operations this volume applies to

Select from:

☒ 100%

(9.2.9.6) Please explain

All facilities in direct operations have implemented secondary treatment. There was an increase in volume this year due to an increase in company activity.

Primary treatment only

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☒ Relevant

(9.2.9.2) Volume (megaliters/year)

5.91

(9.2.9.3) Comparison of treated volume with previous reporting year

Select from:

☒ Lower

(9.2.9.4) Primary reason for comparison with previous reporting year

Select from:

☒ Increase/decrease in efficiency

(9.2.9.5) % of your sites/facilities/operations this volume applies to

Select from:

☒ 100%

(9.2.9.6) Please explain

All directly operated facilities have implemented primary processing. Processing volumes have declined this year due to increased operational efficiency at geothermal power plants.

Discharge to the natural environment without treatment

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☒ Not relevant

(9.2.9.6) Please explain

"Not relevant" because all directly operating facilities only apply Secondary treatment, Primary treatment, and Discharge to a third party without treatment.

Discharge to a third party without treatment

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☒ Relevant

(9.2.9.2) Volume (megaliters/year)

0

(9.2.9.3) Comparison of treated volume with previous reporting year

Select from:

☒ About the same

(9.2.9.4) Primary reason for comparison with previous reporting year

Select from:

☒ Investment in water-smart technology/process

(9.2.9.5) % of your sites/facilities/operations this volume applies to

Select from:

☒ 100%

(9.2.9.6) Please explain

All our operational sites have installed wastewater treatment plants for their domestic wastewater, meaning no wastewater is discharged to a third party. However, this practice remains important due to ongoing drilling activities and potential future projects that may need to discharge domestic wastewater to a third party.

Other

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☒ Not relevant

(9.2.9.6) Please explain

"Not relevant" because all directly operating facilities only apply Secondary treatment, Primary treatment, and Discharge to a third party without treatment.
[Fixed row]

(9.3) In your direct operations and upstream value chain, what is the number of facilities where you have identified substantive water-related dependencies, impacts, risks, and opportunities?

Direct operations

(9.3.1) Identification of facilities in the value chain stage

Select from:

☒ Yes, we have assessed this value chain stage and identified facilities with water-related dependencies, impacts, risks, and opportunities

(9.3.2) Total number of facilities identified

6

(9.3.3) % of facilities in direct operations that this represents

Select from:

☒ 26-50

(9.3.4) Please explain

Based on WRI Aqueduct, there are two areas of water stress, namely Kamojang and Karaha. The percentage of facilities is obtained from the total area located in the Water Stress area divided by the total working area of PGE.

Upstream value chain

(9.3.1) Identification of facilities in the value chain stage

Select from:

☒ No, we have assessed this value chain stage but did not identify any facilities with water-related dependencies, impacts, risks, and opportunities

(9.3.4) Please explain

*Upstream value chain is still 1 area adjacent to water stress, the development is still adjacent to the operation area, and PGE has identified drilling facilities.
[Fixed row]*

(9.3.1) For each facility referenced in 9.3, provide coordinates, water accounting data, and a comparison with the previous reporting year.

Row 1

(9.3.1.1) Facility reference number

Select from:

☒ Facility 1

(9.3.1.2) Facility name (optional)

Kamojang

(9.3.1.3) Value chain stage

Select from:

☒ Direct operations

(9.3.1.4) Dependencies, impacts, risks, and/or opportunities identified at this facility

Select all that apply

☒ Risks

☒ Opportunities

(9.3.1.5) Withdrawals or discharges in the reporting year

Select from:

☒ Yes, withdrawals and discharges

(9.3.1.7) Country/Area & River basin

Indonesia

☒ Other, please specify :Cimanuk River Basin

(9.3.1.8) Latitude

-7.140832

(9.3.1.9) Longitude

107.78786

(9.3.1.10) Located in area with water stress

Select from:

☒ Yes

(9.3.1.11) Primary power generation source for your electricity generation at this facility

Select from:

☒ Geothermal

(9.3.1.13) Total water withdrawals at this facility (megaliters)

50.2

(9.3.1.14) Comparison of total withdrawals with previous reporting year

Select from:

☒ Lower

(9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

36.32

(9.3.1.16) Withdrawals from brackish surface water/seawater

0

(9.3.1.17) Withdrawals from groundwater - renewable

5.24

(9.3.1.18) Withdrawals from groundwater - non-renewable

0

(9.3.1.19) Withdrawals from produced/entrained water

0

(9.3.1.20) Withdrawals from third party sources

8.63

(9.3.1.21) Total water discharges at this facility (megaliters)

4.75

(9.3.1.22) Comparison of total discharges with previous reporting year

Select from:

☒ Lower

(9.3.1.23) Discharges to fresh surface water

4.75

(9.3.1.24) Discharges to brackish surface water/seawater

0

(9.3.1.25) Discharges to groundwater

0

(9.3.1.26) Discharges to third party destinations

0

(9.3.1.27) Total water consumption at this facility (megaliters)

45.45

(9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

☒ Lower

(9.3.1.29) Please explain

Water withdrawal, consumption, and discharge have decreased due to the implementation of 4R. PGE has conducted a study on water efficiency in operational activities through a Life Cycle Assessment study and water audit in 2024, the results of which were deemed effective and led to the creation of effective water efficiency program innovations.

Row 2

(9.3.1.1) Facility reference number

Select from:

☒ Facility 2

(9.3.1.2) Facility name (optional)

Karaha

(9.3.1.3) Value chain stage

Select from:

☒ Direct operations

(9.3.1.4) Dependencies, impacts, risks, and/or opportunities identified at this facility

Select all that apply

☒ Risks

☒ Opportunities

(9.3.1.5) Withdrawals or discharges in the reporting year

Select from:

☒ Yes, withdrawals and discharges

(9.3.1.7) Country/Area & River basin

Indonesia

☒ Other, please specify :Cimanuk River Basin

(9.3.1.8) Latitude

-7.14839

(9.3.1.9) Longitude

108.08382

(9.3.1.10) Located in area with water stress

Select from:

☒ Yes

(9.3.1.11) Primary power generation source for your electricity generation at this facility

Select from:

☒ Geothermal

(9.3.1.13) Total water withdrawals at this facility (megaliters)

188.9

(9.3.1.14) Comparison of total withdrawals with previous reporting year

Select from:

☒ Much higher

(9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

188.9

(9.3.1.16) Withdrawals from brackish surface water/seawater

0

(9.3.1.17) Withdrawals from groundwater - renewable

0

(9.3.1.18) Withdrawals from groundwater - non-renewable

0

(9.3.1.19) Withdrawals from produced/entrained water

0

(9.3.1.20) Withdrawals from third party sources

0

(9.3.1.21) Total water discharges at this facility (megaliters)

0.11

(9.3.1.22) Comparison of total discharges with previous reporting year

Select from:

☒ Higher

(9.3.1.23) Discharges to fresh surface water

0.11

(9.3.1.24) Discharges to brackish surface water/seawater

0

(9.3.1.25) Discharges to groundwater

0

(9.3.1.26) Discharges to third party destinations

0

(9.3.1.27) Total water consumption at this facility (megaliters)

188.79

(9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

☒ Much higher

(9.3.1.29) Please explain

In 2024, the Karaha area experienced an increase in water extraction, disposal, and consumption due to a two-stage turnaround that required repeated filling of the cooling tower basin. Water usage for drilling activities also increased, in line with the increase in drilling activities compared to the previous year. Despite the increase in water consumption, this did not result in water shortages in the surrounding environment. This is because the Company has implemented mitigation measures to prevent water shortages, including conducting drilling activities during the rainy season and utilizing condensate and brine water to reduce the use of surface water.
[Add row]

(9.3.2) For the facilities in your direct operations referenced in 9.3.1, what proportion of water accounting data has been third party verified?

Water withdrawals – total volumes

(9.3.2.1) % verified

Select from:

☒ 76-100

(9.3.2.2) Verification standard used

AA1000

Water withdrawals – volume by source

(9.3.2.1) % verified

Select from:

☒ 76-100

(9.3.2.2) Verification standard used

AA1000

Water withdrawals – quality by standard water quality parameters

(9.3.2.1) % verified

Select from:

☒ 76-100

(9.3.2.2) Verification standard used

AA1000

Water discharges – total volumes

(9.3.2.1) % verified

Select from:

☒ 76-100

(9.3.2.2) Verification standard used

AA1000

Water discharges – volume by destination

(9.3.2.1) % verified

Select from:

☒ 76-100

(9.3.2.2) Verification standard used

AA1000

Water discharges – volume by final treatment level

(9.3.2.1) % verified

Select from:

☒ 76-100

(9.3.2.2) Verification standard used

AA1000

Water discharges – quality by standard water quality parameters

(9.3.2.1) % verified

Select from:

☒ 76-100

(9.3.2.2) Verification standard used

AA1000

Water consumption – total volume

(9.3.2.1) % verified

Select from:

☒ 76-100

(9.3.2.2) Verification standard used

AA1000

[Fixed row]

(9.5) Provide a figure for your organization's total water withdrawal efficiency.

(9.5.1) Revenue (currency)

407120000

(9.5.2) Total water withdrawal efficiency

1019967.43

(9.5.3) Anticipated forward trend

It is expected that there will be a decrease in water withdrawal in the future due to the 4R program and technology that can save the amount of water needed for production. And every year PGE is committed to innovating to improve the 4R program in accordance with Company policy.

[Fixed row]

(9.7) Do you calculate water intensity for your electricity generation activities?

Select from:

☒ Yes

(9.7.1) Provide the following intensity information associated with your electricity generation activities.

Row 1

(9.7.1.1) Water intensity value (m3/denominator)

0.08

(9.7.1.2) Numerator: water aspect

Select from:

☒ Total water consumption

(9.7.1.3) Denominator

Select from:

☒ Other, please specify :GWh

(9.7.1.4) Comparison with previous reporting year

Select from:

☒ Higher

(9.7.1.5) Please explain

In 2024, there was an increase in total water consumption, particularly for operational support activities. This was due to the unavoidable use of water in the Karaha Area due to a two-stage turnaround that required repeated filling of the cooling tower basin. Water usage for drilling activities also increased, due to an increase in drilling activities compared to the previous year. Despite the increase in water consumption, this did not result in water shortages in the surrounding environment. This is because the Company has implemented mitigation measures to prevent water shortages, including conducting drilling activities during the rainy season and utilizing condensate water and brine to reduce surface water usage.

[Add row]

(9.13) Do any of your products contain substances classified as hazardous by a regulatory authority?

(9.13.1) Products contain hazardous substances

Select from:

☒ No

(9.13.2) Comment

Products of PGE include geothermal steam and electricity generated by geothermal power plants. PGE products are not categorized as hazardous based on Indonesian regulations. It does not involve the combustion of fossil fuels, is renewable, and can become a source of sustainable energy for as long as the geothermal steam field is properly managed. PGE is able to sustain its geothermal resources with this “closed loop” geothermal operations, while also minimizing environmental footprints.

[Fixed row]

(9.14) Do you classify any of your current products and/or services as low water impact?

(9.14.1) Products and/or services classified as low water impact

Select from:

☒ Yes

(9.14.2) Definition used to classify low water impact

Our operations are not only focused on geothermal power generation and PGE uses a Life Cycle Assessment study.

(9.14.4) Please explain

The Company conducted Life Cycle Assessment (LCA) studies for Kamojang, Ulubelu, and Lahendong Areas in 2021, and Karaha Area in 2022. The LCA studies are slated to be conducted every three years. Based on the results of the LCA studies, the range of the total impact value of the water footprint category in the studied area is 3.65E-06 m³/kWh to 2.06E-05 m³/kWh. These results show that the water usage is relatively low compared to the production activities undertaken.
[Fixed row]

(9.15) Do you have any water-related targets?

Select from:

☒ Yes

(9.15.1) Indicate whether you have targets relating to water pollution, water withdrawals, WASH, or other water-related categories.

Water pollution

(9.15.1.1) Target set in this category

Select from:

☒ Yes

Water withdrawals

(9.15.1.1) Target set in this category

Select from:

☒ No, but we plan to within the next two years

(9.15.1.2) Please explain

PGE has not established a specific target for water withdrawal; however, a target for water consumption has been set. This target is evaluated based on the water availability and associated risks within our operational areas. Consequently, the current emphasis is placed on achieving the water consumption target.

Water, Sanitation, and Hygiene (WASH) services

(9.15.1.1) Target set in this category

Select from:

☒ No, but we plan to within the next two years

(9.15.1.2) Please explain

PGE currently does not have specific targets for Water, Sanitation, and Hygiene (WASH) services. However, we ensure that all employees have access to high-quality WASH facilities. While there isn't a company-wide target for WASH services, we do have a program that includes WASH as part of our community development efforts. We plan to evaluate this target in the near future.

Other

(9.15.1.1) Target set in this category

Select from:

☒ Yes

[Fixed row]

(9.15.2) Provide details of your water-related targets and the progress made.

Row 1

(9.15.2.1) Target reference number

Select from:

☒ Target 1

(9.15.2.2) Target coverage

Select from:

☒ Business activity

(9.15.2.3) Category of target & Quantitative metric

Monitoring of water use

☒ Increase in the proportion of sites monitoring water discharge quality – by standard effluent parameter

(9.15.2.4) Date target was set

12/31/2022

(9.15.2.5) End date of base year

12/30/2023

(9.15.2.6) Base year figure

8

(9.15.2.7) End date of target year

12/30/2030

(9.15.2.8) Target year figure

10

(9.15.2.9) Reporting year figure

8

(9.15.2.10) Target status in reporting year

Select from:

☒ Achieved

(9.15.2.11) % of target achieved relative to base year

0

(9.15.2.12) Global environmental treaties/initiatives/ frameworks aligned with or supported by this target

Select all that apply

☒ Other, please specify :Minister of Environment and Forestry Regulation no.68 of 2016 concerning Domestic Wastewater Quality Standards

(9.15.2.13) Explain target coverage and identify any exclusions

The water pollution target includes business activities because it comes from the source of sanitation and domestic office activities. For water use from operational activities does not produce water pollutants.

(9.15.2.15) Actions which contributed most to achieving or maintaining this target

In 2024, PGE provided training and certification to workers involved in wastewater management. PGE also selected water efficiency programs that had a significant impact based on the results of Life Cycle Assessment recommendations and water audits. This is a form of the company's commitment to implementing water mitigation programs for PLTP operations.

(9.15.2.16) Further details of target

Until the end of 2024, PGE's wastewater quality standards have been met and will continue to be monitored regularly so that improvements to the quality standards can be in accordance with applicable regulations. The parameter number at the end of 2023 has reached below 10mg/liter.

Row 2

(9.15.2.1) Target reference number

Select from:

☒ Target 2

(9.15.2.2) Target coverage

Select from:

☒ Business activity

(9.15.2.3) Category of target & Quantitative metric

Product water intensity

☒ Reduction per unit of production

(9.15.2.4) Date target was set

12/31/2020

(9.15.2.5) End date of base year

12/30/2021

(9.15.2.6) Base year figure

0.06

(9.15.2.7) End date of target year

12/30/2030

(9.15.2.8) Target year figure

0.04

(9.15.2.9) Reporting year figure

0.01

(9.15.2.10) Target status in reporting year

Select from:

☒ Achieved

(9.15.2.11) % of target achieved relative to base year

250

(9.15.2.12) Global environmental treaties/initiatives/ frameworks aligned with or supported by this target

Select all that apply

☒ Sustainable Development Goal 6

(9.15.2.13) Explain target coverage and identify any exclusions

The target scope relates to business activities as it reduces water usage that does not interfere with production activities.

(9.15.2.15) Actions which contributed most to achieving or maintaining this target

PGE provides a budget for the development of water intensity innovation programs for PLTP production needs. The following are water efficiency initiatives already underway in PGE areas: 1. Kamojang Area: Utilization of condensate during power plant start-up with water efficiency of 0.59 megaliters 2. Lahendong Area: Utilization of brine to reduce the use of fresh water in drilling activities with water efficiency of 3.60 megaliters 3. Ulubelu Area: Use of condensate water for the start-up of units 3 and 4 with water efficiency of 4.23 megaliters 4. Karaha Area: Utilization of brine and condensate as a surface water mixture in TLG 3.4, TLG 3.5, and TLG 3.6 well drilling activities with water efficiency of 4.55 megaliters. A more detailed explanation of other programs in the PGE Area can be found in the PGE 2024 Sustainability Report on page 168.

(9.15.2.16) Further details of target

By the end of 2024, PGE has optimized the utilization of brine / condensate in drilling activities, refilled cooling tower basins with brine / condensate, reduced water loss from leaks, and water saving campaigns to internal companies.

[Add row]

C10. Environmental performance - Plastics

(10.1) Do you have plastics-related targets, and if so what type?

(10.1.1) Targets in place

Select from:

☒ No, and we do not plan to within the next two years

(10.1.3) Please explain

PGE's business activities focus on the utilization of geothermal energy, and therefore its operations are not directly related to plastic. At present, the company has not yet established specific targets regarding plastic, but plans to set targets to achieve waste circularity. Nevertheless, PGE continues to manage plastic waste through reuse and recycling methods. Compared to 2023, this year PGE successfully reduced plastic waste by 0.65 tons. This achievement reflects PGE's commitment to consistently managing plastic waste in a responsible manner.

[Fixed row]

(10.2) Indicate whether your organization engages in the following activities.

Production/commercialization of plastic polymers (including plastic converters)

(10.2.1) Activity applies

Select from:

☒ No

(10.2.2) Comment

PGE's operations focus on the utilization of geothermal energy and therefore are not directly related to plastic. PGE's geothermal power plants use chemicals such as caustic soda and biocide in steam condensate treatment to adjust pH levels and prevent scaling in the closed cooling system. These chemicals are packaged in large containers that are classified as hazardous waste (B3). PGE has implemented supplier responsibility clauses in its chemical procurement contracts, requiring used

containers to be returned to suppliers for reuse. In 2024, the implementation of this supplier responsibility clause enabled PGE to avoid the generation of up to 2.73 tons of hazardous waste annually. In addition, PGE also generates domestic waste, such as paper and plastic. To manage domestic waste while promoting the circular economy, PGE collaborates with local Waste Banks. Through this recycling program with Waste Banks, PGE successfully reduced domestic waste by 61.08%.

Production/commercialization of durable plastic goods and/or components (including mixed materials)

(10.2.1) Activity applies

Select from:

☒ No

(10.2.2) Comment

PGE's operations focus on the utilization of geothermal energy and therefore are not directly related to plastic. PGE's geothermal power plants use chemicals such as caustic soda and biocide in steam condensate treatment to adjust pH levels and prevent scaling in the closed cooling system. These chemicals are packaged in large containers that are classified as hazardous waste (B3). PGE has implemented supplier responsibility clauses in its chemical procurement contracts, requiring used containers to be returned to suppliers for reuse. In 2024, the implementation of this supplier responsibility clause enabled PGE to avoid the generation of up to 2.73 tons of hazardous waste annually. In addition, PGE also generates domestic waste, such as paper and plastic. To manage domestic waste while promoting the circular economy, PGE collaborates with local Waste Banks. Through this recycling program with Waste Banks, PGE successfully reduced domestic waste by 61.08%.

Usage of durable plastics goods and/or components (including mixed materials)

(10.2.1) Activity applies

Select from:

☒ No

(10.2.2) Comment

PGE's operations focus on the utilization of geothermal energy and therefore are not directly related to plastic. PGE's geothermal power plants use chemicals such as caustic soda and biocide in steam condensate treatment to adjust pH levels and prevent scaling in the closed cooling system. These chemicals are packaged in large containers that are classified as hazardous waste (B3). PGE has implemented supplier responsibility clauses in its chemical procurement contracts, requiring used containers to be returned to suppliers for reuse. In 2024, the implementation of this supplier responsibility clause enabled PGE to avoid the generation of up to 2.73 tons of hazardous waste annually. In addition, PGE also generates domestic waste, such as paper and plastic. To manage domestic waste while promoting the

circular economy, PGE collaborates with local Waste Banks. Through this recycling program with Waste Banks, PGE successfully reduced domestic waste by 61.08%.

Production/commercialization of plastic packaging

(10.2.1) Activity applies

Select from:

☒ No

(10.2.2) Comment

PGE's operations focus on the utilization of geothermal energy and therefore are not directly related to plastic. PGE's geothermal power plants use chemicals such as caustic soda and biocide in steam condensate treatment to adjust pH levels and prevent scaling in the closed cooling system. These chemicals are packaged in large containers that are classified as hazardous waste (B3). PGE has implemented supplier responsibility clauses in its chemical procurement contracts, requiring used containers to be returned to suppliers for reuse. In 2024, the implementation of this supplier responsibility clause enabled PGE to avoid the generation of up to 2.73 tons of hazardous waste annually. In addition, PGE also generates domestic waste, such as paper and plastic. To manage domestic waste while promoting the circular economy, PGE collaborates with local Waste Banks. Through this recycling program with Waste Banks, PGE successfully reduced domestic waste by 61.08%.

Production/commercialization of goods/products packaged in plastics

(10.2.1) Activity applies

Select from:

☒ No

(10.2.2) Comment

PGE's operations focus on the utilization of geothermal energy and therefore are not directly related to plastic. PGE's geothermal power plants use chemicals such as caustic soda and biocide in steam condensate treatment to adjust pH levels and prevent scaling in the closed cooling system. These chemicals are packaged in large containers that are classified as hazardous waste (B3). PGE has implemented supplier responsibility clauses in its chemical procurement contracts, requiring used containers to be returned to suppliers for reuse. In 2024, the implementation of this supplier responsibility clause enabled PGE to avoid the generation of up to 2.73 tons of hazardous waste annually. In addition, PGE also generates domestic waste, such as paper and plastic. To manage domestic waste while promoting the circular economy, PGE collaborates with local Waste Banks. Through this recycling program with Waste Banks, PGE successfully reduced domestic waste by 61.08%.

Provision/commercialization of services that use plastic packaging (e.g., food services)

(10.2.1) Activity applies

Select from:

☒ No

(10.2.2) Comment

PGE's operations focus on the utilization of geothermal energy and therefore are not directly related to plastic. PGE's geothermal power plants use chemicals such as caustic soda and biocide in steam condensate treatment to adjust pH levels and prevent scaling in the closed cooling system. These chemicals are packaged in large containers that are classified as hazardous waste (B3). PGE has implemented supplier responsibility clauses in its chemical procurement contracts, requiring used containers to be returned to suppliers for reuse. In 2024, the implementation of this supplier responsibility clause enabled PGE to avoid the generation of up to 2.73 tons of hazardous waste annually. In addition, PGE also generates domestic waste, such as paper and plastic. To manage domestic waste while promoting the circular economy, PGE collaborates with local Waste Banks. Through this recycling program with Waste Banks, PGE successfully reduced domestic waste by 61.08%.

Provision of waste management and/or water management services

(10.2.1) Activity applies

Select from:

☒ No

(10.2.2) Comment

PGE's operations focus on the utilization of geothermal energy and therefore are not directly related to plastic. PGE's geothermal power plants use chemicals such as caustic soda and biocide in steam condensate treatment to adjust pH levels and prevent scaling in the closed cooling system. These chemicals are packaged in large containers that are classified as hazardous waste (B3). PGE has implemented supplier responsibility clauses in its chemical procurement contracts, requiring used containers to be returned to suppliers for reuse. In 2024, the implementation of this supplier responsibility clause enabled PGE to avoid the generation of up to 2.73 tons of hazardous waste annually. In addition, PGE also generates domestic waste, such as paper and plastic. To manage domestic waste while promoting the circular economy, PGE collaborates with local Waste Banks. Through this recycling program with Waste Banks, PGE successfully reduced domestic waste by 61.08%.

Provision of financial products and/or services for plastics-related activities

(10.2.1) Activity applies

Select from:

☒ No

(10.2.2) Comment

PGE's operations focus on the utilization of geothermal energy and therefore are not directly related to plastic. PGE's geothermal power plants use chemicals such as caustic soda and biocide in steam condensate treatment to adjust pH levels and prevent scaling in the closed cooling system. These chemicals are packaged in large containers that are classified as hazardous waste (B3). PGE has implemented supplier responsibility clauses in its chemical procurement contracts, requiring used containers to be returned to suppliers for reuse. In 2024, the implementation of this supplier responsibility clause enabled PGE to avoid the generation of up to 2.73 tons of hazardous waste annually. In addition, PGE also generates domestic waste, such as paper and plastic. To manage domestic waste while promoting the circular economy, PGE collaborates with local Waste Banks. Through this recycling program with Waste Banks, PGE successfully reduced domestic waste by 61.08%. PGE also generates domestic waste in the form of papers and plastics. PGE is teaming up with the local Waste Bank to manage the domestic waste and promote circular economy. Through this recycle program with Waste Bank, PGE has successfully reduce its domestic waste of up to 49%.

Other activities not specified

(10.2.1) Activity applies

Select from:

☒ No

(10.2.2) Comment

PGE's operations focus on the utilization of geothermal energy and therefore are not directly related to plastic. PGE's geothermal power plants use chemicals such as caustic soda and biocide in steam condensate treatment to adjust pH levels and prevent scaling in the closed cooling system. These chemicals are packaged in large containers that are classified as hazardous waste (B3). PGE has implemented supplier responsibility clauses in its chemical procurement contracts, requiring used containers to be returned to suppliers for reuse. In 2024, the implementation of this supplier responsibility clause enabled PGE to avoid the generation of up to 2.73 tons of hazardous waste annually. In addition, PGE also generates domestic waste, such as paper and plastic. To manage domestic waste while promoting the circular economy, PGE collaborates with local Waste Banks. Through this recycling program with Waste Banks, PGE successfully reduced domestic waste by 61.08%.

[Fixed row]

C11. Environmental performance - Biodiversity

(11.2) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

(11.2.1) Actions taken in the reporting period to progress your biodiversity-related commitments

Select from:

☒ Yes, we are taking actions to progress our biodiversity-related commitments

(11.2.2) Type of action taken to progress biodiversity- related commitments

Select all that apply

☒ Law & policy

☒ Species management

☒ Education & awareness

☒ Land/water protection

☒ Land/water management

☒ Livelihood, economic & other incentives

[Fixed row]

(11.3) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
	Select from: ☒ Yes, we use indicators	Select all that apply ☒ State and benefit indicators

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
		☒ Response indicators

[Fixed row]

(11.4) Does your organization have activities located in or near to areas important for biodiversity in the reporting year?

Legally protected areas

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

☒ Yes

(11.4.2) Comment

Some of PGE's operational activities are located near or overlap with areas of high biodiversity value. The Kamojang area overlaps and is adjacent to the Rakutakpulus Protected Forest and the Komojang Crater Nature Tourism Park. The Ulubelu area overlaps and is adjacent to the Bukit Rindingan Protected Forest. The Karaha area overlaps and is adjacent to the Mount Galunggung Protected Forest. The Lumut Balai area overlaps and is adjacent to the Bukit Jambul – Bukit Nanti Protected Forest. The Hulualis area overlaps and is adjacent to the Bukit Gedang Protected Forest and the Ketahun Protected Forest. The Sibayak area is adjacent to the Bukit Barisan Grand Forest Park. Meanwhile, the Lahendong area neither overlaps nor is adjacent to areas of high biodiversity value.

UNESCO World Heritage sites

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

☒ No

(11.4.2) Comment

The operations of PGE and its subsidiaries are only overlapped to protected and conservation forests. None of the Company's operational areas are in proximity to the UNESCO World Heritage Sites.

UNESCO Man and the Biosphere Reserves

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

☒ No

(11.4.2) Comment

The operations of PGE and its subsidiaries are only overlapped to protected and conservation forests. None of the Company's operational areas are in proximity to the UNESCO Man and the Biosphere Reserves.

Ramsar sites

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

☒ No

(11.4.2) Comment

The operations of PGE and its subsidiaries are only overlapped to protected and conservation forests. None of the Company's operational areas are in proximity to the Ramsar Sites.

Key Biodiversity Areas

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

☒ No

(11.4.2) Comment

The operations of PGE and its subsidiaries are only overlapped to protected and conservation forests.

Other areas important for biodiversity

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

☒ No

(11.4.2) Comment

The operations of PGE and its subsidiaries are only overlapped to protected and conservation forests.

[Fixed row]

(11.4.1) Provide details of your organization's activities in the reporting year located in or near to areas important for biodiversity.

Row 1

(11.4.1.2) Types of area important for biodiversity

Select all that apply

☒ Legally protected areas

(11.4.1.3) Protected area category (IUCN classification)

Select from:

☒ Category Ia-III

(11.4.1.4) Country/area

Select from:

☒ Indonesia

(11.4.1.5) Name of the area important for biodiversity

Lumut Balai Area

(11.4.1.6) Proximity

Select from:

☒ Overlap

(11.4.1.7) Area of overlap (hectares)

159.32

(11.4.1.8) Briefly describe your organization's activities in the reporting year located in or near to the selected area

The Lumut Balai area is located in the Lumut Balai and Margabayur working area, about 108 km from the city of Baturaja, South Sumatra Province. The working area is one of the leading ones because it has a fairly large geothermal potential, reaching more than 300 MWe. The Lumut Balai Unit I geothermal power generation started commercial operations in 2019 with an installed capacity of 55 MW. A total of 159.32 ha in the Lumut Balai Area overlaps with protected forest. PGE ensures that the operational areas near protected areas have obtained a permit from the Ministry of the Environment and Forestry and implemented the mitigation hierarchy: avoid, minimize, restore, offset. The Lumut Balai area lies within the Lumut Balai and Margabayur working area, approximately 108 km from Baturaja City, South Sumatra Province. Lumut Balai Unit I geothermal power plant commenced commercial operation in 2019, with an installed capacity of 55 MW. The realization of steam production equivalent to electricity in the Lumut Balai area in 2024 reached 482.06 GWh, or 113.64% of the WP&B target of 424.21 GWh. Within the Lumut Balai area, 159.32 hectares overlap with protected forest. PGE ensures that operational activities near protected areas have obtained the necessary permits from the Ministry of Environment and Forestry and follow the mitigation hierarchy: avoid, minimize, restore, and offset. Currently, the Lumut Balai area is undergoing development of a 1x55 MW capacity unit which is planned to start operating in 2025.

(11.4.1.9) Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity

Select from:

- ☒ Yes, but mitigation measures have been implemented

(11.4.1.10) Mitigation measures implemented within the selected area

Select all that apply

- | | |
|---|--|
| ☒ Scheduling | ☒ Abatement controls |
| ☒ Restoration | ☒ Operational controls |
| ☒ Site selection | ☒ Other, please specify : Education and Monitoring & Evaluation |
| ☒ Project design | |
| ☒ Physical controls | |

(11.4.1.11) Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented

Significant impacts of PGE's activities, products, and services on biodiversity include: • Permanent habitat loss from land clearing for steam fields, power plants, and access roads. • Temporary habitat disturbance during drilling and construction. • Wildlife displacement due to noise and light. • Decline of flora and fauna populations from encroachment and poaching. • Vehicle collisions reducing terrestrial fauna populations. • Physical barriers restricting wildlife movement. • Spread of invasive alien plant species. To manage these impacts, PGE implements various measures: avoiding High Conservation Value (HCV) areas, optimizing land use, tree planting and land rehabilitation under IPPKH, limiting night activities, speed controls, prohibiting illegal logging and poaching, conducting site patrols, and running conservation programs. PGE also applies environmentally friendly design, collaborates with BKSDA for wildlife release, controls invasive species, and promotes awareness through CSR programs and biodiversity education. Regular monitoring of flora and fauna is conducted to evaluate effectiveness. In 2024, the Lumut Balai Area advanced biodiversity action plans by installing five camera traps, which recorded four endangered mammal species on the IUCN Red List: sun bear, clouded leopard, bay cat, and Sumatran striped rabbit. Monitoring also confirmed the presence of other protected species such as the Sumatran tiger, Malayan tapir, banded surili, macaque, siamang, and agile gibbon. By the end of 2024, biodiversity monitoring at Lumut Balai documented 65 fauna species (including 43 bird species, with seven protected) and 85 plant species, dominated by orchids and pitcher plants. Among these, 54 pitcher plant species were identified, with 26 categorized as endangered.

Row 2

(11.4.1.2) Types of area important for biodiversity

Select all that apply

☒ Legally protected areas

(11.4.1.3) Protected area category (IUCN classification)

Select from:

☒ Category Ia-III

(11.4.1.4) Country/area

Select from:

☒ Indonesia

(11.4.1.5) Name of the area important for biodiversity

Karaha Area

(11.4.1.6) Proximity

Select from:

☒ Overlap

(11.4.1.7) Area of overlap (hectares)

45.18

(11.4.1.8) Briefly describe your organization's activities in the reporting year located in or near to the selected area

In 2018, PGE commenced commercial operations of the Karaha Unit I geothermal power plant, located in the Karaha Cakrabuana working area covering Tasikmalaya and Garut, West Java Province, with a total installed capacity of 30 MW. The realization of steam production equivalent to electricity in the Karaha Area in 2024 reached 94.67 GWh, or 95.97% of the WP&B target of 98.64 GWh. Approximately 45.18 hectares of the Karaha Area overlap with protected forest. PGE ensures that operations near these protected areas are conducted under permits issued by the Ministry of Environment and Forestry, and in line with the mitigation hierarchy: avoid, minimize, restore, and offset.

(11.4.1.9) Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity

Select from:

☒ Yes, but mitigation measures have been implemented

(11.4.1.10) Mitigation measures implemented within the selected area

Select all that apply

☒ Scheduling

☒ Restoration

☒ Site selection

☒ Project design

☒ Physical controls

☒ Abatement controls

☒ Operational controls

☒ Other, please specify :**Education and Monitoring & Evaluation**

(11.4.1.11) Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented

*Significant impacts of PGE's activities, products, and services on biodiversity include: • Permanent habitat loss from land clearing for steam fields, power plants, and access roads. • Temporary habitat disturbance during drilling and construction. • Wildlife displacement due to noise and light. • Decline of flora and fauna populations from encroachment and poaching. • Vehicle collisions reducing terrestrial fauna populations. • Physical barriers restricting wildlife movement. • Spread of invasive alien plant species. To manage these impacts, PGE implements various measures: avoiding High Conservation Value (HCV) areas, optimizing land use, tree planting and land rehabilitation under IPPKH, limiting night activities, speed controls, prohibiting illegal logging and poaching, conducting site patrols, and running conservation programs. PGE also applies environmentally friendly design, collaborates with BKSDA for wildlife release, controls invasive species, and promotes awareness through CSR programs and biodiversity education. Regular monitoring of flora and fauna is conducted to evaluate effectiveness. One of the programs in the PGE Karaha Area is agroforestry on critical land, which aims to preserve the environment, provide benefits to the surrounding community, and create a multiplier effect through derivative business opportunities such as agrotourism. In addition, PGE strives to improve the quality of local community agriculture by promoting environmentally friendly practices or conservation farming, particularly on critical land. One of the agroforestry initiatives on critical land is the planting of alligator avocado (*Persea americana*) seedlings in Cikadongdong Village, Garut Regency, and Kadipaten Village, Tasikmalaya Regency, which began in 2024. The initial planting included 1,020 seedlings with a 93% success rate, and the first harvest was achieved in approximately three months. Planting alligator avocado seedlings is part of the effort to increase the biodiversity index, following the previous year's sunflower planting program, which supported the development of a Tourism Village blueprint around the operational area.*

Row 3

(11.4.1.2) Types of area important for biodiversity

Select all that apply

☒ Legally protected areas

(11.4.1.3) Protected area category (IUCN classification)

Select from:

☒ Category Ia-III

(11.4.1.4) Country/area

Select from:

☒ Indonesia

(11.4.1.5) Name of the area important for biodiversity

Hululais Area

(11.4.1.6) Proximity

Select from:

☒ Overlap

(11.4.1.7) Area of overlap (hectares)

129.31

(11.4.1.8) Briefly describe your organization's activities in the reporting year located in or near to the selected area

The Hululais area, located within the Hululais working area in Lebong Regency, lies approximately 180 km from Bengkulu City. PGE plans to develop two geothermal power generation units in this location, each with an installed capacity of 2x55 MW. As of the end of 2024, this area is in the preparation of Notice of Resource Confirmation (NORC). A total of 129.31 hectares of the Hululais area overlap with protected forest. PGE ensures that any operational areas adjacent to protected zones have secured permits from the Ministry of Environment and Forestry and apply the mitigation hierarchy: avoid, minimize, restore, and offset.

(11.4.1.9) Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity

Select from:

- ☒ Yes, but mitigation measures have been implemented

(11.4.1.10) Mitigation measures implemented within the selected area

Select all that apply

- | | |
|---|--|
| ☒ Scheduling | ☒ Abatement controls |
| ☒ Restoration | ☒ Operational controls |
| ☒ Site selection | ☒ Other, please specify : Education and Monitoring & Evaluation |
| ☒ Project design | |
| ☒ Physical controls | |

(11.4.1.11) Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented

Significant impacts of PGE's activities, products, and services on biodiversity include: • Permanent habitat loss from land clearing for steam fields, power plants, and access roads. • Temporary habitat disturbance during drilling and construction. • Wildlife displacement due to noise and light. • Decline of flora and fauna populations from encroachment and poaching. • Vehicle collisions reducing terrestrial fauna populations. • Physical barriers restricting wildlife movement. • Spread of invasive alien plant species. To manage these impacts, PGE implements various measures: avoiding High Conservation Value (HCV) areas, optimizing land use, tree planting and land rehabilitation under IPPKH, limiting night activities, speed controls, prohibiting illegal logging and poaching, conducting site patrols, and running conservation programs. PGE also applies environmentally friendly design, collaborates with BKSDA for wildlife release, controls invasive species, and promotes awareness through CSR programs and biodiversity education. Regular monitoring of flora and fauna is conducted to evaluate effectiveness. In the Hululais Area, PGE conducts flora and fauna monitoring. A total of 32 flora species and 17 fauna species have been recorded in this area. Based on the evaluation of the critical level of flora in the Development Activities of the Hululais Geothermal Steam Field and Power Plant, the vegetation diversity index was assessed at 2.58 and 2.81, indicating a medium level of biodiversity.

Row 4

(11.4.1.2) Types of area important for biodiversity

Select all that apply

☒ Legally protected areas

(11.4.1.3) Protected area category (IUCN classification)

Select from:

☒ Category Ia-III

(11.4.1.4) Country/area

Select from:

☒ Indonesia

(11.4.1.5) Name of the area important for biodiversity

Ulubelu Area

(11.4.1.6) Proximity

Select from:

☒ Overlap

(11.4.1.7) Area of overlap (hectares)

6.64

(11.4.1.8) Briefly describe your organization's activities in the reporting year located in or near to the selected area

The Ulubelu area is situated within the Gunung Way Panas Geothermal Working Area (WKP), approximately 125 km from Bandarlampung City, Lampung Province. Ulubelu Geothermal Power Plant (PLTP) Unit I began commercial operations in 2011. At present, four PLTP units are operating with a total installed capacity of 220 MW. The realization of steam production equivalent to electricity in the Ulubelu Area in 2024 reached 1,593.70 GWh, or 98.39% of the RKAP target of 1,619.81 GWh. In total, 129.36 hectares of the Ulubelu area overlap with protected forest. PGE ensures that operational areas adjacent to protected zones have secured permits from the Ministry of Environment and Forestry and have implemented the mitigation hierarchy: avoid, minimize, restore, and offset.

(11.4.1.9) Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity

Select from:

☒ Yes, but mitigation measures have been implemented

(11.4.1.10) Mitigation measures implemented within the selected area

Select all that apply

☒ Scheduling

☒ Restoration

☒ Site selection

☒ Project design

☒ Physical controls

☒ Abatement controls

☒ Operational controls

☒ Other, please specify :**Education and Monitoring & Evaluation**

(11.4.1.11) Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented

Significant impacts of PGE's activities, products, and services on biodiversity include: • Permanent habitat loss from land clearing for steam fields, power plants, and access roads. • Temporary habitat disturbance during drilling and construction. • Wildlife displacement due to noise and light. • Decline of flora and fauna populations from encroachment and poaching. • Vehicle collisions reducing terrestrial fauna populations. • Physical barriers restricting wildlife movement. • Spread of invasive alien plant species. To manage these impacts, PGE implements various measures: avoiding High Conservation Value (HCV) areas, optimizing land use, tree planting and land rehabilitation under IPPKH, limiting night activities, speed controls, prohibiting illegal logging and poaching, conducting site patrols, and running conservation programs. PGE also applies environmentally friendly design, collaborates with BKSDA for wildlife release, controls invasive species, and promotes awareness through CSR programs and biodiversity education. Regular monitoring of flora and fauna is conducted to evaluate effectiveness. Driven by the economic potential in the Ulubelu Area, the Eloc Bestari program was introduced with a range of innovative initiatives. The program focuses not only on improving the local economy but also on environmental conservation through disaster management that fosters disaster-aware communities. Its initiatives include conserving water springs through bamboo and banyan tree planting, cultivating 300,000 seedlings of Multi-Purpose Tree Species (MPTS) across 45 hectares of land, processing 25 tons of coffee husk waste into compost fertilizer, and promoting efficient use of solar power through the Geothermal Greenhouse. In the Ulubelu Area, PGE also implements the PEACE Program (Permaculture for Environmental, Agricultural Conservation, and Enhancement). The program includes the use of coffee cherry skins for fertilizer, rabbit farming, honeybee demonstration plots, and fishery activities. Prior to the implementation of this innovation, local coffee farmers, many of whom were previously forest hunters, were unfamiliar with the concept of permaculture, which contributed to ecosystem degradation. Following the introduction of the program, farmer groups were established to learn and apply permaculture practices. These included using coffee cherry skin fertilizer on 11 Taiwan Beauty flower plants, which successfully attracted approximately 45,000 Trigona bees and 25,000 Apis cerana bees for honeybee demonstration plots.

Row 5

(11.4.1.2) Types of area important for biodiversity

Select all that apply

☒ Legally protected areas

(11.4.1.3) Protected area category (IUCN classification)

Select from:

☒ Category Ia-III

(11.4.1.4) Country/area

Select from:

☒ Indonesia

(11.4.1.5) Name of the area important for biodiversity

Kamojang Area

(11.4.1.6) Proximity

Select from:

☒ Overlap

(11.4.1.7) Area of overlap (hectares)

106.54

(11.4.1.8) Briefly describe your organization's activities in the reporting year located in or near to the selected area

The Kamojang area is PGE's oldest operational site, where Pertamina first began exploration in 1974. Located in the Kamojang–Darajat working area, West Java Province, the site hosts five geothermal power generation units that have been in commercial operation since 1983. The total installed capacity currently reaches 235 MW. Within this area, 49.69 hectares overlap with protected forest and 56.85 hectares with conservation forest. PGE ensures that all operational areas near these protected zones have obtained the necessary permits from the Ministry of Environment and Forestry and follow the mitigation hierarchy: avoid, minimize, restore, and offset.

(11.4.1.9) Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity

Select from:

- ☒ Yes, but mitigation measures have been implemented

(11.4.1.10) Mitigation measures implemented within the selected area

Select all that apply

- | | |
|---|--|
| ☒ Scheduling | ☒ Abatement controls |
| ☒ Restoration | ☒ Operational controls |
| ☒ Site selection | ☒ Other, please specify : Education and Monitoring & Evaluation |
| ☒ Project design | |
| ☒ Physical controls | |

(11.4.1.11) Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented

*Significant impacts of PGE's activities, products, and services on biodiversity include: • Permanent habitat loss from land clearing for steam fields, power plants, and access roads. • Temporary habitat disturbance during drilling and construction. • Wildlife displacement due to noise and light. • Decline of flora and fauna populations from encroachment and poaching. • Vehicle collisions reducing terrestrial fauna populations. • Physical barriers restricting wildlife movement. • Spread of invasive alien plant species. To manage these impacts, PGE implements various measures: avoiding High Conservation Value (HCV) areas, optimizing land use, tree planting and land rehabilitation under IPPKH, limiting night activities, speed controls, prohibiting illegal logging and poaching, conducting site patrols, and running conservation programs. PGE also applies environmentally friendly design, collaborates with BKSDA for wildlife release, controls invasive species, and promotes awareness through CSR programs and biodiversity education. Regular monitoring of flora and fauna is conducted to evaluate effectiveness. In the Kamojang Area, PGE has established the Kamojang Eagle Conservation Center (Pusat Konservasi Elang Kamojang/PKEK), which has been operating since 2014 as part of a partnership agreement with the West Java Natural Resources Conservation Agency (BBKSDA Jawa Barat). As of December 2024, PKEK has released a total of 145 eagles back into the wild, including 16 individuals in 2024 alone. Since its establishment, the center has rehabilitated 376 eagles. PGE also runs the ELASTIK Program (Ekosistem Lestari Saninten Kamojang), which focuses on planting saninten (*Castanopsis argentea*) trees using organic fertilizer and biopesticides derived from coffee cherry skins. Through this program, areas of the Kamojang Forest that had previously been converted into vegetable plantations by local communities have been restored for conservation purposes, including the planting of 1,000 saninten trees in 2024.*

Row 6

(11.4.1.2) Types of area important for biodiversity

Select all that apply

☒ Legally protected areas

(11.4.1.3) Protected area category (IUCN classification)

Select from:

☒ Category Ia-III

(11.4.1.4) Country/area

Select from:

☒ Indonesia

(11.4.1.5) Name of the area important for biodiversity

Bukit Daun Area

(11.4.1.6) Proximity

Select from:

☒ Overlap

(11.4.1.7) Area of overlap (hectares)

129.41

(11.4.1.8) Briefly describe your organization's activities in the reporting year located in or near to the selected area

The Bukit Daun geothermal exploration site is situated in Rejang Lebong and Lebong Regencies, Bengkulu Province. Within this area, 129.41 hectares overlap with protected forest. PGE ensures that any operational activities near protected zones are conducted with the necessary permits from the Ministry of Environment and Forestry and in accordance with the mitigation hierarchy: avoid, minimize, restore, and offset.

(11.4.1.9) Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity

Select from:

☒ Yes, but mitigation measures have been implemented

(11.4.1.10) Mitigation measures implemented within the selected area

Select all that apply

☒ Scheduling

☒ Restoration

☒ Site selection

☒ Project design

☒ Physical controls

☒ Abatement controls

☒ Operational controls

☒ Other, please specify :**Education and Monitoring & Evaluation**

(11.4.1.11) Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented

Significant impacts of PGE's activities, products, and services on biodiversity include: • Permanent habitat loss from land clearing for steam fields, power plants, and access roads. • Temporary habitat disturbance during drilling and construction. • Wildlife displacement due to noise and light. • Decline of flora and fauna populations from encroachment and poaching. • Vehicle collisions reducing terrestrial fauna populations. • Physical barriers restricting wildlife movement. • Spread of invasive alien plant species. To manage these impacts, PGE implements various measures: avoiding High Conservation Value (HCV) areas, optimizing land use, tree planting and land rehabilitation under IPPKH, limiting night activities, speed controls, prohibiting illegal logging and poaching, conducting site patrols, and running conservation programs. PGE also applies environmentally friendly design, collaborates with BKSDA for wildlife release, controls invasive species, and promotes awareness through CSR programs and biodiversity education. Regular monitoring of flora and fauna is conducted to evaluate effectiveness. The Bukit Daun Area is located in the same region as the Hululais Area, within the Rejang Lebong and Lebong Regencies of Bengkulu Province. Based on the evaluation of critical flora conditions in relation to the development of the Hululais and Bukit Daun Geothermal Steam Field and Power Plant, the vegetation diversity index was recorded at 2.58 and 2.81, respectively, which indicates a medium level of biodiversity.

[Add row]

C13. Further information & sign off

(13.1) Indicate if any environmental information included in your CDP response (not already reported in 7.9.1/2/3, 8.9.1/2/3/4, and 9.3.2) is verified and/or assured by a third party?

	Other environmental information included in your CDP response is verified and/or assured by a third party
	Select from: ☒ Yes

[Fixed row]

(13.1.1) Which data points within your CDP response are verified and/or assured by a third party, and which standards were used?

Row 1

(13.1.1.1) Environmental issue for which data has been verified and/or assured

Select all that apply

- ☒ Climate change
- ☒ Water
- ☒ Biodiversity

(13.1.1.2) Disclosure module and data verified and/or assured

Environmental performance – Water security

- ☒ Water consumption– total volume
- ☒ Water intensities of products and services

- ☒ Water discharges– total volumes
- ☒ Water withdrawals– total volumes
- ☒ Water withdrawals – volumes by source
- ☒ Water discharges – volumes by destination

- ☒ Water discharges – volumes by treatment method
- ☒ Volume withdrawn from areas with water stress (megaliters)

(13.1.1.3) Verification/assurance standard

General standards

- ☒ AA1000AS
- ☒ Other general verification standard, please specify :Ministry of the Environment and Forestry through Decree of the Directorate General of Climate Change Control No. SK.38/PPI/IGAS/PPI.2/11/2020.

Water-related standards

- ☒ Other water verification standard, please specify :WRI Aqueduct

Climate change-related standards

- ☒ Other climate change verification standard, please specify :AA1000

(13.1.1.4) Further details of the third-party verification/assurance process

The Evaluation of the nature and extent of the PT Pertamina Geothermal Energy Tbk adherence to all four AA1000 AccountAbility Principles as conducted in accordance with type 1 moderate level of AA1000AS v3 sustainability assurance engagement

(13.1.1.5) Attach verification/assurance evidence/report (optional)

PF127 - SRA Independent Assurance Opinion Statement PGE 2024 (signed).pdf
[Add row]

(13.2) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

(13.2.1) Additional information

PT Pertamina Geothermal Energy Tbk (PGE) is involved in harnessing geothermal energy, which is both renewable and environmentally sustainable. The growth of PGE's business plays a crucial role in the energy transition and aids the government in achieving Net Zero Emission by 2060. PGE is dedicated to providing long-term benefits for the environment and local communities. The company has established strategic goals and sustainability targets based on three ESG pillars. Within the environmental pillar, PGE's strategy focuses on tackling climate change by enhancing geothermal generation capacity, managing physical climate risks, and protecting biodiversity. Several of PGE's operational areas are situated in protected zones that host rich biodiversity. The release of the book "Friendly to Nature: A Portrait of Biodiversity in Geothermal Energy Sources" aims to inform the broader community about PGE's commitment and initiatives in environmental preservation, particularly regarding the maintenance and conservation of biodiversity through rehabilitation efforts.

(13.2.2) Attachment (optional)

Sumber Informasi Buku_ISBN_Kehati_Tahun_2023.pdf
[Fixed row]

(13.3) Provide the following information for the person that has signed off (approved) your CDP response.

(13.3.1) Job title

Chief Executive Officer (CEO)

(13.3.2) Corresponding job category

Select from:

☒ Chief Executive Officer (CEO)

[Fixed row]

(13.4) Please indicate your consent for CDP to share contact details with the Pacific Institute to support content for its Water Action Hub website.

Select from:

☒ No

