PT Asia Pulp & Paper

2024 CDP Corporate Questionnaire 2024

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.
Terms of disclosure for corporate questionnaire 2024 - CDP

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04/09/2025, 03:43 am

Contents

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:

☑ Privately owned organization

(1.3.3) Description of organization

Asia Pulp & Paper (APP) is a pulp and paper manufacturer headquartered in Indonesia. APP is a global company that employs 40,000 people and has an annual converting capacity of 20 million tons. With branches and sales offices in several countries, the Company markets its products in over 150 countries across 6 continents. APP Indonesia main operation includes mills and forestry operations (forest management units) consist of owned concessions, long term pulpwood suppliers, community forest and open purchase located in Java, Sumatra, and Kalimantan Island in Indonesia. APP mills in Indonesia including OKI Pulp & Paper, Pindo Deli Pulp & Paper, Indah Kiat Pulp & Paper, Tjiwi Kimia, Ekamas Fortuna, Univenus and Lontar Papyrus. APP' operations in Indonesia are carried out by direct or indirect subsidiaries of PT APP Purinusa Ekapersada. The company began in 1960 when our founder, Eka Tjipta Widjaja, migrated from China to Indonesia in 1930 and established a small trading company called CV. Sinar Mas, which focused on importing textiles and exporting natural resources. For over 60 years, the company has transformed itself into APP Sinar Mas as we know it today, having transformed millions of lives through employment opportunities, community development programs, support for education, developing specialized skills, conservation of natural forests, and more. APP focus on technology and product development allows us to deliver innovative solutions that enhance people's lives while positively impacting the environment and society. Our commitment to innovation has resulted in exceptional paper-based products that meet the growing global demand for environmentally friendly packaging, food packaging, surgical masks, and tissues. We believe that the growth of doing our business responsibly, sustainably, is dependent on the support of the stakeholders and people around us: partners, employees, communities, and the general public. As part of our vision for a better future, the integrity of our supply chain and our commitments to our Sustainability Roadmap Vision (SRV) 2030 are crucial to our operations. Every day, we do our best to achieve sustainable forest and peatland management,

marketleading product environmental footprints, and people-first sustainable operations. This vision extends beyond the countries where we operate. We believe that the growth of our business is dependent on the support of the people around us: partners, employees, and communities. Compliance holds a fundamental position in APP's business practices, guiding us to uphold the principles of Good Corporate Governance (GCG), transparency, accountability, responsibility, independence, and fairness. We adhere to stringent standards outlined in our Governance Policy and Business Code of Conduct (BCoC) to ensure these principles are consistently upheld across all areas of our business operations. Each organ of APP has its respective duties and authorities in accordance with commitments, policies, applicable laws and regulations. More information can be found at our website and Sustainability Dashboard.
[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

12/30/2023

(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:
☑ 5 years

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

Select from:
☑ 5 years

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

Select from:

☑ 4 years

[Fixed row]

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

8534000000

(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: ☑ Not applicable – we do not publicly disclose financial statements

[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:

☑ No

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:

☑ No

[Add row]

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

Select all that apply

☑ Indonesia

(1.8) Are you able to provide geolocation data for your facilities?

(1.8.1) Are you able to provide geolocation data for your facilities?

Select from:

☑ Yes, for all facilities

(1.8.2) Comment

APP mills are situated near bodies of water (river) and provide convenient access APP takes and manages water sourced from river, as recorded by a flowmeter.APP acknowledge that water scarcity and stress are significant risks and take a company-wide approach to address this issue. Therefore, no water withdrawal in water stress area

[Fixed row]

(1.8.1) Please provide all available geolocation data for your facilities.

Row 1

(1.8.1.1) Identifier

PT Pindo Deli Pulp and Paper Mills (Perawang Mill)

(1.8.1.2) Latitude

0.69593

(1.8.1.3) Longitude

101.62542

(1.8.1.4) Comment

Local water source: Siak River, Pekanbaru

Row 2

(1.8.1.1) Identifier

PT Indah Kiat Pulp & Paper, Tbk. (Perawang mills)

(1.8.1.2) Latitude

0.68489

(1.8.1.3) Longitude

101.6159

(1.8.1.4) Comment

Local water source: Siak River, Pekanbaru

Row 3

(1.8.1.1) Identifier

PT OKI Pulp & Paper Mills

(1.8.1.2) Latitude

-2.74725

(1.8.1.3) Longitude

105.28015

(1.8.1.4) Comment

Local water source: Padang river, South Sumatra

Row 4

(1.8.1.1) Identifier

PT The Univenus

(1.8.1.2) Latitude

0.68489

(1.8.1.3) Longitude

101.6159

(1.8.1.4) Comment

Local water source: Siak River, Pekanbaru

Row 5

(1.8.1.1) Identifier

PT Lontar Papyrus Pulp & Paper

(1.8.1.2) Latitude

-1.00552

(1.8.1.3) Longitude

103.08149

(1.8.1.4) Comment

Local water source: Pengabuan River, Jambi

Row 6

(1.8.1.1) Identifier

PT Indah Kiat Pulp & Paper, Tbk. (Serang mills)

(1.8.1.2) Latitude

-6.13563

(1.8.1.3) Longitude

106.28851

(1.8.1.4) Comment

Local water source: Ciujung River, Kragilan, Banten

Row 7

(1.8.1.1) Identifier

PT Pabrik Kertas Tjiwi Kimia, Tbk.

(1.8.1.2) Latitude

-7.435321

(1.8.1.3) Longitude

112.46342

(1.8.1.4) Comment

Local water source: Brantas river, Mojokerto, East Java

Row 8

(1.8.1.1) Identifier

PT Indah Kiat Pulp & Paper, Tbk. (Tangerang mills)

(1.8.1.2) Latitude

-6.24722

(1.8.1.3) Longitude

106.64555

(1.8.1.4) Comment

Local water source: Cisadane river, Tangerang, Banten

Row 9

(1.8.1.1) Identifier

PT Pindo Deli Pulp and Paper Mills (Karawang Mill)

(1.8.1.2) Latitude

-6.32168

(1.8.1.3) Longitude

107.31166

(1.8.1.4) Comment

Local water source: Citarum River, West Karawang, West Java

Row 10

(1.8.1.1) Identifier

PT Ekamas Fortuna

(1.8.1.2) Latitude

-8.19188

(1.8.1.3) Longitude

112.55475

(1.8.1.4) Comment

Local water source: Lesti River, Malang, East Java

Row 11

(1.8.1.1) Identifier

PT APP Purinusa Ekapersada (Semarang Mill)

(1.8.1.2) Latitude

-7.21792

(1.8.1.3) Longitude

110.42864

(1.8.1.4) Comment

Local water source: Third Party Water Suppliers (PDAM) which intake form Rawa Pening Lake & Sigebyok River

Row 12

(1.8.1.1) Identifier

PT APP Purinusa Ekapersada (Demak Mill)

(1.8.1.2) Latitude

-6.92555

(1.8.1.3) Longitude

110.568792

(1.8.1.4) Comment

Local water supply: Ground water & Sipon Sidogemah River

Row 13

(1.8.1.1) Identifier

PT APP Purinusa Ekapersada (Bandung Mill)

(1.8.1.2) Latitude

-6.93692

(1.8.1.3) Longitude

107.68834

(1.8.1.4) Comment

Local water supply: Ground water & Cipanjalu River

Row 14

(1.8.1.1) Identifier

PT APP Purinusa Ekapersada (Subang Mill)

(1.8.1.2) Latitude

-6.49088

(1.8.1.3) Longitude

107.55476

(1.8.1.4) Comment

Local water supply: Ground water & Cilamaya River
[Add row]

(1.11) Are greenhouse gas emissions and/or water-related impacts from the production, processing/manufacturing, distribution activities or the consumption of your products relevant to your current CDP disclosure?

Production

(1.11.1) Relevance of emissions and/or water-related impacts

Select from:

☑ Value chain (including own land)

Processing/ Manufacturing

(1.11.1) Relevance of emissions and/or water-related impacts

Select from:

☑ Both direct operations and upstream/downstream value chain

Distribution

(1.11.1) Relevance of emissions and/or water-related impacts

Select from:

☑ Both direct operations and the upstream/downstream value chain

Consumption

(1.11.1) Relevance of emissions and/or water-related impacts

Select from:

☑ Yes

[Fixed row]

(1.22) Provide details on the commodities that you produce and/or source.

Timber products

(1.22.1) Produced and/or sourced

Select from:

☑ Produced and sourced

(1.22.2) Commodity value chain stage

Select all that apply

☑ Production

☑ Processing

(1.22.4) Indicate if you are providing the total commodity volume that is produced and/or sourced

Select from:

☑ Yes, we are providing the total volume

(1.22.5) Total commodity volume (metric tons)

24293977

(1.22.8) Did you convert the total commodity volume from another unit to metric tons?

Select from:

☑ No

(1.22.11) Form of commodity

Select all that apply

☑ Hardwood logs

☑ Pulp

(1.22.12) % of procurement spend

Select from:

☑ 91-99%

(1.22.13) % of revenue dependent on commodity

Select from:

☑ 81-90%

(1.22.14) In the questionnaire setup did you indicate that you are disclosing on this commodity?

Select from:

☑ Yes, disclosing

(1.22.15) Is this commodity considered significant to your business in terms of revenue?

Select from:

☑ Yes

(1.22.19) Please explain

APP's supply chain encompasses a diverse range of partners, including suppliers of raw materials such as pulpwood from HTI plantations, recycled fibers, and long fibers; pulp and paper mills; local and international distributors or traders; and customers. Additionally, APP sources goods and services from a variety of providers, including suppliers of chemicals, fertilizers, environmental and social consultants, outsourced labour, etc. A key initiative in ensuring supplier compliance is the communication of the Supplier Code of Conduct (SCoC) to all wood fiber suppliers partnering with APP. This SCoC serves as a clear and comprehensive guideline outlining the expected behavioural standards for all suppliers. The document covers critical aspects such as human rights, environmental protection, occupational health and safety, and fair and transparent business practices. APP is taking concrete steps to prioritize raw materials from local suppliers, recognizing the importance of mutually beneficial collaboration between companies and local communities. In addition, local procurement reduces transportation distances, which has the effect of reducing carbon emissions. In this way, APP is also contributing to efforts to reduce the environmental impact. Local suppliers are suppliers who are domiciled in Indonesia. 100% of APP's pulpwood suppliers in Indonesia are certified under both mandatory and voluntary sustainable forest management certification. [Fixed row]

(1.23) Which of the following agricultural commodities that your organization produces and/or sources are the most significant to your business by revenue?

Cotton

(1.23.1) Produced and/or sourced

Select from:

☑ No

Dairy & egg products

(1.23.1) Produced and/or sourced

Select from:

☑ No

Fish and seafood from aquaculture

(1.23.1) Produced and/or sourced

Select from:

☑ No

Fruit

(1.23.1) Produced and/or sourced

Select from:

☑ No

Maize/corn

(1.23.1) Produced and/or sourced

Select from:

☑ No

Nuts

(1.23.1) Produced and/or sourced

Select from:

☑ No

Other grain (e.g., barley, oats)

(1.23.1) Produced and/or sourced

Select from:

☑ No

Other oilseeds (e.g. rapeseed oil)

(1.23.1) Produced and/or sourced

Select from:

☑ No

Poultry & hog

(1.23.1) Produced and/or sourced

Select from:

☑ No

Rice

(1.23.1) Produced and/or sourced

Select from:

☑ No

Sugar

(1.23.1) Produced and/or sourced

Select from:

☑ No

Tea

(1.23.1) Produced and/or sourced

Select from:

☑ No

Tobacco

(1.23.1) Produced and/or sourced

Select from:

☑ No

Vegetable

(1.23.1) Produced and/or sourced

Select from:

☑ No

Wheat

(1.23.1) Produced and/or sourced

Select from:

☑ No

Other commodity

(1.23.1) Produced and/or sourced

Select from:

☑ No

[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

☑ Downstream value chain

(1.24.3) Highest supplier tier mapped

Select from:

☑ Tier 2 suppliers

(1.24.4) Highest supplier tier known but not mapped

Select from:

☑ Tier 4+ suppliers

(1.24.6) Smallholder inclusion in mapping

Select from:

☑ Smallholders relevant and included

(1.24.7) Description of mapping process and coverage

APP's commitment to a sustainable fiber supply is established using local raw materials from Industrial Forest Plantation (HTI) areas, recycled fiber, and the implementation of the Supplier Evaluation and Risk Assessment (SERA) system. The SERA system ensures supplier compliance with sustainability principles, enhances transparency, and drives continuous improvement. To ensure SERA implementation, APP conducts regular field reviews and assessments. We also provide feedback, conduct audits, or terminate contracts with non-compliant suppliers. Before appointing suppliers, APP allows 14 days for the public and stakeholders to provide input and/or share concerns on prospective suppliers undergoing SERA consideration and evaluation. SERA is a tool and an extension to APP's Fiber Procurement and Processing Policy (FPPP). It serves as a comprehensive guideline to APP's commitment to eliminating deforestation across its supply chain and upholding sustainable forest management.
[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
	Select from: ☑ Yes, we have mapped or are currently in the process of mapping plastics in our value chain	*Select all that apply* ☑ Upstream value chain ☑ Downstream value chain

[Fixed row]

(1.24.2) Which commodities has your organization mapped in your upstream value chain (i.e., supply chain)?

Timber products

(1.24.2.1) Value chain mapped for this sourced commodity

Select from:
☑ Yes

(1.24.2.2) Highest supplier tier mapped for this sourced commodity

Select from:

☑ Tier 2 suppliers

(1.24.2.3) % of tier 1 suppliers mapped

Select from:

☑ 100%

(1.24.2.4) % of tier 2 suppliers mapped

Select from:

☑ 100%

(1.24.2.7) Highest supplier tier known but not mapped for this sourced commodity

Select from:

☑ Tier 4+ suppliers

[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

APP has engaged consultants to develop a carbon emission reduction scenario aligned with the SRV 2030 targets. This scenario has been designed by setting targets, including reducing fossil fuel use, increasing renewable energy utilization, and enhancing green energy adoption (i.e., solar panels). The analysis helps APP to identify potential challenges and opportunities. APP uses qualitative and quantitative data to assess the impact of time-related risk and diversifying investment targets and realization across the time horizon. It will help APP to manage risk and optimize returns.

Medium-term

(2.1.1) From (years)

3

(2.1.3) To (years)

5

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

APP has engaged consultants to develop a carbon emission reduction scenario aligned with the SRV 2030 targets. This scenario has been designed by setting a series of targets, including reducing fossil fuel use, increasing renewable energy utilization, and enhancing green energy adoption (i.e., solar panels). The analysis helps APP to identify potential challenges and opportunities. APP use qualitative and quantitative data to assess the impact of time related risk and diversifying investment target and realization across time horizon. It will help APP to manage risk and optimize returns.

Long-term

(2.1.1) From (years)

6

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

Select from:

☑ Yes

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

APP has engaged consultants to develop a carbon emission reduction scenario aligned with the SRV 2030 targets. This scenario has been designed by setting a series of targets, including reducing fossil fuel use, increasing renewable energy utilization, and enhancing green energy adoption (i.e., solar panels). The analysis helps APP to identify potential challenges and opportunities. APP use qualitative and quantitative data to assess the impact of time related risk and diversifying investment target and realization across time horizon. It will help APP to manage risk and optimize returns. APP supports the Government of Indonesia's efforts to achieve Net Zero emissions by 2050. APP is currently conducting a study to align its Net Zero goals with the Science Based Targets initiative (SBTi).
[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:	*Select from:*

	Process in place	Dependencies and/or impacts evaluated in this process
	☑ Yes	☑ 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

☑ Dependencies

☑ Impacts

☑ 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:

☑ Annually

(2.2.2.9) Time horizons covered

Select all that apply

☑ Short-term

(2.2.2.10) Integration of risk management process

Select from:

☑ A specific environmental 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

☑ Sustainability Policy Transparency Toolkit (SPOTT)

Enterprise Risk Management

☑ Internal company methods

International methodologies and standards

☑ IPCC Climate Change Projections

☑ ISO 14001 Environmental Management Standard

Databases

☑ Nation-specific databases, tools, or standards

☑ Regional government databases

Other

☑ Scenario analysis

☑ Partner and stakeholder consultation/analysis

☑ Desk-based research
☑ External consultants
☑ Materiality assessment
☑ Internal company methods

(2.2.2.13) Risk types and criteria considered

Chronic physical
☑ Change in land-use
☑ Water availability at a basin/catchment level
☑ Water quality at a basin/catchment level

Market
☑ Availability and/or increased cost of certified sustainable material

Reputation
☑ Increased partner and stakeholder concern and partner and stakeholder negative feedback

Technology
☑ Data access/availability or monitoring systems
☑ Transition to lower emissions technology and products

(2.2.2.14) Partners and stakeholders considered

Select all that apply
☑ NGOs
☑ Customers
☑ Employees
☑ Investors
☑ Suppliers
☑ Regulators
☑ Local communities
☑ Indigenous peoples

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

Select from:

☑ No

(2.2.2.16) Further details of process

APP fully recognizes that climate change and its environmental impacts have the potential to affect our business significantly. The Sustainability Committee has developed a comprehensive risk management framework, including risks associated with climate change and other environmental impacts. The Committee regularly evaluates these risks, identifies their potential impact on our operations, and designs appropriate mitigation strategies. It is important to note that the results of the risk evaluation and mitigation recommendations from the Sustainability Committee are regularly communicated to the Board of Directors. This information is a basis for supporting strategic decision-making at the highest management level, ensuring that APP can adapt to climate and environmental change and effectively manage risks in an ever-changing context. The following are the various climate-related risks, and APP's management of these topics: regulatory risk, technology risk, legal risk, market risk, reputational risk, and physical risk. The process of identifying, assessing, and managing climate-related risks is integrated into the overall risk management of APP through a structured and holistic approach. The company implements the following key steps: risk identification, risk assessment, risk management, integration into overall risk management. The first step is for APP to identify climate-related risks by analysing the potential impacts of climate change on our operations and business activities. This involves assessing factors such as changes in weather patterns, rainfall levels, temperatures, and their impact on our supply chains, infrastructure, and production sites. After identification, we conduct an in-depth assessment of the identified risks. This assessment includes analysing the probability of the risks occurring and their potential impact on various aspects of our operations and business sustainability. We also consider secondary risks that may arise due to climate change. Based on the assessment results, we develop appropriate risk management strategies. This involves formulating concrete action plans to reduce the probability of risks occurring, mitigate their impact if they do occur, or even avoid the risks entirely. These strategies may involve investing in climate-resilient infrastructure, diversifying supply chains, using eco-friendly technologies, or other adaptation policies. Climate risk identification, assessment, and management processes are integrated into APP's overall risk management framework. This is carried out by incorporating climate-related risks into the existing risk management framework, ensuring that these risks are comprehensively considered in strategic decision-making, operational planning, and resource allocation.
[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

The first step is for APP to identify climate-related risks by analysing the potential impacts of climate change on our operations and business activities. This involves assessing factors such as changes in weather patterns, rainfall levels, temperatures, and their impact on our supply chains, infrastructure, and production sites. After

identification, we conduct an in-depth assessment of the identified risks. This assessment includes analysing the probability of the risks occurring and their potential impact on various aspects of our operations and business sustainability. We also consider secondary risks that may arise due to climate change. Based on the assessment results, we develop appropriate risk management strategies. This involves formulating concrete action plans to reduce the probability of risks occurring, mitigate their impact if they do occur, or even avoid the risks entirely. These strategies may involve investing in climate-resilient infrastructure, diversifying supply chains, using eco-friendly technologies, or other adaptation policies. Climate risk identification, assessment, and management processes are integrated into APP's overall risk management framework. This is carried out by incorporating climate-related risks into the existing risk management framework, ensuring that these risks are comprehensively considered in strategic decision-making, operational planning, and resource allocation.
[Fixed row]

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

(2.3.1) Identification of priority locations

Select from:

☑ Yes, we are currently in the process of identifying priority locations

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

Select all that apply

☑ Direct operations

☑ Upstream value chain

(2.3.3) Types of priority locations identified

Sensitive locations

☑ Areas important for biodiversity

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 biodiversity

(2.3.4) Description of process to identify priority locations

Identifying priority locations is a crucial step in many strategic planning processes. APP collected data for potential locations based on our defined criteria. The criteria focus on compliance with government regulation, national and international standards with aligning our SRV 2030.

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

Select from:

☑ No, we have a list/geospatial map of priority locations, but we will not be disclosing it

[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

☑ Qualitative

☑ Quantitative

(2.4.2) Indicator used to define substantive effect

Select from:

☑ Market share

(2.4.3) Change to indicator

Select from:

☑ % decrease

(2.4.4) % change to indicator

Select from:

☑ Less than 1%

(2.4.6) Metrics considered in definition

Select all that apply

☑ Time horizon over which the effect occurs

(2.4.7) Application of definition

Third-party certification is crucial to demonstrate to our stakeholders that our fiber is sourced sustainably. In 2022, APP maintained 100% compliance from our pulpwood suppliers with the PEFC scheme and the Government of Indonesia's mandatory SFM scheme. APP managed to certify an area under the PEFC Sustainable Forest Management scheme from the total concession areas of pulpwood suppliers in Indonesia currently supplying to APP mills. This is the maximum area eligible for PEFC certification of the total concession area of APP's pulpwood suppliers in Indonesia.

Opportunities

(2.4.1) Type of definition

Select all that apply

☑ Qualitative

☑ Quantitative

(2.4.2) Indicator used to define substantive effect

Select from:

☑ Market share

(2.4.3) Change to indicator

Select from:

☑ % increase

(2.4.4) % change to indicator

Select from:

☑ 91-99

(2.4.6) Metrics considered in definition

Select all that apply

☑ Time horizon over which the effect occurs

(2.4.7) Application of definition

This assurance is essential for our customers, many of whom require that APP provide certification as part of their responsible sourcing commitment. Through the availability of certified materials in our supply chain, APP can fulfil customer demands and approach new customers with similar requirements. Increasing demand from customer for certified materials will give us the opportunity to gain new customers and will give good financial impact to our business.
[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

APP has an environmental management system (EMS) policy that implemented through ISO 140001 committed not to pollute the environment as government regulation. in ISO 140001 APP identifies and classifies our potential water pollutants.
[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

acidification impact

(2.5.1.3) Value chain stage

Select all that apply

☑ Direct operations

(2.5.1.4) Actions and procedures to minimize adverse impacts

Select all that apply

☑ Beyond compliance with regulatory requirements

☑ Water recycling

☑ Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

☑ Upgrading of process equipment/methods

(2.5.1.5) Please explain

APP has an environmental management system (EMS) policy that is implemented through ISO 140001. APP has implemented control measures for all wastewater generated and managed at wastewater treatment (WWT) units. The processing stages start with primary treatment, followed by secondary treatment, post-treatment, and sludge treatment. 1. Primary treatment: This initial process is a physical treatment applied to the wastewater by adding PAC and polymer chemicals in the flocculation and coagulation unit. The wastewater is then settled in the primary clarifier process. The aim is to remove the TSS value from the wastewater. 2. Secondary treatment: After settling, the wastewater proceeds to the next stage, which is secondary treatment. This process aims to remove the COD and BOD values from the wastewater, using microorganisms/bacteria. The bacteria decompose the COD and BOD within a specified retention time. Next, the secondary clarifier process separates the wastewater from the bacteria. 3. The treated wastewater is then ready to be discharged, with values below the standard wastewater quality, according to central regulations and those set by local governments. 4. The sludge produced during the WWT process undergoes dewatering to reduce the water content in the WWT sludge.

Row 2

(2.5.1.1) Water pollutant category

Select from:

☑ Inorganic pollutants

(2.5.1.2) Description of water pollutant and potential impacts

acidification impact

(2.5.1.3) Value chain stage

Select all that apply

☑ Direct operations

(2.5.1.4) Actions and procedures to minimize adverse impacts

Select all that apply

☑ Beyond compliance with regulatory requirements

☑ Water recycling

☑ Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

☑ Upgrading of process equipment/methods

(2.5.1.5) Please explain

APP has an environmental management system (EMS) policy that is implemented through ISO 140001. APP has implemented control measures for all wastewater generated, which are managed at wastewater treatment (WWT)units. The processing stages start with primary treatment, followed by secondary treatment, post-treatment, and sludge treatment . 1. Primary treatment: This initial process is a physical treatment applied to the wastewater by adding PAC and polymer chemicals in the flocculation and coagulation unit. The wastewater is then settled in the primary clarifier process. The aim is to remove the TSS value from the wastewater.2. Secondary treatment: After settling, the wastewater proceeds to the next stage, which is secondary treatment. This process aims to remove the COD and BOD values from the wastewater, using microorganisms/bacteria. The bacteria decompose the COD and BOD within a specified retention time. Next, the secondary clarifier process separates the wastewater from the bacteria.3. The treated wastewater is then ready to be discharged, with values below the standard wastewater quality, according to central regulations and hose set by local governments.4. The sludge produced during the WWT process undergoes dewatering to reduce the water content in the WWT sludge.
[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, only within our direct operations

(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:

☑ Evaluation in progress

(3.1.3) Please explain

APP mapped out various climate-related impacts and strategies in the short-term (1-2 years), medium-term (3-5 years), and long-term (6 years).

Forests

(3.1.1) Environmental risks identified

Select from:

☑ Yes, only within our direct operations

(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:

☑ Evaluation in progress

(3.1.3) Please explain

APP's commitment to a sustainable fiber supply is established through the use of local raw materials from Industrial Forest Plantation (HTI) areas, recycled fiber, and the implementation of the Supplier Evaluation and Risk Assessment (SERA) system. The SERA system ensures supplier compliance with sustainability principles, enhances transparency, and drives continuous improvement. SERA is a tool and an extension to APP's Fiber Procurement and Processing Policy (FPPP) serving as a comprehensive guideline to APP's commitment to eliminating deforestation across its supply chain and upholding sustainable forest management. All (100%) suppliers were screened/assessed using environmental criteria (SERA), ensuring no negative environmental impacts in APP's supply chain. SERA has 12 indicators: 1. The company, or any of its associated companies in the pulpwood industry, converting natural forest after February 1st, 2013. 2. Country / region 3. Tree species 4. Third-party certification/verification 5. Chain of Custody System 6. Legality Compliance 7. Protection of High Conservation Values or High Carbon Stock 8. Species protection as listed on the IUCN Red List of Critical Endangered Species and CITES 9. Company's respect for traditional civil and human right 10. Compliance with ILO Core Conventions 11. Company's respect for the health and safety of forest workers 12. No introduction of genetically modified organisms (GMOs).

Water

(3.1.1) Environmental risks identified

Select from:

☑ Yes, only within our direct operations

(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:

☑ Evaluation in progress

(3.1.3) Please explain

APP investing significant amounts of time, money and resources on initiatives that will not only help the company reduce its water footprint in Indonesia and deliver clean water to the nation's citizens, but also provide jobs and other economic and social opportunities in communities where APP operates. These many initiatives are underway at the local, national and international levels. On the global front, APP was the first pulp and paper company in Indonesia to join companies worldwide in endorsing United Nations Global Compact - CEO Water Mandate, a public-private initiative dedicated to developing strategies and solutions that help solve the emerging global water crisis. According to the United Nations (UN), every day millions of tons of inadequately treated sewage and industrial and agricultural wastes are poured into the world's waters, leaving 1 billion people without access to a sufficient water supply. In turn, this water contamination weakens or destroys natural ecosystems that support human health, food production, and biodiversity. In endorsing the UN mandate, APP is working with governments, UN agencies, non-governmental organizations, and other stakeholders to address the global water challenge. APP embraces the Global Mandate's six core elements: Direct

Operations, Supply Chain and Watershed Management, Collective Action, Public Policy, Community Engagement, and Transparency. APP mills introduced the anaerobic ("without oxygen") treatment process to Indonesia's pulp and paper industry. This water treatment process uses bacteria that do not depend on oxygen to convert contaminants in the water. The technology is unique because these bacteria produce methane gas during conversion, which can be used as energy for production. The result: clean water and an efficient source of energy. In addition, to ensure that the quality of their effluent meets or exceeds both Indonesian and world water quality standards, all of APP's mills treat water with high-efficiency activated sludge and chemical removal processes. And to reduce chemical oxygen demand (COD) levels, each mill employs oxygen bleaching in the water treatment process. Through continuous innovations of waste water treatment technologies and production efficiency, APP strives to reduce its water consumption and improve its waste water quality significantly.

Plastics

(3.1.1) Environmental risks identified

Select from:

☑ Yes, only within our direct operations

(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:

☑ Evaluation in progress

(3.1.3) Please explain

Plastic waste generated from impurities in recycled paper material will be utilized by the Company. Therefore, the Company is constructing a Waste Boiler facility to convert plastic waste into RDF (Refuse Derived Fuel) as an alternative fuel source in steam production, aiming to reduce carbon emissions by reducing coal consumption. APP's pulpwood suppliers use better nursery mediums with fiber cells, which are more environmentally friendly as they do not produce plastic waste. APP gives plastic rope waste from their mill to the community to create baskets and other crafts. Then community sells it to give them additional income.
[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:

☑ Risk3

(3.1.1.3) Risk types and primary environmental risk driver

Technology

☑ Transition to lower emissions technology and products

(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

Some of our pulp & paper machines are operated more than 20 years, Our data shows that those machines taking lower efficiency due to age of machines. It shows that the machine efficiency is decrease 10 % compared with the initial operation 20 years ago. On the other hand, new pulp & paper machines with the new technology are consuming 20 % less of energy compared with the pulp & paper machines technology in 20 years old ago. That means, if we could invest new pulp & paper machines, it's potentially impact to reduce energy consumption about 20-30 % as well as carbon footprint.

(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

☑ Long-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-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

If we are still operating with old machines, age more than 20 years, we will have issue with efficiency. Our assessment the machines efficiency have decreased 10%.

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

Select from:

☑ Yes

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

150000000

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

150000000

(3.1.1.25) Explanation of financial effect figure

As maximum impact, our energy intake is 287 million GJ, increment of 20% of energy intake equal to 50 million GJ based on our conservative calculation. Assume we use coal as main fuel, 1 ton coal assume 18 GJ, then 50 million GJ energy equal to 3.1 million ton of coal. Assume coal price is 110 USD/ton then price of 3.1 million Tonnes of coal is 346 million USD. This is the estimated maximum impact cost for financial impact of our inefficient pulp & paper machine. The potential financial impact per single figure can be estimated with decrease the efficiency 20% for one pulp & paper mill can lead the increment of 20 % of energy intake or 26 million GJ. We can assume the increase energy intake cost equal with 1.4 million ton Coal or 150 million USD

(3.1.1.26) Primary response to risk

Compliance, monitoring and targets

☑ Implementation of environmental best practices in direct operations

(3.1.1.27) Cost of response to risk

200000000

(3.1.1.28) Explanation of cost calculation

For example, in the long term, we have initiative, our Indah Kiat Perawang mill installed new high efficiency boiler to replace old boiler, this impacted on energy consumption reduction as well as carbon emission reduction. The new installation for 1 set Recovery Boiler with specification 5,500 TDS need to be invested around 200,000,000 USD.

(3.1.1.29) Description of response

Replace old equipment with new equipment by considering best available technology. Installation of new technology includes: - installation of new boiler equipment, with potential expenses - installation of new pulp and paper machine equipment, with potential expenses For example, in the long term, we have initiative, our Indah Kiat Perawang mill installed new high efficiency boiler to replace old boiler, this impacted on energy consumption reduction as well as carbon emission reduction. The new installation for 1 set Recovery Boiler with specification 5,500 TDS need to be invested around 200,000,000 USD. The impact of action plan, we can reduce carbon absolute.

Forests

(3.1.1.1) Risk identifier

Select from:

☑ Risk1

(3.1.1.2) Commodity

Select all that apply

☑ Timber products

(3.1.1.3) Risk types and primary environmental risk driver

Policy

☑ Changes to national legislation

(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

APP actively monitors applicable legal regulations and ensures compliance with all regulations. Additionally, APP sets higher standards than required, such as obtaining sustainable forest management certifications. By complying with the law and setting high standards, APP reduces legal risks that could arise from noncompliance, such as sanctions, fines, or reputational losses. This strategy ensures that APP not only meets legal obligations but also contributes to sustainable and responsible business practices.

(3.1.1.11) Primary financial effect of the risk

Select from:

☑ Fines, penalties or enforcement orders

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

Select all that apply

☑ The risk has already had a substantive effect on our organization in the reporting year

(3.1.1.14) Magnitude

Select from:

☑ High

(3.1.1.15) Effect of the risk on the financial position, financial performance and cash flows of the organization in the reporting year

Governments around the world are tightening regulations related to greenhouse gas emissions and forest management. This could increase compliance cost for APP.

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

Select from:

☑ No

(3.1.1.26) Primary response to risk

Compliance, monitoring and targets

☑ Ensure no deforestation and no conversion in own operations

(3.1.1.27) Cost of response to risk

30000000

(3.1.1.28) Explanation of cost calculation

Besides total allocated budget for DMPA program USD 10 million since 2015, APP also improve our Integrated Fire Management (IFM) strategy and already investedaround USD 250 million to provide advance technology, firefighters with equipment, personnel incentive, transportation and the implementation of supporting program involving the community. The IFM consists of four main pillars of Prevention, Preparedness, Early Detection and Rapid Response, with a particular emphasis on multi-stakeholder collaboration to tackle fire risks. APP continue our work with the communities, particularly in areas with higher fire risks, through community empowerment programs as well associalization and education on the dangers on fires. In 2023, only 0.008% of the total concession areas of our pulpwood suppliers were affected by fires. This achievement is in line with our SRV 2030 target of less than 2% of concession area being affected by fires. To calculate the total financial figure USD 30,000,000/year

(3.1.1.29) Description of response

Since 2015, APP implements the Integrated Fire Management (IFM) strategy as an effort to prevent and manage the risk of fire inside and around its suppliers' concession areas. The IFM consists of four main pillars of Prevention, Preparedness, Early Detection and Rapid Response, with a particular emphasis on multi-

stakeholder collaboration to tackle the fire risks. APP continue our work with the communities, particularly in areas with higher fire risks, through community empowerment programs as well as socialization and education on the dangers of fire. In 2023, only 0.008% of the total concession areas of our pulpwood suppliers were affected by fire. This is made possible because of the effectiveness of our team in implementing the IFM. APP launched the DMPA program in 2015 with total allotted budget USD 10 million, based on integrated forestry and farming system concepts. The program is aimed to provide alternative livelihood for community to increase their productivity and not using fire to open the land. 90% of DMPA location are free from fire.

Water

(3.1.1.1) Risk identifier

Select from:

☑ Risk1

(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

(3.1.1.9) Organization-specific description of risk

APP faces various physical risks that could disrupt its operations, including extreme weather events, floods that hinder supply chains, and droughts that impact water supplies. Long-term climate change also poses a significant challenge that must be considered in managing these physical risks. To manage these risks, APP has specific guidelines, namely the APP/SMK3/P/013 OHS Management Procedure Guidelines on Emergency Management. This guideline includes clear procedures and innovative solutions for addressing various emergencies. APP ensures preparedness and rapid response to physical risks, maintains operational continuity, and minimizes disruptions to the supply chain. These innovative solutions also empower the company to adapt to long-term climate change, ensuring business sustainability and environmental protection

(3.1.1.11) Primary financial effect of the risk

Select from:

☑ Fines, penalties or enforcement orders

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

Select all that apply

☑ Long-term

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

Select from:

☑ Unlikely

(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

Our supply chain operations impacted by water level in forestry area. Flooding and drought during unusual condition will impacted to the growth of tress as well as pulpwood supply to pulp & paper operations. Unusual condition such as drought and flooding will impact to pulpwood production and supply to pulp & paper operations.

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

Select from:

☑ No

(3.1.1.26) Primary response to risk

Infrastructure, technology and spending

☑ Adopt water efficiency, water reuse, recycling and conservation practices

(3.1.1.27) Cost of response to risk

2000000

(3.1.1.28) Explanation of cost calculation

APP has water storage (lagoon) to store during dry season. It's as back up if the water scarcity happens. Furthermore, we have other water intake pump in other branches of the river. Therefore, in responding the water scarcity, some initiatives such as preventive maintenance of water intake pump in the other branches of the river need to be concerned. The cost of maintenance and relocate the water intake pump can be assumed with 2 million USD

(3.1.1.29) Description of response

The main anticipated condition in term of water scarcity is the drought. Therefore, drought emergency plans should be developed and supported by other mechanisms such as efficiency and 3R implementation as well as working together with government and other stakeholders.

Plastics

(3.1.1.1) Risk identifier

Select from:

☑ Risk1

(3.1.1.3) Risk types and primary environmental risk driver

Policy

☑ Changes to international law and bilateral agreements

(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

The current market increasingly demands more eco-friendly products. To meet this demand, producers must comply with strict ecolabel standards, often a requirement for exporting products, particularly to international markets. APP manages this market risk by complying with various nationally and globally recognized environmental standards and certifications. By obtaining these certifications, APP not only meets market demands but also demonstrates its commitment to sustainable practices. This helps APP to maintain and expand its market share, reduces the risk of losing customers, and enhances its sustainability footprint. APP's Foopak Bio Natura, a flagship product made from environmentally friendly materials that are free from plastics and other harmful compounds. This ensures the safety of the product for customers. Foopak Bio Natura is biodegradable and compostable, making it a suitable choice for an increasingly environmentally conscious world.

(3.1.1.11) Primary financial effect of the risk

Select from:

☑ Disruption to sales

(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:

☑ Unlikely

(3.1.1.14) Magnitude

Select from:

☑ 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

Our business operations do not involve the production or manufacturing of plastic products. We only report the total weight of plastic used in our packaging. We are committed to reducing plastic usage through efficient practices and the adoption of more sustainable packaging alternatives.

(3.1.1.26) Primary response to risk

Compliance, monitoring and targets

☑ Promotion of best practice and awareness in the value chain

(3.1.1.29) Description of response

Our business operations do not involve the production or manufacturing of plastic products. We only report the total weight of plastic used in our packaging. We are committed to reducing plastic usage through efficient practices and the adoption of more sustainable packaging alternatives.
[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:

☑ CAPEX

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

200000000

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

Select from:
☑ 1-10%

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

10000000

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

Select from:
☑ 41-50%

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

1000000

(3.1.2.7) Explanation of financial figures

APP is focusing on installation of solar panels in several mills and increase renewable energy fuel.

Forests

(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)

3000000000

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

Select from:

☑ 1-10%

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

100000000

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

Select from:

☑ 21-30%

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

50000000

(3.1.2.7) Explanation of financial figures

APP is focusing on utilizing the latest technology and digitalization to optimize operations: modern nurseries, solar panels, seed clones, the use of Artificial Intelligence and drones. Consistent implementation of the Integrated Fire Management (IFM) System, training and education on fire prevention for local communities and company staff. Installing GPS collars on elephants to track their movement routes in real-time to help mitigate negative human-elephant interactions. Using better nursery mediums with fiber cells, which are more environmentally friendly as they do not produce plastic waste.

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)

20000000

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

Select from:

☑ 1-10%

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

500000

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

Select from:

☑ 21-30%

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

100000

(3.1.2.7) Explanation of financial figures

- In collaboration with a third-party vendor, APP plans to implement monitoring technology to obtain realtime information on the conditions of the water level and water table. This technology is combined with hydrological modelling and data analysis approaches to predict and estimate changes in water conditions. The results of this initiative can be used to conduct root cause analysis and quantitative decision-making in terms of priority issues. Thus, appropriate corrective and preventive actions can be taken to maintain the desired water table and water level conditions. - Installing sludge waste treatment in Wastewater Treatment Technology (WTT), a technology used to treat wastewater to make it safe and environmentally friendly before disposal into the environment.
[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

Zimbabwe

☑ Other, please specify **:**Siak River, Riau

(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

3

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

Select from:

☑ 1-25%

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

Select from:

☑ 1-10%

(3.2.11) Please explain

APP has 3 facilities using Siak River. Siak river is the deepest river in Indonesia, thus there is no issue related to water scarcity and stress.

Row 2

(3.2.1) Country/Area & River basin

Zimbabwe

☑ Other, please specify **:**Pangabuan River

(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

1

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

Select from:

☑ 1-25%

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

Select from:

☑ 1-10%

(3.2.11) Please explain

APP has 1 facility using Pengabuang River. There is no issue in this river related to water scarcity and stress.

Row 3

(3.2.1) Country/Area & River basin

Zimbabwe

☑ Other, please specify **:**Citarum River

(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

3

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

Select from:

☑ 1-25%

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

Select from:

☑ 1-10%

(3.2.11) Please explain

APP has 3 facilities using Citarum River. There is no issue in this river related to water scarcity and stress.

Row 4

(3.2.1) Country/Area & River basin

Zimbabwe

☑ Other, please specify **:**Padang River

(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

1

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

Select from:

☑ 1-25%

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

Select from:

☑ 1-10%

(3.2.11) Please explain

APP has been working with the consultant to study the Padang River for complex water flow connections, high monsoon flows, dry season, macro-tidal range, presence of acid generating peat marshes and a reliable water source for OKI Mill to secure its future water demand and evaluate the most feasible pumping station location with the least risks of salt pulse, pH acid, and metals leaching.

Row 5

(3.2.1) Country/Area & River basin

Zimbabwe

☑ Other, please specify **:**Brantas River

(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

1

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

Select from:

☑ 1-25%

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

Select from:

☑ 1-10%

(3.2.11) Please explain

APP has 1 facility using Brantas River. There is no issue in this river related to water scarcity and stress.

Row 6

(3.2.1) Country/Area & River basin

Zimbabwe

☑ Other, please specify **:**Ciujung River

(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

1

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

Select from:

☑ 1-25%

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

Select from:

☑ 1-10%

(3.2.11) Please explain

APP has 1 facility using Ciujung River. There is no issue in this river related to water scarcity and stress.

Row 7

(3.2.1) Country/Area & River basin

Zimbabwe

☑ Other, please specify **:**Cisadane River

(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

1

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

Select from:

☑ 1-25%

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

Select from:

☑ 1-10%

(3.2.11) Please explain

APP has 1 facility using Cisadane River. There is no issue in this river related to water scarcity and stress.

Row 8

(3.2.1) Country/Area & River basin

Zimbabwe

☑ Other, please specify **:**Lesti River

(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

1

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

Select from:

☑ 1-25%

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

Select from:

☑ 1-10%

(3.2.11) Please explain

APP has 1 facility using Cisadane River. There is no issue in this river related to water scarcity and stress.
[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	*Zero water-related incidents occurred during the reporting period year 2023 that resulted in significant fines or penalties.*

[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?

Indonesia starts to develop carbon market mechanism through Industry Ministry with a program called PMR (partnership for market readiness). This will be a journey for companies in Indonesia to involve in carbon market or carbon pricing. We realize that our company is one of high energy consumed manufacturing therefore we are now preparing for that mechanism through investment plan for energy efficiency and renewable energy. We also have conservation program in our concession to

be able participate in selling carbon to carbon market or as alternative we conduct carbon in-setting mechanism which balancing our conservation programs to our manufacturing emission.

(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
Forests	*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

(3.6.1.2) Commodity

Select all that apply

☑ Timber products

(3.6.1.3) Opportunity type and primary environmental opportunity driver

Capital flow and financing

☑ Access to sustainability linked loans

(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

98% of the energy used at the OKI mill is derived from renewable waste products generated from the pulp-making process. The company continues to strive to increase the use of environmentally friendly fuels and reduce the use of fossil fuels. OKI mill is easier to get sustainability loan scheme because of their performance. And more solar panel installation in APP's operations.

(3.6.1.9) Primary financial effect of the opportunity

Select from:

☑ Increased access to capital at lower/more favorable rates

(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

(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-high

(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

Enhanced Financial Position: A strong sustainability performance can improve the company's reputation and attract ethical investors, leading to increased access to capital and favorable financing terms. This can positively impact the company's financial position. Improved Financial Performance: Sustainability initiatives often lead to cost savings through improved efficiency, reduced waste, and lower environmental risks. This can enhance financial performance and profitability. Increased Cash Flows: By optimizing resource use and reducing environmental liabilities, companies can improve their cash flow management.

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

Select from:

☑ No

(3.6.1.24) Cost to realize opportunity

5000000

(3.6.1.25) Explanation of cost calculation

This is already BAU for OKI mill. And more solar panels installation in all operations.

(3.6.1.26) Strategy to realize opportunity

Maintain and improve the level of renewable energy usage and enlarge the use of solar panels.

Forests

(3.6.1.1) Opportunity identifier

Select from:

☑ Opp2

(3.6.1.2) Commodity

Select all that apply

☑ Timber products

(3.6.1.3) Opportunity type and primary environmental opportunity driver

Markets

☑ Stronger competitive advantage

(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

All APP's pulpwood suppliers in Indonesia are certified under one or more Sustainable Forest Management (SFM) certification scheme. Third party certification is a crucial tool to demonstrate to our stakeholders that our fiber is sourced sustainably. In 2022, APP have been able to maintain 100% compliance from our pulpwood suppliers to the PEFC scheme. This assurance is especially important for our customers, many of whom require that APP provide certification as part of their responsible sourcing commitment. Through the availability of certified materials in our supply chain, APP can fulfill customer demands and approach new customers with similar requirement. Increasing demand from customer for certified materials will give us the opportunity to gain new customers and will give good financial impact to our business. In terms of market demand, the past 5 year the demand for packaging product has increased 43%.

(3.6.1.9) Primary financial effect of the opportunity

Select from:

☑ Increased revenues resulting from increased demand for products and services

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

Select all that apply

☑ Medium-term

☑ Long-term

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

Select from:

☑ Likely (66–100%)

(3.6.1.12) Magnitude

Select from:

☑ Medium-high

(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

Enhanced Financial Position: A strong sustainability performance can improve the company's reputation and attract ethical investors, leading to increased access to capital and favorable financing terms. This can positively impact the company's financial position.

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

Select from:

☑ No

(3.6.1.24) Cost to realize opportunity

1000000

(3.6.1.25) Explanation of cost calculation

This is already BAU (Business As Usual) to maintain sustainability forest management certification and third-party verification process.

(3.6.1.26) Strategy to realize opportunity

APP's commitment to a sustainable fiber supply is established through the use of local raw materials from Industrial Forest Plantation (HTI) areas, recycled materials fiber, and the implementation of the Supplier Evaluation and Risk Assessment (SERA) system. The SERA system ensures supplier compliance with sustainability principles, enhances transparency, and drives continuous improvement. SERA is tool and an extension to APP's Fiber Procurement and Processing Policy (FPPP) serving as a comprehensive guideline to APP's commitment to eliminating deforestation across its supply chain and upholding sustainable forest management. To promote transparency, APP has implemented E-Product Tracing at our mills, enabling easy tracing of product origins. This program is continuously being refined to meet the demands of APP customers. In the reporting year, all (100%) new suppliers were screened/assessed using environmental criteria (SERA), ensuring that there are no negative environmental impacts in APP's supply chain. The SERA assessment system has been developed with high and robust sustainability standards. APP provides education and guidance to its supplier partners to consistently meet these standards. Supplier partners that meet the SERA standards strengthen their reputation for sustainability practices. We refer to our pulpwood supplier partners that have met SERA standards as SERA compliant supplier (SERACS). APP is committed to ensuring that 100% of its plantation wood is sourced from sustainably managed forests. To achieve this, APP requires its wood suppliers to obtain certifications and/ or verification such as: • Sustainable Forest Management (SFM) Best Practice • Timber Legality Verification (VLK) • Voluntary Program for the Endorsement of Forest Certification (PEFC)

Water

(3.6.1.1) Opportunity identifier

Select from:

☑ Opp3

(3.6.1.3) Opportunity type and primary environmental opportunity driver

Resource efficiency

☑ Reduced water usage and consumption

(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 **:**River used in our operations

(3.6.1.8) Organization specific description

Improved water efficiency in operations. Water is a vital ingredient for our production process, we use it in pulp and paper production and to produce steam at various stages of our processes. We recognize our responsibility to protect local water sources at each of our mill sites, we do this by minimizing consumption and ensuring the water we return to source meets the highest environmental standards. We conduct water balance studies at all mills and use external water experts to conduct regular sampling checks too to ensure our wastewater is safe for return to source. In 2023 we reused & recycle 17% of our water in processes, meaning we use less fresh water. At the end of 2022, we had achieved a water intensity reduction of 17%, as compared to a 2018 baseline. This decline is attributed to APP's ongoing efforts to enhance efficiency each year, documented and monitored under the Skill Development Activity (SDA) Program. Moreover, APP remains dedicated to sustainability, implementing the '3R' water strategy, as demonstrated through various initiatives carried out in 2023: 1. reuse paper from paper machine 2. recycle treated water effluent back to process 3. reuse condensate from vacuum evaporator to RC process 4. improve fiber line washing press performance 5. wood preparation reduce water consumption 6. reuse water reject to wash the wood

(3.6.1.9) Primary financial effect of the opportunity

Select from:

☑ Reduced direct 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

☑ Medium-term

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

Select from:

☑ Likely (66–100%)

(3.6.1.12) Magnitude

Select from:

☑ Medium-high

(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

It will lead to cost savings through improved efficiency, reduced waste, and lower environmental risks. This can enhance financial performance and profitability.

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

Select from:

☑ No

(3.6.1.24) Cost to realize opportunity

10000000

(3.6.1.25) Explanation of cost calculation

Estimation cost in water management

(3.6.1.26) Strategy to realize opportunity

Here are some of the initiatives undertaken by APP to value and use water efficiently: 1. Measurement and Calibration APP utilizes a water measurement tool called a flow meter, which is installed on the water pump at the intake point. By continuously measuring water flow, the company can monitor and manage water consumption more effectively. Additionally, APP periodically calibrates the flow meter to ensure its accuracy, thereby ensuring that the data obtained forms a solid foundation for ongoing decision-making. 2. Determine the Right Location APP is committed to not sourcing water from areas experiencing water stress or shortages. By understanding the ecological and social impacts of water extraction at each location, APP strives to operate responsibly without further burdening regions already facing water availability issues. Due to our commitment to avoid sourcing water from water stressed areas, we do not appoint specific managers to oversee this, nor conduct water scarcity assessments or report on water shortage risks. 3. Water Reuse To optimize water usage, APP implements water recycling practices wherever possible. Water used in operational processes, such as heating and cooling, is reclaimed for reuse within the production cycle. This approach helps reduce the demand for raw water sources and mitigates the ecological impact of fresh water intake. 4. Responsible Effluent Management APP ensures that its effluent management complies with applicable regulations. Through effective and responsible effluent treatment methods, APP strives to minimize the negative impact of effluent on the surrounding environment. This includes monitoring effluent quality and implementing the latest technologies to ensure discharged water meets established standards. All water intake, usage, and discharge processes adhere to governmental regulations and are reported to the authorities.
[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:

☑ Assets

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

1000000000

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

Select from:

☑ 1-10%

(3.6.2.4) Explanation of financial figures

We sold our tissue & paper product to overseas such as Australia, Singapore, etc. Our customers in this market increase the demand for low carbon footprint of product such as ecolabels certification. We take this opportunity to design low environmental impact for other products and reach other operations which not yet certified on ecolabels scheme. This will be a good opportunity to reach a new market as well as to place more products on current market. At the moment, the requirement for ecolabel is for tissue product, if we can expand our certificate into paper product, it would be increasing the revenue.

Forests

(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)

8500000000

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

Select from:

☑ 1-10%

(3.6.2.4) Explanation of financial figures

Substantive positive and long-term financial impacts is expected with the increased demand of certified materials which can increase the sales and impacted to the revenue calculation from average sales export increase per year around USD 300 million to USD 500 million.

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)

150000000

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

Select from:

☑ 1-10%

(3.6.2.4) Explanation of financial figures

Due the increasing water efficiency, the water intake will be decreased. The impact is revenue in conservative calculation.

[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

☑ Non-executive directors or equivalent

☑ Independent non-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

APP's Governance Policy is implemented to ensure that APP will uphold the principles of Good Corporate Governance ("GCG"), transparency, accountability, responsibility, independence and fairness—throughout its business operations. Our Governance policy devided into sub policies, which are: Board of Directors Charter, Board of Commissioners Charter, Corporate Secretary Charter, Nomination and Remuneration Committee, Internal Audit Charter, Audit Committee Charter, Communication with the Shareholders Policy, Insider Trading Policy, Affiliated Transaction Policy, Dividend Distribution Policy, Procurement Policy, IT Governance and Protection. We attached some of governance policies, for complete policies can be found in the following link: https://app.co.id/about-us

(4.1.6) Attach the policy (optional)

J7 Introduction_Governance Policy.pdf,J7 13. INSIDER TRADING_APP PURINUSA.pdf,J7 4. DIVIDEND DISTRIBUTION POLICY_APP PURINUSA.pdf,J7 1. BOARD OF DIRECTORS CHARTER_APP PURINUSA.pdf,J7 2. BOARD OF COMMISSIONERS CHARTER_APP PURINUSA.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
Forests	*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

☑ Other C-Suite Officer
☑ Board-level committee
☑ Chief Executive Officer (CEO)
☑ Chief Financial Officer (CFO)
☑ Chief Operating Officer (COO)
☑ Chief Sustainability Officer (CSO)

(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
☑ Board mandate
☑ 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 the setting of corporate targets
☑ Approving corporate policies and/or commitments
☑ Approving and/or overseeing employee incentives
☑ Overseeing and guiding major capital expenditures
☑ Overseeing reporting, audit, and verification processes
☑ Monitoring the implementation of a climate transition plan

(4.1.2.7) Please explain

CEO together with Deputy CEO, Managing Director, Director of Corporate Affairs and Communications, Social Division Head, Human Resources Division Head, Business Unit Heads and Chief Sustainability Officer (CSO), our Chief Executive Officer (CEO) responsible to oversee our sustainability commitments implementation across APP operations. This team named as "Sustainability Committee". CEO responsible to lead the team on evaluating the assessment results on the adequacy and effectiveness of environment, social, and climate strategy according to APP's Sustainability Roadmap Vision (SRV) 2030, national regulations and global relevant standards. Our CEO also approved Sustainability Commitment and its' policies (such as Environmental Policy), and initiatives related to climate change risk.

Forests

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

Select all that apply

☑ Other C-Suite Officer

☑ Board-level committee

☑ Chief Executive Officer (CEO)

☑ Chief Financial Officer (CFO)

☑ Chief Operating Officer (COO)

☑ Chief Sustainability Officer (CSO)

(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

☑ Board mandate

☑ 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 the setting of corporate targets
☑ Monitoring progress towards corporate targets
☑ Approving corporate policies and/or commitments
☑ Approving and/or overseeing employee incentives
☑ Overseeing and guiding major capital expenditures
☑ Overseeing reporting, audit, and verification processes
☑ Monitoring supplier compliance with organizational requirements
☑ Monitoring compliance with corporate policies and/or commitments

(4.1.2.7) Please explain

CEO together with Deputy CEO, Managing Director, Director of Corporate Affairs and Communications, Social Division Head, Human Resources Division Head, Business Unit Heads and Chief Sustainability Officer (CSO), our Chief Executive Officer (CEO) responsible to oversee our sustainability commitments implementation accross APP operations. This team named as "Sustainability Committee". CEO responsible to lead the team on evaluating the assessment results on the adequacy and effectiveness of environment, social, and climate strategy including forestry according to APP's Sustainability Roadmap Vision (SRV) 2030, national regulations and global relevant standards. Our CEO also approved Sustainability Commitment and its' policies (such as FPPP, Human Rights Policy, etc), the development / renovation of modern nursery, implementation of solar panel in several forestry areas, etc.

Water

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

Select all that apply

☑ Other C-Suite Officer
☑ Board-level committee
☑ Chief Executive Officer (CEO)
☑ Chief Financial Officer (CFO)
☑ Chief Operating Officer (COO)
☑ Chief Sustainability Officer (CSO)

(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

☑ Board mandate

☑ 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

☑ Overseeing and guiding the development of a business strategy

☑ Monitoring supplier compliance with organizational requirements

☑ Monitoring compliance with corporate policies and/or commitments

☑ Reviewing and guiding the assessment process for dependencies, impacts, risks, and opportunities

☑ Reviewing and guiding innovation/R&D priorities

☑ Approving and/or overseeing employee incentives

☑ Overseeing and guiding major capital expenditures

☑ Monitoring the implementation of the business strategy

☑ Overseeing reporting, audit, and verification processes

(4.1.2.7) Please explain

Sustainability Committee responsible for integrating, synergizing, and managing companywide sustainability, initiatives, policy and programs focuses on production manufacturing, forest and people to ensure environmental compliance world-wide and suggest ways to harmonize company activities with nature. From the Governance side, CSO is one of the members of Sustainability Committee that in-charge evaluating water management strategy, implementation and its' decision-making process by management. Our CSO made strategic decision related to: 1. Water cost by manage water treatment process and utilize the solid waste (sludge). 2. The quality of wastewater according to government regulation. 3. Water efficiency program and coordinate with Mill team to improve water efficiency and wastewater quality. 4. Working together with various partners to maintain environmental impact. COO has responsibility to: 1. Control wastewater cost by manage water treatmant process and utilize the solid waste (sludge). 2. Ensure all treatment for fresh water and waste running well 3. Monitor wastewater quality, and coordinate with paper team to improve wastewater quality 4. Work together to maintain environment and increase wastewater quality

Biodiversity

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

Select all that apply

☑ Other C-Suite Officer
☑ Board-level committee
☑ Chief Executive Officer (CEO)
☑ Chief Financial Officer (CFO)
☑ Chief Operating Officer (COO)
☑ Chief Sustainability Officer (CSO)

(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

☑ Board mandate
☑ 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 the setting of corporate targets
☑ Monitoring progress towards corporate targets
☑ Approving corporate policies and/or commitments
☑ Reviewing and guiding innovation/R&D priorities
☑ Approving and/or overseeing employee incentives
☑ Overseeing and guiding major capital expenditures
☑ Monitoring the implementation of the business strategy
☑ Overseeing reporting, audit, and verification processes
☑ Monitoring the implementation of a climate transition plan

☑ Overseeing and guiding the development of a business strategy

☑ Monitoring supplier compliance with organizational requirements

☑ Monitoring compliance with corporate policies and/or commitments

☑ Reviewing and guiding the assessment process for dependencies, impacts, risks, and opportunities

(4.1.2.7) Please explain

CEO together with Deputy CEO, Managing Director, Director of Corporate Affairs and Communications, Social Division Head, Human Resources Division Head, Business Unit Heads and Chief Sustainability Officer (CSO), our Chief Executive Officer (CEO) responsible to oversee our sustainability commitments implementation across APP operations. This team named as "Sustainability Committee". CEO responsible to lead the team on evaluating the assessment results on the adequacy and effectiveness of environment, social, and climate strategy including forestry according to APP's Sustainability Roadmap Vision (SRV) 2030, national regulations and global relevant standards. Our CEO also approved Sustainability Commitment and its' policies (such as FPPP, Human Rights Policy, etc), the development / renovation of modern nursery, implementation of solar panel in several forestry areas, etc. CSO responsible for integrating, synergizing, and managing companywide sustainability, initiatives, policy and programs focuses on production manufacturing, forest and people to ensure environmental compliance world-wide and suggest ways to harmonize company activities with nature. From the Governance side, CSO is in-charge of evaluating Sustainable Forest Management (SFM) strategy, biodiversity program implementation and its' decision-making process by management.
[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

☑ Consulting regularly with an internal, permanent, subject-expert working group

☑ Engaging regularly with external stakeholders and experts on environmental issues

☑ Integrating knowledge of environmental issues into board nominating process

☑ Regular training for directors on environmental issues, industry best practice, and standards (e.g., TCFD, SBTi)

☑ Having at least one board member with expertise on this environmental issue

(4.2.3) Environmental expertise of the board member

Additional training

☑ Training in an environmental subject by a certified organization, please specify **:**ISO14001; ISO45001; ISO9001; HRDD; SDGs; SBTi; TCFD

Experience

☑ Management-level experience in a role focused on environmental issues

☑ Staff-level experience in a role focused on environmental issues

☑ Experience in an academic role focused on environmental issues

☑ Experience in the environmental department of a government (national or local)

☑ Experience in an organization that is exposed to environmental-scrutiny and is going through a sustainability transition

Forests

(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

☑ Consulting regularly with an internal, permanent, subject-expert working group

☑ Engaging regularly with external stakeholders and experts on environmental issues

☑ Integrating knowledge of environmental issues into board nominating process

☑ Regular training for directors on environmental issues, industry best practice, and standards (e.g., TCFD, SBTi)

☑ Having at least one board member with expertise on this environmental issue

(4.2.3) Environmental expertise of the board member

Additional training

☑ Training in an environmental subject by a certified organization, please specify **:**ISO14001; ISO45001; HRDD; ISO 9001

Experience

☑ Active member of an environmental committee or organization

☑ Experience in an academic role focused on environmental issues

☑ Staff-level experience in a role focused on environmental issues

☑ Executive-level experience in a role focused on environmental issues

☑ Management-level experience in a role focused on environmental issues

☑ Experience in the environmental department of a government (national or local)

☑ Experience in an organization that is exposed to environmental-scrutiny and is going through a sustainability transition

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

☑ Consulting regularly with an internal, permanent, subject-expert working group

☑ Engaging regularly with external stakeholders and experts on environmental issues

☑ Integrating knowledge of environmental issues into board nominating process

☑ Regular training for directors on environmental issues, industry best practice, and standards (e.g., TCFD, SBTi)

☑ Having at least one board member with expertise on this environmental issue

(4.2.3) Environmental expertise of the board member

Additional training

☑ Training in an environmental subject by a certified organization, please specify **:**ISO14001; ISO9001; ISO45001; HRDD

Experience

☑ Active member of an environmental committee or organization

☑ Experience in an academic role focused on environmental issues

☑ Staff-level experience in a role focused on environmental issues

☑ Executive-level experience in a role focused on environmental issues

☑ Management-level experience in a role focused on environmental issues

☑ Experience in the environmental department of a government (national or local)

☑ Experience in an organization that is exposed to environmental-scrutiny and is going through a sustainability transition

[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
Forests	*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

Committee

☑ Sustainability committee

(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

☑ Managing environmental dependencies, impacts, risks, and opportunities

Engagement

☑ Managing engagement in landscapes and/or jurisdictions

☑ Managing public policy engagement related to environmental issues

☑ Managing supplier compliance with environmental requirements

☑ Managing value chain engagement related to environmental issues

Policies, commitments, and targets

☑ Monitoring compliance with corporate environmental policies and/or commitments

☑ Measuring progress towards environmental corporate targets

☑ Measuring progress towards environmental science-based targets

☑ Setting corporate environmental policies and/or commitments

☑ Setting corporate environmental targets

Strategy and financial planning

☑ Developing a climate transition plan

☑ Implementing a climate transition plan
☑ Conducting environmental scenario analysis
☑ Managing annual budgets related to environmental issues
☑ Implementing the business strategy related to environmental issues
☑ Developing a business strategy which considers environmental issues
☑ Managing environmental reporting, audit, and verification processes
☑ Managing acquisitions, mergers, and divestitures related to environmental issues
☑ Managing major capital and/or operational expenditures relating to environmental issues
☑ Managing priorities related to innovation/low-environmental impact products or services (including R&D)

(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:
☑ Quarterly

(4.3.1.6) Please explain

The Management team under the business units as described in the governance structure consist of senior management team members who are responsible for overseeing various departments. This Management Team conducts a review of economic, environmental, and social aspects every three months. They report and explain the status to CEO.

Forests

(4.3.1.1) Position of individual or committee with responsibility

Committee
☑ Sustainability committee

(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

☑ Managing environmental dependencies, impacts, risks, and opportunities

Engagement

☑ Managing engagement in landscapes and/or jurisdictions

☑ Managing public policy engagement related to environmental issues

☑ Managing supplier compliance with environmental requirements

☑ Managing value chain engagement related to environmental issues

Policies, commitments, and targets

☑ Monitoring compliance with corporate environmental policies and/or commitments

☑ Measuring progress towards environmental corporate targets

☑ Measuring progress towards environmental science-based targets

☑ Setting corporate environmental policies and/or commitments

☑ Setting corporate environmental targets

Strategy and financial planning

☑ Developing a climate transition plan

☑ Implementing a climate transition plan

☑ Conducting environmental scenario analysis

☑ Managing annual budgets related to environmental issues

☑ Implementing the business strategy related to environmental issues

☑ Developing a business strategy which considers environmental issues

☑ Managing environmental reporting, audit, and verification processes

☑ Managing acquisitions, mergers, and divestitures related to environmental issues

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

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

(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:

☑ Quarterly

(4.3.1.6) Please explain

The Management team under the business units as described in the governance structure consist of senior management team members who are responsible for overseeing various departments. This Management Team conducts a review of economic, environmental, and social aspects every three months. They report and explain the status to CEO.

Water

(4.3.1.1) Position of individual or committee with responsibility

Committee

☑ Sustainability committee

(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

☑ Managing environmental dependencies, impacts, risks, and opportunities

Engagement

☑ Managing engagement in landscapes and/or jurisdictions

☑ Managing public policy engagement related to environmental issues

☑ Managing supplier compliance with environmental requirements

☑ Managing value chain engagement related to environmental issues

Policies, commitments, and targets

☑ Monitoring compliance with corporate environmental policies and/or commitments
☑ Measuring progress towards environmental corporate targets
☑ Measuring progress towards environmental science-based targets
☑ Setting corporate environmental policies and/or commitments
☑ Setting corporate environmental targets

Strategy and financial planning

☑ Developing a climate transition plan
☑ Implementing a climate transition plan
☑ Conducting environmental scenario analysis
☑ Managing annual budgets related to environmental issues
☑ Implementing the business strategy related to environmental issues
☑ Developing a business strategy which considers environmental issues
☑ Managing environmental reporting, audit, and verification processes
☑ Managing acquisitions, mergers, and divestitures related to environmental issues
☑ Managing major capital and/or operational expenditures relating to environmental issues
☑ Managing priorities related to innovation/low-environmental impact products or services (including R&D)

(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:

☑ Quarterly

(4.3.1.6) Please explain

The Management team under the business units as described in the governance structure consist of senior management team members who are responsible for overseeing various departments. This Management Team conducts a review of economic, environmental, and social aspects every three months. They report and explain the status to CEO.

Biodiversity

(4.3.1.1) Position of individual or committee with responsibility

Committee

☑ Sustainability committee

(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

☑ Managing environmental dependencies, impacts, risks, and opportunities

Engagement

☑ Managing engagement in landscapes and/or jurisdictions

☑ Managing public policy engagement related to environmental issues

☑ Managing supplier compliance with environmental requirements

☑ Managing value chain engagement related to environmental issues

Policies, commitments, and targets

☑ Monitoring compliance with corporate environmental policies and/or commitments

☑ Measuring progress towards environmental corporate targets

☑ Measuring progress towards environmental science-based targets

☑ Setting corporate environmental policies and/or commitments

☑ Setting corporate environmental targets

Strategy and financial planning

☑ Developing a climate transition plan

☑ Implementing a climate transition plan
☑ Conducting environmental scenario analysis
☑ Managing annual budgets related to environmental issues
☑ Implementing the business strategy related to environmental issues
☑ Developing a business strategy which considers environmental issues
☑ Managing environmental reporting, audit, and verification processes
☑ Managing acquisitions, mergers, and divestitures related to environmental issues
☑ Managing major capital and/or operational expenditures relating to environmental issues
☑ Managing priorities related to innovation/low-environmental impact products or services (including R&D)

(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:
☑ Quarterly

(4.3.1.6) Please explain

The Management team under the business units as described in the governance structure consist of senior management team members who are responsible for overseeing various departments. This Management Team conducts a review of economic, environmental, and social aspects every three months. They report and explain the status to CEO.
[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

100

(4.5.3) Please explain

The incentive(s) encouraged the Director on Board to continue improve performance of APP's climate change, energy-related strategy implementation as part of Sustainable Roadmap Vision (SRV) 2030. Incentives plays a crucial role in motivating and driving behavior towards achieving goals. Here are some ways in which incentives contribute to goal attainment driven by our Director on Board: 1. Encouraging Action 2. Focusing Attention 3. Driving Performance 4. Stimulating Innovation 5. Aligning Interests 6. Sustaining Motivation 7. Changing Behavior, for integrating, synergizing, and managing company-wide sustainability, initiatives, policy and programs focuses on production manufacturing, forest and people to ensure environmentally compliance world-wide and suggest ways to harmonize company activities with nature.

Forests

(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

100

(4.5.3) Please explain

The incentive(s) encouraged the Director on Board to continue improve performance of APP's sustainability forest management, biodiversity programs implementation as part of Sustainable Roadmap Vision (SRV) 2030. Incentives plays a crucial role in motivating and driving behavior towards achieving goals. Here are some ways in which incentives contribute to goal attainment driven by our Director on Board: 1. Encouraging Action 2. Focusing Attention 3. Driving Performance 4. Stimulating Innovation 5. Aligning Interests 6. Sustaining Motivation 7. Changing Behavior, for integrating, synergizing, and managing company-wide sustainability, initiatives, policy and programs focuses on production manufacturing, forest and people to ensure environmentally compliance world-wide and suggest ways to harmonize company activities with nature.

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

100

(4.5.3) Please explain

The incentive(s) encouraged the Director on Board to continue improve performance of APP's water management implementation as part of Sustainable Roadmap Vision (SRV) 2030. Incentives plays a crucial role in motivating and driving behavior towards achieving goals. Here are some ways in which incentives contribute to goal attainment driven by our Director on Board: 1. Encouraging Action 2. Focusing Attention 3. Driving Performance 4. Stimulating Innovation 5. Aligning Interests 6. Sustaining Motivation 7. Changing Behavior, for integrating, synergizing, and managing company-wide sustainability, initiatives, policy and programs focuses on production manufacturing, forest and people to ensure environmentally compliance world-wide and suggest ways to harmonize company activities with nature. [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

Facility/Unit/Site management

☑ Business unit manager

(4.5.1.2) Incentives

Select all that apply

☑ Bonus – set figure

(4.5.1.3) Performance metrics

Targets

☑ Achievement of environmental targets

☑ Organization performance against an environmental sustainability index

(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

Bonus comes from the achievement of annual KPI sustainability target, total amount of bonus depends in individual score performance.

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

The design of incentives are thoughtful, aligned with the desired outcomes, and consider potential unintended consequences. Properly designed incentives can be powerful tools in driving progress, fostering engagement, and ultimately contributing to the successful achievement of goals. Sustainability Roadmap Vision (SRV) 2030 has goals in each pillars, where one of the goals is to reduce greenhouse gas emission 30% in our operations. This embedded to KPI target of our Chief Sustainability Officer (CSO). Once the target achieved, incentives will be distributed.

Forests

(4.5.1.1) Position entitled to monetary incentive

Facility/Unit/Site management

☑ Business unit manager

(4.5.1.2) Incentives

Select all that apply

☑ Bonus – set figure

(4.5.1.3) Performance metrics

Targets

☑ Achievement of environmental targets

☑ Organization performance against an environmental sustainability index

(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

Bonus comes from the achievement of annual KPI sustainability target, total amount of bonus depends in individual score performance.

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

The design of incentives are thoughtful, aligned with the desired outcomes, and consider potential unintended consequences. Properly designed incentives can be powerful tools in driving progress, fostering engagement, and ultimately contributing to the successful achievement of goals. Sustainability Roadmap Vision (SRV) 2030 has goals in each pillars, where one of the goals is to reduce greenhouse gas emission 30% in our operations. This embedded to KPI target of our Chief Sustainability Officer (CSO). Once the target achieved, incentives will be distributed.

Water

(4.5.1.1) Position entitled to monetary incentive

Facility/Unit/Site management

☑ Business unit manager

(4.5.1.2) Incentives

Select all that apply

☑ Bonus – set figure

(4.5.1.3) Performance metrics

Targets

☑ Achievement of environmental targets

☑ Organization performance against an environmental sustainability index

(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

Bonus comes from the achievement of annual KPI sustainability target, total amount of bonus depends in individual score performance.

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

The design of incentives are thoughtful, aligned with the desired outcomes, and consider potential unintended consequences. Properly designed incentives can be powerful tools in driving progress, fostering engagement, and ultimately contributing to the successful achievement of goals. Sustainability Roadmap Vision (SRV) 2030 has goals in each pillars, where one of the goals is to reduce greenhouse gas emission 30% in our operations. This embedded to KPI target of our Chief Sustainability Officer (CSO). Once the target achieved, incentives will be distributed.
[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

☑ Forests

☑ 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

☑ Direct operations

☑ Upstream value chain

☑ Downstream value chain

☑ Portfolio

(4.6.1.4) Explain the coverage

- The Policy applies to APP's operations and suppliers in Indonesia. - The provisions stated in this Policy are applied in the derived rules in our operations. - The Policy will be reviewed on a regular basis for relevance and its effectiveness to achieve business objectives. To ensure the implementation of this Policy, we conduct regular monitoring and evaluation of its progress. - Sustainability and Stakeholder Engagement Division is appointed to coordinate the day-to-day implementation of APP's environmental performance in line with this Policy. APP regularly reviews the progress on the implementation of this Policy. - We report the progress on the implementation of this Policy, to our stakeholders in a variety of ways that include publications, stakeholder forums and webinars. Complete policies: https://app.co.id/about-us

(4.6.1.5) Environmental policy content

Environmental commitments

☑ Commitment to a circular economy strategy

☑ 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

☑ Commitment to engage in integrated, multi-stakeholder landscape (including river basin) initiatives to promote shared sustainability goals

Forests-specific commitments

☑ Commitment to best management practices for soils and peat

☑ Commitment to no land clearance by burning or clearcutting

☑ Commitment to no-conversion of natural ecosystems by target date, please specify **:**we have Forest Conservation Policy with commitment no deforestation since 2013.

☑ Commitment to no-deforestation by target date, please specify **:**we have Forest Conservation Policy with commitment no deforestation since 2013.

☑ Commitment to the use of the High Conservation Value (HCV) approach

Water-specific commitments

☑ Commitment to reduce or phase out hazardous substances

☑ Commitment to reduce water consumption volumes

Social commitments

☑ 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

☑ Acknowledgement of the human right to water and sanitation

☑ Description of biodiversity-related performance standards

☑ Description of grievance/whistleblower mechanism to monitor non-compliance with the environmental policy and raise/address/escalate any other greenwashing concerns

(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

220615 APP's Environmental Policy.pdf

Row 2

(4.6.1.1) Environmental issues covered

Select all that apply

☑ Climate change

☑ Forests

☑ 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

☑ Direct operations

☑ Upstream value chain

☑ Downstream value chain

☑ Portfolio

(4.6.1.4) Explain the coverage

- The Policy applies to APP's operations and suppliers in Indonesia. - The provisions stated in this Policy are applied in the derived rules in our operations. - The Policy will be reviewed on a regular basis for relevance and its effectiveness to achieve business objectives. To ensure the implementation of this Policy, we conduct regular monitoring and evaluation of its progress. - Sustainability and Stakeholder Engagement Division is appointed to coordinate the day-to-day implementation of APP's environmental performance in line with this Policy. APP regularly reviews the progress on the implementation of this Policy. - We report the progress on the implementation of this Policy, to our stakeholders in a variety of ways that include publications, stakeholder forums and webinars. Complete policies: https://app.co.id/about-us

(4.6.1.5) Environmental policy content

Environmental commitments

☑ Commitment to a circular economy strategy

☑ 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 implementation of nature-based solutions that support landscape restoration and long-term protection of natural ecosystems

☑ Commitment to engage in integrated, multi-stakeholder landscape (including river basin) initiatives to promote shared sustainability goals

(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

APP's Forest Conservation Policy 2013 - new logo.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

☑ CEO Water Mandate

☑ UN Global Compact

☑ New York Declaration on Forests

☑ Science-Based Targets Initiative (SBTi)

☑ High Carbon Stock Approach Steering Group

☑ International Corporate Governance Network (IGCN)

☑ Task Force on Climate-related Financial Disclosures (TCFD)

☑ Programme for the Endorsement of Forest Certification (PEFC)

☑ World Business Council for Sustainable Development (WBCSD)

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

UN Global Compact Network- Signatory Member Indonesia Global Compact Network (IGCN) - Board of Founders UNGC CEO Water Mandate Indonesia Water Mandate Working Group -Steering Board Consumer Goods Forum - Member PEFC - Member SBTi - Member
[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 indirectly through, and/or provided financial or in-kind support to a trade association or other intermediary organization or individual whose activities could influence policy, law, or regulation

(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

231121 SR PT APP Purinusa Ekapersada 2022.pdf

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

Select from:

☑ Yes

(4.11.6) Types of transparency register your organization is registered on

Select all that apply

☑ Mandatory government register

(4.11.7) Disclose the transparency registers on which your organization is registered & the relevant ID numbers for your organization

Press release: https://app.co.id/-/asia-pulp-paper-signs-cdp-s-road-to-paris-commitment-to-help-address-climate-change Asia Pulp & Paper Group (APP), one of the largest paper companies in the world, today joined leading global companies in committing to CDP's 'Road to Paris' Initiative. Signatories of the initiative pledge their commitments on fighting climate change and can disclose their progress in fulfilling those commitments through the CDP reporting mechanism.

(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

APP established the Stakeholder Advisory Forum (SAF) as a platform for constructive dialogue with stakeholders, to obtain up-todate input and discuss the implementation of SRV 2030. This is a proactive step by the company to ensure active engagement and transparency in the planning and implementation processes of sustainability initiatives. The process of determining material topics for our sustainability report has been discussed in the "Strategy" chapter. We greatly appreciate the input and opinions of all stakeholders. Stakeholders have an interest in the company's activities and valuable insights into the most significant issues to them and the wider community. Their perspectives are crucial in shaping the materiality assessment, ensuring that the sustainability report addresses topics relevant to those impacted by the company's operations. link to our latest report:
https://app.co.id/documents/20123/0/SR_PT_APP_PURINUSA_EKAPERSADA_2023_ENGLISH%281%29.pdf/d95b7b39-4515-96fe-f6ae-7b5929eb4f98?t1721444987715
[Fixed row]

(4.11.2) Provide details of your indirect engagement on policy, law, or regulation that may (positively or negatively) impact the environment through trade associations or other intermediary organizations or individuals in the reporting year.

Row 1

(4.11.2.1) Type of indirect engagement

Select from:

☑ Indirect engagement via a trade association

(4.11.2.4) Trade association

Global

☑ Other global trade association, please specify **:**Indonesia Pulp & Paper Association (APKI); Indonesian Forest Concessionaires (APHI); Indonesian Association for Clinical Chemistry (AKIDA); Indonesian Public Listed Companies Association (AEI); Indonesia Chamber of Commerce (KADIN Indonesia)

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

☑ Climate change

☑ Forests

☑ Water

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

☑ Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

☑ Yes, we publicly promoted their current position

(4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

APP is part of various industry organizations as a form of strategic collaboration to promote sustainable policies, practices, and goals. This membership serves not only as a means to stay up-to-date with the latest information but also to share experiences with other stakeholders.

(4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

100000

(4.11.2.10) Describe the aim of this funding and how it could influence policy, law or regulation that may impact the environment

APP is part of various industry organizations as a form of strategic collaboration to promote sustainable policies, practices, and goals. This membership serves not only as a means to stay up-to-date with the latest information but also to share experiences with other stakeholders.

(4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

☑ Yes, we have evaluated, and it is aligned

(4.11.2.12) Global environmental treaties or policy goals aligned with your organization's engagement on 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 voluntary sustainability reports

(4.12.1.3) Environmental issues covered in publication

Select all that apply

☑ Climate change

☑ Forests

☑ 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

☑ Commodity volumes

☑ Water accounting figures

☑ Water pollution indicators

☑ Risks & Opportunities

☑ Value chain engagement

☑ Dependencies & Impacts

☑ Biodiversity indicators

☑ Public policy engagement

☑ Content of environmental policies

☑ Deforestation and conversion footprint

(4.12.1.6) Page/section reference

Message from Top Management page 7 Governance page 16 TCFD framework page 20 Strategy page 27 Performance page 45 Performance Deep Dive page 62 Operating with ethics and integrity page 204

(4.12.1.7) Attach the relevant publication

SR_PT_APP_PURINUSA_EKAPERSADA_2023_ENGLISH_FINAL.pdf

(4.12.1.8) Comment

We published Sustainability Report with framework reporting standard: GRI, POJK 51, TCFD, SASB Pulp and Paper, SASB Forestry Management. APP has engaged the services of an independent assurance provider, Bureau Veritas Indonesia, was selected based on its expertise and other requirements set by the Board of Directors. This assurance provider has no other employment relationship with APP other than this assurance service. The assurance report, which adheres to the international AA1000 (AS) standard.
[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:

☑ Every three years or less frequently

Forests

(5.1.1) Use of scenario analysis

Select from:

☑ Yes

(5.1.2) Frequency of analysis

Select from:

☑ Every three years or less frequently

Water

(5.1.1) Use of scenario analysis

Select from:

☑ Yes

(5.1.2) Frequency of analysis

Select from:

☑ Every three years or less frequently

[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

☑ Customized publicly available climate physical scenario, please specify **:**Indonesia launch NDC in 2016, this is a guideline for all private sectors in Indonesia to decide climate change target. As APP operates in developing country with limited access to renewable energy, therefore NDC would be the most possible guideline.

(5.1.1.3) Approach to scenario

Select from:

☑ Qualitative and quantitative

(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

☑ Technology

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 1.5°C or lower

(5.1.1.7) Reference year

2018

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2030

☑ 2040

☑ 2050

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

☑ Climate change (one of five drivers of nature change)

Regulators, legal and policy regimes

☑ Global targets

☑ Methodologies and expectations for science-based targets

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

Indonesia launch NDC (Nationally Determined Contribution) in 2016, this is a guideline for all private sectors in Indonesia to decide climate change target. As APP operates in developing country with limited access to renewable energy, therefore NDC would be the most possible guideline to be implemented by private sectors. Indonesia's Nationally Determined Contribution (NDC) outlines the country's transition to a low carbon and climate resilience future. The NDC describes the enhanced actions and the necessary enabling environment during the 2015-2019 period that will lay the foundation for more ambitious goals beyond 2020,

contributing to the concerted effort to prevent 2oC increase in global average temperature and to pursue efforts to limit the temperature increase to 1.5oC above pre-industrial levels. We have also committed in SBTi that set scenario to reduce GHG emission more ambitious with some many or major initiatives and GHG reduction program more impactful rather than other scenario.

(5.1.1.11) Rationale for choice of scenario

APP Indonesia needs to support the government of Indonesia climate change target. Our strategy will align with Indonesia's target. We set up several temperature alignment of scenario from 1.5oC or lower and: 1.6oC - 2oC scenario: This scenario is assumed a scenario as business as usual with many / minor initiatives or impact to reduce GHG emission. The scenario impact is assumed can below as business-as-usual scenario with increase the global temperature up to 2 degrees Celsius. 2.1ºC - 3ºC: This scenario is assumed a scenario as business as usual with few initiatives or GHG reduction program to minimize impact to global warming. The scenario impact is assumed can increase the global temperature up to 4 degrees Celsius. 3.1ºC - 4ºC: This scenario is assumed a scenario as business as usual without any initiatives or GHG reduction program to minimize impact to global warming. The scenario impact is assumed can increase the global temperature up to 4 degrees Celsius.

Forests

(5.1.1.1) Scenario used

Forests scenarios

☑ Customized publicly available forests scenario, please specify **:**Drought and Wildfires: Extreme weather events due to climate change could increase the risk of drought and wildfires, which could damage plantation forests and disrupt pulp and paper production.

(5.1.1.3) Approach to scenario

Select from:

☑ Qualitative and quantitative

(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

☑ Technology

(5.1.1.7) Reference year

2013

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2030

☑ 2040

☑ 2050

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

☑ Changes to the state of nature

☑ Number of ecosystems impacted

Relevant technology and science

☑ Granularity of available data (from aggregated to local)

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

Every year APP monitored conversion of natural ecosystems throughout its' supply chain. In 2023, all of our long-term pulpwood suppliers are 100% certified under the mandatory certification PHPL-VLK and 100% compliant with PEFC scheme: which are 36 FMUs certified under IFCC-PEFC and 4 FMUs verified through PEFC due diligence. APP also managed internal due diligence mechanism with of the indicators assessed deforestation and/or conversion of natural ecosystem since 1st February 2013. These ways are aligned with APP's Forest Conservation Policy (FCP) and Fibre Procurement and Processing Policy (FPPP). The FCP is a set of policies that govern APP's approach to sustainable and responsible practices, implemented since 1st February 2013. Moratorium on all-natural forest clearance by suppliers and required large-scale High Conservation Value (HCV) and High Carbon Stock (HCS) assessments to identify natural forest and other important areas for protection is included in the FCP. The FCP sets out four main policy commitments that cover: 1) Protecting Natural Forests, 2) Peatland Management, 3) Social Commitments, 4) Responsible Global Supply Chain. APP's FCP is a cornerstone of APP's Sustainability Roadmap Vision. While FPPP, the supporting policy of FCP, stated only accepting wood that is from sustainable forest plantation management as defined in its' FCP.

(5.1.1.11) Rationale for choice of scenario

We maintain all long-term pulpwood suppliers are 100% certified mandatory PHL-VLK certification and 100% compliant with PEFC scheme. APP ensure its sustainable plantation forests to increase resilience to climate change and ensure a sustainable supply of raw materials.

Water

(5.1.1.1) Scenario used

Water scenarios

☑ Customized publicly available water scenario, please specify **:**Floods: Floods due to heavy rainfall could disrupt the operations of APP's mills, distribution, and logistics infrastructure.

(5.1.1.3) Approach to scenario

Select from:

☑ Qualitative and quantitative

(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

☑ Technology

(5.1.1.7) Reference year

2018

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2030

☑ 2040

☑ 2050

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

☑ Number of ecosystems impacted

Regulators, legal and policy regimes

☑ Global targets

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

Severe weather events such as hurricanes and storms can pose an acute physical risk to our water supply and disrupt our supply chain, especially through flooding. However, this situation also presents opportunities for innovative solutions that can improve crop resilience, including water efficiency, drought and heat tolerance, and soil carbon sequestration. Additionally, we need to consider the potential impact of longterm climatic changes on mean temperatures and precipitation patterns, which can affect rising sea levels and water intake, crop quality, yields, and the length of harvesting periods, ultimately impacting our production capacity. These changes may also create opportunities for us to explore the use of new species. Physical risk at APP is regulated in line with OHSMS Procedure Guidelines APP/OHSMS/P/013 on Emergency Management. In line with this guideline, APP conducts risk identification of its operational activities as a basis for setting emergency response objectives and improvement programs. The identification process involves all parties responsible in the Work Units. Risk identification and assessment of APP activities take into account (but not limited to) infrastructure, equipment, materials, contents, and physical conditions of the workplace; and includes disasters such as earthquakes, floods, and landslides, among others. APP has a procedure in place to deal with each of these types of emergencies.

(5.1.1.11) Rationale for choice of scenario

We are still in the process of developing business continuity policy to strengthen our emergency management.
[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

☑ Target setting and transition 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

APP always benchmarks technology against the best available technology and includes it in our climate and energy risk assessment. We ensure that we adapt and adopt appropriate technology in our operation lines not only to gain better efficiency but also to preserve resources. For instance, we recognize that old equipment on some aged paper machines can lead to high energy consumption, which in turn, affects our carbon footprint as well as the carbon product itself. As customers and stakeholders are increasingly concerned about the low environmental impact of products, we must respond to this by improving our technology.

Forests

(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

☑ Resilience of business model and strategy

(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

APP's commitment to a sustainable fiber supply is established through the use of local raw materials from Industrial Forest Plantation (HTI) areas, recycled fiber, and the implementation of the Supplier Evaluation and Risk Assessment (SERA) system. The SERA system ensures supplier compliance with sustainability principles,

enhances transparency, and drives continuous improvement. SERA is tool and an extension to APP's Fiber Procurement and Processing Policy (FPPP) serving as a comprehensive guideline to APP's commitment to eliminating deforestation across its supply chain and upholding sustainable forest management. APP is committed to ensuring that 100% of its plantation wood is sourced from sustainably managed forests. To achieve this, APP requires its wood suppliers to obtain certifications and/ or verification such as: • Sustainable Forest Management (SFM) Best Practice • Timber Legality Verification (VLK) • Voluntary Program for the Endorsement of Forest Certification (PEFC) To promote transparency, APP has implemented E-Product Tracing at our mills, enabling easy tracing of product origins. This program is continuously being refined to meet the demands of APP customers.

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

☑ Resilience of business model and strategy

(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

APP is committed to not sourcing water from areas experiencing water stress or shortages. By understanding the ecological and social impacts of water extraction at each location, APP strives to operate responsibly without further burdening regions already facing water availability issues. Due to our commitment to avoid sourcing water from water-stressed areas, we do not appoint specific managers to oversee this, nor conduct water scarcity assessments or report on water shortage risks. To optimize water usage, APP implements water recycling practices wherever possible. Water used in operational processes, such as heating and cooling, is reclaimed for reuse within the production cycle. This approach helps reduce the demand for raw water sources and mitigates the ecological impact of fresh water intake. APP ensures that its effluent management complies with applicable regulations. Through effective and responsible effluent treatment methods, APP strives to minimize the negative impact of effluent on the surrounding environment. This includes monitoring effluent quality and implementing the latest technologies to ensure discharged water meets established standards. All water intake, usage, and discharge processes adhere to governmental regulations and are reported to the authorities. [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:

☑ No

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

Select from:

☑ Yes

(5.2.5) Description of activities included in commitment and implementation of commitment

In line with the 1.5C scenario, APP has engaged consultants to develop a carbon emission reduction scenario aligned with the SRV 2030 targets. This scenario has been designed by setting a series of targets, including reducing fossil fuel use, increasing renewable energy utilization, and enhancing green energy adoption (i.e., solar panels).

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

Select from:

☑ We have a different feedback mechanism in place

(5.2.8) Description of feedback mechanism

APP established the Stakeholder Advisory Forum (SAF) as a platform for constructive dialogue with stakeholders, to obtain up-to-date input and discuss the implementation of SRV 2030. This is a proactive step by the company to ensure active engagement and transparency in the planning and implementation processes of sustainability initiatives.

(5.2.9) Frequency of feedback collection

Select from:

☑ Annually

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

We have some initiatives or plan to reduce GHG emission for both short and long terms. Overall, for Scope 1 & 2, our plans to achieve target are to increase the efficiency of operational & equipment, reduce fossil fuel consumption in power boiler by modifying or installing with biomass fuel, and seek other green initiatives to replace fossil fuel, such as, installation of solar panel, obtain more REC, waste utilization as biogas / biomass. for Scope 3, we will engage with the supply chain to have same commitment to reduce GHG emission aligning with SBTi, and monitor carbon emission emitted supply chain. For the land & forestry sector, we will also consider the carbon sequestration / absorption coming from our restoration or conservation area.

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

APP has taken concrete steps to reduce energy consumption in its operations, particularly through lighting and illumination initiatives. These initiatives aim to achieve energy efficiency, lower carbon footprints, and support the transition to more sustainable energy sources. Some key steps include: 1. Embracing LED Lighting APP has proactively replaced conventional lighting systems with more efficient LED lights. LED lights are renowned for their lower energy consumption and longer lifespan compared to conventional bulbs. This initiative has significantly reduced energy consumption in production areas. 2. Switching to Translucent Roofs As part of its energy reduction strategy, APP has replaced roofs in production areas with materials that allow sunlight penetration. Translucent roof is employed to enhance natural lighting within buildings, reduce reliance on artificial lighting, and optimize the utilization of renewable energy sources. 3. Skill Development Activity (SDA) Program Energy reduction efforts are integrated into the company's Skill Development Activity (SDA) Program. This program focuses on enhancing employee skills in managing and optimizing resource usage, including energy. It involves training and developing employees to become experts in energy-efficient practices. 4. Monitoring by the Olympic System Team (MBOS) The effectiveness of the Skill Development Activity (SDA) Program in reducing energy consumption is closely monitored by the Olympic System Team (MBOS). This team is responsible for measuring performance, evaluating the impact of initiatives, providing recommendations for continuous production efficiency improvements, and identifying additional energy-saving opportunities.

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

SR_PT_APP_PURINUSA_EKAPERSADA_2023_ENGLISH_FINAL.pdf

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

Select all that apply

☑ Forests

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

For theforestry sector, we will also consider the carbon sequestration / absorption coming from our restoration or conservation area.
[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

☑ Products and services

[Fixed row]

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

Products and services

(5.3.1.1) Effect type

Select all that apply

☑ Risks

(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

As market demand nowadays tend to low carbon product, we take this opportunity to place our product on low carbon product certified. The price of low carbon certified product at least 50% higher than non-certified product. As the impact, our revenue will increase significantly. Currently we have 2 mills which ecolabel certified, there is a big opportunity to expand this scheme on other mills. To accommodate this planning, we need to do investment on our facility to upgrade this with best technology available. Some facility has upgraded such as replacement old boiler, motors and other operations equipment, we plan to do more investment to

another mills with high potential market of low carbon product and this will impact to higher capital expenditures. Indirect cost will also impact as other market need to put on carbon neutral product. To accommodate this, we need to put more cost or indirect cost to participate on carbon market. Time horizon of this actions is medium to long term.
[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

☑ Capital expenditures

(5.3.2.2) Effect type

Select all that apply

☑ Risks

☑ 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

As market demand nowadays tend to low carbon product, we take this opportunity to place our product on low carbon product certified. The price of low carbon certified product at least 50% higher than non-certified product. As the impact, our revenue will increase significantly. Currently we have 2 mills which ecolabel certified, there is a big opportunity to expand this scheme on other mills. To accommodate this planning, we need to do investment on our facility to upgrade this with best technology available. Some facility has upgraded such as replacement old boiler, motors and other operations equipment, we plan to do more investment to another mills with high potential market of low carbon product and this will impact to higher capital expenditures. Indirect cost will also impact as other market need to put on carbon neutral product. To accommodate this, we need to put more cost or indirect cost to participate on carbon market. Time horizon of this actions is medium to long term.

[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
	Select from: ☑ No, but we plan to in the next two years

[Fixed 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)

15

(5.9.2) Anticipated forward trend for CAPEX (+/- % change)

15

(5.9.3) Water-related OPEX (+/- % change)

-5

(5.9.4) Anticipated forward trend for OPEX (+/- % change)

-5

(5.9.5) Please explain

CAPEX increase for water efficiency program is caused by condensate vacuum evaporator recycle, new aerator, wash press roll overhaul.
[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, but we plan to in the next two years

(5.10.3) Primary reason for not pricing environmental externalities

Select from:

☑ Other, please specify **:**Some of our operations are integrated to raw material (wood), therefore landscape approach assessment is very critical for the identification of long-term water security.

(5.10.4) Explain why your organization does not price environmental externalities

Some of our operations are integrated to raw material (logwood), therefore landscape approach assessment is very critical for the identification of long-term water security.
[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 ☑ Forests ☑ Water
Smallholders	*Select from:* ☑ Yes	*Select all that apply*
Customers	*Select from:* ☑ Yes	*Select all that apply* ☑ Climate change ☑ Forests ☑ Water ☑ Plastics
Investors and shareholders	*Select from:* ☑ Yes	*Select all that apply* ☑ Climate change ☑ Forests
Other value chain stakeholders	*Select from:* ☑ Yes	*Select all that apply* ☑ Climate change ☑ Forests ☑ 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 deforestation or conversion of other natural ecosystems

(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

We inform Scope 3 emissions: 1 Purchase of goods and services 2 Energy and fuel-related activities not included in scope 1 & 2 3 Processing of sold products 4 Downstream transportation and distribution 5 Upstream transportation and distribution 6 Capital goods 7 End-of-life treatment of sold products 8 Employee commuting 9 Waste generated in operations 10 Business travel

(5.11.1.5) % Tier 1 suppliers meeting the thresholds for substantive dependencies and/or impacts on the environment

Select from:

☑ 100%

(5.11.1.6) Number of Tier 1 suppliers meeting the thresholds for substantive dependencies and/or impacts on the environment

39

Forests

(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 deforestation or conversion of other natural ecosystems

(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

We inform Scope 3 emissions: 1 Purchase of goods and services 2 Energy and fuel-related activities not included in scope 1 & 2 3 Processing of sold products 4 Downstream transportation and distribution 5 Upstream transportation and distribution 6 Capital goods 7 End-of-life treatment of sold products 8 Employee commuting 9 Waste generated in operations 10 Business travel

(5.11.1.5) % Tier 1 suppliers meeting the thresholds for substantive dependencies and/or impacts on the environment

Select from:

☑ 100%

(5.11.1.6) Number of Tier 1 suppliers meeting the thresholds for substantive dependencies and/or impacts on the environment

40

Water

(5.11.1.1) Assessment of supplier dependencies and/or impacts on the environment

Select from:

☑ No, we do not currently assess the dependencies and/or impacts of our suppliers, but we plan to do so within the next two years

[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

☑ Material sourcing

(5.11.2.4) Please explain

We focused on our pulpwood suppliers.

Forests

(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

☑ Material sourcing

(5.11.2.4) Please explain

We focused on our pulpwood suppliers.

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

☑ Material sourcing

(5.11.2.4) Please explain

We focused on our pulpwood suppliers.
[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

All our suppliers and potential suppliers must comply and sign Supplier Code of Conduct (SCoC). point 1.3 in the SCoC: 1.3 Environmental Protection APP is committed to being actively involved in the global effort of reducing emissions to combat climate-changing and protect biodiversity. APP also encourages the same commitment from APP Suppliers. At the minimum, APP Suppliers must comply with the below requirements: a. Obtain, maintain, and keep current all required environmental permits and registrations, and follow such permits' operational and reporting requirements. b. Endeavor to use resources efficiently and reduce or eliminate waste of all types, including water and energy, by implementing appropriate conservation measures in their facilities, through their maintenance and production processes, and by recycling, reusing, or substituting materials. c. Comply with all applicable environmental laws and regulations regarding hazardous materials, air emissions, waste, and wastewater discharges, including the manufacture, transportation, storage, disposal, and release to the environment of such materials. d. If applicable, identify the chemicals or other materials being produced and/or released that pose a threat to the environment and manage them appropriately to ensure their safe handling, movement, storage, use, recycling, or reuse and disposal.

Forests

(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

All our suppliers and potential suppliers must comply and sign Supplier Code of Conduct (SCoC). point 1.3 in the SCoC: 1.3 Environmental Protection APP is committed to being actively involved in the global effort of reducing emissions to combat climate-changing and protect biodiversity. APP also encourages the same commitment from APP Suppliers. At the minimum, APP Suppliers must comply with the below requirements: a. Obtain, maintain, and keep current all required environmental permits and registrations, and follow such permits' operational and reporting requirements. b. Endeavor to use resources efficiently and reduce or

eliminate waste of all types, including water and energy, by implementing appropriate conservation measures in their facilities, through their maintenance and production processes, and by recycling, reusing, or substituting materials. c. Comply with all applicable environmental laws and regulations regarding hazardous materials, air emissions, waste, and wastewater discharges, including the manufacture, transportation, storage, disposal, and release to the environment of such materials. d. If applicable, identify the chemicals or other materials being produced and/or released that pose a threat to the environment and manage them appropriately to ensure their safe handling, movement, storage, use, recycling, or reuse and disposal.

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

All our suppliers and potential suppliers must comply and sign Supplier Code of Conduct (SCoC). point 1.3 in the SCoC: 1.3 Environmental Protection APP is committed to being actively involved in the global effort of reducing emissions to combat climate-changing and protect biodiversity. APP also encourages the same commitment from APP Suppliers. At the minimum, APP Suppliers must comply with the below requirements: a. Obtain, maintain, and keep current all required environmental permits and registrations, and follow such permits' operational and reporting requirements. b. Endeavor to use resources efficiently and reduce or eliminate waste of all types, including water and energy, by implementing appropriate conservation measures in their facilities, through their maintenance and production processes, and by recycling, reusing, or substituting materials. c. Comply with all applicable environmental laws and regulations regarding hazardous materials, air emissions, waste, and wastewater discharges, including the manufacture, transportation, storage, disposal, and release to the environment of such materials. d. If applicable, identify the chemicals or other materials being produced and/or released that pose a threat to the environment and manage them appropriately to ensure their safe handling, movement, storage, use, recycling, or reuse and disposal.
[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:

☑ Adoption of the UN International Labour Organization Principles

(5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply

☑ Certification

☑ Grievance mechanism/ Whistleblowing hotline

☑ Off-site third-party audit

☑ On-site third-party audit

☑ Supplier self-assessment

(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:

☑ 76-99%

(5.11.6.7) % tier 1 supplier-related scope 3 emissions attributable to the suppliers required to comply with this environmental requirement

Select from:

☑ 100%

(5.11.6.8) % tier 1 supplier-related scope 3 emissions attributable to the suppliers in compliance with this environmental requirement

Select from:

☑ 100%

(5.11.6.9) Response to supplier non-compliance with this environmental requirement

Select from:

☑ Suspend and engage

(5.11.6.10) % of non-compliant suppliers engaged

Select from:

☑ None

(5.11.6.11) Procedures to engage non-compliant suppliers

Select all that apply

☑ Assessing the efficacy and efforts of non-compliant supplier actions through consistent and quantified metrics

☑ Developing quantifiable, time-bound targets and milestones to bring suppliers back into compliance

☑ Providing information on appropriate actions that can be taken to address non-compliance

(5.11.6.12) Comment

We asked our pulpwood suppliers to provide information that can support our Scope 3 emissions calculation. We also have grievance, whistleblower channels for stakeholders who has concern/findings related to our operations.

Forests

(5.11.6.1) Environmental requirement

Select from:

☑ Adoption of the UN International Labour Organization Principles

(5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply

☑ Certification
☑ Grievance mechanism/ Whistleblowing hotline
☑ Off-site third-party audit
☑ On-site third-party audit
☑ Supplier self-assessment

(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:
☑ 76-99%

(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:
☑ 100%

(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:
☑ 100%

(5.11.6.9) Response to supplier non-compliance with this environmental requirement

Select from:
☑ Other, please specify **:**If the suppliers dont comply with our RFPPP policy, FCP; they will exclude from our supplier list.

(5.11.6.10) % of non-compliant suppliers engaged

Select from:

☑ None

(5.11.6.11) Procedures to engage non-compliant suppliers

Select all that apply

☑ Assessing the efficacy and efforts of non-compliant supplier actions through consistent and quantified metrics

☑ Developing quantifiable, time-bound targets and milestones to bring suppliers back into compliance

☑ Providing information on appropriate actions that can be taken to address non-compliance

(5.11.6.12) Comment

We have grievance, whistleblower channels for stakeholders who has concern/findings related to our operations. To ensure SERA implementation, APP conducts regular field reviews and assessments. We also provide feedback, conduct audits, or terminate contracts with non-compliant suppliers. Before appointing suppliers, APP allows 14 days for the public and stakeholders to provide input and/or share concerns on prospective suppliers undergoing SERA consideration and evaluation. SERA is tool and an extension to APP's Fiber Procurement and Processing Policy (FPPP) serving as a comprehensive guideline to APP's commitment to eliminating deforestation across its supply chain and upholding sustainable forest management. The SERA assessment system has been developed with high and robust sustainability standards. APP provides education and guidance to its supplier partners to consistently meet these standards. Supplier partners that meet the SERA standards strengthen their reputation for sustainability practices. We refer to our pulpwood supplier partners that have met SERA standards as SERA compliant supplier (SERACS).

Water

(5.11.6.1) Environmental requirement

Select from:

☑ Adoption of the UN International Labour Organization Principles

(5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply

☑ Certification

☑ Grievance mechanism/ Whistleblowing hotline

☑ Off-site third-party audit

☑ On-site third-party audit

☑ Supplier self-assessment

(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:

☑ 76-99%

(5.11.6.9) Response to supplier non-compliance with this environmental requirement

Select from:

☑ Suspend and engage

(5.11.6.10) % of non-compliant suppliers engaged

Select from:

☑ None

(5.11.6.11) Procedures to engage non-compliant suppliers

Select all that apply

☑ Assessing the efficacy and efforts of non-compliant supplier actions through consistent and quantified metrics

☑ Developing quantifiable, time-bound targets and milestones to bring suppliers back into compliance

☑ Providing information on appropriate actions that can be taken to address non-compliance

(5.11.6.12) Comment

We also have grievance, whistleblower channels for stakeholders who has concern/findings related to our operations.
[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:

☑ Adaptation to climate change

(5.11.7.3) Type and details of engagement

Capacity building

☑ Develop or distribute resources on how to map upstream value chain

☑ Provide training, support and best practices on how to make credible renewable energy usage claims

☑ Provide training, support and best practices on how to mitigate environmental impact

☑ Support suppliers to set their own environmental commitments across their operations

Information collection

☑ Collect environmental risk and opportunity information at least annually from suppliers

☑ Collect GHG emissions data at least annually from suppliers

Innovation and collaboration

☑ Collaborate with suppliers on innovations to reduce environmental impacts in products and services

☑ Collaborate with suppliers on innovative business models and corporate renewable energy sourcing mechanisms

☑ Collaborate with suppliers to develop reuse infrastructure and reuse models

(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:

☑ 51-75%

(5.11.7.9) Describe the engagement and explain the effect of your engagement on the selected environmental action

We engaged our pulpwood supplier to implement sustainable forest management (SFM), as the result all of our pulpwood supplier is certified SFM therefore concession area that identified as High conservation value or high carbon stock will not converted to be plantation area. We also enforce best practice of peatland management and fire risk reduction in our suppliers area. The impact of these is that the forestry operations managed to avoid significant amount of carbon avoidance compared to business as usual. The success of engagement proved by reduced emission from forest. In 2018, we engaged with independent consultant to calculate emission from forestry since the implementation of Forest Conservation Policy, the result was we succeed reduce 64% carbon emission from forestry compare to business as usual (BAU). Furthermore, We recognize the risk opportunity from supply chain by mapping our supply chain under supplier engagement, identifying the carbon emission emitted from supply chain, monitoring & evaluating the supplier performance & impact. As we are committed to Science Based Target initiatives (SBTi), we will also encourage the supply chain also committed with SBTi as well.

(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 **:**Comply with our Environmental policy, CSR Policy, Fiber Procurement and Processing policy, Human Rights policy, Health & Safety policy, Forest Conservation Policy

(5.11.7.11) Engagement is helping your tier 1 suppliers engage with their own suppliers on the selected action

Select from:

☑ Yes

Forests

(5.11.7.1) Commodity

Select from:

☑ Timber products

(5.11.7.2) Action driven by supplier engagement

Select from:

☑ No deforestation and/or conversion of other natural ecosystems

(5.11.7.3) Type and details of engagement

Capacity building

☑ Develop or distribute resources on how to map upstream value chain

☑ Provide training, support and best practices on how to measure GHG emissions

☑ Provide training, support and best practices on how to mitigate environmental impact

☑ Provide training, support and best practices on how to set science-based targets

(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

We engaged our pulpwood supplier to implement sustainable forest management (SFM), as the result all of our pulpwood supplier is certified SFM therefore concession area that identified as High conservation value or high carbon stock will not converted to be plantation area. We also enforce best practice of peatland management and fire risk reduction in our suppliers area. The impact of these is that the forestry operations managed to avoid significant amount of carbon avoidance compared to business as usual. The success of engagement proved by reduced emission from forest. In 2018, we engaged with independent consultant to calculate emission from forestry since the implementation of Forest Conservation Policy, the result was we succeed reduce 64% carbon emission from forestry compare to business as usual (BAU). Furthermore, We recognize the risk opportunity from supply chain by mapping our supply chain under supplier engagement, identifying the carbon emission emitted from supply chain, monitoring & evaluating the supplier performance & impact. As we are committed to Science Based Target initiatives (SBTi), we will also encourage the supply chain also committed with SBTi as well.

(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 **:**Comply with our Environmental policy, CSR Policy, Fiber Procurement and Processing policy, Human Rights policy, Health & Safety policy, Forest Conservation Policy

(5.11.7.11) Engagement is helping your tier 1 suppliers engage with their own suppliers on the selected action

Select from:

☑ Yes

Water

(5.11.7.2) Action driven by supplier engagement

Select from:

☑ Adaptation to climate change

(5.11.7.3) Type and details of engagement

Capacity building

☑ Develop or distribute resources on how to map upstream value chain

☑ Support suppliers to develop public time-bound action plans with clear milestones

☑ Support suppliers to set their own environmental commitments across their operations

Information collection

☑ Collect environmental risk and opportunity information 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%

(5.11.7.7) % 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

We engaged our pulpwood supplier to implement sustainable forest management (SFM), as the result all of our pulpwood supplier is certified SFM therefore concession area that identified as High conservation value or high carbon stock will not converted to be plantation area. We also enforce best practice of peatland management and fire risk reduction in our suppliers area. The impact of these is that the forestry operations managed to avoid significant amount of carbon avoidance compared to business as usual. The success of engagement proved by reduced emission from forest. In 2018, we engaged with independent consultant to calculate emission from forestry since the implementation of Forest Conservation Policy, the result was we succeed reduce 64% carbon emission from forestry compare to business as usual (BAU). Furthermore, We recognize the risk opportunity from supply chain by mapping our supply chain under supplier engagement, identifying the carbon emission emitted from supply chain, monitoring & evaluating the supplier performance & impact. As we are committed to Science Based Target initiatives (SBTi), we will also encourage the supply chain also committed with SBTi as well.

(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 **:**Comply with our Environmental policy, CSR Policy, Fiber Procurement and Processing policy, Human Rights policy, Health & Safety policy, Forest Conservation Policy

(5.11.7.11) Engagement is helping your tier 1 suppliers engage with their own suppliers on the selected action

Select from:
☑ Yes
[Add row]

(5.11.8) Provide details of any environmental smallholder engagement activity

Row 1

(5.11.8.1) Commodity

Select from:
☑ Timber products

(5.11.8.2) Type and details of smallholder engagement approach

Capacity building
☑ Disseminate technical materials
☑ Organize capacity building events
☑ Develop or distribute upstream value chain mapping tool
☑ Support smallholders to clarify and secure land tenure rights
☑ Support smallholders to adhere to standards in upstream value chain
☑ Support smallholders to adopt best practices which protect biodiversity
☑ Support smallholders to measure and address their exposure to environmental risk
☑ Provide training, support and best practices on sustainable agriculture practices and nutrient management

Innovation and collaboration
☑ Encourage smallholders to take part in landscape or jurisdictional initiatives

(5.11.8.3) Number of smallholders engaged

21

(5.11.8.4) Effect of engagement and measures of success

Communities play an important role in forest protection. APP accepts community forestry suppliers in line with our efforts to foster sustainable livelihoods in the landscapes where APP are active and in support of the Government of Indonesia's social forestry objectives. Currently there are 11 community forest that included as our supplier. APP give them training on the ground as well as supporting them to continue comply with our commitment such as provide assistance in certification process. APP also have our flagship community-forestry program in place to work towards that goal by improving the welfare of the communities living in and around forest areas, while at the same time reducing the risks of illegal logging, forest fires, and land disputes. In 2015, APP establish a program called Desa Makmur Peduli Api (DMPA). Our objective with the DMPA program, which evolved from the Integrated Forestry & Farming System (IFFS), is to empower and involve communities in our sustainable operations, to achieve landscape-scale sustainable forest management, as well as to improve the protection and restoration outcomes across APP and supplier operations. This participatory community engagement program aims to improve livelihoods, transfer knowledge, improve collaboration, and create a virtuous circle of forest management. As of 2023, the DMPA program has been implemented in 441 villages with a budget of USD4.0 million, benefitting more than 80,000 people and partnering with 223 BumDes, 9 corporations, and 209 farming groups. The program is targeting an additional 30 villages in 2023. By doing DMPA, communites have alternative livelihoods, thus reducing pressure on forest. The program's key objective is to reduce the risk of fire, and fire prevention content is emphasized throughout the program, with a focus on environmentally-friendly land preparation and maximizing available land outside the forest area. In 2023, at least 90% of the villages monitored by APP's fire monitoring program were free of fire.
[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

Education/Information sharing
☑ Share information on environmental initiatives, progress and achievements

Innovation and collaboration

☑ Align your organization’s goals to support customers’ targets and ambitions

☑ Collaborate with stakeholders in creation and review of your climate transition plan

☑ Collaborate with stakeholders on innovations to reduce environmental impacts in products and services

☑ Engage with stakeholders to advocate for policy or regulatory change

☑ Run a campaign to encourage innovation to reduce environmental impacts

(5.11.9.3) % of stakeholder type engaged

Select from:

☑ 76-99%

(5.11.9.4) % stakeholder-associated scope 3 emissions

Select from:

☑ 76-99%

(5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

About 60% of our product is exported to overseas and they often request environmental information including GHG emission in our facility or product. We engage our customer both local and overseas (export) through meeting, workshop and seminars. We also provide a campaign mechanism about our product and environmental performance. This is representing o our 100 % customer.

(5.11.9.6) Effect of engagement and measures of success

As impact of engagement, customer is more aware about environmental product. We have product with certified on Ecolabel scheme. This will be a good consideration for low impact environmental product. We are also prepare our product for LCA as customer in other countries requested such product for the best environmental product. This is representing o our 100 % customer scope 3 emission, we have fully support to proivde our scope 3 emission to customer if needed.

Forests

(5.11.9.1) Type of stakeholder

Select from:

☑ Customers

(5.11.9.2) Type and details of engagement

Education/Information sharing

☑ Share information about your products and relevant certification schemes

☑ Share information on environmental initiatives, progress and achievements

Innovation and collaboration

☑ Collaborate with stakeholders on innovations to reduce environmental impacts in products and services

☑ Encourage collaborative work in multi-stakeholder landscape towards initiatives for sustainable land-use goals

☑ Engage with stakeholders to advocate for policy or regulatory change

☑ Run a campaign to encourage innovation to reduce environmental impacts

(5.11.9.3) % of stakeholder type engaged

Select from:

☑ 76-99%

(5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

About 60% of our product is exported to overseas and they often request environmental information including GHG emission in our facility or product. We engage our customer both local and overseas (export) through meeting, workshop and seminars. We also provide a campaign mechanism about our product and environmental performance. This is representing o our 100 % customer.

(5.11.9.6) Effect of engagement and measures of success

As impact of engagement, customer is more aware about environmental product. We have product with certified on Ecolabel scheme. This will be a good consideration for low impact environmental product. We are also prepare our product for LCA as customer in other countries requested such product for the best environmental product. This is representing o our 100 % customer scope 3 emission, we have fully support to proivde our scope 3 emission to customer if needed.

Water

(5.11.9.1) Type of stakeholder

Select from:

☑ Customers

(5.11.9.2) Type and details of engagement

Education/Information sharing

☑ Run an engagement campaign to educate stakeholders about the environmental impacts about your products, goods and/or services

☑ Share information about your products and relevant certification schemes

☑ Share information on environmental initiatives, progress and achievements

Innovation and collaboration

☑ Align your organization’s goals to support customers’ targets and ambitions

☑ Collaborate with stakeholders on innovations to reduce environmental impacts in products and services

☑ Encourage collaborative work in multi-stakeholder landscape towards initiatives for sustainable land-use goals

☑ Engage with stakeholders to advocate for policy or regulatory change

☑ Run a campaign to encourage innovation to reduce environmental impacts

(5.11.9.3) % of stakeholder type engaged

Select from:

☑ 76-99%

(5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

About 60% of our product is exported to overseas and they often request environmental information including GHG emission in our facility or product. We engage our customer both local and overseas (export) through meeting, workshop and seminars. We also provide a campaign mechanism about our product and environmental performance. This is representing o our 100 % customer.

(5.11.9.6) Effect of engagement and measures of success

As impact of engagement, customer is more aware about environmental product. We have product with certified on Ecolabel scheme. This will be a good consideration for low impact environmental product. We are also prepare our product for LCA as customer in other countries requested such product for the best environmental product. This is representing o our 100 % customer scope 3 emission, we have fully support to proivde our scope 3 emission to customer if needed. [Add row]

(5.12) Indicate any mutually beneficial environmental initiatives you could collaborate on with specific CDP Supply Chain members.

Row 1

(5.12.1) Requesting member

Select from:

(5.12.2) Environmental issues the initiative relates to

Select all that apply

☑ Climate change

☑ Forests

☑ Water

(5.12.3) Commodities the initiative relates to

Select all that apply

☑ Timber products

(5.12.4) Initiative category and type

Change to supplier operations

☑ Assess life-cycle impact of products or services to identify efficiencies

(5.12.5) Details of initiative

As our customer, PMI has consistently requested that APP align with their sustainability ambitions and goals, which include third-party verification of specific areas of concern.

(5.12.6) Expected benefits

Select all that apply

☑ Increased transparency of upstream/downstream value chain

(5.12.7) Estimated timeframe for realization of benefits

Select from:

☑ 0-1 year

(5.12.8) Are you able to estimate the lifetime CO2e and/or water savings of this initiative?

Select from:

☑ No

(5.12.11) Please explain

APP provides product carbon footprint and Life Cycle Assessment to PMI.
[Add row]

(5.13) Has your organization already implemented any mutually beneficial environmental initiatives due to CDP Supply Chain member engagement?

	Environmental initiatives implemented due to CDP Supply Chain member engagement
	Select from: ☑ Yes

[Fixed row]

(5.13.1) Specify the CDP Supply Chain members that have prompted your implementation of mutually beneficial environmental initiatives and provide information on the initiatives.

Row 1

(5.13.1.1) Requesting member

Select from:

(5.13.1.2) Environmental issues the initiative relates to

Select all that apply

☑ Climate change

☑ Forests

☑ Water

(5.13.1.3) Commodities the initiative relates to

Select all that apply

☑ Timber products

(5.13.1.4) Initiative ID

Select from:

☑ Ini1

(5.13.1.5) Initiative category and type

Change to supplier operations

☑ Assess life-cycle impact of products or services to identify efficiencies

(5.13.1.6) Details of initiative

As our customer, PMI has consistently requested that APP align with their sustainability ambitions and goals, which include third-party verification of specific areas of concern.

(5.13.1.7) Benefits achieved

Select all that apply

☑ Increased transparency of upstream/downstream value chain

(5.13.1.8) Are you able to provide figures for emissions savings or water savings in the reporting year?

Select from:

☑ No

(5.13.1.11) Please explain how success for this initiative is measured

The product's carbon footprint and LCA results remain consistent with PMI's expectations.

(5.13.1.12) Would you be happy for CDP Supply Chain members to highlight this work in their external communication?

Select from:

☑ No

[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

We consolidate 100% of the GHG emissions (Scope 1,2,3) data from operations over which the company has operational control. And we monitor their performance via KPI sustainability index and provide evaluation feedback quarterly.

Forests

(6.1.1) Consolidation approach used

Select from:

☑ Operational control

(6.1.2) Provide the rationale for the choice of consolidation approach

We consolidate forestry data from operations over which the company has operational control. And we monitor their performance via KPI sustainability index and provide evaluation feedback quarterly.

Water

(6.1.1) Consolidation approach used

Select from:

☑ Operational control

(6.1.2) Provide the rationale for the choice of consolidation approach

We consolidate water management data from operations over which the company has operational control. And we monitor their performance via KPI sustainability index and provide evaluation feedback quarterly.

Plastics

(6.1.1) Consolidation approach used

Select from:

☑ Operational control

(6.1.2) Provide the rationale for the choice of consolidation approach

Our business scope does not relate to plastic but we consolidate packaging plastics data from operations over which the company has operational control.

Biodiversity

(6.1.1) Consolidation approach used

Select from:

☑ Operational control

(6.1.2) Provide the rationale for the choice of consolidation approach

We consolidate biodiversity activities data from operations over which the company has operational control. And we monitor their performance via KPI sustainability index and provide evaluation feedback quarterly.
[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?

(7.1.1.1) Has there been a structural change?

Select all that apply

☑ Yes, other structural change, please specify

(7.1.1.2) Name of organization(s) acquired, divested from, or merged with

APP is changing from branding perspective to the legal entity name: APP Purinusa Eka Persada (APP). This designation includes the following entities: PT. Indah Kiat Pulp & Paper Tbk. PT. Pabrik Kertas Tjiwi Kimia Tbk. PT. Pindo Deli Pulp and Paper Mills PT. Lontar Papyrus Pulp & Paper Industry PT. OKI Pulp & Paper Mills PT. The Univenus PT. Ekamas Fortuna PT. APP Purinusa Ekapersada (which includes the Bandung Mill, Bawen Mill, Subang Mill, and Demak Mill)

(7.1.1.3) Details of structural change(s), including completion dates

APP is changing from branding perspective to legal entity name: APP Purinusa Eka Persada (APP). This designation includes the following entities: PT. Indah Kiat Pulp & Paper Tbk. PT. Pabrik Kertas Tjiwi Kimia Tbk. PT. Pindo Deli Pulp and Paper Mills PT. Lontar Papyrus Pulp & Paper Industry PT. OKI Pulp & Paper Mills PT. The Univenus PT. Ekamas Fortuna PT. APP Purinusa Ekapersada (which includes the Bandung Mill, Bawen Mill, Subang Mill, and Demak Mill)
[Fixed row]

(7.1.2) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

	Change(s) in methodology, boundary, and/or reporting year definition?	Details of methodology, boundary, and/or reporting year definition change(s)
	Select all that apply ☑ Yes, a change in methodology	*Update calculation methodology using IPCC AR-6.*

[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:

☑ Yes

(7.1.3.2) Scope(s) recalculated

Select all that apply

☑ Scope 1

☑ Scope 2, location-based

☑ Scope 2, market-based

☑ Scope 3

(7.1.3.3) Base year emissions recalculation policy, including significance threshold

Calculation methodology IPCC AR-6 The assessment of greenhouse gas (GHG) emissions is based on the methodologies of the Intergovernmental Panel on Climate Change (IPCC) and the World Resources Institute (WRI)/World Business Council for Sustainable Development (WBCSD) - Greenhouse Gas (GHG) Protocol. • Emission factors and global warming potential (GWP) for Scope 1 are based on the IPCC's Sixth Assessment Report for 2022 and 2023, and on the Fifth Assessment Report for 2021. • The gases included in the calculations are CO2, CH4, N2O, HFCs, and PFCs. • A consolidation approach for emissions; operational control. • Pertamina's specifications are used to calculate fuel oil conversion factors. • Due to well-managed aerobic wastewater treatment system, GHG emission

from wastewater treatment area assumed to be zero • Scope 1 includes direct emissions from fuel used in power generation, gasoline for company vehicles, purchased CaCO3 for lime kilns, solid waste to landfills, and refrigerant consumption. • For Scope 2, APP calculate its location based and market-based emission from imported electricity. Scope 2 location based calculate total imported electricity and scope 2 market based calculate only the fossil imported electricity. Both methods use emission factor of PLN (ESDM), where we assume that location and market based have the same emission factor. • Scope 3 for 2023 includes purchased goods and services, capital goods, activities related to fuel and energy not covered in Scope 1 or Scope 2, upstream transportation and distribution, waste generated in operations, business travel, employee commuting, downstream transportation and distribution, and processing of sold products.

(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

☑ IPCC Guidelines for National Greenhouse Gas Inventories, 2006

☑ The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

☑ The Greenhouse Gas Protocol: Scope 2 Guidance

☑ The Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Standard

☑ Other, please specify **:**Calculation Tools for GHG pulp & paper

(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 are reporting a Scope 2, market-based figure

(7.3.3) Comment

Scope 2 - includes indirect emissions from purchased national grid electricity For Scope 2 market-based, the indirect emission was 0 (zero) because it came from renewable energy, however the emission from generating the electricity have been calculated in Scope 3 Category 3 Fuel-energy not related in Scope 1 and 2. Those the value of scope 2 market-based reflect the emissions residue between fossil electricity - REC (renewable electricity certificate)
[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

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

11535825

(7.5.3) Methodological details

The assessment of greenhouse gas (GHG) emissions is based on the methodologies of the Intergovernmental Panel on Climate Change (IPCC) and the World Resources Institute (WRI)/World Business Council for Sustainable Development (WBCSD) - Greenhouse Gas (GHG) Protocol. • Emission factors and global warming potential (GWP) for Scope 1 are based on the IPCC's Sixth Assessment Report for 2023 • The gases included in the calculations are CO2, CH4, N2O, HFCs, and PFCs. • A consolidation approach for emissions; operational control. • Pertamina's specifications are used to calculate fuel oil conversion factors. • Due to well-

managed aerobic wastewater treatment system, GHG emission from wastewater treatment area assumed to be zero • Scope 1 includes direct emissions from fuel used in power generation, gasoline for company vehicles, purchased CaCO3 for lime kilns, solid waste to landfills, and refrigerant consumption.

Scope 2 (location-based)

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

688945

(7.5.3) Methodological details

The assessment of greenhouse gas (GHG) emissions is based on the methodologies of the Intergovernmental Panel on Climate Change (IPCC) and the World Resources Institute (WRI)/World Business Council for Sustainable Development (WBCSD) - Greenhouse Gas (GHG) Protocol. • Emission factors and global warming potential (GWP) for Scope 1 are based on the IPCC's Sixth Assessment Report for 2023 • The gases included in the calculations are CO2, CH4, N2O, HFCs, and PFCs. • A consolidation approach for emissions; operational control. • Pertamina's specifications are used to calculate fuel oil conversion factors. • Due to well-managed aerobic wastewater treatment system, GHG emission from wastewater treatment area assumed to be zero • Scope 1 includes direct emissions from fuel used in power generation, gasoline for company vehicles, purchased CaCO3 for lime kilns, solid waste to landfills, and refrigerant consumption.

Scope 2 (market-based)

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

503397

(7.5.3) Methodological details

The assessment of greenhouse gas (GHG) emissions is based on the methodologies of the Intergovernmental Panel on Climate Change (IPCC) and the World Resources Institute (WRI)/World Business Council for Sustainable Development (WBCSD) - Greenhouse Gas (GHG) Protocol. • Emission factors and global warming potential (GWP) for Scope 1 are based on the IPCC's Sixth Assessment Report for 2023 • The gases included in the calculations are CO2, CH4, N2O, HFCs, and

PFCs. • A consolidation approach for emissions; operational control. • Pertamina's specifications are used to calculate fuel oil conversion factors. • Due to well-managed aerobic wastewater treatment system, GHG emission from wastewater treatment area assumed to be zero • Scope 1 includes direct emissions from fuel used in power generation, gasoline for company vehicles, purchased CaCO3 for lime kilns, solid waste to landfills, and refrigerant consumption.

Scope 3 category 1: Purchased goods and services

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

2808058

(7.5.3) Methodological details

Scope 3 for 2023 includes purchased goods and services, capital goods, activities related to fuel and energy not covered in Scope 1 or Scope 2, upstream transportation and distribution, waste generated in operations, business travel, employee commuting, downstream transportation and distribution, processing of sold products, and end-of-life treatment. Primary data: purchased raw material for chemicals & pulp. Secondary data: cradle-to-gate emissions factors were obtained from commercially and publicly available databases SimaPro (Pre) software and ecoinvent V3.6

Scope 3 category 2: Capital goods

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

298145

(7.5.3) Methodological details

Scope 3 for 2023 includes purchased goods and services, capital goods, activities related to fuel and energy not covered in Scope 1 or Scope 2, upstream transportation and distribution, waste generated in operations, business travel, employee commuting, downstream transportation and distribution, processing of sold products, and end-of-life treatment. Primary data: purchased raw material for chemicals & pulp. Secondary data: cradle-to-gate emissions factors were obtained from commercially and publicly available databases SimaPro (Pre) software and ecoinvent V3.6

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

2604615

(7.5.3) Methodological details

Scope 3 for 2023 includes purchased goods and services, capital goods, activities related to fuel and energy not covered in Scope 1 or Scope 2, upstream transportation and distribution, waste generated in operations, business travel, employee commuting, downstream transportation and distribution, and processing of sold products. Primary data: quantity of wood transported to pulp mills, distance between forestry to pulp mills Secondary data: cradle-to-gate emissions factors were obtained from commercially and publicly available databases SimaPro (Pre) software and ecoinvent V3.6, estimate distance by calculator online

Scope 3 category 4: Upstream transportation and distribution

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

888006

(7.5.3) Methodological details

Scope 3 for 2023 includes purchased goods and services, capital goods, activities related to fuel and energy not covered in Scope 1 or Scope 2, upstream transportation and distribution, waste generated in operations, business travel, employee commuting, downstream transportation and distribution, processing of sold products, and end-of-life treatment. Primary data: purchased raw material for chemicals & pulp. Secondary data: cradle-to-gate emissions factors were obtained from commercially and publicly available databases SimaPro (Pre) software and ecoinvent V3.6

Scope 3 category 5: Waste generated in operations

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

18735

(7.5.3) Methodological details

Scope 3 for 2023 includes purchased goods and services, capital goods, activities related to fuel and energy not covered in Scope 1 or Scope 2, upstream transportation and distribution, waste generated in operations, business travel, employee commuting, downstream transportation and distribution, processing of sold products, and end-of-life treatment. Primary data: purchased raw material for chemicals & pulp. Secondary data: cradle-to-gate emissions factors were obtained from commercially and publicly available databases SimaPro (Pre) software and ecoinvent V3.6

Scope 3 category 6: Business travel

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

20135

(7.5.3) Methodological details

Scope 3 for 2023 includes purchased goods and services, capital goods, activities related to fuel and energy not covered in Scope 1 or Scope 2, upstream transportation and distribution, waste generated in operations, business travel, employee commuting, downstream transportation and distribution, and processing of sold products.

Scope 3 category 7: Employee commuting

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

28496

(7.5.3) Methodological details

Scope 3 for 2023 includes purchased goods and services, capital goods, activities related to fuel and energy not covered in Scope 1 or Scope 2, upstream transportation and distribution, waste generated in operations, business travel, employee commuting, downstream transportation and distribution, and processing of sold products.

Scope 3 category 8: Upstream leased assets

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

Not relevant category.

Scope 3 category 9: Downstream transportation and distribution

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

975423

(7.5.3) Methodological details

Scope 3 for 2023 includes purchased goods and services, capital goods, activities related to fuel and energy not covered in Scope 1 or Scope 2, upstream transportation and distribution, waste generated in operations, business travel, employee commuting, downstream transportation and distribution, and processing of sold products. Primary data: quantities of products sold in the reporting year as well as transportation to customers. Transportation was assumed by sea freight. Land

transportation from mills to port is negligible due to short distance compare to sea freight. Secondary data: Emissions factors (secondary data) were obtained from commercially and publicly available databases SimaPro (Pre) and ecoinvent (updated database 2020). The figure is calculated by multiplying distance kilometres and by the respective CO2-eq factors using Simapro Software.

Scope 3 category 10: Processing of sold products

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

1726729

(7.5.3) Methodological details

Primary data: production of pulp product from APP mills. Secondary data: Emissions factors (secondary data) were obtained from commercially and publicly available databases SimaPro (Pre) and ecoinvent (updated database 2020). The total emissions value is calculated based on pulp sold amount and multiplied using CO2-eq factors for each material using Simapro Software.

Scope 3 category 11: Use of sold products

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

0.0

(7.5.3) Methodological details

Not a relevant category. Pulp and paper products do not generate emissions at the use stage.

Scope 3 category 12: End of life treatment of sold products

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

157218

(7.5.3) Methodological details

Primary data: whole paper production from APP mills Secondary data: Emissions factors (secondary data) were obtained from commercially and publicly available databases SimaPro (Pre) and ecoinvent (updated database 2020). The total emissions value is calculated based on paper sold amount and multiplied using CO2-eq factors for each material using Simapro Software.

Scope 3 category 13: Downstream leased assets

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

0.0

(7.5.3) Methodological details

Not relevant category.

Scope 3 category 14: Franchises

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

Not relevant category.

Scope 3 category 15: Investments

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

0.0

(7.5.3) Methodological details

Not relevant category.

Scope 3: Other (upstream)

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

Not relevant category.

Scope 3: Other (downstream)

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

Not relevant category
[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)

11535826

(7.6.3) Methodological details

•The assessment of greenhouse gas (GHG) emissions is based on the methodologies of the Intergovernmental Panel on Climate Change (IPCC) and the World Resources Institute (WRI)/World Business Council for Sustainable Development (WBCSD) - Greenhouse Gas (GHG) Protocol. •Emission factors and global warming potential (GWP) for Scope 1 are based on the IPCC’s Sixth Assessment Report • The gases included in the calculations are CO2, CH4, N2O, HFCs, and PFCs. • A consolidation approach for emissions; operational control. • Pertamina’s specifications are used to calculate fuel oil conversion factors. • Due to well-managed aerobic wastewater treatment system, GHG emission from wastewater treatment area assumed to be zero • Scope 1 includes direct emissions from fuel used in power generation, gasoline for company vehicles, purchased CaCO3 for lime kilns, solid waste to landfills 3 and refrigerant consumption.

Past year 1

(7.6.1) Gross global Scope 1 emissions (metric tons CO2e)

11444727

(7.6.2) End date

12/30/2022

(7.6.3) Methodological details

•The assessment of greenhouse gas (GHG) emissions is based on the methodologies of the Intergovernmental Panel on Climate Change (IPCC) and the World Resources Institute (WRI)/World Business Council for Sustainable Development (WBCSD) - Greenhouse Gas (GHG) Protocol. •Emission factors and global warming potential (GWP) for Scope 1 are based on the IPCC's Sixth Assessment Report for 2022 • The gases included in the calculations are CO2, CH4, N2O, HFCs, and PFCs. • A consolidation approach for emissions; operational control. • Pertamina's specifications are used to calculate fuel oil conversion factors. • Due to well-managed aerobic wastewater treatment system, GHG emission from wastewater treatment area assumed to be zero • Scope 1 includes direct emissions from fuel used in power generation, gasoline for company vehicles, purchased CaCO3 for lime kilns, solid waste to landfills 3 and refrigerant consumption.

Past year 2

(7.6.1) Gross global Scope 1 emissions (metric tons CO2e)

11021377

(7.6.2) End date

12/30/2021

(7.6.3) Methodological details

• The assessment of GHG emissions is based on the methodology of the Intergovernmental Panel on Climate Change (IPCC) and the World Resources Institute (WRI)/World Business Council for Sustainable Development (WBCSD)—Greenhouse Gas (GHG) Protocol. • The assessment of GHG emission for electricity is based on the factor emission from Ministry of Energy, Resource, and Mineral • Source emission factor and global warming potential (GWP) rates is based IPCC 5th assessment report • Gas included in calculation: CO2, CH4, N2O, HFCs, PFCs • Consolidation approach for emissions; operational control • The Pertamina specification is used to calculate the fuel oil conversion factor • Because of well-managed wastewater treatment, GHG emissions from wastewater treatment are assumed to be zero • Scope 1 includes direct emissions from fuel used in power generators, petrol for company vehicles, CaCO3 purchased for lime kiln, solid waste to landfill, refrigerant consumption

Past year 3

(7.6.1) Gross global Scope 1 emissions (metric tons CO2e)

10783135

(7.6.2) End date

12/30/2020

(7.6.3) Methodological details

• The assessment of GHG emissions is based on the methodology of the Intergovernmental Panel on Climate Change (IPCC) and the World Resources Institute (WRI)/World Business Council for Sustainable Development (WBCSD)—Greenhouse Gas (GHG) Protocol. • The assessment of GHG emission for electricity is based on the factor emission from Ministry of Energy, Resource, and Mineral • Source emission factor and global warming potential (GWP) rates is based IPCC 5th assessment report • Gas included in calculation: CO2, CH4, N2O, HFCs, PFCs • Consolidation approach for emissions; operational control • The Pertamina specification is used to calculate the fuel oil conversion factor • Because of well-managed wastewater treatment, GHG emissions from wastewater treatment are assumed to be zero • Scope 1 includes direct emissions from fuel used in power generators, petrol for company vehicles, CaCO3 purchased for lime kiln, solid waste to landfill, refrigerant consumption

Past year 4

(7.6.1) Gross global Scope 1 emissions (metric tons CO2e)

10739250

(7.6.2) End date

12/30/2019

(7.6.3) Methodological details

• The assessment of GHG emissions is based on the methodology of the Intergovernmental Panel on Climate Change (IPCC) and the World Resources Institute (WRI)/World Business Council for Sustainable Development (WBCSD)—Greenhouse Gas (GHG) Protocol. • The assessment of GHG emission for electricity is based on the factor emission from Ministry of Energy, Resource, and Mineral • Source emission factor and global warming potential (GWP) rates is based IPCC 5th assessment report • Gas included in calculation: CO2, CH4, N2O, HFCs, PFCs • Consolidation approach for emissions; operational control • The Pertamina specification is used to calculate the fuel oil conversion factor • Because of well-managed wastewater treatment, GHG emissions from wastewater treatment are assumed to be zero • Scope 1 includes direct emissions from fuel used in power generators, petrol for company vehicles, CaCO3 purchased for lime kiln, solid waste to landfill, refrigerant consumption

Past year 5

(7.6.1) Gross global Scope 1 emissions (metric tons CO2e)

11328559

(7.6.2) End date

12/30/2018

(7.6.3) Methodological details

GHG or carbon emission assessment is based on Intergovernmental Panel on Climate Change (IPCC) and World Resources Institute (WRI)/World Business Council for Sustainable Development (WBCSD)—Greenhouse Gas (GHG) Protocol methodology. Fuel oil conversion factor is based on Pertamina specification. GHG emission from wastewater treatment is assumed to be zero due to well-managed wastewater treatment. Scope 3 emissions include purchased goods and services, fuel and energy-related activities not included in scope 1 or scope 2, upstream transportation and distribution, waste generated in operations, downstream transportation and distribution, processing of sold products, and end-of-life treatment of sold products.
[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)

688945

(7.7.2) Gross global Scope 2, market-based emissions (metric tons CO2e) (if applicable)

503397

(7.7.4) Methodological details

•The assessment of greenhouse gas (GHG) emissions is based on the methodologies of the Intergovernmental Panel on Climate Change (IPCC) and the World Resources Institute (WRI)/World Business Council for Sustainable Development (WBCSD) - Greenhouse Gas (GHG) Protocol. •Emission factors and global warming potential (GWP) for Scope 1 are based on the IPCC’s Sixth Assessment Report for 2022 and 2023, and on the Fifth Assessment Report for 2021. • The gases included in the calculations are CO2, CH4, N2O, HFCs, and PFCs. • A consolidation approach for emissions; operational control. • Pertamina’s specifications are used to calculate fuel oil conversion factors. • Due to well-managed aerobic wastewater treatment system, GHG emission from wastewater treatment area assumed to be zero • For Scope 2, APP calculate its location based and market-based emission from imported electricity. Scope 2 location based calculate total imported electricity and scope 2 market based calculate only the fossil imported electricity. Both methods use emission factor of PLN (ESDM), where we assume that location and market based have the same emission factor.

Past year 1

(7.7.1) Gross global Scope 2, location-based emissions (metric tons CO2e)

781261

(7.7.2) Gross global Scope 2, market-based emissions (metric tons CO2e) (if applicable)

705229

(7.7.3) End date

12/30/2022

(7.7.4) Methodological details

•The assessment of greenhouse gas (GHG) emissions is based on the methodologies of the Intergovernmental Panel on Climate Change (IPCC) and the World Resources Institute (WRI)/World Business Council for Sustainable Development (WBCSD) - Greenhouse Gas (GHG) Protocol. •Emission factors and global warming potential (GWP) for Scope 1 are based on the IPCC's Sixth Assessment Report for 2022 and 2023, and on the Fifth Assessment Report for 2021. • The gases included in the calculations are CO2, CH4, N2O, HFCs, and PFCs. • A consolidation approach for emissions; operational control. • Pertamina's specifications are used to calculate fuel oil conversion factors. • Due to well-managed aerobic wastewater treatment system, GHG emission from wastewater treatment area assumed to be zero • For Scope 2, APP calculate its location based and market-based emission from imported electricity. Scope 2 location based calculate total imported electricity and scope 2 market based calculate only the fossil imported electricity. Both methods use emission factor of PLN (ESDM), where we assume that location and market based have the same emission factor.

Past year 2

(7.7.1) Gross global Scope 2, location-based emissions (metric tons CO2e)

810364

(7.7.2) Gross global Scope 2, market-based emissions (metric tons CO2e) (if applicable)

810364

(7.7.3) End date

12/30/2021

(7.7.4) Methodological details

•The assessment of greenhouse gas (GHG) emissions is based on the methodologies of the Intergovernmental Panel on Climate Change (IPCC) and the World Resources Institute (WRI)/World Business Council for Sustainable Development (WBCSD) - Greenhouse Gas (GHG) Protocol. •Emission factors and global warming potential (GWP) for Scope 1 are based on the IPCC's Sixth Assessment Report for 2022 and 2023, and on the Fifth Assessment Report for 2021. • The gases included in the calculations are CO2, CH4, N2O, HFCs, and PFCs. • A consolidation approach for emissions; operational control. • Pertamina's specifications are used to calculate fuel oil conversion factors. • Due to well-managed aerobic wastewater treatment system, GHG emission from wastewater treatment area assumed to be zero • For Scope 2, APP calculate its location based and market-based emission from imported electricity. Scope 2 location based calculate total imported electricity and scope 2 market based calculate only the fossil imported electricity. Both methods use emission factor of PLN (ESDM), where we assume that location and market based have the same emission factor.

Past year 3

(7.7.1) Gross global Scope 2, location-based emissions (metric tons CO2e)

766124

(7.7.2) Gross global Scope 2, market-based emissions (metric tons CO2e) (if applicable)

766124

(7.7.3) End date

12/30/2020

(7.7.4) Methodological details

• The assessment of GHG emissions is based on the methodology of the Intergovernmental Panel on Climate Change (IPCC) and the World Resources Institute (WRI)/World Business Council for Sustainable Development (WBCSD)—Greenhouse Gas (GHG) Protocol. • The assessment of GHG emission for electricity is based on the factor emission from Ministry of Energy, Resource, and Mineral • Source emission factor and global warming potential (GWP) rates is based IPCC 5th assessment report • Gas included in calculation: CO2, CH4, N2O, HFCs, PFCs • Consolidation approach for emissions; operational control • The Pertamina specification is used to calculate the fuel oil conversion factor • Because of well-managed wastewater treatment, GHG emissions from wastewater treatment are assumed to be zero • Scope 1 includes direct emissions from fuel used in power generators, petrol for company vehicles, CaCO3 purchased for lime kiln, solid waste to landfill, refrigerant consumption • Scope 2 includes indirect emissions from purchased electricity • Scope 3 includes purchased goods and services, fuel and energy-related activities not covered by scope 1 or scope 2, upstream transportation and distribution, waste generated in operations, downstream transportation and

distribution, processing of sold products, and end-of-life treatment of sold products • Scope 3 emissions were re-stated due to a better understanding on emissions boundary through improvements in methodology

Past year 4

(7.7.1) Gross global Scope 2, location-based emissions (metric tons CO2e)

814041

(7.7.2) Gross global Scope 2, market-based emissions (metric tons CO2e) (if applicable)

814041

(7.7.3) End date

12/30/2019

(7.7.4) Methodological details

• The assessment of GHG emissions is based on the methodology of the Intergovernmental Panel on Climate Change (IPCC) and the World Resources Institute (WRI)/World Business Council for Sustainable Development (WBCSD)—Greenhouse Gas (GHG) Protocol. • The assessment of GHG emission for electricity is based on the factor emission from Ministry of Energy, Resource, and Mineral • Source emission factor and global warming potential (GWP) rates is based IPCC 5th assessment report • Gas included in calculation: CO2, CH4, N2O, HFCs, PFCs • Consolidation approach for emissions; operational control • The Pertamina specification is used to calculate the fuel oil conversion factor • Because of well-managed wastewater treatment, GHG emissions from wastewater treatment are assumed to be zero • Scope 1 includes direct emissions from fuel used in power generators, petrol for company vehicles, CaCO3 purchased for lime kiln, solid waste to landfill, refrigerant consumption • Scope 2 includes indirect emissions from purchased electricity • Scope 3 includes purchased goods and services, fuel and energy-related activities not covered by scope 1 or scope 2, upstream transportation and distribution, waste generated in operations, downstream transportation and distribution, processing of sold products, and end-of-life treatment of sold products • Scope 3 emissions were re-stated due to a better understanding on emissions boundary through improvements in methodology

Past year 5

(7.7.1) Gross global Scope 2, location-based emissions (metric tons CO2e)

784732

(7.7.2) Gross global Scope 2, market-based emissions (metric tons CO2e) (if applicable)

784732

(7.7.3) End date

12/30/2018

(7.7.4) Methodological details

GHG or carbon emission assessment is based on Intergovernmental Panel on Climate Change (IPCC) and World Resources Institute (WRI)/World Business Council for Sustainable Development (WBCSD)—Greenhouse Gas (GHG) Protocol methodology. Fuel oil conversion factor is based on Pertamina specification. GHG emission from wastewater treatment is assumed to be zero due to well-managed wastewater treatment. Scope 3 emissions include purchased goods and services, fuel and energy-related activities not included in scope 1 or scope 2, upstream transportation and distribution, waste generated in operations, downstream transportation and distribution, processing of sold products, and end-of-life treatment of sold products.
[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)

2808058

(7.8.3) Emissions calculation methodology

Select all that apply
☑ Average data method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

(7.8.5) Please explain

Primary data: quantities of purchasing volumes from APP sourcing, supplier data. Secondary data: Emissions factors (secondary data), cradle-to-gate emissions factors were obtained from commercially and publicly available databases SimaPro (Pre) and ecoinvent (updated database 2020)

Capital goods

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

298145

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Spend-based method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

(7.8.5) Please explain

Primary data: quantities of purchasing volumes from APP sourcing, supplier data. Secondary data: Emissions factors (secondary data), cradle-to-gate emissions factors were obtained from commercially and publicly available databases SimaPro (Pre) and ecoinvent (updated database 2020)

Fuel-and-energy-related activities (not included in Scope 1 or 2)

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

2604615

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Average data method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

(7.8.5) Please explain

Primary data: quantity of wood transported to pulp mills, distance between forestry to pulp mills Secondary data: Emissions factors (secondary data) were obtained from commercially and publicly available databases SimaPro (Pre) and ecoinvent (updated database 2020).

Upstream transportation and distribution

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

888006

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Average data method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

(7.8.5) Please explain

Primary data: quantity of wood transported to pulp mills, distance between forestry to pulp mills Secondary data: Emissions factors (secondary data) were obtained from commercially and publicly available databases SimaPro (Pre) and ecoinvent (updated database 2020).

Waste generated in operations

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

18735

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Average product method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

(7.8.5) Please explain

We have identified the waste treatment.

Business travel

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

20135

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Average data method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

(7.8.5) Please explain

Primary data: distance and number people travelled by air & car Secondary data: Emissions factors (secondary data) were obtained from commercially and publicly available databases SimaPro (Pre) and ecoinvent (updated database 2020).

Employee commuting

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

28494

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Average data method

☑ Other, please specify **:**secondary research

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

(7.8.5) Please explain

We have identified that some employees are provided mess / house thus no emission cause from employee commuting. Some of them are also live with distance not more than 25 km from the office.

Upstream leased assets

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

Not relevant with business process.

Downstream transportation and distribution

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

975423

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Average data method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

(7.8.5) Please explain

Primary data: quantities of products sold in the reporting year as well as transportation to customers. Transportation was assumed by sea freight. Land transportation from mills to port is negligible due to short distance compared to sea freight. Secondary data: Emissions factors (secondary data) were obtained from commercially and publicly available databases SimaPro (Pre) and ecoinvent (updated database 2020).

Processing of sold products

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

1726729

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Average data method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

(7.8.5) Please explain

Primary data: production of pulp product from APP mills. Secondary data: Emissions factors (secondary data) were obtained from commercially and publicly available databases SimaPro (Pre) and ecoinvent (updated database 2020).

Use of sold products

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

Not a relevant category. Pulp and paper products do not generate emissions at the use stage.

End of life treatment of sold products

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

157218

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Average data method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

(7.8.5) Please explain

Primary data: whole paper production from APP mills Secondary data: Emissions factors (secondary data) were obtained from commercially and publicly available databases SimaPro (Pre) and ecoinvent (updated database 2020).

Downstream leased assets

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

Not relevant with business process.

Franchises

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

Not relevant with business process.

Investments

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

Not relevant with business process.

Other (upstream)

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

Not relevant with business process.

Other (downstream)

(7.8.1) Evaluation status

Select from:
☑ Not relevant, explanation provided

(7.8.5) Please explain

Not relevant with business process.
[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

12/30/2022

(7.8.1.2) Scope 3: Purchased goods and services (metric tons CO2e)

2496479

(7.8.1.3) Scope 3: Capital goods (metric tons CO2e)

0

(7.8.1.4) Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

834438

(7.8.1.5) Scope 3: Upstream transportation and distribution (metric tons CO2e)

169406

(7.8.1.6) Scope 3: Waste generated in operations (metric tons CO2e)

0

(7.8.1.7) Scope 3: Business travel (metric tons CO2e)

336

(7.8.1.8) Scope 3: Employee commuting (metric tons CO2e)

0

(7.8.1.9) Scope 3: Upstream leased assets (metric tons CO2e)

0

(7.8.1.10) Scope 3: Downstream transportation and distribution (metric tons CO2e)

404003

(7.8.1.11) Scope 3: Processing of sold products (metric tons CO2e)

3375221

(7.8.1.12) Scope 3: Use of sold products (metric tons CO2e)

0

(7.8.1.13) Scope 3: End of life treatment of sold products (metric tons CO2e)

73181

(7.8.1.14) Scope 3: Downstream leased assets (metric tons CO2e)

0

(7.8.1.15) Scope 3: Franchises (metric tons CO2e)

0

(7.8.1.16) Scope 3: Investments (metric tons CO2e)

0

(7.8.1.17) Scope 3: Other (upstream) (metric tons CO2e)

0

(7.8.1.18) Scope 3: Other (downstream) (metric tons CO2e)

0

(7.8.1.19) Comment

In 2022, we calculated Scope 3: purchase goods and services, fuel and energy related activities not included in scope 1 or scope 2, upstream transportation and distribution, downstream transportation and distribution, business travel, processing of sold products, end of life treatment of sold products.

Past year 2

(7.8.1.1) End date

12/30/2021

(7.8.1.2) Scope 3: Purchased goods and services (metric tons CO2e)

3130809

(7.8.1.3) Scope 3: Capital goods (metric tons CO2e)

0

(7.8.1.4) Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

701830

(7.8.1.5) Scope 3: Upstream transportation and distribution (metric tons CO2e)

171582

(7.8.1.6) Scope 3: Waste generated in operations (metric tons CO2e)

0

(7.8.1.7) Scope 3: Business travel (metric tons CO2e)

0

(7.8.1.8) Scope 3: Employee commuting (metric tons CO2e)

0

(7.8.1.9) Scope 3: Upstream leased assets (metric tons CO2e)

0

(7.8.1.10) Scope 3: Downstream transportation and distribution (metric tons CO2e)

422254

(7.8.1.11) Scope 3: Processing of sold products (metric tons CO2e)

4832680

(7.8.1.12) Scope 3: Use of sold products (metric tons CO2e)

0

(7.8.1.13) Scope 3: End of life treatment of sold products (metric tons CO2e)

73978

(7.8.1.14) Scope 3: Downstream leased assets (metric tons CO2e)

0

(7.8.1.15) Scope 3: Franchises (metric tons CO2e)

0

(7.8.1.16) Scope 3: Investments (metric tons CO2e)

0

(7.8.1.17) Scope 3: Other (upstream) (metric tons CO2e)

0

(7.8.1.18) Scope 3: Other (downstream) (metric tons CO2e)

0

(7.8.1.19) Comment

In 2021, we calculated Scope 3: purchase goods and services, fuel and energy related activities not included in scope 1 or scope 2, upstream transportation and distribution, downstream transportation and distribution, business travel (covid time-no travel), processing of sold products, end of life treatment of sold products.

Past year 3

(7.8.1.1) End date

12/30/2020

(7.8.1.2) Scope 3: Purchased goods and services (metric tons CO2e)

2671173

(7.8.1.3) Scope 3: Capital goods (metric tons CO2e)

0

(7.8.1.4) Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

613692

(7.8.1.5) Scope 3: Upstream transportation and distribution (metric tons CO2e)

186530

(7.8.1.6) Scope 3: Waste generated in operations (metric tons CO2e)

0

(7.8.1.7) Scope 3: Business travel (metric tons CO2e)

0

(7.8.1.8) Scope 3: Employee commuting (metric tons CO2e)

0

(7.8.1.9) Scope 3: Upstream leased assets (metric tons CO2e)

0

(7.8.1.10) Scope 3: Downstream transportation and distribution (metric tons CO2e)

460515

(7.8.1.11) Scope 3: Processing of sold products (metric tons CO2e)

4833981

(7.8.1.12) Scope 3: Use of sold products (metric tons CO2e)

0

(7.8.1.13) Scope 3: End of life treatment of sold products (metric tons CO2e)

73925

(7.8.1.14) Scope 3: Downstream leased assets (metric tons CO2e)

0

(7.8.1.15) Scope 3: Franchises (metric tons CO2e)

0

(7.8.1.16) Scope 3: Investments (metric tons CO2e)

0

(7.8.1.17) Scope 3: Other (upstream) (metric tons CO2e)

0

(7.8.1.18) Scope 3: Other (downstream) (metric tons CO2e)

0

(7.8.1.19) Comment

Scope 3 emissions include purchased goods and services, fuel and energy-related activities not included in scope 1 or scope 2, upstream transportation and distribution, downstream transportation and distribution, processing of sold products, and end-of-life treatment of sold products and this number refer to sustainability report 2021

Past year 4

(7.8.1.1) End date

12/30/2019

(7.8.1.2) Scope 3: Purchased goods and services (metric tons CO2e)

2251630

(7.8.1.3) Scope 3: Capital goods (metric tons CO2e)

0

(7.8.1.4) Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

389669

(7.8.1.5) Scope 3: Upstream transportation and distribution (metric tons CO2e)

77213

(7.8.1.6) Scope 3: Waste generated in operations (metric tons CO2e)

0

(7.8.1.7) Scope 3: Business travel (metric tons CO2e)

1630

(7.8.1.8) Scope 3: Employee commuting (metric tons CO2e)

0

(7.8.1.9) Scope 3: Upstream leased assets (metric tons CO2e)

0

(7.8.1.10) Scope 3: Downstream transportation and distribution (metric tons CO2e)

447895

(7.8.1.11) Scope 3: Processing of sold products (metric tons CO2e)

4155282

(7.8.1.12) Scope 3: Use of sold products (metric tons CO2e)

0

(7.8.1.13) Scope 3: End of life treatment of sold products (metric tons CO2e)

86765

(7.8.1.14) Scope 3: Downstream leased assets (metric tons CO2e)

0

(7.8.1.15) Scope 3: Franchises (metric tons CO2e)

0

(7.8.1.16) Scope 3: Investments (metric tons CO2e)

0

(7.8.1.17) Scope 3: Other (upstream) (metric tons CO2e)

0

(7.8.1.18) Scope 3: Other (downstream) (metric tons CO2e)

0

(7.8.1.19) Comment

Scope 3 emissions include purchased goods and services, fuel and energy-related activities not included in scope 1 or scope 2, upstream transportation and distribution, downstream transportation and distribution, processing of sold products, and end-of-life treatment of sold products and the number refers to sustainability report 2021

[Fixed row]

(7.9) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	*Select from:* ☑ Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	*Select from:* ☑ Third-party verification or assurance process in place
Scope 3	*Select from:* ☑ 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:

☑ High assurance

(7.9.1.4) Attach the statement

240718 APP Assurance Statement 2023_signed.pdf

(7.9.1.5) Page/section reference

1-4

(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:

☑ High assurance

(7.9.2.5) Attach the statement

240718 APP Assurance Statement 2023_signed.pdf

(7.9.2.6) Page/ section reference

1-4

(7.9.2.7) Relevant standard

Select from:

☑ AA1000AS

(7.9.2.8) Proportion of reported emissions verified (%)

100

Row 2

(7.9.2.1) Scope 2 approach

Select from:

☑ Scope 2 market-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:

☑ High assurance

(7.9.2.5) Attach the statement

240718 APP Assurance Statement 2023_signed.pdf

(7.9.2.6) Page/ section reference

1-4

(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: Capital goods
- ☑ Scope 3: Business travel
- ☑ Scope 3: Employee commuting
- ☑ Scope 3: Processing of sold products
- ☑ Scope 3: Purchased goods and services
- ☑ Scope 3: Waste generated in operations
- ☑ Scope 3: End-of-life treatment of sold products
- ☑ Scope 3: Upstream transportation and distribution
- ☑ Scope 3: Downstream transportation and distribution
- ☑ Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)

(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:

☑ High assurance

(7.9.3.5) Attach the statement

240718 APP Assurance Statement 2023_signed.pdf

(7.9.3.6) Page/section reference

1-4

(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:

☑ Decreased

(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 renewable energy consumption

(7.10.1.1) Change in emissions (metric tons CO2e)

393057

(7.10.1.2) Direction of change in emissions

Select from:

☑ Increased

(7.10.1.3) Emissions value (percentage)

2

(7.10.1.4) Please explain calculation

APP has initiated efforts to increase biomass consumption and utilize solar panels, which will result in higher biogenic emissions and a reduction in fossil emissions. In 2023, biogenic emissions reached 16,342,954 tCO2e, compared to 15,949,897 tCO2e in 2022. This represents an increase of 393,057 tCO2e, reflecting a 2% rise compared to the previous year.

Other emissions reduction activities

(7.10.1.1) Change in emissions (metric tons CO2e)

201832

(7.10.1.2) Direction of change in emissions

Select from:

☑ Decreased

(7.10.1.3) Emissions value (percentage)

40

(7.10.1.4) Please explain calculation

APP has initiated efforts to reduce Scope 2 emissions by decreasing purchased electricity and obtaining Renewable Energy Certificates (RECs) from the National Grid. In 2022, Scope 2 emissions from indirect sources were 705,229 tCO2e, while in 2023, they decreased to 503,397 tCO2e. This represents a reduction of 201,832 tCO2e, which is a 40% decrease compared to 2022.

Divestment

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:

☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

No change with this category

Acquisitions

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:
☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

No change with this category

Mergers

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:

☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

No change with this category

Change in output

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:
☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

No change with this category

Change in methodology

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:

☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

No change with this category

Change in boundary

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:

☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

No change with this category

Change in physical operating conditions

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:

☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

No change with this category

Unidentified

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:

☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

No change with this category

Other

(7.10.1.1) Change in emissions (metric tons CO2e)

110733

(7.10.1.2) Direction of change in emissions

Select from:

☑ Decreased

(7.10.1.3) Emissions value (percentage)

100

(7.10.1.4) Please explain calculation

This reporting year, the total carbon emissions are 12,039,223 tCO2e, with Scope 1 emissions at 11,535,826 tCO2e and Scope 2 emissions at 503,397 tCO2e. The carbon intensity is 1.02 tCO2e/ton. Several initiatives have been implemented during this reporting period: Increased Biomass Consumption: APP achieved 58% of our energy consumption from renewable sources, an increase of 1% compared to 2022. The increased biomass consumption totaled 4,431,012 GJ. Increase the waste utilization as biogas consumption, as a result, APP have increased the renewable energy from biogas with 614 GJ comparing with 2022 Renewable Energy Certificate (REC): We obtained RECs from the National Grid (PLN), equivalent to 212,756 MWh, allowing us to reduce our Scope 2 emissions by 452,070 tCO2e compared to 2022. Solar Panel Installation: We installed solar panels with a capacity of 9.8 MWp in 2023, which enables us to replace fossil fuel energy with non-fossil energy equivalent to 12,488 GJ.
[Fixed row]

(7.10.2) Are your emissions performance calculations in 7.10 and 7.10.1 based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Select from:

☑ Market-based

(7.13) Is biogenic carbon pertaining to your direct operations relevant to your current CDP climate change disclosure?

Select from:

☑ Yes

(7.13.1) Account for biogenic carbon data pertaining to your direct operations and identify any exclusions.

CO2 emissions from land use management

(7.13.1.1) Emissions (metric tons CO2)

0

(7.13.1.2) Methodology

Select all that apply

☑ Default emissions factors

(7.13.1.3) Please explain

Emission from FOLU is still being verified by SBTi.

CO2 removals from land use management

(7.13.1.1) Emissions (metric tons CO2)

0

(7.13.1.2) Methodology

Select all that apply

☑ Default emissions factors

(7.13.1.3) Please explain

Emission from FOLU is still being verified by SBTi.

Sequestration during land use change

(7.13.1.1) Emissions (metric tons CO2)

0

(7.13.1.2) Methodology

Select all that apply

☑ Default emissions factors

(7.13.1.3) Please explain

Emission from FOLU is still being verified by SBTi.

CO2 emissions from biofuel combustion (land machinery)

(7.13.1.1) Emissions (metric tons CO2)

0

(7.13.1.2) Methodology

Select all that apply

☑ Default emissions factors

(7.13.1.3) Please explain

Emission from FOLU is still being verified by SBTi.

CO2 emissions from biofuel combustion (processing/manufacturing machinery)

(7.13.1.1) Emissions (metric tons CO2)

16342954

(7.13.1.2) Methodology

Select all that apply

☑ Default emissions factors

(7.13.1.3) Please explain

This number reflect to biogenic emission from biomass combustion, such as bark, black liquor, sawdust, palm shell, EFB, sludge, and biodiesel. The amount of fuel multiply by CO2 emission factor of IPCC for each type of biomass.

CO2 emissions from biofuel combustion (other)

(7.13.1.1) Emissions (metric tons CO2)

0

(7.13.1.2) Methodology

Select all that apply

☑ Default emissions factors

(7.13.1.3) Please explain

The emissions from biofuel have been captured during processing and manufacturing.
[Fixed row]

(7.14) Do you calculate greenhouse gas emissions for each agricultural commodity reported as significant to your business?

Timber products

(7.14.1) GHG emissions calculated for this commodity

Select from:

☑ Yes

(7.14.2) Reporting emissions by

Select from:

☑ Unit of production

(7.14.3) Emissions (metric tons CO2e)

406009.6

(7.14.4) Denominator: unit of production

Select from:

☑ Metric tons

(7.14.5) Change from last reporting year

Select from:

☑ This is our first year of measurement

(7.14.6) Please explain

In 2023, APP improved our boundaries for scope 3 emissions. APP include the emission from wood log (timber) from sustainable Forest Management Unit (FMU) to the manufactures
[Fixed row]

(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)

11333643

(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)

49431

(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)

152752

(7.15.1.3) GWP Reference

Select from:

☑ IPCC Sixth Assessment Report (AR6 - 100 year)

[Add row]

(7.16) Break down your total gross global Scope 1 and 2 emissions by country/area.

	Scope 1 emissions (metric tons CO2e)	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Indonesia	*11535826*	*688945*	*503397*

[Fixed row]

(7.17) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

Select all that apply

☑ By facility

(7.17.2) Break down your total gross global Scope 1 emissions by business facility.

Row 1

(7.17.2.1) Facility

Indah Kiat Pulp & Paper, Univerus, and Pindo Deli in Perawang Mill

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

4293910

(7.17.2.3) Latitude

0.664278

(7.17.2.4) Longitude

101.595668

Row 2

(7.17.2.1) Facility

Tjiwi Kimia

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

1895015

(7.17.2.3) Latitude

-7.4716

(7.17.2.4) Longitude

112.44

Row 3

(7.17.2.1) Facility

Pindo Deli Karawang, Mill 2

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

1088039

(7.17.2.3) Latitude

-6.3125

(7.17.2.4) Longitude

107.295

Row 4

(7.17.2.1) Facility

Pindo Deli Karawang, Mill 1

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

405886

(7.17.2.3) Latitude

-6.3125

(7.17.2.4) Longitude

107.295

Row 5

(7.17.2.1) Facility

Indah Kiat Pulp & Paper, Serang Mill

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

2044404

(7.17.2.3) Latitude

-6.12

(7.17.2.4) Longitude

106.15028

Row 6

(7.17.2.1) Facility

Pindo Deli Karawang, Mill 3

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

306445

(7.17.2.3) Latitude

-6.3125

(7.17.2.4) Longitude

107.295

Row 7

(7.17.2.1) Facility

Lontar Papyrus

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

1082094

(7.17.2.3) Latitude

-1.01

(7.17.2.4) Longitude

103.08

Row 8

(7.17.2.1) Facility

Ekamas Fortuna Malang

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

116610

(7.17.2.3) Latitude

-7.975985

(7.17.2.4) Longitude

112.626878

Row 9

(7.17.2.1) Facility

OKI Pulp & Paper Mills

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

157040

(7.17.2.3) Latitude

-3.329272

(7.17.2.4) Longitude

105.416347

Row 10

(7.17.2.1) Facility

Indah Kiat Pulp & Paper, Tangerang Mill

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

106650

(7.17.2.3) Latitude

-6.17833

(7.17.2.4) Longitude

106.63194

Row 11

(7.17.2.1) Facility

APP Purinusa Subang

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

8702

(7.17.2.3) Latitude

-6.49

(7.17.2.4) Longitude

107.55

Row 12

(7.17.2.1) Facility

APP Purinusa Bandung

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

15268

(7.17.2.3) Latitude

-6.93

(7.17.2.4) Longitude

107.69

Row 13

(7.17.2.1) Facility

APP Purinusa Semarang

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

8039

(7.17.2.3) Latitude

-7.22

(7.17.2.4) Longitude

110.43

Row 14

(7.17.2.1) Facility

APP Purinusa Demak

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

7723

(7.17.2.3) Latitude

-6.93

(7.17.2.4) Longitude

110.57
[Add row]

(7.18) Do you include emissions pertaining to your business activity(ies) in your direct operations as part of your global gross Scope 1 figure?

Select from:
☑ Yes

(7.18.1) Select the form(s) in which you are reporting your agricultural/forestry emissions.

Select from:
☑ Total emissions

(7.18.2) Report the Scope 1 emissions pertaining to your business activity(ies) and explain any exclusions. If applicable, disaggregate your agricultural/forestry by GHG emissions category.

Row 1

(7.18.2.1) Activity

Select from:

☑ Processing/Manufacturing

(7.18.2.3) Emissions (metric tons CO2e)

11535826

(7.18.2.4) Methodology

Select all that apply

☑ Default emissions factor

(7.18.2.5) Please explain

Scope 1 includes direct emissions from the following sources: fuel used in power generators, petrol for company vehicles, purchased CaCO3 for the lime kiln, solid waste sent to landfill, and refrigerant consumption.
[Add row]

(7.20) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

Select all that apply

☑ By facility

(7.20.2) Break down your total gross global Scope 2 emissions by business facility.

Row 1

(7.20.2.1) Facility

PT Indah Kiat Pulp & Paper, Pindo Deli, Univenus Mills in Perawang

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

0

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

0

Row 2

(7.20.2.1) Facility

PT. Pabrik Kertas Tjiwi Kimia

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

245138

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

155018

Row 3

(7.20.2.1) Facility

PT Lontar Papyrus Pulp & Paper Industry

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

0

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

0

Row 4

(7.20.2.1) Facility

PT Pindo Deli Pulp and Paper Mills - Karawang

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

178334

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

178334

Row 5

(7.20.2.1) Facility

PT Indah Kiat Pulp & Paper - Serang Mill

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

130204

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

43776

Row 6

(7.20.2.1) Facility

PT Indah Kiat Pulp & Paper Mills - Tangerang Mill

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

31204

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

31204

Row 7

(7.20.2.1) Facility

PT OKI Pulp & Paper Mills

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

0

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

0

Row 8

(7.20.2.1) Facility

PT Ekamas Fortuna

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

78580

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

78580

Row 9

(7.20.2.1) Facility

APP Purinusa-Subang Mill

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

3619

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

3619

Row 10

(7.20.2.1) Facility

APP Purinusa Bandung

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

6046

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

6046

Row 11

(7.20.2.1) Facility

APP Purinusa Semarang

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

3449

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

3449

Row 12

(7.20.2.1) Facility

APP Purinusa Demak

(7.20.2.2) Scope 2, location-based (metric tons CO2e)

3371

(7.20.2.3) Scope 2, market-based (metric tons CO2e)

3371
[Add 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)

11535826

(7.22.2) Scope 2, location-based emissions (metric tons CO2e)

688945

(7.22.3) Scope 2, market-based emissions (metric tons CO2e)

503397

(7.22.4) Please explain

All emissions have been accounted for in the consolidated accounting group.

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

(7.22.3) Scope 2, market-based emissions (metric tons CO2e)

0

(7.22.4) Please explain

All emissions have been accounted for in the consolidated accounting group.
[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:
☑ No

(7.26) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

Row 1

(7.26.1) Requesting member

Select from:

(7.26.2) Scope of emissions

Select from:

☑ Scope 1

(7.26.4) Allocation level

Select from:

☑ Facility

(7.26.5) Allocation level detail

PMI purchases products from APP (Indah Kiat Pulp & Paper at the Serang Mill). APP collects and calculates data for specific products for PMI, allocating energy consumption between the mill level and the paper machine level.

(7.26.6) Allocation method

Select from:

☑ Allocation based on mass of products purchased

(7.26.7) Unit for market value or quantity of goods/services supplied

Select from:

☑ Metric tons

(7.26.8) Market value or quantity of goods/services supplied to the requesting member

36466

(7.26.9) Emissions in metric tonnes of CO2e

29248.28

(7.26.10) Uncertainty (±%)

10

(7.26.11) Major sources of emissions

Scope 1 includes direct emissions from fuel used in power generators

(7.26.12) Allocation verified by a third party?

Select from:

☑ Yes

(7.26.13) Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

PMI purchases products from APP (Indah Kiat Pulp & Paper at the Serang Mill). APP collects and calculates data for specific products for PMI, allocating energy consumption between the mill level and the paper machine level.

(7.26.14) Where published information has been used, please provide a reference

No, the emissions for customers are only published to relevant customers.
[Add row]

(7.27) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Row 1

(7.27.1) Allocation challenges

Select from:

☑ Diversity of product lines makes accurately accounting for each product/product line cost ineffective

(7.27.2) Please explain what would help you overcome these challenges

Standardized methodologies and boundaries can help address the varying requirements of different customers who use the same product in different ways, leading to different emissions profiles.

Row 2

(7.27.1) Allocation challenges

Select from:

☑ Customer base is too large and diverse to accurately track emissions to the customer level

(7.27.2) Please explain what would help you overcome these challenges

A cost-effective system for continuously monitoring GHG emissions at various production process steps across different facilities would enable accurate calculation of the product's carbon footprint.
[Add row]

(7.28) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

	Do you plan to develop your capabilities to allocate emissions to your customers in the future?	Describe how you plan to develop your capabilities
	Select from: ☑ Yes	*Participate in the workshop or training to refresh and enhance the knowledge related to carbon footprints.*

[Fixed row]

(7.29) What percentage of your total operational spend in the reporting year was on energy?

Select from:

☑ More than 5% but less than or equal to 10%

(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)	*Select from:* ☑ Yes
Consumption of purchased or acquired electricity	*Select from:* ☑ Yes
Consumption of purchased or acquired heat	*Select from:* ☑ No
Consumption of purchased or acquired steam	*Select from:* ☑ No
Consumption of purchased or acquired cooling	*Select from:* ☑ No
Generation of electricity, heat, steam, or cooling	*Select from:* ☑ 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:

☑ Unable to confirm heating value

(7.30.1.2) MWh from renewable sources

46484424

(7.30.1.3) MWh from non-renewable sources

33869737

(7.30.1.4) Total (renewable and non-renewable) MWh

80354161

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

212756

(7.30.1.3) MWh from non-renewable sources

463561

(7.30.1.4) Total (renewable and non-renewable) MWh

676317

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

3469

(7.30.1.4) Total (renewable and non-renewable) MWh

3469

Total energy consumption

(7.30.1.1) Heating value

Select from:
☑ Unable to confirm heating value

(7.30.1.2) MWh from renewable sources

46700586

(7.30.1.3) MWh from non-renewable sources

34333298

(7.30.1.4) Total (renewable and non-renewable) MWh

81033946
[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	*Select from:* ☑ Yes
Consumption of fuel for the generation of heat	*Select from:* ☑ No
Consumption of fuel for the generation of steam	*Select from:* ☑ Yes
Consumption of fuel for the generation of cooling	*Select from:* ☑ No
Consumption of fuel for co-generation or tri-generation	*Select from:* ☑ Yes

[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

46484245

(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

(7.30.7.5) MWh fuel consumed for self-generation of steam

0

(7.30.7.6) MWh fuel consumed for self-generation of cooling

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

46484245

(7.30.7.8) Comment

It refers to biomass consumption, such as bark, black liquor, efb, sawdust, and palm fiber.

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

116

(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

(7.30.7.5) MWh fuel consumed for self-generation of steam

0

(7.30.7.6) MWh fuel consumed for self-generation of cooling

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

116

(7.30.7.8) Comment

it refers to solar energy consumption

Other renewable fuels (e.g. renewable hydrogen)

(7.30.7.1) Heating value

Select from:
☑ HHV

(7.30.7.2) Total fuel MWh consumed by the organization

62

(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

(7.30.7.5) MWh fuel consumed for self-generation of steam

0

(7.30.7.6) MWh fuel consumed for self-generation of cooling

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

62

(7.30.7.8) Comment

it refers to renewable hydrogen consumption

Coal

(7.30.7.1) Heating value

Select from:
☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

30112937

(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

(7.30.7.5) MWh fuel consumed for self-generation of steam

0

(7.30.7.6) MWh fuel consumed for self-generation of cooling

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

30112937

(7.30.7.8) Comment

it refers to coal consumption

Oil

(7.30.7.1) Heating value

Select from:
☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

312335

(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

(7.30.7.5) MWh fuel consumed for self-generation of steam

0

(7.30.7.6) MWh fuel consumed for self-generation of cooling

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

312335

(7.30.7.8) Comment

it refers to diesel oil, gasoline, MFO consumption

Gas

(7.30.7.1) Heating value

Select from:
☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

3444466

(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

(7.30.7.5) MWh fuel consumed for self-generation of steam

0

(7.30.7.6) MWh fuel consumed for self-generation of cooling

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

3444466

(7.30.7.8) Comment

it refers to natural gas consumption

Other non-renewable fuels (e.g. non-renewable hydrogen)

(7.30.7.1) Heating value

Select from:
☑ LHV

(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

(7.30.7.5) MWh fuel consumed for self-generation of steam

0

(7.30.7.6) MWh fuel consumed for self-generation of cooling

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

0

(7.30.7.8) Comment

all fuel consumption have been captured

Total fuel

(7.30.7.1) Heating value

Select from:
☑ Unable to confirm heating value

(7.30.7.2) Total fuel MWh consumed by the organization

80354161

(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

(7.30.7.5) MWh fuel consumed for self-generation of steam

0

(7.30.7.6) MWh fuel consumed for self-generation of cooling

0

(7.30.7.7) MWh fuel consumed for self- cogeneration or self-trigeneration

80354161

(7.30.7.8) Comment

all fuel consumption have been captured
[Fixed row]

(7.30.9) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

Electricity

(7.30.9.1) Total Gross generation (MWh)

11590280

(7.30.9.2) Generation that is consumed by the organization (MWh)

11589330

(7.30.9.3) Gross generation from renewable sources (MWh)

6655139

(7.30.9.4) Generation from renewable sources that is consumed by the organization (MWh)

6655138.78

Heat

(7.30.9.1) Total Gross generation (MWh)

0

(7.30.9.2) Generation that is consumed by the organization (MWh)

0

(7.30.9.3) Gross generation from renewable sources (MWh)

0

(7.30.9.4) Generation from renewable sources that is consumed by the organization (MWh)

0

Steam

(7.30.9.1) Total Gross generation (MWh)

81033946.46

(7.30.9.2) Generation that is consumed by the organization (MWh)

81033946.46

(7.30.9.3) Gross generation from renewable sources (MWh)

46700648.55

(7.30.9.4) Generation from renewable sources that is consumed by the organization (MWh)

46700648.55

Cooling

(7.30.9.1) Total Gross generation (MWh)

0

(7.30.9.2) Generation that is consumed by the organization (MWh)

0

(7.30.9.3) Gross generation from renewable sources (MWh)

0

(7.30.9.4) Generation from renewable sources that is consumed by the organization (MWh)

0
[Fixed row]

(7.30.14) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero or near-zero emission factor in the market-based Scope 2 figure reported in 7.7.

Row 1

(7.30.14.1) Country/area

Select from:
☑ Indonesia

(7.30.14.2) Sourcing method

Select from:
☑ Default delivered electricity from the grid (e.g. standard product offering by an energy supplier), supported by energy attribute certificates

(7.30.14.3) Energy carrier

Select from:
☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Geothermal

(7.30.14.5) Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

87181

(7.30.14.6) Tracking instrument used

Select from:

☑ TIGR

(7.30.14.7) Country/area of origin (generation) of the low-carbon energy or energy attribute

Select from:

☑ Indonesia

(7.30.14.8) Are you able to report the commissioning or re-powering year of the energy generation facility?

Select from:

☑ No

(7.30.14.10) Comment

For 2023 there are 2 mills that have purchased REC: Tjiwi Kimia and Indah Kiat Serang with total purchased REC is 87181 MWh
[Add 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)

676317

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

(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)

676317.00
[Fixed row]

(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

1.02

(7.45.2) Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

12039223

(7.45.3) Metric denominator

Select from:

☑ metric ton of product

(7.45.4) Metric denominator: Unit total

100

(7.45.5) Scope 2 figure used

Select from:

☑ Location-based

(7.45.6) % change from previous year

1

(7.45.7) Direction of change

Select from:

☑ Decreased

(7.45.8) Reasons for change

Select all that apply

☑ Change in renewable energy consumption

☑ Other emissions reduction activities

(7.45.9) Please explain

This reporting year, the total carbon emissions are 12,039,223 tCO2e, with Scope 1 emissions at 11,535,826 tCO2e and Scope 2 emissions at 503,397 tCO2e. The carbon intensity is 1.02 tCO2e/ton. Several initiatives have been implemented during this reporting period: Increased Biomass Consumption: APP achieved 58% of our energy consumption from renewable sources, an increase of 1% compared to 2022. The increased biomass consumption totaled 4,431,012 GJ. Increase the waste utilization as biogas consumption, as a result, APP have increased the renewable energy from biogas with 614 GJ comparing with 2022 Renewable Energy Certificate (REC): We obtained RECs from the National Grid (PLN), equivalent to 212,756 MWh, allowing us to reduce our Scope 2 emissions by 452,070 tCO2e compared to 2022. Solar Panel Installation: We installed solar panels with a capacity of 9.8 MWp in 2023, which enables us to replace fossil fuel energy with non-fossil energy equivalent to 12,488 GJ.

[Add 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

50

(7.52.3) Metric numerator

percentage of renewable energy consumption

(7.52.4) Metric denominator (intensity metric only)

%

(7.52.5) % change from previous year

1

(7.52.6) Direction of change

Select from:
☑ Increased

(7.52.7) Please explain

Under SRV 2030, APP has set a target to use 50% renewable energy. In 2023, APP consumed 168,122,335 GJ of renewable energy out of a total of 291,722,207 GJ, which means that 58% of our total energy use comes from renewable sources

Row 3

(7.52.1) Description

Select from:

☑ Energy usage

(7.52.2) Metric value

25

(7.52.3) Metric numerator

percentage reduction in energy intensity

(7.52.4) Metric denominator (intensity metric only)

GJ/ton

(7.52.5) % change from previous year

3

(7.52.6) Direction of change

Select from:

☑ Increased

(7.52.7) Please explain

Under SRV 2030, APP has set a target to reduce energy intensity. In 2023 APP has energy intensity 24.71 GJ/ton-product with 3.1% energy reduction from 2018 baseline data SRV

Row 4

(7.52.1) Description

Select from:

☑ Waste

(7.52.2) Metric value

0

(7.52.3) Metric numerator

waste to landfill

(7.52.4) Metric denominator (intensity metric only)

ton

(7.52.5) % change from previous year

59

(7.52.6) Direction of change

Select from:

☑ Decreased

(7.52.7) Please explain

Under SRV 2030, APP has set a target of zero waste to landfill. In 2023, 209,533 tons of waste were sent to landfill, representing a 59% decrease compared to 2022. [Add row]

(7.53) Did you have an emissions target that was active in the reporting year?

Select all that apply

☑ Absolute target

☑ Intensity target

(7.53.1) Provide details of your absolute emissions targets and progress made against those targets.

Row 1

(7.53.1.1) Target reference number

Select from:

☑ Abs 1

(7.53.1.2) Is this a science-based target?

Select from:

☑ Yes, we consider this a science-based target, and the target is currently being reviewed by the Science Based Targets initiative

(7.53.1.4) Target ambition

Select from:

☑ Well-below 2°C aligned

(7.53.1.5) Date target was set

12/30/2023

(7.53.1.6) Target coverage

Select from:

☑ Organization-wide

(7.53.1.7) Greenhouse gases covered by target

Select all that apply

☑ Methane (CH4)
☑ Nitrous oxide (N2O)
☑ Carbon dioxide (CO2)
☑ Perfluorocarbons (PFCs)
☑ Hydrofluorocarbons (HFCs)
☑ Sulphur hexafluoride (SF6)
☑ Nitrogen trifluoride (NF3)

(7.53.1.8) Scopes

Select all that apply

☑ Scope 3

(7.53.1.10) Scope 3 categories

Select all that apply

☑ Scope 3, Category 2 – Capital goods
☑ Scope 3, Category 6 – Business travel
☑ Scope 3, Category 7 – Employee commuting
☑ Scope 3, Category 1 – Purchased goods and services
☑ Scope 3, Category 10 – Processing of sold products
☑ Scope 3, Category 5 – Waste generated in operations
☑ Scope 3, Category 12 – End-of-life treatment of sold products
☑ Scope 3, Category 4 – Upstream transportation and distribution
☑ Scope 3, Category 9 – Downstream transportation and distribution
☑ Scope 3, Category 3 – Fuel- and energy- related activities (not included in Scope 1 or 2)

(7.53.1.11) End date of base year

12/30/2023

(7.53.1.14) Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)

2808058

(7.53.1.15) Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)

298145

(7.53.1.16) Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)

2604615

(7.53.1.17) Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)

888006

(7.53.1.18) Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)

18735

(7.53.1.19) Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)

20135

(7.53.1.20) Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)

28496

(7.53.1.22) Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)

975423

(7.53.1.23) Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)

1726729

(7.53.1.25) Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)

157218

(7.53.1.31) Base year total Scope 3 emissions covered by target (metric tons CO2e)

9525560.000

(7.53.1.32) Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

9525560.000

(7.53.1.35) Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)

100

(7.53.1.36) Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)

100

(7.53.1.37) Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

100

(7.53.1.38) Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)

100

(7.53.1.39) Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)

100

(7.53.1.40) Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)

100

(7.53.1.41) Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)

100

(7.53.1.43) Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)

100

(7.53.1.44) Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)

100

(7.53.1.46) Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)

100

(7.53.1.52) Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

100

(7.53.1.53) Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

(7.53.1.54) End date of target

12/30/2033

(7.53.1.55) Targeted reduction from base year (%)

32.5

(7.53.1.56) Total emissions at end date of target covered by target in all selected Scopes (metric tons CO2e)

6429753.000

(7.53.1.59) Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)

2808058

(7.53.1.60) Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

298145

(7.53.1.61) Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)

2604615

(7.53.1.62) Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

888006

(7.53.1.63) Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)

18735

(7.53.1.64) Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)

20135

(7.53.1.65) Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)

28496

(7.53.1.67) Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

975423

(7.53.1.68) Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)

1726729

(7.53.1.70) Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)

157218

(7.53.1.76) Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)

9525560.000

(7.53.1.77) Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

9525560.000

(7.53.1.78) Land-related emissions covered by target

Select from:

☑ No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

(7.53.1.79) % of target achieved relative to base year

0.00

(7.53.1.80) Target status in reporting year

Select from:

☑ New

(7.53.1.82) Explain target coverage and identify any exclusions

We are still in process to validate our target, so there are changed in number both of target and covered emission be expected. For Scope 3 no exclusion

(7.53.1.83) Target objective

For Scope 3: to reduce absolute GHG emissions 32.5% by 2033 from a 2023 base year

(7.53.1.84) Plan for achieving target, and progress made to the end of the reporting year

Supplier and customer engagement, efficiency shipment process, minimise waste generation and increase material recycle and recovery in internal,

(7.53.1.85) Target derived using a sectoral decarbonization approach

Select from:

☑ Yes

Row 2

(7.53.1.1) Target reference number

Select from:

☑ Abs 1

(7.53.1.2) Is this a science-based target?

Select from:

☑ Yes, we consider this a science-based target, and the target is currently being reviewed by the Science Based Targets initiative

(7.53.1.4) Target ambition

Select from:

☑ 1.5°C aligned

(7.53.1.5) Date target was set

12/30/2023

(7.53.1.6) Target coverage

Select from:

☑ Organization-wide

(7.53.1.7) Greenhouse gases covered by target

Select all that apply

☑ Methane (CH4)

☑ Nitrous oxide (N2O)

☑ Carbon dioxide (CO2)

☑ Perfluorocarbons (PFCs)

☑ Hydrofluorocarbons (HFCs)

☑ Sulphur hexafluoride (SF6)

☑ Nitrogen trifluoride (NF3)

(7.53.1.8) Scopes

Select all that apply

☑ Scope 1

(7.53.1.11) End date of base year

12/30/2023

(7.53.1.12) Base year Scope 1 emissions covered by target (metric tons CO2e)

11455587

(7.53.1.31) Base year total Scope 3 emissions covered by target (metric tons CO2e)

0.000

(7.53.1.32) Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

11455587.000

(7.53.1.33) Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

99.3

(7.53.1.53) Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

99.3

(7.53.1.54) End date of target

10/30/2033

(7.53.1.55) Targeted reduction from base year (%)

54.6

(7.53.1.56) Total emissions at end date of target covered by target in all selected Scopes (metric tons CO2e)

5200836.498

(7.53.1.57) Scope 1 emissions in reporting year covered by target (metric tons CO2e)

11455587

(7.53.1.77) Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

11455587.000

(7.53.1.78) Land-related emissions covered by target

Select from:

☑ No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

(7.53.1.79) % of target achieved relative to base year

0.00

(7.53.1.80) Target status in reporting year

Select from:

☑ New

(7.53.1.82) Explain target coverage and identify any exclusions

We are still in process to validate our target, so there are changed in number both of target and covered emission be expected. For Scope 1 exclusion come from process emission (waste generated and wastewater) and fugitive (refrigerant)

(7.53.1.83) Target objective

For Scope 1Scope 2: to reduce absolute GHG emissions 54.6% by 2033 from a 2023 base year

(7.53.1.84) Plan for achieving target, and progress made to the end of the reporting year

Energy efficiency with condensate segregation, installation solar panel, utilisation of biogas, increase biomass consumption in mixed energy

(7.53.1.85) Target derived using a sectoral decarbonization approach

Select from:

☑ Yes

Row 3

(7.53.1.1) Target reference number

Select from:

☑ Abs 1

(7.53.1.2) Is this a science-based target?

Select from:

☑ Yes, we consider this a science-based target, and the target is currently being reviewed by the Science Based Targets initiative

(7.53.1.4) Target ambition

Select from:

☑ 1.5°C aligned

(7.53.1.5) Date target was set

12/30/2023

(7.53.1.6) Target coverage

Select from:

☑ Organization-wide

(7.53.1.7) Greenhouse gases covered by target

Select all that apply

☑ Carbon dioxide (CO2)

☑ Methane (CH4)

☑ Nitrous oxide (N2O)

(7.53.1.8) Scopes

Select all that apply

☑ Scope 2

(7.53.1.9) Scope 2 accounting method

Select from:

☑ Market-based

(7.53.1.11) End date of base year

12/30/2023

(7.53.1.13) Base year Scope 2 emissions covered by target (metric tons CO2e)

503397

(7.53.1.31) Base year total Scope 3 emissions covered by target (metric tons CO2e)

0.000

(7.53.1.32) Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

503397.000

(7.53.1.34) Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

100

(7.53.1.53) Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

(7.53.1.54) End date of target

12/30/2033

(7.53.1.55) Targeted reduction from base year (%)

54.6

(7.53.1.56) Total emissions at end date of target covered by target in all selected Scopes (metric tons CO2e)

228542.238

(7.53.1.58) Scope 2 emissions in reporting year covered by target (metric tons CO2e)

503397

(7.53.1.77) Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

503397.000

(7.53.1.78) Land-related emissions covered by target

Select from:

☑ No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

(7.53.1.79) % of target achieved relative to base year

0.00

(7.53.1.80) Target status in reporting year

Select from:

☑ New

(7.53.1.82) Explain target coverage and identify any exclusions

We are still in process to validate our target, so there are changed in number both of target and covered emission be expected. For Scope 2 no exclusion

(7.53.1.83) Target objective

For Scope 1Scope 2: to reduce absolute GHG emissions 54.6% by 2033 from a 2023 base year

(7.53.1.84) Plan for achieving target, and progress made to the end of the reporting year

Purchased Renewable Electricity Cerificate

(7.53.1.85) Target derived using a sectoral decarbonization approach

Select from:

☑ Yes

[Add row]

(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 are reporting another target that is science-based

(7.53.2.5) Date target was set

12/31/2019

(7.53.2.6) Target coverage

Select from:

☑ Organization-wide

(7.53.2.7) Greenhouse gases covered by target

Select all that apply

☑ Methane (CH4)
☑ Nitrous oxide (N2O)
☑ Carbon dioxide (CO2)
☑ Perfluorocarbons (PFCs)
☑ Hydrofluorocarbons (HFCs)
☑ Nitrogen trifluoride (NF3)
☑ Sulphur hexafluoride (SF6)

(7.53.2.8) Scopes

Select all that apply

☑ Scope 1
☑ Scope 2

(7.53.2.9) Scope 2 accounting method

Select from:

☑ Location-based

(7.53.2.11) Intensity metric

Select from:

☑ Other, please specify **:**tCO2e/ton product pulp & paper

(7.53.2.12) End date of base year

12/30/2018

(7.53.2.13) Intensity figure in base year for Scope 1 (metric tons CO2e per unit of activity)

1.09

(7.53.2.14) Intensity figure in base year for Scope 2 (metric tons CO2e per unit of activity)

0.08

(7.53.2.33) Intensity figure in base year for all selected Scopes (metric tons CO2e per unit of activity)

1.1700000000

(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

(7.53.2.54) % 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 (%)

30

(7.53.2.57) Intensity figure at end date of target for all selected Scopes (metric tons CO2e per unit of activity)

0.8190000000

(7.53.2.58) % change anticipated in absolute Scope 1+2 emissions

10

(7.53.2.60) Intensity figure in reporting year for Scope 1 (metric tons CO2e per unit of activity)

0.98

(7.53.2.61) Intensity figure in reporting year for Scope 2 (metric tons CO2e per unit of activity)

0.04

(7.53.2.80) Intensity figure in reporting year for all selected Scopes (metric tons CO2e per unit of activity)

1.0200000000

(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

42.74

(7.53.2.83) Target status in reporting year

Select from:

☑ Achieved and maintained

(7.53.2.85) Explain target coverage and identify any exclusions

APP has set target 30% reduction in carbon intensity based on the 2018 baseline udner SRV2030

(7.53.2.86) Target objective

reduce carbon intensity

(7.53.2.88) Target derived using a sectoral decarbonization approach

Select from:

☑ Yes

(7.53.2.89) List the emissions reduction initiatives which contributed most to achieving this target

Several initiatives have been implemented during this reporting period: Increased Biomass Consumption: APP achieved 58% of our energy consumption from renewable sources, an increase of 1% compared to 2022. The increased biomass consumption totaled 4,431,012 GJ. Increase the waste utilization as biogas consumption, as a result, APP have increased the renewable energy from biogas with 614 GJ comparing with 2022 Renewable Energy Certificate (REC): We obtained RECs from the National Grid (PLN), equivalent to 212,756 MWh, allowing us to reduce our Scope 2 emissions by 452,070 tCO2e compared to 2022. Solar Panel Installation: We installed solar panels with a capacity of 9.8 MWp in 2023, which enables us to replace fossil fuel energy with non-fossil energy equivalent to 12,488 GJ.
[Add row]

(7.54) Did you have any other climate-related targets that were active in the reporting year?

Select all that apply
☑ No other climate-related targets

(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 (only for rows marked *)
Under investigation	*9*	*`Numeric input*
To be implemented	*5*	*158384*
Implementation commenced	*1*	*174551*

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Implemented	*4*	*64151*
Not to be implemented	*0*	*`Numeric input*

[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

Non-energy industrial process emissions reductions

☑ Process material efficiency

(7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

48595

(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 C0.4)

4409297

(7.55.2.6) Investment required (unit currency – as specified in C0.4)

0

(7.55.2.7) Payback period

Select from:
☑ 1-3 years

(7.55.2.8) Estimated lifetime of the initiative

Select from:
☑ 16-20 years

(7.55.2.9) Comment

The initiative refers to the installation of condensate segregation systems

Row 2

(7.55.2.1) Initiative category & Initiative type

Low-carbon energy consumption
☑ Solar PV

(7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

3485

(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 C0.4)

55444

(7.55.2.6) Investment required (unit currency – as specified in C0.4)

0

(7.55.2.7) Payback period

Select from:

☑ No payback

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☑ 16-20 years

(7.55.2.9) Comment

This initiative refers to 3.1 MWp rooftop installment

Row 3

(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)

10564

(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 C0.4)

168070

(7.55.2.6) Investment required (unit currency – as specified in C0.4)

0

(7.55.2.7) Payback period

Select from:

☑ No payback

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☑ 16-20 years

(7.55.2.9) Comment

This initiative refers to 9.8 MWp rooftop installment

Row 4

(7.55.2.1) Initiative category & Initiative type

Low-carbon energy consumption

☑ Solar PV

(7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

1507

(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 C0.4)

14084

(7.55.2.6) Investment required (unit currency – as specified in C0.4)

0

(7.55.2.7) Payback period

Select from:

☑ No payback

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☑ 16-20 years

(7.55.2.9) Comment

This initiative refers to 0.87 MWp rooftop installment
[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:

☑ Compliance with regulatory requirements/standards

(7.55.3.2) Comment

Pulp and paper manufacturing is an energy intensive process, where the generation of heat, steam and electricity is required. Reducing energy use equal to reduce fuel consumption which also means reducing our energy cost.

Row 2

(7.55.3.1) Method

Select from:

☑ Financial optimization calculations

(7.55.3.2) Comment

Pulp and paper manufacturing is an energy intensive process, where the generation of heat, steam and electricity is required. Reducing energy use equal to reduce fuel consumption which also means reducing our energy cost.

[Add row]

(7.67) Do you implement agriculture or forest management practices on your own land with a climate change mitigation and/or adaptation benefit?

Select from:

☑ Yes

(7.67.1) Specify the agricultural or forest management practice(s) implemented on your own land with climate change mitigation and/or adaptation benefits and provide a corresponding emissions figure, if known.

Row 1

(7.67.1.1) Management practice reference number

Select from:

☑ MP1

(7.67.1.2) Management practice

Select from:

☑ Agroforestry

(7.67.1.3) Description of management practice

IFFS (Integrated Forestry and Farming System) Program aim to provide alternative sustainable livelihood for forest community to prevent them opening land using illegal practices such as fire and illegal logging. To prevent deforestation due to community illegal practices, APP initiate an Integrated Forest and Farming System (IFFS), a program aim to support community in implementing sustainable livelihood using existing land to prevent unsustainable practices such as opening land using fire, poaching or illegal logging.

(7.67.1.4) Primary climate change-related benefit

Select from:

☑ Emission reductions (mitigation)

(7.67.1.5) Estimated CO2e savings (metric tons CO2e)

20000

(7.67.1.6) Please explain

This program reduce emission from forest due to reduction of forest fires.

Row 2

(7.67.1.1) Management practice reference number

Select from:

☑ MP4

(7.67.1.2) Management practice

Select from:

☑ Land use change

(7.67.1.3) Description of management practice

SERA (Supplier Evaluation and Risk Assessment)

(7.67.1.4) Primary climate change-related benefit

Select from:

☑ Emission reductions (mitigation)

(7.67.1.5) Estimated CO2e savings (metric tons CO2e)

500000.0

(7.67.1.6) Please explain

CO2 savings in biomass plantations

Row 4

(7.67.1.1) Management practice reference number

Select from:

☑ MP3

(7.67.1.2) Management practice

Select from:

☑ Fire control

(7.67.1.3) Description of management practice

Integrated Fire Management Strategy (prevention, preparation, early detection and rapid response)

(7.67.1.4) Primary climate change-related benefit

Select from:

☑ Emission reductions (mitigation)

(7.67.1.5) Estimated CO2e savings (metric tons CO2e)

3682822

(7.67.1.6) Please explain

Physical risks arise from forest fires which still happen in our concession area in Sumatra. We do not practice, and highly condemn slash and burn activity for its detrimental impact to the environment. To combat forest fires, we are implementing Integrated Fire Management Strategy (prevention, preparation, early detection and rapid response).

Row 5

(7.67.1.1) Management practice reference number

Select from:

☑ MP2

(7.67.1.2) Management practice

Select from:

☑ Pest, disease and weed management practices

(7.67.1.3) Description of management practice

We develop precautionary approach to prevent pest attack or illness in plantation forest

(7.67.1.4) Primary climate change-related benefit

Select from:

☑ Increasing resilience to climate change (adaptation)

(7.67.1.5) Estimated CO2e savings (metric tons CO2e)

41502.0

(7.67.1.6) Please explain

CO2 saving in biomass plantations
[Add row]

(7.68) Do you encourage your suppliers to undertake any agricultural or forest management practices with climate change mitigation and/or adaptation benefits?

Select from:

☑ Yes

(7.68.1) Specify which agricultural or forest management practices with climate change mitigation and/or adaptation benefits you encourage your suppliers to undertake and describe your role in the implementation of each practice.

Row 1

(7.68.1.1) Management practice reference number

Select from:

☑ MP1

(7.68.1.2) Management practice

Select from:

☑ Agroforestry

(7.68.1.3) Description of management practice

IFFS (Integrated Forestry and Farming System) Program aim to provide alternative sustainable livelihood for forest community to prevent them opening land using illegal practices such as fire and illegal logging. To prevent deforestation due to community illegal practices, APP initiate an Integrated Forest and Farming System (IFFS), a program aim to support community in implementing sustainable livelihood using existing land to prevent unsustainable practices such as opening land using fire, poaching or illegal logging.

(7.68.1.4) Your role in the implementation

Select all that apply

☑ Financial

☑ Knowledge sharing

(7.68.1.5) Explanation of how you encourage implementation

IFFS (Integrated Forestry and Farming System) Program aim to provide alternative sustainable livelihood for forest community to prevent them opening land using illegal practices such as fire and illegal logging. To prevent deforestation due to community illegal practices, APP initiate an Integrated Forest and Farming System (IFFS), a program aim to support community in implementing sustainable livelihood using existing land to prevent unsustainable practices such as opening land using fire, poaching or illegal logging. Our target is 500 villages in and around APP pulpwood suppliers concession area that has identified having high risk of forest fire. As per year 2022, IFFS has been implemented in 421 villages and provide benefit to more than 80,000 people.

(7.68.1.6) Climate change related benefit

Select all that apply

☑ Emissions reductions (mitigation)
☑ Increasing resilience to climate change (adaptation)

(7.68.1.7) Comment

Emission reduction by reduction forest fires, and community around forest area maximize land potential value

Row 2

(7.68.1.1) Management practice reference number

Select from:
☑ MP3

(7.68.1.2) Management practice

Select from:
☑ Fire control

(7.68.1.3) Description of management practice

Integrated Fire Management Strategy (prevention, preparation, early detection and rapid response)

(7.68.1.4) Your role in the implementation

Select all that apply
☑ Financial
☑ Knowledge sharing
☑ Operational
☑ Procurement

(7.68.1.5) Explanation of how you encourage implementation

Physical risks arise from forest fires which still happen in our concession area in Sumatra. We do not practice, and highly condemn slash and burn activity for its detrimental impact to the environment. In 2015 forest fires impacted significantly to our operation. To combat them, we are implementing Integrated Fire Management Strategy (prevention, preparation, early detection and rapid response).

(7.68.1.6) Climate change related benefit

Select all that apply

☑ Emissions reductions (mitigation)

☑ Increasing resilience to climate change (adaptation)

☑ Increase carbon sink (mitigation)

(7.68.1.7) Comment

emission reduction by preventing forest fire

Row 3

(7.68.1.1) Management practice reference number

Select from:

☑ MP4

(7.68.1.2) Management practice

Select from:

☑ Land use change

(7.68.1.3) Description of management practice

SERA (Supplier Evaluation and Risk Assessment)

(7.68.1.4) Your role in the implementation

Select all that apply

☑ Knowledge sharing

☑ Operational

☑ Procurement

(7.68.1.5) Explanation of how you encourage implementation

As pulp and paper company which committed to zero deforestation, we use 100% pulpwood plantation fiber as our raw material to produce our products. To ensure that we only source from sustainable plantation, we implement FPPP (Fiber Procurement & Processing Policy). We also implement SERA (Supplier Evaluation and Risk Assessment) to ensure our suppliers comply to our no deforestation policy.

(7.68.1.6) Climate change related benefit

Select all that apply

☑ Emissions reductions (mitigation)

☑ Increase carbon sink (mitigation)

(7.68.1.7) Comment

emission reduction by managing sustainable forest management

Row 4

(7.68.1.1) Management practice reference number

Select from:

☑ MP2

(7.68.1.2) Management practice

Select from:

☑ Pest, disease and weed management practices

(7.68.1.3) Description of management practice

We develop precautionary approach to prevent pest attack or illness in plantation forest

(7.68.1.4) Your role in the implementation

Select all that apply

☑ Financial

☑ Knowledge sharing

☑ Operational

☑ Procurement

(7.68.1.5) Explanation of how you encourage implementation

The change of temperature caused by climate change impacts APP pulpwood supply in terms of diseases and/or pest attack in the plantation forest. It potentially disrupts our production volume. Therefore, we develop precautionary approach to prevent pest attack or illness in plantation forest as well as mitigation plan if the attack does happen.

(7.68.1.6) Climate change related benefit

Select all that apply

☑ Increasing resilience to climate change (adaptation)

(7.68.1.7) Comment

emission reduction by managing sustainable forest management
[Add row]

(7.68.2) Do you collect information from your suppliers about the outcomes of any implemented agricultural/forest management practices you have encouraged?

Select from:

☑ Yes

(7.69) Do you know if any of the management practices implemented on your own land disclosed in 7.67.1 have other impacts besides climate change mitigation/adaptation?

Select from:

☑ Yes

(7.69.1) Provide details on those management practices that have other impacts besides climate change mitigation/adaptation and on your management response.

Row 1

(7.69.1.1) Management practice reference number

Select from:

☑ MP1

(7.69.1.2) Overall effect

Select from:

☑ Positive

(7.69.1.3) Which of the following has been impacted?

Select all that apply

☑ Other, please specify

(7.69.1.4) Description of impact

Our Integrated Forestry and Farming System (IFFS) forms a critical part of our fire strategy by reducing threats to the forest by supporting local communities to develop alternative livelihoods, thus, reducing dependency on forests and one of the driving forces behind fires – land clearance

(7.69.1.5) Have you implemented any response to these impacts?

Select from:

☑ Yes

(7.69.1.6) Description of the response

This program started in 2016 and currently implemented for 421 villages, Our target is 500 villages and around APP pulpwood suppliers concession area that has identified having high risk of forest fire.

Row 3

(7.69.1.1) Management practice reference number

Select from:

☑ MP3

(7.69.1.2) Overall effect

Select from:

☑ Positive

(7.69.1.3) Which of the following has been impacted?

Select all that apply

☑ Yield

(7.69.1.4) Description of impact

Our current fibre supply is sufficient to support our planned growth and will further benefit from the efficiency and yield improvements we are making across our supply chain

(7.69.1.5) Have you implemented any response to these impacts?

Select from:

☑ Yes

(7.69.1.6) Description of the response

This program started 2016 and has improve our yield across supply chain. Based on the independent G&Y study indicates that Asia Pulp & Paper Group (APP) has sufficient plantation resource to meet the pulp requirements of its existing mills

Row 4

(7.69.1.1) Management practice reference number

Select from:

☑ MP2

(7.69.1.2) Overall effect

Select from:

☑ Positive

(7.69.1.3) Which of the following has been impacted?

Select all that apply

☑ Yield

(7.69.1.4) Description of impact

This program sets out ways in which we can increase tree growth yield through the development of more robust seedlings, develop more area specific siviculture, improve disease & pest control, and reduce wood loss from harvesting and wood handling to mill sites

(7.69.1.5) Have you implemented any response to these impacts?

Select from:

☑ Yes

(7.69.1.6) Description of the response

Our current fibre supply is sufficient to support our planned growth and will further benefit from the efficiency and yield improvements we are making across our supply chain

Row 5

(7.69.1.1) Management practice reference number

Select from:

☑ MP4

(7.69.1.2) Overall effect

Select from:

☑ Positive

(7.69.1.3) Which of the following has been impacted?

Select all that apply

☑ Biodiversity

(7.69.1.4) Description of impact

APP committed to zero deforestation, we use 100% pulpwood plantation fiber as our raw material to produce our products. This commitment help to protect biodiversity on natural forest.

(7.69.1.5) Have you implemented any response to these impacts?

Select from:

☑ Yes

(7.69.1.6) Description of the response

We have implented Forest Consevation Policy (FCP) since 2012 and commited to zero deforestation. By implementing this, we also support biodiversity on forest. [Add row]

(7.70) Do you know if any of the management practices mentioned in 7.68.1 that were implemented by your suppliers have other impacts besides climate change mitigation/adaptation?

Select from:

☑ Yes

(7.70.1) Provide details of those management practices implemented by your suppliers that have other impacts besides climate change mitigation/adaptation.

Row 1

(7.70.1.1) Management practice reference number

Select from:

☑ MP1

(7.70.1.2) Overall effect

Select from:

☑ Positive

(7.70.1.3) Which of the following has been impacted?

Select all that apply

☑ Other, please specify

(7.70.1.4) Description of impacts

Our Integrated Forestry and Farming System (IFFS) forms a critical part of our fire strategy by reducing threats to the forest by supporting local communities to develop alternative livelihoods, thus, reducing dependency on forests and one of the driving forces behind fires – land clearance

(7.70.1.5) Have any response to these impacts been implemented?

Select from:

☑ Yes

(7.70.1.6) Description of the response(s)

This program started in 2016 and currently implemented for 297 villages, Our target is 500 villages and around APP pulpwood suppliers concession area that has identified having high risk of forest fire. Implementation of the program target to be completed in the year 2020.

Row 2

(7.70.1.1) Management practice reference number

Select from:

☑ MP3

(7.70.1.2) Overall effect

Select from:

☑ Positive

(7.70.1.3) Which of the following has been impacted?

Select all that apply

☑ Yield

(7.70.1.4) Description of impacts

Integrated Fire Management Strategy reduce fire at our concession as well as reduce wood losses. This program then can improve our supply chain yield and maintain raw material supply

(7.70.1.5) Have any response to these impacts been implemented?

Select from:

☑ Yes

(7.70.1.6) Description of the response(s)

This program started 2016 and has improve our yield across supply chain. Based on the independent G&Y study indicates that Asia Pulp & Paper Group (APP) has sufficient plantation resource to meet the pulp requirements of its existing mills as well as its future mill in OKI, South Sumatra

Row 4

(7.70.1.1) Management practice reference number

Select from:

☑ MP2

(7.70.1.2) Overall effect

Select from:

☑ Positive

(7.70.1.3) Which of the following has been impacted?

Select all that apply

☑ Yield

(7.70.1.4) Description of impacts

This program sets out ways in which we can increase tree growth yield through the development of more robust seedlings, develop more area specific siviculture, improve disease & pest control, and reduce wood loss from harvesting and wood handling to mill sites

(7.70.1.5) Have any response to these impacts been implemented?

Select from:

☑ Yes

(7.70.1.6) Description of the response(s)

Our current fibre supply is sufficient to support our planned growth and will further benefit from the efficiency and yield improvements we are making across our supply chain

Row 5

(7.70.1.1) Management practice reference number

Select from:

☑ MP4

(7.70.1.2) Overall effect

Select from:

☑ Positive

(7.70.1.3) Which of the following has been impacted?

Select all that apply

☑ Biodiversity

(7.70.1.4) Description of impacts

APP committed to zero deforestation, we use 100% pulpwood plantation fiber as our raw material to produce our products. This commitment help to protect biodiversity on natural forest.

(7.70.1.5) Have any response to these impacts been implemented?

Select from:

☑ Yes

(7.70.1.6) Description of the response(s)

We have implented Forest Consevation Policy (FCP) since 2012 and commited to zero deforestation. By implementing this, we also support biodiversity conservation on forest.
[Add row]

(7.73) Are you providing product level data for your organization’s goods or services?

Select from:

☑ No, I am not providing data

(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:

☑ Other, please specify **:**black liquor

(7.74.1.3) Type of product(s) or service(s)

Aluminum

☑ Other, please specify **:**Copy Paper

(7.74.1.4) Description of product(s) or service(s)

APP has successful carbon offsetting the copy paper product to be marketed in various country with equivalents 6,264 tCO2e / ton product copy paper

(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:

☑ Methodology for Environmental Life-Cycle Assessment of Information and Communication Technology Goods, Networks and Services (ITU-TL.1410)

(7.74.1.7) Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Select from:

☑ Cradle-to-gate + end-of-life stage

(7.74.1.8) Functional unit used

1 ton copy paper A4/A3

(7.74.1.9) Reference product/service or baseline scenario used

The product is copy paper with baseline 1 January - 31 December 2023

(7.74.1.10) Life cycle stage(s) covered for the reference product/service or baseline scenario

Select from:

☑ Cradle-to-gate + end-of-life stage

(7.74.1.11) Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

6264

(7.74.1.12) Explain your calculation of avoided emissions, including any assumptions

The LCA boundary follows a “cradle-to-customer plus waste” approach in line with the Greenhouse Gas Protocol ProductLife Cycle Accounting and Reporting Standard (GHG Protocol)

(7.74.1.13) Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

0.3

Row 2

(7.74.1.1) Level of aggregation

Select from:

☑ Group of products or services

(7.74.1.2) Taxonomy used to classify product(s) or service(s) as low-carbon

Select from:

☑ Other, please specify **:**Carbon Neutral Scheme

(7.74.1.3) Type of product(s) or service(s)

Power

☑ Other, please specify **:**Tissue / Toilet Paper

(7.74.1.4) Description of product(s) or service(s)

We have successful carbon offsetting the tissue / toilet paper to be marketed in Australian & New Zealand market with equivalents 1,913,660 kgCO2e / ton product tissue / toilet paper

(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:

☑ Methodology for Environmental Life-Cycle Assessment of Information and Communication Technology Goods, Networks and Services (ITU-TL.1410)

(7.74.1.7) Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Select from:

☑ Cradle-to-gate + end-of-life stage

(7.74.1.8) Functional unit used

1 ton of tissue / toilet paper

(7.74.1.9) Reference product/service or baseline scenario used

The product is tissue / toilet paper with baseline 1 January - 31 December 2021

(7.74.1.10) Life cycle stage(s) covered for the reference product/service or baseline scenario

Select from:

☑ Cradle-to-gate + end-of-life stage

(7.74.1.11) Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

1913

(7.74.1.12) Explain your calculation of avoided emissions, including any assumptions

The LCA boundary follows a “cradle-to-customer plus waste” approach in line with the Greenhouse Gas Protocol ProductLife Cycle Accounting and Reporting Standard (GHG Protocol). Emissions were taken into account according to the following lifecycle stages: Extraction and pre-processing of raw materials and packaging, production, supply of the product up to the customer’s factory gates as well as any relevant disposal emissions for the product and its packaging.In this approach, the calculation focuses on the processes that can be monitored by the producer. The emissions from the service life or 'use' stage cannot generally be controlled and are subject to assumptions and estimates in the application. As such, they were not taken into account throughout the calculation.Where possible, primary data was used. Where this was not possible, secondary data was gathered from recognised sources. The underlying emission factors are derived from international databases, such as ecoinvent or GEMIS. All greenhouse gases were taken into account for the calculation and are represented in carbon dioxide equivalents (CO_2e) for improved legibility andcomparability.Emissions that could not be directly attributed to the product but were required for production, such as employee commuting or business travel, were also included in the calculation as “general emissions”.

(7.74.1.13) Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

0.3
[Add row]

(7.79) Has your organization canceled any project-based carbon credits within the reporting year?

Select from:
☑ No

C8. Environmental performance - Forests

(8.1) Are there any exclusions from your disclosure of forests-related data?

	Exclusion from disclosure
Timber products	*Select from:* ☑ No

[Fixed row]

(8.2) Provide a breakdown of your disclosure volume per commodity.

	Disclosure volume (metric tons)	Volume type	Sourced volume (metric tons)
Timber products	*24293977*	*Select all that apply* ☑ Sourced	*24293977*

[Fixed row]

(8.5) Provide details on the origins of your sourced volumes.

Timber products

(8.5.1) Country/area of origin

Select from:

☑ Indonesia

(8.5.2) First level administrative division

Select from:

☑ States/equivalent jurisdictions

(8.5.3) Specify the states or equivalent jurisdictions

Republic of Indonesia

(8.5.4) Volume sourced from country/area of origin (metric tons)

24293977

(8.5.5) Source

Select all that apply

☑ Multiple contracted producers

☑ Trader/broker/commodity market

(8.5.6) List of supplier production and primary processing sites: names and locations (optional)

Link to APP Indonesia Pulpwood Supplliers.pdf

(8.5.7) Please explain

APP Indonesia pulpwood suppliers consist of owned concessions, long term pulpwood suppliers, community forest and open purchase located in Sumatra, and Kalimantan Island in Indonesia. We provide the list of suppliers in the attachment.
[Add row]

(8.7) Did your organization have a no-deforestation or no-conversion target, or any other targets for sustainable production/ sourcing of your disclosed commodities, active in the reporting year?

Timber products

(8.7.1) Active no-deforestation or no-conversion target

Select from:

☑ Yes, we have a no-deforestation target

(8.7.2) No-deforestation or no-conversion target coverage

Select from:

☑ Organization-wide (including suppliers)

(8.7.5) Other active targets related to this commodity, including any which contribute to your no-deforestation or no-conversion target

Select from:

☑ Yes, we have other targets related to this commodity

[Fixed row]

(8.7.1) Provide details on your no-deforestation or no-conversion target that was active during the reporting year.

Timber products

(8.7.1.1) No-deforestation or no-conversion target

Select from:

☑ No-deforestation

(8.7.1.2) Your organization’s definition of “no-deforestation” or “no-conversion”

APP and its suppliers will only develop areas that are not forested, as identified through independent HCV and HCS assessments. The commitment cut-off date is 1st February 2013.

(8.7.1.3) Cutoff date

Select from:

☑ 2013

(8.7.1.4) Geographic scope of cutoff date

Select from:

☑ Applied globally

(8.7.1.5) Rationale for selecting cutoff date

Select from:

☑ In line with organizational commitments, because no sector- or region-wide cutoff date is available

(8.7.1.6) Target date for achieving no-deforestation or no-conversion

Select from:

☑ <2017

[Add row]

(8.7.2) Provide details of other targets related to your commodities, including any which contribute to your no-deforestation or no-conversion target, and progress made against them.

Timber products

(8.7.2.1) Target reference number

Select from:

☑ Target 1

(8.7.2.2) Target contributes to no-deforestation or no-conversion target reported in 8.7

Select from:

☑ Yes, this target contributes to our no-deforestation target

(8.7.2.3) Target coverage

Select from:

☑ Organization-wide (including suppliers)

(8.7.2.4) Commodity volume covered by target (metric tons)

Select from:

☑ Total commodity volume

(8.7.2.5) Category of target & Quantitative metric

Third-party certification

☑ % of volume third-party certified

(8.7.2.7) Third-party certification scheme

Forest management unit/Producer certification

☑ PEFC Sustainable Forest Management certification

(8.7.2.8) Date target was set

01/31/2013

(8.7.2.9) End date of base year

12/30/2013

(8.7.2.10) Base year figure

0

(8.7.2.11) End date of target

12/30/2099

(8.7.2.12) Target year figure

24293977

(8.7.2.13) Reporting year figure

24293977

(8.7.2.14) Target status in reporting year

Select from:

☑ Achieved

(8.7.2.15) % of target achieved relative to base year

100.00

(8.7.2.16) Global environmental treaties/ initiatives/ frameworks aligned with or supported by this target

Select all that apply

☑ Sustainable Development Goals

☑ Other, please specify **:**Company's own commitment

(8.7.2.17) Explain target coverage and identify any exclusions

All our pulpwood logs (100%) and plantation fiber (100%) only come from sustainable forests.

(8.7.2.19) List the actions which contributed most to achieving or maintaining this target

Our SERA (Supplier Evaluation Risk Assessment) system ensures supplier compliance with sustainability principles, enhances transparency, and drives continuous improvement. SERA is tool and an extension to APP's Fiber Procurement and Processing Policy (FPPP) serving as a comprehensive guideline to APP's commitment to eliminating deforestation across its supply chain and upholding sustainable forest management. SERA 12 indicators: 1. No conversion of natural forests after 2013 2. Operating in certain regions/countries 3. Planting specific tree species 4. Obtaining third-party verification 5. Having a traceability system 6. Complying with applicable regulations on licensing, forest management, and timber trade 7. Protecting High Conservation Value (HCV) forests 8. Protecting IUCN and CITES Red

List and near threatened species 9. Respecting indigenous people and human rights 10. Complying with ILO conventions 11. Implementing occupational health and safety principles 12. No introduction of genetically modified organisms (GMOs)

(8.7.2.20) Further details of target

Maintain the implementation of our robust SERA tools and always follow up on the latest sustainable management practices. And we are in the process of reassociation with FSC.
[Add row]

(8.8) Indicate if your organization has a traceability system to determine the origins of your sourced volumes and provide details of the methods and tools used.

Timber products

(8.8.1) Traceability system

Select from:

☑ Yes

(8.8.2) Methods/tools used in traceability system

Select all that apply

☑ Chain-of-custody certification

☑ Internal traceability system

(8.8.3) Description of methods/tools used in traceability system

APP has implemented E-Product Tracing at our mills, enabling easy tracing of product origins. This program is continuously being refined to meet the demands of APP customers. We develop an application that customers can input their delivery note number to traceback its product origins up to the pulpwood supplier location.
[Fixed row]

(8.8.1) Provide details of the point to which your organization can trace its sourced volumes.

Timber products

(8.8.1.1) % of sourced volume traceable to production unit

100

(8.8.1.2) % of sourced volume traceable to sourcing area and not to production unit

100

(8.8.1.3) % sourced volume traceable to country/area of origin and not to sourcing area or production unit

100

(8.8.1.4) % of sourced volume traceable to other point (i.e., processing facility/first importer) not in the country/area of origin

100

(8.8.1.5) % of sourced volume from unknown origin

100

(8.8.1.6) % of sourced volume reported

500.00
[Fixed row]

(8.9) Provide details of your organization's assessment of the deforestation-free (DF) or deforestation- and conversion-free (DCF) status of its disclosed commodities.

Timber products

(8.9.1) DF/DCF status assessed for this commodity

Select from:
☑ Yes, deforestation- and conversion-free (DCF) status assessed

(8.9.2) % of disclosure volume determined as DF/DCF in the reporting year

100

(8.9.3) % of disclosure volume determined as DF/DCF through a third-party certification scheme providing full DF/DCF assurance

100

(8.9.4) % of disclosure volume determined as DF/DCF through monitoring of production unit

100

(8.9.5) % of disclosure volume determined as DF/DCF through monitoring of sourcing area

100

(8.9.6) Is a proportion of your disclosure volume certified through a scheme not providing full DF/DCF assurance?

Select from:

☑ No

[Fixed row]

(8.9.1) Provide details of third-party certification schemes used to determine the deforestation-free (DF) or deforestation- and conversion-free (DCF) status of the disclosure volume, since specified cutoff date.

Timber products

(8.9.1.1) Third-party certification scheme providing full DF/DCF assurance

Forest management unit/Producer certification

☑ Other forest management/producer certification, please specify **:**Programme for the Endorsement of Forest Certification (IFCC-PEFC)

(8.9.1.2) % of disclosure volume determined as DF/DCF through certification scheme providing full DF/DCF assurance

100

(8.9.1.3) Comment

The foundation of our supply chain is wood legality and, we go one step further to only procure sustainable sources of wood fibre. Therefore, we only accept: 1 Wood that is from sustainable forest plantation management as defined in our Forest Conservation Policy. 2 Wood that is properly checked and verified as to its legal origin and/or certified chain of custody. 3 Wood that does not violate traditional and civil rights. 4 Wood originated from area in which High Conservation Value (HCV) are protected by forest management activities. List of pulpwood suppliers can be found in the following link: https://sustainability-dashboard.com/in/supplier-management/pulpwood-suppliers 5 Wood that are not restricted and listed under government regulation or The International Union for Conservation of Nature (IUCN) Red List Critically Endangered species or The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Appendix I. 6 Wood from forest management units free from genetically modified organism. 7 Wood harvested in compliance with the ILO Core Conventions. 8 Recycled fibre in compliance with government regulations.

(8.9.1.4) Certification documentation

02 AA_IFCC sampai 3 Juni 2025.pdf
[Add row]

(8.9.3) Provide details of production unit monitoring used to determine deforestation-free (DF) or deforestation- and conversion-free (DCF) status of volumes since specified cutoff date.

Timber products

(8.9.3.1) % of disclosure volume determined as DF/DCF through monitoring of production unit

100.00

(8.9.3.2) Production unit monitoring approach

Select all that apply

☑ Geospatial monitoring or remote sensing tool

☑ Ground-based monitoring system

☑ Other, please specify :chain of custody verifiation

(8.9.3.3) Description of production unit monitoring approach

APP is committed to protecting natural forests and improving the livelihoods of communities. To achieve this goal, APP has developed a sophisticated Forest Alert System to monitor changes in forest cover across its suppliers' concession areas. In this digital age, technology plays a crucial role in various aspects of life, including nature conservation efforts. One example is the Forest Alert System, which utilizes RADARSAT-2 satellite technology to monitor and protect Indonesia's forests. RADARSAT-2 is a satellite launched by the Canadian Space Agency in 2007. It is equipped with Synthetic Aperture Radar (SAR) technology that can penetrate clouds and smoke, enabling forest monitoring in all weather conditions. Its remarkable capabilities even allow RADARSAT-2 to detect a single felled tree in the forest. Forest Alert System utilizes RADARSAT-2 satellite data to detect real-time changes in forest cover. This enables authorities to take immediate action in the event of illegal deforestation. In 2023, the Forest Alert System yielded positive results, detecting a decline in forest cover change from 0.29% to 0.13%. This decrease indicates an improvement in forest conservation efforts. APP collaborates with authorities to prevent illegal logging and protect forests. In addition, APP also works with various parties to improve the standard of living of the community. These efforts are expected to help the community find sustainable sources of income and eliminate the need for illegal logging.

(8.9.3.4) DF/DCF status verified

Select from:

☑ Yes

(8.9.3.5) Type of verification

Select all that apply

☑ Third party

(8.9.3.6) % of your disclosure volume that is both determined as DF/DCF through monitoring of production unit and is verified as DF/DCF

100

(8.9.3.7) Explain the process of verifying DF/DCF status

Internal process: we use our robust SERA (Supplier Evaluation Risk Assessment) to review pulpwood suppliers annually. Third party verification: during audit due diligence certification process.

(8.9.3.8) Attachment of verification (optional)

08_BV IFCC FM Public Summary_SV 1_PT AA_2023.pdf
[Fixed row]

(8.9.4) Provide details of the sourcing area monitoring used to determine deforestation-free (DF) or deforestation- and conversion-free (DCF) status of volumes since specified cutoff date.

Timber products

(8.9.4.1) % of disclosure volume determined as DF/DCF through monitoring of deforestation and conversion within the sourcing area

100.00

(8.9.4.2) Monitoring approach used for determining that sourcing areas have no or negligible risk of deforestation or conversion

Select all that apply

☑ Landscape or jurisdictional approaches

☑ Remote sensing or other geospatial data

☑ Third-party assessment tool

(8.9.4.3) Description of approach, including frequency of assessment

Our system for assessing the deforestation and/or conversion risk is Supplier Evaluation and Risk Assessment (SERA). SERA acts as a screening to evaluate the level of risk within a supplier's operations, wherever sourcing areas it is in Indonesia. SERA consist of 12 indicators that determine level of risk based on Sustainable Forest Management (SFM) methodology. We conducted SERA annually.

(8.9.4.4) Countries/areas of origin

Select all that apply

☑ Indonesia

(8.9.4.5) Sourcing areas

Pulpwood suppliers located in Sumatra and Kalimantan Island.

(8.9.4.6) DF/DCF status is verified

Select from:

☑ Yes

(8.9.4.7) Type of verification

Select all that apply

☑ First party

☑ Third party

(8.9.4.8) % of your disclosure volume that is both determined as DF/DCF through sourcing area monitoring and is verified as DF/DCF

100

(8.9.4.9) Explain the process of verifying DF/DCF status

Internal process: we use our robust SERA (Supplier Evaluation Risk Assessment) to review pulpwood suppliers annually. Third party verification: during audit due diligence certification process.

(8.9.4.10) Attachment of verification (optional)

220527 SERA Result Kubu Mulya Forestry.pdf

(8.9.4.11) Use of risk classification

To assess supplier sustainability performance, we conduct Supplier Evaluation and Risk Assessments (SERA). We categorize suppliers into two risk categories: Low Risk and High Risk based on their 12 indicators of performance.

(8.9.4.12) Attachment indicating risk classification for each sourcing area (optional)

SERA Result Template Report.pdf
[Fixed row]

(8.10) Indicate whether you have monitored or estimated the deforestation and conversion of other natural ecosystems footprint for your disclosed commodities.

	Monitoring or estimating your deforestation and conversion footprint
Timber products	*Select from:* ☑ Yes

[Fixed row]

(8.10.1) Provide details on the monitoring or estimating of your deforestation and conversion footprint.

Timber products

(8.10.1.1) Monitoring and estimating your deforestation and conversion footprint

Select from:

☑ We monitor the deforestation and conversion footprint in our value chain

(8.10.1.2) % of disclosure volume monitored or estimated

100

(8.10.1.3) Reporting of deforestation and conversion footprint

Select all that apply

☑ During the reporting period

(8.10.1.5) Known or estimated deforestation and conversion footprint in the reporting period (hectares)

650

(8.10.1.9) Describe the methods and data sources used to monitor or estimate your deforestation and conversion footprint

In this digital age, technology plays a crucial role in various aspects of life, including nature conservation efforts. One example is the Forest Alert System, which utilizes RADARSAT-2 satellite technology to monitor and protect Indonesia's forests. RADARSAT-2 is a satellite launched by the Canadian Space Agency in 2007. It is equipped with Synthetic Aperture Radar (SAR) technology that can penetrate clouds and smoke, enabling forest monitoring in all weather conditions. Its remarkable capabilities even allow RADARSAT-2 to detect a single felled tree in the forest. Forest Alert System utilizes RADARSAT-2 satellite data to detect real-time changes in forest cover. This enables authorities to take immediate action in the event of illegal deforestation.
[Add row]

(8.12) Indicate if certification details are available for the commodity volumes sold to requesting CDP Supply Chain members.

	Third-party certification scheme adopted	Certification details are available for the volumes sold to any requesting CDP Supply Chain members
Timber products	*Select from:* ☑ Yes	*Select from:* ☑ Yes

[Fixed row]

(8.12.1) Provide details of the certified volumes sold to each requesting CDP Supply Chain member.

Row 1

(8.12.1.1) Requesting member

Select from:

(8.12.1.2) Commodity

Select from:

☑ Timber products

(8.12.1.3) Form of commodity

Select all that apply

☑ Primary packaging

☑ Secondary packaging

(8.12.1.4) Total volume of commodity sold to requesting member

37497

(8.12.1.5) Metric

Select from:

☑ Metric tons

(8.12.1.6) Third-party certification scheme

Forest management unit/Producer certification

☑ PEFC Sustainable Forest Management certification

(8.12.1.7) % of the total volume of commodity sold to requesting member that is certified

100

(8.12.1.8) Comment (optional)

100% of APP's pulpwood suppliers in Indonesia are certified under both mandatory and voluntary sustainable forest management certification.
[Add row]

(8.13) Does your organization calculate the GHG emission reductions and/or removals from land use management and land use change that have occurred in your direct operations and/or upstream value chain?

	GHG emissions reductions and removals from land use management and land use change calculated
Timber products	*Select from:* ☑ Yes, but not willing to share details with requesting CDP Supply Chain members

[Fixed row]

(8.14) Indicate if you assess your own compliance and/or the compliance of your suppliers with forest regulations and/or mandatory standards, and provide details.

(8.14.1) Assess legal compliance with forest regulations

Select from:

☑ Yes, from suppliers

(8.14.2) Aspects of legislation considered

Select all that apply

☑ Labor rights

☑ Land use rights

☑ Third parties' rights

☑ Environmental protection

☑ Human rights protected under international law

☑ Tax, anti-corruption, trade and customs regulations

☑ Forest-related rules, including forest management and biodiversity conservation, where directly related to wood harvesting

☑ The principle of free, prior and informed consent (FPIC), including as set out in the UN Declaration on the Rights of Indigenous Peoples

(8.14.3) Procedure to ensure legal compliance

Select all that apply

☑ Certification

☑ First party audits

(8.14.5) Please explain

To maintain a sustainable supply of wood fibers for our products, APP recognise the importance of evaluating our suppliers' practices and their impact on the environment and local communities. APP has pledged to source 100% of its plantation wood from sustainably managed forests. As a result, APP only accepts pulpwood/fibre with certification, such as the Sustainable Production Forest Management (PHPL) and Timber Legality Verification (VLK) certification, as well as the voluntary Programme for the Endorsement of Forest Certification (PEFC) certification. Other than the mandatory certification above, APP employ a Supplier Evaluation and Risk Assessment (SERA) system that evaluates our suppliers' compliance with 12 indicators, including adherence to local laws and regulations, no genetically modified species, biodiversity protection, and respect for the rights of indigenous peoples and local communities. Our SERA process also includes a 14-day public consultation period, allowing stakeholders to provide feedback on potential suppliers undergoing evaluation. SERA consist of 12 indicator such as: 1. The company, or any of its associated companies in the pulpwood industry, converting natural forest after February 1st, 2013. 2. Country/region 3. Tree species 4. Third-party certification/verification 5. Chain of Custody System 6. Legality Compliance 7. Protection of High Conservation Values or High Carbon Stock 8. Species protection as listed on the IUCN Red List of Critical Endangered Species and CITES 9. Company's respect for traditional civil and human rights 10. Compliance with ILO Core Conventions 11. Company's respect for the health and safety of forest workers 12. No introduction of genetically modified organisms (GMOs). APP has ongoing engagement with suppliers. For example, once SERA is completed, if the supplier is to be used continuously (not one-time) then a HCV assessment is made. Additionally, as APP mills operation is 100% certified under Chain of Custody certification, APP are enables to ensure the wood comes from sustainable plantation and APP are able to trace back the product that bought by our customers. APP are able to give information to our customer the type of raw material that APP use until the location where the wood come from. This to ensure that the material that APP use come from responsible and sustainable plantation.
[Fixed row]

(8.15) Do you engage in landscape (including jurisdictional) initiatives to progress shared sustainable land use goals?

	Engagement in landscape/jurisdictional initiatives
	Select from: ☑ Yes, we engage in landscape/jurisdictional initiatives

[Fixed row]

(8.15.1) Indicate the criteria you consider when prioritizing landscapes and jurisdictions for engagement in collaborative approaches to sustainable land use and provide an explanation.

(8.15.1.1) Criteria for prioritizing landscapes/jurisdictions for engagement

Select all that apply

- ☑ Risk of fires
- ☑ Response to regulation
- ☑ Risk of biodiversity loss
- ☑ Risk of human rights issues
- ☑ Current and future sourcing risk
- ☑ Opportunity to protect and restore natural ecosystems
- ☑ Ability to contribute to/ build on existing landscape/jurisdictional initiatives
- ☑ Risk of deforestation, forests/land degradation, or conversion of other natural ecosystems
- ☑ Recognized as priority landscape by credible multi-stakeholder groups or industry platforms
- ☑ Risk of supplier non-compliance in area
- ☑ Opportunity to build resilience at scale
- ☑ Risk of issues related to land tenure rights
- ☑ Organization has operational presence in area
- ☑ Opportunity for increased human well-being in area

(8.15.1.2) Explain your process for prioritizing landscapes/jurisdictions for engagement

Criteria in prioritizing landscapes/jurisdictions for engagement refereing to the criteria that APP choose above. Our experience shows that all those criteria are important as a basis for engagement in landscape approach and they are connected each other and cannot be stand alone to support the common goals of engagement.
[Fixed row]

(8.15.2) Provide details of your engagement with landscape/jurisdictional initiatives to sustainable land use during the reporting year.

Row 1

(8.15.2.1) Landscape/jurisdiction ID

Select from:

☑ LJ1

(8.15.2.2) Name of initiative

Multi-stakeholder approach on landscape conservation and restoration.

(8.15.2.3) Country/area

Select from:

☑ Indonesia

(8.15.2.4) Name of landscape or jurisdiction area

South Sumatra province, Riau province, Jambi province, East Kalimantan province

(8.15.2.5) Attach public information about the initiative (optional)

SR_PT_APP_PURINUSA_EKAPERSADA_2023_ENGLISH_FINAL.pdf

(8.15.2.6) Indicate if you can provide the size of the area covered by the initiative

Select from:

☑ Yes

(8.15.2.7) Area covered by the initiative (ha)

1000000

(8.15.2.8) Type of engagement

Select all that apply

☑ Convener: Leads or facilitates the design, set-up, and high-level management of the initiative

☑ Partner: Shares responsibility with other stakeholders to manage and implement actions.

☑ Funder: Provides full or partial financial resources

(8.15.2.9) Engagement start year

2013

(8.15.2.10) Engagement end year

Select from:

☑ Not defined

(8.15.2.11) Estimated investment over the project period

10000000

(8.15.2.12) Landscape goals supported by engagement

Environmental

☑ Forest fires monitored and prevented

☑ Biodiversity protected and/or restored

☑ Increased and/or maintained protected areas

☑ Natural ecosystems conserved and/or restored

☑ Ecosystem services maintained and/or enhanced

☑ Improved community resilience from climate adaptation plans or mitigation efforts

☑ Avoided deforestation/conversion of other natural ecosystems and/or decreased degradation rate

Governance

☑ Promotion of transparency, participation, inclusion, and coordination in landscape policy, planning, and management

Social

☑ Respect, protect, and fulfil human rights

☑ Improved capacity for community engagement in multi-stakeholder processes

☑ Implementation of livelihood activities/practices that reduce pressure on forests

☑ Improved standard of living, especially for vulnerable and/or marginalized groups

☑ Rights to land and resources recognized and protected, and related conflicts reduced

☑ Ensuring local communities and smallholders benefit from the outcomes of landscape/jurisdictional initiative

Production

☑ Increased adoption of sustainable production practices (e.g., input use efficiency and water management practices)

(8.15.2.13) Organization actions supporting initiative

Participate in planning and multi-stakeholder alignment

☑ Collaborate on management/land use planning in the landscape/jurisdiction

☑ Collaborate on landscape sustainability assessments through participatory mapping

☑ Collaborate on establishing and managing monitoring system for livelihoods and human well-being

☑ Collaborate to maintain representation from all relevant stakeholders within governance structure of initiative

☑ Co-design and develop goals, strategies and an action plan with timebound targets and milestones for the initiative

☑ Collaborate on establishing and managing monitoring system for deforestation, natural ecosystem conversion and/or degradation

☑ Help establish effective mechanisms for undertaking human rights due diligence, risk management, monitoring, verification, and grievance resolution

☑ Collaborate on establishing and managing monitoring system for biodiversity, habitat fragmentation and/or threats to IUCN Red List species in priority areas

☑ Help establish a transparent governance platform responsible for managing the initiative and its activities with clear roles, responsibilities and balanced decision-making

Build community and multi-stakeholder capacities

☑ Promote and implement climate change adaptation and mitigation activities

Enhance government and capacity

☑ Support local governments (or equivalent) to enhance landscape governance structure, and provide them with resources to develop and implement sustainable landscape policies and/or management plan

Support and incentivize sustainable production and community land use practices

☑ Capacity building for farmers, smallholders and local communities to implement good agricultural practices (including improved efficiency, crop diversification and adoption of certification)

(8.15.2.14) Type of partners engaged in the initiative design and implementation

Select all that apply

☑ National government

☑ Sub-national government

☑ Local communities

☑ NGO and/or civil society

☑ Private sector

(8.15.2.15) Description of engagement

APP is committed to a multistakeholder approach, engaging with a wide range of stakeholders beyond their direct influence, including communities, NGOs, government, indigenous peoples, and the industry to protect and restore Indonesia's forests. This approach presents significant challenges, but through community involvement, collaboration, and the development of best practices, APP is committed to implementing a sustainability commitment on an unprecedented scale. Some of APP's collaboration projects: Collaboration to Mitigate Human-Elephant Conflicts in Air Sugihan Area, South Sumatra APP collaborates with the Center for Standardization of Disaster Resilience Instruments and Climate Change (PUSTANDPI) to conduct a study on the use of mycorrhizal inoculants on native plants in peatland areas. This study is a crucial and relevant step in efforts to restore a climate-resilient ecosystem. The objectives of this study include accelerating the growth of stagnant native plants. OKI Pulp and Paper Mill, in collaboration with the South Sumatra BKSDA (Natural Resource Conservation Agency), conducted a biodiversity assessment to evaluate the impact of the mill's operations and surrounding pulpwood supplier plantations. APP has undertaken this conservation on locally tree species initiatives through collaboration with the Ministry of Environment and Forestry (MoEF) and the National Research and Innovation Agency (as locally known as BRIN). Forest Restoration Project: "SDGs Together!" is an initiative that aims to donate a portion of the proceeds from the sale of APP Indonesia's products to the Belantara Foundation. The donations are used to plant seedlings of endemic tree species that are endangered in Indonesian forests damaged by degradation and wildfires. This program has been running since August 2020. By the end of 2023, we have successfully planted 40,366 trees on 94 hectares of land. This project is being implemented in the Giam Siak Kecil Bukit Batu landscape, Riau Province, which includes peat swamp forests and lowlands. A peatland protection and restoration program in Jati Mulyo Village. This initiative, called the Sumatran Peatland Restoration Program, began in March 2023 and has already planted at least 16,600 trees across 30 hectares. IKTangerang mill has collaborated with the Tangerang Regency Government in managing the Ketapang mangrove area. As part of this initiative, the IK Tangerang mill has planted a total of 150,000 mangrove trees.

(8.15.2.16) Collective monitoring framework used to measure progress towards landscape goals and actions

Select from:

☑ Yes, progress is collectively monitored using a shared external framework, please specify **:**in monitoring biodiversity, APP using Directorate General of Ecosystem Natural Resources Conservation (KSDAE) framework

(8.15.2.17) State the achievements of your engagement so far and how progress is monitored

Significant progress was made in the restoration of Peatland and the discovery of new species in the restoration efforts. Retirements were carried out in Tri Pupa Jaya and Satria Perkasa Agung, covering an area of 7,000 hectares, which led to the discovery of new species, namely Lophopetalum tanahgambut and Disepalum rawagambut (Annonaceae), which were previously unknown. The progress monitored by field team who works on site. Tangerang mill has planted 150,000 mangroves trees to protect the northern coastline from erosion.

(8.15.2.18) Claims made

Select from:

☑ Yes, we are making a claim

(8.15.2.19) Type of claim made

Select from:

☑ Both individual and collective

(8.15.2.20) Provide further details on your claim

APP was working with experts to ensure the restoration of peatland area. We are collaborating with partners, academicians, experts in our conservation and restoration program to ensure the resilience and sustainability of the programs. You can find the information in our Sustainability Report.
[Add row]

(8.15.3) For each of your disclosed commodities, provide details on the disclosure volume from each of the landscapes/jurisdictions you engage in.

Row 1

(8.15.3.1) Landscape/jurisdiction ID

Select from:

☑ LJ1

(8.15.3.2) Does any of your produced and/or sourced commodity volume originate from this landscape/jurisdiction, and are you able/willing to disclose information on this volume?

Select from:

☑ Yes, we do produce/source from this landscape/jurisdiction, and we are able/willing to disclose volume data

(8.15.3.3) Commodity

Select from:

☑ Timber products

(8.15.3.4) % of disclosure volume from this landscape/jurisdiction

98
[Add row]

(8.16) Do you participate in any other external activities to support the implementation of policies and commitments related to deforestation, ecosystem conversion, or human rights issues in commodity value chains?

Select from:
☑ Yes

(8.16.1) Provide details of the external activities to support the implementation of your policies and commitments related to deforestation, ecosystem conversion, or human rights issues in commodity value chains

Row 1

(8.16.1.1) Commodity

Select all that apply
☑ Timber products

(8.16.1.2) Activities

Select all that apply
☑ Engaging with communities
☑ Engaging with non-governmental organizations

(8.16.1.3) Country/area

Select from:
☑ Indonesia

(8.16.1.4) Subnational area

Select from:

☑ Not applicable

(8.16.1.5) Provide further details of the activity

As a crucial aspect of 'Collaboration for Resilience', APP actively builds and nurtures strategic alliances through partnerships with external associations and initiatives. This contribution to the development and implementation of industry standards and best practices enhances our understanding of key issues and enables us to share knowledge with key stakeholders. External Initiatives participation: - Signatory member of UNGC and Board of Founderof Indonesia Global Compact Network (IGCN) - Steering Committee of UNGC CEO Water Mandate - Executive Committee of Indonesia Business Council for Sustainable Development (IBCSD) - a local network of WBCSD - Members in 3 CGF Coalition (Forest Positive, Human Rights, Supply Chain Initiatives) - Executive Committee of HCSA - Member of New York Declaration on Forest (NYDF) APP prioritizes human rights in its human resources management and all operational aspects. To ensure compliance with high human rights standards, we employ a mechanism known as Human Rights Due Diligence (HRDD). Our HRDD implementation is conducted in collaboration with the Foundation for International Human Rights Reporting Standards (FIHRRST), ensuring consistency and reliability throughout the process. As a continuation of reassociation with FSC, APP continues the dialog with FSC in preparation to enter the remedy framework. The FSC Remedy Framework launched in 2023.
[Add row]

(8.17) Is your organization supporting or implementing project(s) focused on ecosystem restoration and long-term protection?

Select from:

☑ Yes

(8.17.1) Provide details on your project(s), including the extent, duration, and monitoring frequency. Please specify any measured outcome(s).

Row 1

(8.17.1.1) Project reference

Select from:

☑ Project 1

(8.17.1.2) Project type

Select from:

☑ Peatland protection and restoration

(8.17.1.3) Expected benefits of project

Select all that apply

☑ Disaster risk reduction

☑ Improvement to soil health

☑ Compliance with certification

☑ Restoration of natural ecosystem(s)

☑ Net gain in biodiversity and ecosystem integrity

☑ More inclusive, transparent, and empowering governance processes

☑ Further transformative change through sharing of project design, implementation and lessons learnt

(8.17.1.4) Is this project originating any carbon credits?

Select from:

☑ No

(8.17.1.5) Description of project

One off APP's target on FSC Pillar No. 2 is conserving critical peatland ecosystems. Throughout 2015-2023, APP have seen progress in restoration works in more than 9,000 hectares area in peat dome peaks across APP suppliers' concession areas. Those were achieved mostlythrough natural succession, with a small portion of demonstration plot revegetation. Natural succession approach has become the focus as it is considered the most feasible, cost-effective approach for restoration effort on large area.To find effective restoration strategy on peat previously used for production, APP continue our research with a leading global university, National University of Singapore (NUS) Environmental Research Institute (NERI). The research takes place in the concession of an APP supplier, PT. Tripupa Jaya, in South Sumatra, where 4,000 hectares of production areas on peat has been retired for conservation purpose.

(8.17.1.6) Where is the project taking place in relation to your value chain?

Select all that apply

☑ Project based in sourcing area(s)

(8.17.1.7) Start year

2015

(8.17.1.8) Target year

Select from:

☑ Other, please specify **:**APP continue to monitor peat dome peak condition and can put other peatland /peat dome peak location as restoration target.

(8.17.1.9) Project area to date (Hectares)

7000

(8.17.1.10) Project area in the target year (Hectares)

7000

(8.17.1.11) Country/Area

Select from:

☑ Indonesia

(8.17.1.12) Latitude

90

(8.17.1.13) Longitude

90

(8.17.1.14) Monitoring frequency

Select from:

☑ Six-monthly or more frequently

(8.17.1.15) Total investment over the project period (currency)

300000

(8.17.1.16) For which of your expected benefits are you monitoring progress?

Select all that apply

☑ Disaster risk reduction

☑ Improvement to soil health

☑ Restoration of natural ecosystem(s)

☑ Net gain in biodiversity and ecosystem integrity

☑ More inclusive, transparent, and empowering governance processes

☑ Further transformative change through sharing of project design, implementation and lessons learnt

(8.17.1.17) Please explain

Significant progress was made in the restoration of Peatland and the discovery of new species in the restoration efforts. Retirements were carried out in Tri Pupa Jaya and Satria Perkasa Agung, which led to the discovery of new species, namely Lophopetalum tanahgambut and Disepalum rawagambut (Annonaceae), which were previously unknown. Peatland Ecosystem Function Recovery is an activity carried out to restore the properties and functions of the peatland ecosystem to or close to its original state through natural succession, hydrological restoration, vegetation rehabilitation, and/or other methods following the development of science and technology. The total peak peat dome restoration carried out until 2023 has reached 99% of the SRV 2030 target. 2024, APP will focus on utilizing technology to enhance credibility, improvement, and integrity in the implementation of peatland areas, including: By implementing these two technologies, APP is committed to enhancing credibility and integrity in implementing the Forest Conservation Policy. This will enable timely and accurate data-driven decision-making and ensure sustainable water and forest management. 1. Intelligent Water Management In collaboration with a third-party vendor, APP plans to implement monitoring technology to obtain realtime information on the conditions of the water level and water table. This technology is combined with hydrological modeling and data analysis approaches to predict and estimate changes in water conditions. The results of this initiative can be used to conduct root cause analysis and quantitative decision-making in terms of priority issues. Thus, appropriate corrective and preventive actions can be taken to maintain the desired water table and water level conditions. Land Cover Change Detection and Alert (LCCA) APP employs remote sensing technology by leveraging the ESA Sentinel-1 active sensor satellite and Deep Learning algorithms to monitor land cover changes continuously. The Sentinel-1 satellite carries a C-band Synthetic Aperture Radar (SAR), to collect data unaffected by weather, day or night. Its ability to penetrate clouds addresses the issue of data coverage for monitoring land in equatorial regions,where APP's forestry operations are located. This initiative will cover all forest concessions managed by APP Forestry. The system will provide monthly land cover change
[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:

☑ Continuously

(9.2.3) Method of measurement

Water withdrawals are measured by using in place flowmeter (real time). APP uses PI (Processing Information) system to facilitate the collection, analysis, and visualization of operational data from the flowmeter readings.

(9.2.4) Please explain

All water used for operating comes from river water are monitored 100% by flowmeter. Flowmeter is connected to PI (Processing Information) system to facilitate APP in collecting/recording, analyzing and visualizing data.

Water withdrawals – volumes by source

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Continuously

(9.2.3) Method of measurement

Water withdrawals are measured by using in place flowmeter (real time). APP uses PI (Processing Information) system to facilitate the collection, analysis, and visualization of operational data from the flowmeter readings.

(9.2.4) Please explain

APP mills are closed to the river and has a convenient access to water river. APP takes and manages water sourced from river, as measured by a flowmeter with a total of 322,674 ML in 2023. Flowmeter is connected to PI (Process Information) system to facilitate APP in collecting/recording, analyzing and visualizing data. Water amount and flowmeter point location installed in field is according to SIPPA permit by government, authority given to legal entities in carrying out water.

Water withdrawals quality

(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

Quality water withdrawals are monitored by site lab testing. Parameters are measured: conductivity, turbidity, pH, color, total hardness, etc. APP uses SR (Sustainability Report) dashboard to analyze and visualize the quality data.

(9.2.4) Please explain

100% of our operational sites are monitored and checked daily by laboratory testing, conductivity, turbidity, pH, color, and total hardness. The quality of the withdrawal water needs to be monitored for the water treatment process operation.

Water discharges – total volumes

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Continuously

(9.2.3) Method of measurement

Water discharge are measured by using in place flowmeter (real time). To facilitate the collection, analysis, and visualization of operational data from the flowmeter readings, APP uses PI (Processing Information) system.

(9.2.4) Please explain

100% of our operational sites are monitored for this water aspect and this is considered part of the usual management for our sites. APP manages wastewater from operations and discharges it to rivers with a measured flow meter of 224.262 ML in 2023. Flowmeter is connected to PI (Processing Information) system to facilitate APP in collecting/recording, analyzing and visualizing data.

Water discharges – volumes by destination

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Continuously

(9.2.3) Method of measurement

We use flowmeters to measure discharge volumes in real time. The volume is recorded by using PI (Processing Information) system.

(9.2.4) Please explain

APP treats and discharges water volumes to freshwater bodies (river). APP are committed to reduce water pollution. APP has set a goal to achieve a 30% lower Chemical Oxygen Demand (COD) emissions per government regulation by 2030

Water discharges – volumes by treatment method

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Continuously

(9.2.3) Method of measurement

APP performs primary and secondary waste water treatment Water discharge from primary and secondary treatment is recorded by flowmeter (real time). APP uses PI (Processing Information) system to facilitate the collection, analysis, and visualization of operational data from the flowmeter readings.

(9.2.4) Please explain

100% of APP operational sites are monitored for this water aspect and this is considered part of the facility management for APP sites. APP has implemented control measures for all wastewater generated, which are managed at wastewater treatment (WWT)

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:

☑ Daily

(9.2.3) Method of measurement

Quality water discharge is monitored by site lab testing. Parameters are measured: BOD, COD, TSS, PH. APP uses SR (Sustainability Report) dashboard to analyze, and visualize the quality data.

(9.2.4) Please explain

APP has set a goal to achieve 30% lower Chemical Oxygen Demand (COD) emissions per government regulation by 2030. Waste water emission complies with the waste water regulation under MoEF Regulation No. 5 of 2014 on Wastewater (Appendix 35 - Waste Water in Pulp & Paper Industry) but not limited the compliance with the regional level regulation. In addition, APP have purchased live analyzer meter for BOD, COD, TSS, pH and flowmeter to monitor treated waste water quality.

Water discharge quality – emissions to water (nitrates, phosphates, pesticides, and/or other priority substances)

(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

not mandatory to report nitrates, phosphates, pesticides. But we monitor water emission: pH, TSS, BOD, COD, AOX every month.

(9.2.4) Please explain

not mandatory to report nitrates, phosphates, pesticides

Water discharge quality – temperature

(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

Temperature water discharge is monitored by site lab.

(9.2.4) Please explain

Temperature water discharge is monitored by site lab daily. In addition, APP has purchased live analyzer meter for temperature to monitor treated wastewater quality.

Water consumption – total volume

(9.2.1) % of sites/facilities/operations

Select from:
☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Continuously

(9.2.3) Method of measurement

APP uses flowmeters to measure water consumption in real time. APP uses PI (Processing Information) system to facilitate the collection, analysis, and visualization of operational data from the flowmeter readings.

(9.2.4) Please explain

APP uses flowmeters to measure water consumption from process operation, supporting area, office, mess, etc in real time. Beside, we monitor water losses to oversee intake and consumption. We use PI (Processing Information) system to record water intake and consumption data.

Water recycled/reused

(9.2.1) % of sites/facilities/operations

Select from:

☑ 1-25

(9.2.2) Frequency of measurement

Select from:

☑ Monthly

(9.2.3) Method of measurement

APP estimates water recycle, 14%

(9.2.4) Please explain

Volumes of recycled and reused water are monitored at all of our sites. In 2023 we reused & recycled 14% of our water in processes, the amount of reused recycled water is needed to replace water intake from the river.

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:

☑ Daily

(9.2.3) Method of measurement

APP has WASH services for employees

(9.2.4) Please explain

APP is committed to implementing access to safe water, sanitation and hygiene at the workplace at an appropriate level of standard for all employees in all sites. [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)

322798

(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:

☑ Much lower

(9.2.2.5) Primary reason for forecast

Select from:

☑ Increase/decrease in efficiency

(9.2.2.6) Please explain

APP has set a goal to achieve a 30% reduction in water intensity. Through the implementation of water efficiency at each mill, APP was able to achieve a water intensity of 27.3 m3/tonne-product equivalent in 2023, which represents a 17% reduction from our 2018 baseline of 33.0 m3/tonne product.

Total discharges

(9.2.2.1) Volume (megaliters/year)

224262

(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:

☑ Much lower

(9.2.2.5) Primary reason for forecast

Select from:

☑ Increase/decrease in efficiency

(9.2.2.6) Please explain

APP reduces discharge water by 3% from previous reporting year. APP increases water efficiency through internal initiatives are registered and tracked as part of the Skill Development Activity (SDA) Program. APP conducts to continuously conserve water by reducing, reusing and recycling as much as possible through APP's 3R strategy

Total consumption

(9.2.2.1) Volume (megaliters/year)

265945

(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:

☑ Much lower

(9.2.2.5) Primary reason for forecast

Select from:

☑ Increase/decrease in efficiency

(9.2.2.6) Please explain

This reduction in water intensity is attributed to the APP's continuous efforts to implement cutting-edge technology and initiatives aimed at reducing water consumption.
[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:

☑ No

(9.2.4.8) Identification tool

Select all that apply

☑ WRI Aqueduct

(9.2.4.9) Please explain

APP relies on water for its operations, which is utilized for steam generation, cooling and production process. Our method to calculate water withdrawal and discharge is using flow meter installed in the water intake, APP calibrates the flow meter periodically. APP acknowledges that water scarcity and stress are significant risks and take a companywide approach to address this issue. Therefore, no water withdrawal in water stress area. Even though APP is not in water stress area, APP still continuing the water reduction program.
[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)

322674

(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

APP's operations are rely on water, drawing 100% of its supply from river water. In 2023, APP takes 322,674 ML of river water, a reduced intake compared to the previous reporting year. This declining on water intake is attributed to APP's ongoing efforts to enhance efficiency each year, documenting and monitoring under the Skill Development Activity (SDA) Program. Moreover, APP remains dedicated to sustainability, implementing the '3R' water strategy, as demonstrated through various initiatives carried out in 2023: 1. reuse paper from paper machine 2. recycle treated water effluent back to process 3. reuse condensate from vacuum evaporator to RC (Re-causticizing) process 4. improve fiber line washing press performance 5. wood preparation reduce water consumption 6. reuse water reject to wash the wood

Brackish surface water/Seawater

(9.2.7.1) Relevance

Select from:

☑ Not relevant

(9.2.7.5) Please explain

Not relevant. APP's water sourcing almost 100% relies on surface water from rivers.

Groundwater – renewable

(9.2.7.1) Relevance

Select from:
☑ Relevant

(9.2.7.2) Volume (megaliters/year)

77

(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 efficiency

(9.2.7.5) Please explain

APP does not extract water from water-stressed areas. Water calculations including extraction, consumption, and discharge are measured using flow meters

Groundwater – non-renewable

(9.2.7.1) Relevance

Select from:

☑ Not relevant

(9.2.7.5) Please explain

Not relevant. APP's water sourcing almost 100% relies on surface water from rivers.

Produced/Entrained water

(9.2.7.1) Relevance

Select from:
☑ Not relevant

(9.2.7.5) Please explain

Not relevant. APP's water sourcing almost 100% relies on surface water from rivers.

Third party sources

(9.2.7.1) Relevance

Select from:
☑ Relevant

(9.2.7.2) Volume (megaliters/year)

47

(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 efficiency

(9.2.7.5) Please explain

APP does not extract water from water-stressed areas. Water calculations including extraction, consumption, and discharge are measured using flow meters [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)

224262

(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

APP water discharges is 224,262 ML to river, a reduced compared to the previous reporting year. APP conducts continuously working to conserve water by reducing, reusing and recycling it as much as possible through APP's 3R strategy, as demonstrated through various initiatives carried out in 2023: 1. reuse paper from paper

machine 2. recycle treated water effluent back to process 3. reuse condensate from vacuum evaporator to RC process 4. improve fiber line washing press performance 5. wood preparation reduce water consumption 6. reuse water reject to wash the wood

Brackish surface water/seawater

(9.2.8.1) Relevance

Select from:

☑ Not relevant

(9.2.8.5) Please explain

not relevant. APP discharges 100% to surface water, rivers.

Groundwater

(9.2.8.1) Relevance

Select from:

☑ Not relevant

(9.2.8.5) Please explain

not relevant. APP discharges 100% to surface water, rivers.

Third-party destinations

(9.2.8.1) Relevance

Select from:

☑ Not relevant

(9.2.8.5) Please explain

not relevant. APP discharges 100% to surface water, rivers.
[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. APP performs primary and secondary waste water treatment

Secondary treatment

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Relevant

(9.2.9.2) Volume (megaliters/year)

224262

(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

APP has implemented control measures for all wastewater generated, which are managed at wastewater treatment (WWT) units. The processing stages start with primary treatment, followed by secondary treatment, post-treatment, and sludge treatment. Most APP mills utilize aerobic treatment, a biological wastewater treatment that takes place in the presence of oxygen. However, certain mills with higher COD (Chemical Oxygen Demand) utilize anaerobic treatment plants. The byproduct of anaerobic treatment is biogas, which is utilized in the operational processes. After WWT units, the treated wastewater is then ready to be discharged, with values below the standard wastewater quality, according to central regulations and those set by local governments.

Primary treatment only

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Not relevant

(9.2.9.6) Please explain

not relevant. APP performs primary and secondary waste water treatment

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. APP performs primary and secondary waste water treatment

Discharge to a third party without treatment

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Not relevant

(9.2.9.6) Please explain

not relevant. APP performs primary and secondary waste water treatment

Other

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Not relevant

(9.2.9.6) Please explain

not relevant. APP performs primary and secondary waste water treatment
[Fixed row]

(9.2.10) Provide details of your organization’s emissions of nitrates, phosphates, pesticides, and other priority substances to water in the reporting year.

	Emissions to water in the reporting year (metric tons)	Categories of substances included	Please explain
	0	*Select all that apply* ☑ Nitrates ☑ Phosphates	*It is not mandatory to report nitrates, phosphates, pesticides. But we monitor pH, TSS, BOD, COD, AOX.*

	Emissions to water in the reporting year (metric tons)	Categories of substances included	Please explain
		☑ Pesticides	

[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

10

(9.3.3) % of facilities in direct operations that this represents

Select from:

☑ 76-99

(9.3.4) Please explain

APP has 10 mills that exposed to water risks (production facilities) APP, a pulp and paper company in Indonesia, is committed to using water responsibly in its operations. This is important because water is essential for pulp and paper production. APP wants to reduce its impact on local water sources. How APP is Managing Water: - Reducing water consumption: - Using less water in its processes. - Reusing water whenever possible. - Maintaining water quality: - Ensuring that the water it releases back into the environment is clean. Working with Suppliers: - Developing a scorecard system to evaluate suppliers' environmental and social practices. - Conducting High Conservation Value (HCV) assessments to identify and protect important forest areas. - Creating a Peat Management & Monitoring Plan (PMMP) to

ensure sustainable management of peatlands. Overall Goal: APP aims to create an integrated sustainable forest management system that will improve water management both within its operations and in the surrounding areas.

Upstream value chain

(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

(9.3.4) Please explain

APP has 9 forestry management units managed by owned operations and 31 forestry management units of long-term pulpwood suppliers. For all our pulpwood suppliers water management: - Developing a scorecard system to evaluate suppliers' environmental and social practices. - Conducting High Conservation Value (HCV) assessments to identify and protect important forest areas. - Creating a Peat Management & Monitoring Plan (PMMP) to ensure sustainable management of peatlands. Overall Goal: APP aims to create an integrated sustainable forest management system that will improve water management both within its operations and in the surrounding areas.
[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)

PT. Indah Kiat Pulp & Paper Perawang Mills, PT. Pindo Deli Perawang Mills, PT. Univenus Perawang.

(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

☑ Dependencies

(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

Armenia

☑ Other, please specify **:**Siak River, Riau

(9.3.1.8) Latitude

0.664278

(9.3.1.9) Longitude

101.595668

(9.3.1.10) Located in area with water stress

Select from:

☑ No

(9.3.1.13) Total water withdrawals at this facility (megaliters)

143414

(9.3.1.14) Comparison of total withdrawals with previous reporting year

Select from:

☑ Higher

(9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

143414

(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)

108907

(9.3.1.22) Comparison of total discharges with previous reporting year

Select from:

☑ Lower

(9.3.1.23) Discharges to fresh surface water

108907

(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)

114098

(9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

☑ Lower

(9.3.1.29) Please explain

PT. Indah Kiat Pulp & Paper Perawang Mills, PT. Pindo Deli Perawang Mills, PT. Univenus Perawang takes and discharge water sourced from Siak River. We continuously working by reusing and recycling it as much as possible through our 3R strategy and implementing cutting-edge technology and initiatives. We have set a goal to achieve a 30% reduction in water intensity by 2030. Furthermore, we have made progress in reducing water intake and consumption. Additionally, water previously used as white water in pulp was reused, contributing to further water conservation efforts. We implement various water conservation measures, including: • Reusing and recycling process water. • Adopting water-saving technologies. • Raising employee awareness about the importance of water conservation. Committed

to ensuring business continuity and mitigating water scarcity risks, the Company has implemented a dedicated water reduction program. The program focuses on the following areas: • Increasing condensate return to the utility system. • Reusing production process water and water reject from clean water treatment. • Optimizing and maintaining cooling towers.

Row 2

(9.3.1.1) Facility reference number

Select from:

☑ Facility 2

(9.3.1.2) Facility name (optional)

PT. Lontar Papyrus Pulp & Paper Industry

(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

☑ Dependencies

(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

Afghanistan

☑ Other, please specify **:**Padang River

(9.3.1.8) Latitude

-1.01

(9.3.1.9) Longitude

103.08

(9.3.1.10) Located in area with water stress

Select from:

☑ No

(9.3.1.13) Total water withdrawals at this facility (megaliters)

30242

(9.3.1.14) Comparison of total withdrawals with previous reporting year

Select from:

☑ Higher

(9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

30242

(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)

23893

(9.3.1.22) Comparison of total discharges with previous reporting year

Select from:

☑ Lower

(9.3.1.23) Discharges to fresh surface water

23893

(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)

26493

(9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

☑ Higher

(9.3.1.29) Please explain

PT. Lontar Papyrus Pulp & Paper Industry takes and discharges water sourced from Pangabuan River. We continuously working by reusing and recycling it as much as possible through our 3R strategy and implementing cutting-edge technology and initiatives. We have set a goal to achieve a 30% reduction in water intensity by 2030. Furthermore, we have made progress in reducing water intake and consumption. In 2023, the Company successfully reduced the intensity of water consumption, with a decrease of 14% compared to the past 4 years. This achievement was attained through various innovations related to the Reduce, Reuse and Recycle (3R) strategy. Some of the innovations implemented to reduce water consumption include maximize water usage in production machines, reuse machine washing water, maintain and repair cooling towers, recycle treated wastewater and reject water, and increase the condensate return rate. We also installed a condensate segregation system on the Vacuum Evaporator (VE) unit to improve clean condensate recovery. This program has reduced water usage by 1.9 m3/ton. Additionally, improving chiller performance, reducing blowdown from the cooling tower, and enhancing condensate recovery.

Row 3

(9.3.1.1) Facility reference number

Select from:

☑ Facility 3

(9.3.1.2) Facility name (optional)

PT. OKI Pulp & Paper Mills

(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

☑ Dependencies

(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

Afghanistan

☑ Other, please specify **:**Ciujung River

(9.3.1.8) Latitude

-3.329272

(9.3.1.9) Longitude

106.15028

(9.3.1.10) Located in area with water stress

Select from:

☑ No

(9.3.1.13) Total water withdrawals at this facility (megaliters)

64329

(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

64329

(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)

41026

(9.3.1.22) Comparison of total discharges with previous reporting year

Select from:

☑ Higher

(9.3.1.23) Discharges to fresh surface water

41026

(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)

45568

(9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

☑ Lower

(9.3.1.29) Please explain

PT. OKI Pulp & Paper Mills takes and discharges water sourced from Padang River. OKI continuously working by reusing and recycling it as much as possible through our 3R strategy and implementing cutting-edge technology and initiatives. OKI aimed to maintain a water consumption rate of 15-16 ADT to reduce water consumption.

Row 4

(9.3.1.1) Facility reference number

Select from:

☑ Facility 4

(9.3.1.2) Facility name (optional)

PT. Indah Kiat Pulp & Paper Serang Mills

(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

☑ Dependencies

(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

Afghanistan

☑ Other, please specify **:**Lesti Water

(9.3.1.8) Latitude

-6.12

(9.3.1.9) Longitude

106.15028

(9.3.1.10) Located in area with water stress

Select from:

☑ No

(9.3.1.13) Total water withdrawals at this facility (megaliters)

22125

(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

22125

(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)

11001

(9.3.1.22) Comparison of total discharges with previous reporting year

Select from:

☑ Much lower

(9.3.1.23) Discharges to fresh surface water

11001

(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)

21534

(9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

☑ Lower

(9.3.1.29) Please explain

PT. Indah Kiat Pulp & Paper Serang Mills takes water sourced from upstream Ciujung River and discharge to downstream Ciujung River. We continuously working by reusing and recycling it as much as possible through our 3R strategy and implementing cutting-edge technology and initiatives. Water intake, consumption are higher than previous reporting year due to new boiler commissioning.

Row 5

(9.3.1.1) Facility reference number

Select from:

☑ Facility 5

(9.3.1.2) Facility name (optional)

PT. Indah Kiat Pulp & Paper Tangerang Mills

(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

☑ Dependencies

(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

Afghanistan

☑ Other, please specify **:**Citarum River

(9.3.1.8) Latitude

-6.17833

(9.3.1.9) Longitude

106.63194

(9.3.1.10) Located in area with water stress

Select from:

☑ No

(9.3.1.13) Total water withdrawals at this facility (megaliters)

3732

(9.3.1.14) Comparison of total withdrawals with previous reporting year

Select from:

☑ Higher

(9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

3732

(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)

1448

(9.3.1.22) Comparison of total discharges with previous reporting year

Select from:

☑ Lower

(9.3.1.23) Discharges to fresh surface water

1449

(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)

2101

(9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

☑ Lower

(9.3.1.29) Please explain

PT. Indah Kiat Pulp & Paper Tangerang Mills takes and discharges water sourced from Cisadane River. We continuously working by reusing and recycling it as much as possible through our 3R strategy and implementing cutting-edge technology and initiatives. Water intake and consumption are about the same than previous reporting year due to different production specification which requires more water.

Row 6

(9.3.1.1) Facility reference number

Select from:

☑ Facility 6

(9.3.1.2) Facility name (optional)

PT. Pindo Deli Karawang Mills

(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

☑ Dependencies

(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

Afghanistan

☑ Other, please specify **:**Siak River, Riau

(9.3.1.8) Latitude

-6.3125

(9.3.1.9) Longitude

107.295

(9.3.1.10) Located in area with water stress

Select from:

☑ No

(9.3.1.13) Total water withdrawals at this facility (megaliters)

26137

(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

26137

(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)

19592

(9.3.1.22) Comparison of total discharges with previous reporting year

Select from:

☑ About the same

(9.3.1.23) Discharges to fresh surface water

19592

(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)

24849

(9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

☑ Lower

(9.3.1.29) Please explain

PT. Pindo Deli Karawang Mills takes and discharges water sourced from Citarum River. We continuously working by reusing and recycling it as much as possible through our 3R strategy and implementing cutting-edge technology and initiatives. Water intake and consumption are higher than previous reporting year due to new boiler commissioning.

Row 7

(9.3.1.1) Facility reference number

Select from:

☑ Facility 7

(9.3.1.2) Facility name (optional)

PT. Pabrik Kertas Tjiwi Kimia

(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

☑ Dependencies

(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

Afghanistan

☑ Other, please specify **:**Brantas River

(9.3.1.8) Latitude

-7.4716

(9.3.1.9) Longitude

112.44

(9.3.1.10) Located in area with water stress

Select from:

☑ No

(9.3.1.13) Total water withdrawals at this facility (megaliters)

30268

(9.3.1.14) Comparison of total withdrawals with previous reporting year

Select from:

☑ Higher

(9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

30268

(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)

16082

(9.3.1.22) Comparison of total discharges with previous reporting year

Select from:

☑ Lower

(9.3.1.23) Discharges to fresh surface water

16082

(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)

24396

(9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

☑ Lower

(9.3.1.29) Please explain

PT. Pabrik Kertas Tjiwi Kimia takes and discharges water sourced from Brantas River. We continuously working by reusing and recycling it as much as possible through our 3R strategy and implementing cutting-edge technology and initiatives. We have set a goal to achieve a 30% reduction in water intensity by 2030. Furthermore, we have made significant progress in reducing water intake and consumption. Tjiwi Kimia, water consumption decreased by 9% due to the implementation of automation pumps and motors, as well as interconnecting the WT unit. In 2022, the mill installed pipes to optimize waste sludge treatment (WWT). Over the past three years, our water consumption has decreased by 10%. Some efforts implemented to reduce water consumption include optimizing water use in production machines, reusing water from production process, repairing and maintaining cooling towers, and increasing condensate return rates.

Row 8

(9.3.1.1) Facility reference number

Select from:

☑ Facility 8

(9.3.1.2) Facility name (optional)

PT. Ekamas Fortuna

(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

☑ Dependencies

(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

Afghanistan

☑ Other, please specify **:**Cisadane

(9.3.1.8) Latitude

-7.975985

(9.3.1.9) Longitude

112.626878

(9.3.1.10) Located in area with water stress

Select from:

☑ No

(9.3.1.13) Total water withdrawals at this facility (megaliters)

2426

(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

2426

(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)

2229

(9.3.1.22) Comparison of total discharges with previous reporting year

Select from:

☑ Higher

(9.3.1.23) Discharges to fresh surface water

2229

(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)

2229

(9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

☑ Lower

(9.3.1.29) Please explain

PT. Ekamas Fortuna takes and discharges water sourced from Lesti River. We continuously working by reusing and recycling it as much as possible through our 3R strategy and implementing cutting-edge technology and initiatives.
[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

Verification conducted by AA 1000 ASv3 type 2 with level assurance is High, GRI Standard

Water withdrawals – volume by source

(9.3.2.1) % verified

Select from:

☑ 76-100

(9.3.2.2) Verification standard used

Verification conducted by AA 1000 ASv3 type 2 with level assurance is High, GRI Standard

Water withdrawals – quality by standard water quality parameters

(9.3.2.1) % verified

Select from:

☑ 76-100

(9.3.2.2) Verification standard used

Verification conducted by AA 1000 ASv3 type 2 with level assurance is High, GRI Standard, ISO 9001

Water discharges – total volumes

(9.3.2.1) % verified

Select from:

☑ 76-100

(9.3.2.2) Verification standard used

Verification conducted by AA 1000 ASv3 type 2 with level assurance is High, GRI Standard

Water discharges – volume by destination

(9.3.2.1) % verified

Select from:

☑ 76-100

(9.3.2.2) Verification standard used

Verification conducted by AA 1000 ASv3 type 2 with level assurance is High, GRI Standard, Government Environmental Audit

Water discharges – volume by final treatment level

(9.3.2.1) % verified

Select from:

☑ 76-100

(9.3.2.2) Verification standard used

Verification conducted by AA 1000 ASv3 type 2 with level assurance is High, GRI Standard

Water discharges – quality by standard water quality parameters

(9.3.2.1) % verified

Select from:

☑ 76-100

(9.3.2.2) Verification standard used

Verification conducted by AA 1000 ASv3 type 2 with level assurance is High, GRI Standard, Government Environmental Audit

Water consumption – total volume

(9.3.2.1) % verified

Select from:

☑ 76-100

(9.3.2.2) Verification standard used

Verification conducted by AA 1000 ASv3 type 2 with level assurance is High, GRI Standard
[Fixed row]

(9.4) Could any of your facilities reported in 9.3.1 have an impact on a requesting CDP supply chain member?

Select from:

☑ Yes, CDP supply chain members buy goods or services from facilities listed in 9.3.1

(9.4.1) Indicate which of the facilities referenced in 9.3.1 could impact a requesting CDP supply chain member.

Row 1

(9.4.1.1) Facility reference number

Select from:

☑ Facility 1

(9.4.1.2) Facility name

PT. Indah Kiat Pulp & Paper Perawang Mills, PT. Pindo Deli Perawang Mills, PT. Univenus Perawang

(9.4.1.3) Requesting member

Select from:

(9.4.1.4) Description of potential impact on member

Our mill not operated in high risk of water source thus the impact is very low

(9.4.1.5) Comment

APP acknowledges that water scarcity and stress are significant risks and take a company-wide approach to address this issue. Therefore, no water withdrawal in water stress area.

Row 2

(9.4.1.1) Facility reference number

Select from:

☑ Facility 4

(9.4.1.2) Facility name

PT. Indah Kiat Pulp & Paper Serang Mills

(9.4.1.3) Requesting member

Select from:

(9.4.1.4) Description of potential impact on member

Our mill not operated in high risk of water source thus the impact is very low.

(9.4.1.5) Comment

APP acknowledges that water scarcity and stress are significant risks and take a company-wide approach to address this issue. Therefore, no water withdrawal in water stress area.
[Add row]

(9.5) Provide a figure for your organization’s total water withdrawal efficiency.

(9.5.1) Revenue (currency)

8236000000

(9.5.2) Total water withdrawal efficiency

25514.41

(9.5.3) Anticipated forward trend

We conduct appropriate risk assessments and integrate their findings into our business planning, continuously working to conserve water by reusing and recycling it as much as possible through our 3R strategy. All mill initiatives are registered and tracked as part of the Skill Development Activity (SDA) Program.
[Fixed row]

(9.12) Provide any available water intensity values for your organization’s products or services.

Row 1

(9.12.1) Product name

Pulp and Paper Products

(9.12.2) Water intensity value

27.3

(9.12.3) Numerator: Water aspect

Select from:

☑ Water withdrawn

(9.12.4) Denominator

Production in volume

(9.12.5) Comment

Water intensity value 27.3 M3/Ton in 2023.
[Add row]

(9.13) Do any of your products contain substances classified as hazardous by a regulatory authority?

	Products contain hazardous substances	Comment
	Select from: ☑ No	*no, our product not categorized as hazardous waste and source from plant based*

[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:

☑ No, but we plan to address this within the next two years

(9.14.3) Primary reason for not classifying any of your current products and/or services as low water impact

Select from:

☑ Important but not an immediate business priority

(9.14.4) Please explain

Our operations rely heavily on water, which is used for steam generation, heating, cooling, and cleaning. We are constantly working to conserve water by reusing and recycling it as much as possible. We recognize that water scarcity and water stress is a serious climate risk, and we adopt Board-level responsibility in tackling this problem. The majority of our mills are located near source of surface water and ensures easy access. Water scarcity, on the other hand, can also impact our operations, particularly during the dry season. Thus, we must closely monitor water quality, for example, by collaborating with local governments to establish minimum water standards and conducting periodic testing to ensure compliance. Given the importance of water scarcity and the risk that it may pose to our business, we conduct appropriate risk assessments and integrate their findings into our business planning.
[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.

	Target set in this category
Water pollution	*Select from:* ☑ Yes
Water withdrawals	*Select from:* ☑ Yes

	Target set in this category
Water, Sanitation, and Hygiene (WASH) services	*Select from:* ☑ Yes
Other	*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:

☑ Organization-wide (direct operations only)

(9.15.2.3) Category of target & Quantitative metric

Product water intensity

☑ Reduction per product

(9.15.2.4) Date target was set

12/30/2022

(9.15.2.5) End date of base year

12/30/2018

(9.15.2.6) Base year figure

33

(9.15.2.7) End date of target year

12/30/2023

(9.15.2.8) Target year figure

28.3

(9.15.2.9) Reporting year figure

27.3

(9.15.2.10) Target status in reporting year

Select from:

☑ Achieved

(9.15.2.11) % of target achieved relative to base year

121

(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 coverage is the water intensity against its APP Sustainability Roadmap Vision 2030 target.

(9.15.2.15) Actions which contributed most to achieving or maintaining this target

The Company uses water for its operations for the following purposes: steam generation, heating, c production materials, and cleaning. Therefore, the Company continuously strive to conserve water by reusing and recycling process water. The Company recognizes that water scarcity and water availability are serious climate risks, and the Company adopts Board level responsibility to address this issue. The Company's mill locations are near water bodies, which makes it easy to access raw water. On the other hand, water scarcity can also impact operations, which may occur during the dry season. Therefore, the Company continues to closely monitor the flow rate and quality of raw water and conducts regular quality testing. Recognizing the importance of water scarcity and the potential risks it poses to our business, we conduct appropriate risk assessments and integrate the findings into our business planning. Progress towards water efficiency is monitored at relevant department meeting.

(9.15.2.16) Further details of target

We have an SRV 2030 target, which is further broken down into annual targets.

Row 2

(9.15.2.1) Target reference number

Select from:

☑ Target 2

(9.15.2.2) Target coverage

Select from:

☑ Organization-wide (direct operations only)

(9.15.2.3) Category of target & Quantitative metric

Water pollution

☑ Other water pollution, please specify **:**30% COD Emission Lower than Government Regulation

(9.15.2.4) Date target was set

12/30/2022

(9.15.2.5) End date of base year

12/30/2018

(9.15.2.6) Base year figure

350

(9.15.2.7) End date of target year

12/30/2023

(9.15.2.8) Target year figure

298

(9.15.2.9) Reporting year figure

267

(9.15.2.10) Target status in reporting year

Select from:

☑ Achieved

(9.15.2.11) % of target achieved relative to base year

160

(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 coverage is target SRV 2030 which is 30% COD Emission Lower than Government Regulation

(9.15.2.15) Actions which contributed most to achieving or maintaining this target

The Company conducts environmental management (water pollution control and air pollution control) referring to the Environmental Permit issued by the Relevant Government Agency. Monitoring and evaluation of the results of environmental management activities are reported every 6 months to the relevant Government Agency. As an effort to control water pollution, the Company has installed Fiber Recovery System equipment in every production activity to reduce the load of wastewater that will be processed at the WWTP. The Company has also installed an Online Water Monitoring System (SPARING) to transmit wastewater monitoring data online and in real time to the MoEF (Ministry of Environment and Forestry Republic of Indonesia).

(9.15.2.16) Further details of target

We have an SRV 2030 target, which is further broken down into annual targets.
[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

APP's business model and products are centered around the use of renewable, biodegradable, and recyclable materials derived from wood pulp. This is fundamentally different from the production and use of plastics, which are synthetic polymers with different environmental and material properties.
[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

APP's focus is on cellulose-based products derived from wood pulp. This is distinctly different from plastic products, which are typically made from petrochemical processes.

Production/commercialization of durable plastic goods and/or components (including mixed materials)

(10.2.1) Activity applies

Select from:

☑ No

(10.2.2) Comment

APP's focus is on cellulose-based products derived from wood pulp. This is distinctly different from plastic products, which are typically made from petrochemical processes.

Usage of durable plastics goods and/or components (including mixed materials)

(10.2.1) Activity applies

Select from:

☑ No

(10.2.2) Comment

APP's focus is on cellulose-based products derived from wood pulp. This is distinctly different from plastic products, which are typically made from petrochemical processes.

Production/commercialization of plastic packaging

(10.2.1) Activity applies

Select from:

☑ No

(10.2.2) Comment

APP's focus is on cellulose-based products derived from wood pulp. This is distinctly different from plastic products, which are typically made from petrochemical processes.APP's focus is on cellulose-based products derived from wood pulp. This is distinctly different from plastic products, which are typically made from petrochemical processes.APP's focus is on cellulose-based products derived from wood pulp. This is distinctly different from plastic products, which are typically made from petrochemical processes.APP's focus is on cellulose-based products derived from wood pulp. This is distinctly different from plastic products, which are typically made from petrochemical processes.

Production/commercialization of goods/products packaged in plastics

(10.2.1) Activity applies

Select from:

☑ No

(10.2.2) Comment

APP's focus is on cellulose-based products derived from wood pulp. This is distinctly different from plastic products, which are typically made from petrochemical processes.

Provision/commercialization of services that use plastic packaging (e.g., food services)

(10.2.1) Activity applies

Select from:

☑ No

(10.2.2) Comment

APP's focus is on cellulose-based products derived from wood pulp. This is distinctly different from plastic products, which are typically made from petrochemical processes.

Provision of waste management and/or water management services

(10.2.1) Activity applies

Select from:

☑ No

(10.2.2) Comment

APP's focus is on cellulose-based products derived from wood pulp. This is distinctly different from plastic products, which are typically made from petrochemical processes.

Provision of financial products and/or services for plastics-related activities

(10.2.1) Activity applies

Select from:

☑ No

(10.2.2) Comment

APP's focus is on cellulose-based products derived from wood pulp. This is distinctly different from plastic products, which are typically made from petrochemical processes.

Other activities not specified

(10.2.1) Activity applies

Select from:

☑ No

(10.2.2) Comment

APP's focus is on cellulose-based products derived from wood pulp. This is distinctly different from plastic products, which are typically made from petrochemical processes.
[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:	*Select all that apply*

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
	☑ Yes, we use indicators	☑ 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 (partial assessment)

(11.4.2) Comment

APP is dedicated to safeguarding forests and the ecosystems they harbor, including initiatives to protect wildlife. This commitment is embedded as an integral part of the company's Sustainability Roadmap Vision 2030 (SRV 2030). As a concrete step, APP has established a robust monitoring system, using baseline as a reference. APP has also set longterm goals that encompass biodiversity management and conservation efforts in areas that are the focus of the company's operations. None of APP's operational sites are located within protected forest areas. It is APP's policy to not operate within protected forest areas. The operational activities of APP inevitably have an impact on ecosystems, including changes in habitat structure during logging operations. These changes can have a significant impact on the populations of animals and plants within these ecosystems. APP is committed to implementing a range of nature conservation programs, drawing upon the expertise of renowned conservationists, including those from the Sriwijaya University. This commitment is evident in our direct survey and exploration efforts within our concession areas, complemented by comprehensive flora and fauna inventory and recording methodologies. It is important to note that APP operates within designated production forest areas.

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:

☑ Yes (partial assessment)

(11.4.2) Comment

APP is dedicated to safeguarding forests and the ecosystems they harbor, including initiatives to protect wildlife. This commitment is embedded as an integral part of the company's Sustainability Roadmap Vision 2030 (SRV 2030). As a concrete step, APP has established a robust monitoring system, using baseline as a reference. APP has also set longterm goals that encompass biodiversity management and conservation efforts in areas that are the focus of the company's operations. None of APP's operational sites are located within protected forest areas. It is APP's policy to not operate within protected forest areas. The operational activities of APP inevitably have an impact on ecosystems, including changes in habitat structure during logging operations. These changes can have a significant impact on the populations of animals and plants within these ecosystems. APP is committed to implementing a range of nature conservation programs, drawing upon the expertise of renowned conservationists, including those from the Sriwijaya University. This commitment is evident in our direct survey and exploration efforts within our concession areas, complemented by comprehensive flora and fauna inventory and recording methodologies. It is important to note that APP operates within designated production forest areas.

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:

☑ Yes (partial assessment)

(11.4.2) Comment

APP is dedicated to safeguarding forests and the ecosystems they harbor, including initiatives to protect wildlife. This commitment is embedded as an integral part of the company's Sustainability Roadmap Vision 2030 (SRV 2030). As a concrete step, APP has established a robust monitoring system, using baseline as a reference. APP has also set longterm goals that encompass biodiversity management and conservation efforts in areas that are the focus of the company's operations. None of APP's operational sites are located within protected forest areas. It is APP's policy to not operate within protected forest areas. The operational activities of APP inevitably have an impact on ecosystems, including changes in habitat structure during logging operations. These changes can have a significant impact on the populations of animals and plants within these ecosystems. APP is committed to implementing a range of nature conservation programs, drawing upon the expertise of renowned conservationists, including those from the Sriwijaya University. This commitment is evident in our direct survey and exploration efforts within our

concession areas, complemented by comprehensive flora and fauna inventory and recording methodologies. It is important to note that APP operates within designated production forest areas.

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:

☑ Yes (partial assessment)

(11.4.2) Comment

APP is dedicated to safeguarding forests and the ecosystems they harbor, including initiatives to protect wildlife. This commitment is embedded as an integral part of the company's Sustainability Roadmap Vision 2030 (SRV 2030). As a concrete step, APP has established a robust monitoring system, using baseline as a reference. APP has also set longterm goals that encompass biodiversity management and conservation efforts in areas that are the focus of the company's operations. None of APP's operational sites are located within protected forest areas. It is APP's policy to not operate within protected forest areas. The operational activities of APP inevitably have an impact on ecosystems, including changes in habitat structure during logging operations. These changes can have a significant impact on the populations of animals and plants within these ecosystems. APP is committed to implementing a range of nature conservation programs, drawing upon the expertise of renowned conservationists, including those from the Sriwijaya University. This commitment is evident in our direct survey and exploration efforts within our concession areas, complemented by comprehensive flora and fauna inventory and recording methodologies. It is important to note that APP operates within designated production forest areas.

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:

☑ Yes (partial assessment)

(11.4.2) Comment

APP is dedicated to safeguarding forests and the ecosystems they harbor, including initiatives to protect wildlife. This commitment is embedded as an integral part of the company's Sustainability Roadmap Vision 2030 (SRV 2030). As a concrete step, APP has established a robust monitoring system, using baseline as a reference. APP has also set longterm goals that encompass biodiversity management and conservation efforts in areas that are the focus of the company's operations. None of

APP's operational sites are located within protected forest areas. It is APP's policy to not operate within protected forest areas. The operational activities of APP inevitably have an impact on ecosystems, including changes in habitat structure during logging operations. These changes can have a significant impact on the populations of animals and plants within these ecosystems. APP is committed to implementing a range of nature conservation programs, drawing upon the expertise of renowned conservationists, including those from the Sriwijaya University. This commitment is evident in our direct survey and exploration efforts within our concession areas, complemented by comprehensive flora and fauna inventory and recording methodologies. It is important to note that APP operates within designated production forest areas.

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:

☑ Yes (partial assessment)

(11.4.2) Comment

APP is dedicated to safeguarding forests and the ecosystems they harbor, including initiatives to protect wildlife. This commitment is embedded as an integral part of the company's Sustainability Roadmap Vision 2030 (SRV 2030). As a concrete step, APP has established a robust monitoring system, using baseline as a reference. APP has also set longterm goals that encompass biodiversity management and conservation efforts in areas that are the focus of the company's operations. None of APP's operational sites are located within protected forest areas. It is APP's policy to not operate within protected forest areas. The operational activities of APP inevitably have an impact on ecosystems, including changes in habitat structure during logging operations. These changes can have a significant impact on the populations of animals and plants within these ecosystems. APP is committed to implementing a range of nature conservation programs, drawing upon the expertise of renowned conservationists, including those from the Sriwijaya University. This commitment is evident in our direct survey and exploration efforts within our concession areas, complemented by comprehensive flora and fauna inventory and recording methodologies. It is important to note that APP operates within designated production forest areas.
[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

☑ Ramsar sites

☑ Key Biodiversity Areas

☑ Legally protected areas

☑ UNESCO World Heritage sites

☑ UNESCO Man and the Biosphere Reserves

☑ Other areas important for biodiversity

(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

National Park Berbak Sembilang Giam Siak Kecil BB - Bukit Tigapuluh Bukit Tigapuluh National Park Sungai Lumpur Mangrove Forest Padang Sugihan Natural Reserve Zamrud National Park PLG Sibanga Natural Reserve Tahura Sultan Syarif Kasim National Park Teso Nelo National Park Kerumutan Natural Reserve

(11.4.1.6) Proximity

Select from:

☑ Adjacent

(11.4.1.8) Briefly describe your organization’s activities in the reporting year located in or near to the selected area

APP is actively engaged in restoring natural forests across our supplier concession areas, aiming to revitalize degraded ecosystems while simultaneously preserving intact ones. Our restoration efforts encompass three key steps: • Eradication: This is implemented in areas dominated by acacia plantations, • Natural Succession: This approach is applied to areas with vegetation cover ranging from young shrubs to mature shrubs, and • Enrichment Planting: This is carried out in areas with open land cover or sparse shrubland. Key Highlights from 2023: • Maintaining Healthy Natural Forests: We maintained a remarkable 85% of our natural forests in good condition across all regions. • Expanding Restoration Efforts: Despite challenges such as encroachment, illegal mining, limited access, and dispersed locations, we successfully restored approximately 13,000 hectares of degraded natural forests and nontimber forests (include SERACS). • Collaborating for Ecosystem Restoration: In partnership with PUSTANTDPI under BRIN (National Research and Innovation Agency), we embarked on initiatives to restore ecosystems and

develop mycorrhizal inoculants to enhance the productivity of alternative tree species on peatlands. • Biodiversity assessment to evaluate the impact of the mill's operations and surrounding pulpwood supplier plantations. The assessment involved a survey of flora and fauna within the forest environment • Conservation of local tree species • Mangrove conservation: Collaborating with the government and the Mangrove Ecosystem Restoration Alliance (MERA), a multistakeholder platform spearheaded by Yayasan Konservasi Alam Nusantara (YKAN), APP is making significant strides towards preserving these vital ecosystems. 150,000 mangrove trees planted. • Wildlife breeding • APP initiated several initiatives to prevent negative interactions between humans and wildlife. These include collaborating with local governments, NGOs, academics, experts, and communities. • Educating and raising awareness to care for biodiversity and wildlife.

(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

☑ Site selection

☑ Scheduling

☑ Physical controls

☑ Operational controls

☑ Restoration

(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

Establishing High Conservation Value (HCV), and Key Biodiversity Areas - mapping endangered species-monitoring and evaluation- developing forest protection strategies- restoring degraded forests- adapting operations to wildlife movements- providing human-wildlife conflict mitigation training-developing human-wildlife conflict mitigation SOP. Habitat Preservation and Restoration • Habitat Restoration: Restore degraded habitats through reforestation, wetland restoration, and habitat connectivity initiatives. • Plantation and Harvesting Planning: Implement sustainable planning to minimize habitat fragmentation and loss. Species Conservation • Species Protection: Enact and enforce laws to protect endangered and threatened species. • Conservation: Protect species in their natural habitats through habitat restoration and management, wildlife breeding. Invasive Species Control • Early Detection and Rapid Response: Implement early warning systems to detect and control invasive species before they become established. • Eradication Programs: Develop and implement eradication programs for invasive species that have already established themselves. • Prevention: Prevent the introduction of invasive species through strict quarantine measures and regulations. [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

☑ Forests

☑ Water

☑ Biodiversity

(13.1.1.2) Disclosure module and data verified and/or assured

Environmental performance – Climate change

☑ Waste data
☑ Fuel consumption
☑ Product footprint
☑ Base year emissions
☑ Progress against targets
☑ Electricity/Steam/Heat/Cooling consumption
☑ Emissions reduction initiatives/activities
☑ Year on year change in land use change emissions
☑ Renewable Electricity/Steam/Heat/Cooling generation
☑ Year on year change in absolute emissions (Scope 3)
☑ Renewable fuel consumption
☑ Target-setting methodology
☑ Emissions breakdown by country/area
☑ Emissions breakdown by business division
☑ Electricity/Steam/Heat/Cooling generation
☑ Renewable Electricity/Steam/Heat/Cooling consumption
☑ Year on year change in emissions intensity (Scope 3)
☑ Year on year change in absolute emissions (Scope 1 and 2)
☑ Year on year change in emissions intensity (Scope 1 and 2)

(13.1.1.3) Verification/assurance standard

General standards

☑ AA1000AS

(13.1.1.4) Further details of the third-party verification/assurance process

For our sustainability report, APP has engaged the services of an independent assurance provider, Bureau Veritas Indonesia, selected based on its expertise and other requirements set by the Board of Directors. This assurance provider has no employment relationship with APP other than this assurance service. The assurance report, which adheres to the international AA1000 (AS) standard.

(13.1.1.5) Attach verification/assurance evidence/report (optional)

240718 APP Assurance Statement 2023_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

Dear Stakeholders, At the core of our organization lies an unwavering belief in doing the right thing. As a global leader in pulp and paper products manufacturing, our commitment to a sustainable economy, positive environmental impact, and social responsibility remains steadfast. Our ambitious goals and performance over the years are a testament to this commitment. We recognize that addressing the risks and opportunities of sustainable development extends beyond business as usual. Our efforts contribute positively on both global and local levels. This is embodied in APP's Sustainability Commitment, a policy guiding responsible business practices throughout our value chain, and the Sustainability Roadmap: Vision 2030, an organization-wide sustainability strategy. These two governance initiatives serve as the backbone of APP's efforts in innovative technology, positive forestry practices, and community empowerment. Since their inception, our commitment to sustainable values has deepened, emphasizing circular production, sustainable forests, and community empowerment. By 2023, we achieved 98% energy use from renewable sources at OKI plants, significantly reducing greenhouse gas emissions. Additionally, a 9.8 MWp solar PLTS facility was installed at the Tjiwi Kimia mill on the rooftop of warehouses, office, and production facilities, with a planned increase up 45 MWp across APP. We believe a sustainable future must be inclusive and equitable. We strive to create a diverse, equitable, and inclusive environment where everyone feels valued and has the opportunity to contribute. In 2023, we formed a focus group to develop strategies and plans, culminating in the establishment of a Diversity, Equality, and Inclusion (DEI) Committee within APP. The committee's initial focus will be to develop governance structures and strategies to increase diversity in leadership, promote equal opportunity, and foster an inclusive culture. For over a decade, APP has been committed to improving community welfare, impacting around 400 thousands beneficiaries surrounding our operations including our sanitation and clean water programs benefit around 250 households in East Java, by providing clean water facilities and educating the public on the importance of cleanliness. The year 2023 has been exciting, marked by significant performance, by adhering to the ten universal principles of the United Nations (UN) in human rights, employment, environment, and anti-corruption, our entities have received recognition through 44 awards. Notably, we were honoured with the PRISMA award for strong human rights implementation and the PROKLIM award, a prestigious environmental accolade in Indonesia. APP's meaningful and victorious sustainability journey is a collective effort of stakeholders and an empowered community. Together, we can continue to push the boundaries of sustainable practices to protect and preserve our planet for future generations, inspiring impact & unveiling opportunities. Thank you to everyone who has joined us on this journey.

(13.2.2) Attachment (optional)

SR_PT_APP_PURINUSA_EKAPERSADA_2023_ENGLISH_FINAL.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 Sustainability Officer

(13.3.2) Corresponding job category

Select from:

☑ Chief Sustainability Officer (CSO)

[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:

☑ Yes, CDP may share our Disclosure Submission Lead contact details with the Pacific Institute