PT Asia Pulp & Paper - Water Security 2023

W0. Introduction

W0.1

(W0.1) Give a general description of and introduction to your 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 as processing facilities from pulpwood suppliers into products. APP mills including OKI Pulp & Paper, Pindo Deli Pulp & Paper, Indah Kiat Pulp & Paper, Tjiwi Kimia, Ekamas Fortuna, Univenus and Lontar Papyrus. APP Sinar Mas' operations in Indonesia are carried out by direct or indirect subsidiaries of PT 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, market-leading 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.

W0.2

(W0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date
Reporting year	January 1 2022	December 31 2022

W0.3

(W0.3) Select the countries/areas in which you operate.

Indonesia

W0.4

(W0.4) Select the currency used for all financial information disclosed throughout your response.

USD

W0.5

(W0.5) Select the option that best describes the reporting boundary for companies, entities, or groups for which water impacts on your business are being reported.

Companies, entities or groups over which operational control is exercised

W0.6

(W0.6) Within this boundary, are there any geographies, facilities, water aspects, or other exclusions from your disclosure?

No

W0.7

(W0.7) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization.	Provide your unique identifier
Yes, another unique identifier, please specify (Indonesia stock exchange)	INKP, TKIM

W1. Current state

W1.1

(W1.1) Rate the importance (current and future) of water quality and water quantity to the success of your business.

	Direct use importance rating	Indirect use importance rating	Please explain
Sufficient amounts of good quality freshwater available for use	Vital	Important	APP consumes a large amount of water about 274,455,918 m3. APP consumes water for generating steam, cooling and other processes. APP closely monitors water contaminants and recognize that APP has a responsibility to protect local water resources at all of APP mill sites. APP constantly striving to reduce APP water consumption through the use of the latest water efficient technology and doing initiatives related water efficiency program. APP has a water treatment plant for processing water from the river. This processing water utilized for the production process. Currently APP depends on water resources from the river, however APP also optimizes the reuse, reduce and recycle the process water, so APP can reduce exploring water from the river.
Sufficient amounts of recycled, brackish and/or produced water available for use	Important	Neutral	In 2022 APP reused and recycled 14% of APP water in processes, the amount of reused and recycled water is needed to reduce water intake from the river so we categorize it as a company priority.

W1.2

(W1.2) Across all your operations, what proportion of the following water aspects are regularly measured and monitored?

	% of sites/facilities/operations	Frequency of measurement	Method of measurement	Please explain
Water withdrawals – total volumes	100%	Continuously	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.	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 325,542 ML in 2022. 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 – volumes by source	100%	Continuously	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.	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.
Entrained water associated with your metals & mining and/or coal sector activities - total volumes [only metals and mining and coal sectors]	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Produced water associated with your oil & gas sector activities - total volumes [only oil and gas sector]	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Water withdrawals quality	100%	Daily	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.	100% of our operational sites are monitored and checked daily by laboratory testing; conductivity, turbidity, pH, color, total hardness. The quality of the withdrawal water needs to be monitored for the water treatment process operation.
Water discharges – total volumes	100%	Continuously	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.	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 waste water from operations and discharges it to rivers with a measured flow meter of 219.289 ML in 2022. Flowmeter is connected to PI (Processing Information) system to facilitate APP in collecting/recording, analyzing and visualizing data.
Water discharges – volumes by destination	100%	Continuously	We use flowmeters to measure discharge volumes in real time. The volume is recorded by using PI (Processing Information) system.	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	100%	Continuously	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.	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	100%	Daily	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.	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. Currently is under installation.
Water discharge quality – emissions to water (nitrates, phosphates, pesticides, and/or other priority substances)	100%	Monthly	not mandatory to report nitrates, phosphates, pesticides. But we monitor water emission: pH, TSS, BOD, COD, AOX every month.	not mandatory to report nitrates, phosphates, pesticides
Water discharge quality – temperature	100%	Daily	Temperature water discharge is monitored by site lab.	Temperature water discharge is monitored by site lab daily. In addition, APP has purchased live analyzer meter for temperature to monitor treated waste water quality. Currently is under installation.
Water consumption – total volume	100%	Continuously	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.	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	1-25	Monthly	APP estimates water recycle, 14%	Volumes of recycled and reused water are monitored at all of our sites. In 2022 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	100%	Daily	APP has WASH services for employees	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.

W1.2b

(W1.2b) 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?

	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Five-year forecast	Primary reason for forecast	Please explain
Total withdrawals	325542	Lower	Increase/decrease in efficiency	Much lower	Increase/decrease in efficiency	APP takes and manages water sourced from river with a total of 325,542 ML in 2022. This is lower than previous reporting year. 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 27.9 m3/tonne-product equivalent in 2022, which represents a 16% reduction from our 2018 baseline of 33.0 m3/tonneproduct.
Total discharges	219289	Lower	Increase/decrease in efficiency	Much lower	Increase/decrease in efficiency	APP discharges 219,289 ML water in 2022 to river, lower than previous reporting year 226,370 ML. APP reduces discharge water by 3.1% 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	274455918	About the same	Increase/decrease in efficiency	Much lower	Increase/decrease in efficiency	APP consumes 274,455 ML water for production in 2022, this amount is about the same as previous reporting year but in terms of water intensity is decreasing 6% from 2021.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.

W1.2d

(W1.2d) Indicate whether water is withdrawn from areas with water stress, provide the proportion, how it compares with the previous reporting year, and how it is forecasted to change.

	Withdrawals are from areas with water stress	% withdrawn from areas with water stress	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Five-year forecast	Primary reason for forecast	Identification tool	Please explain
Row 1	No	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	WRI Aqueduct	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 company-wide 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.

W1.2h

(W1.2h) Provide total water withdrawal data by source.

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Relevant	325542	Lower	Increase/decrease in efficiency	APP's operations are rely on water, drawing 100% of its supply from river water. In 2022, APP takes 325,542 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 2022: 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	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	not relevant. APP's water sourcing 100% relies on surface water from rivers.
Groundwater – renewable	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	not relevant. APP's water sourcing 100% relies on surface water from rivers.
Groundwater – non-renewable	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	not relevant. APP's water sourcing 100% relies on surface water from rivers.
Produced/Entrained water	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	not relevant. APP's water sourcing 100% relies on surface water from rivers.
Third party sources	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	not relevant. APP's water sourcing 100% relies on surface water from rivers.

W1.2i

(W1.2i) Provide total water discharge data by destination.

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Please explain
Fresh surface water	Relevant	219289	Lower	Increase/decrease in efficiency	APP water discharges is 219,289 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 2022: 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	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	not relevant. APP discharges 100% to surface water, rivers.
Groundwater	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	not relevant. APP discharges 100% to surface water, rivers.
Third-party destinations	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	not relevant. APP discharges 100% to surface water, rivers.

W1.2j

(W1.2j) Within your direct operations, indicate the highest level(s) to which you treat your discharge.

	Relevance of treatment level to discharge	Volume (megaliters/year)	Comparison of treated volume with previous reporting year	Primary reason for comparison with previous reporting year	% of your sites/facilities/operations this volume applies to	Please explain
Tertiary treatment	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	not relevant. APP performs primary and secondary waste water treatment
Secondary treatment	Relevant	219289	Lower	Increase/decrease in efficiency	100%	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 waste water 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	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	not relevant. APP performs primary and secondary waste water treatment
Discharge to the natural environment without treatment	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	not relevant. APP performs primary and secondary waste water treatment
Discharge to a third party without treatment	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	not relevant. APP performs primary and secondary waste water treatment
Other	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	not relevant. APP performs primary and secondary waste water treatment

W1.2k

(W1.2k) 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 tonnes)	Category(ies) of substances included	List the specific substances included	Please explain
Row 1	0	Nitrates Phosphates Pesticides	<Not Applicable>	not mandatory to report nitrates, phosphates, pesticides. But we monitor pH, TSS, BOD, COD, AOX.

W1.3

(W1.3) Provide a figure for your organization's total water withdrawal efficiency.

	Revenue	Total water withdrawal volume (megaliters)	Total water withdrawal efficiency	Anticipated forward trend
Row 1	9400000000	325542		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 The net sales volume sales revenue from is USD9.4 billion in 2022.

W1.4

(W1.4) Do any of your products contain substances classified as hazardous by a regulatory authority?

	Products contain hazardous substances	Comment
Row 1	No	no, our product not categorized as hazardous waste and source from plant based

W1.5

(W1.5) Do you engage with your value chain on water-related issues?

	Engagement	Primary reason for no engagement	Please explain
Suppliers	No	Important but not an immediate business priority	We are still monitoring internal process thus value chain on water not yet assessed
Other value chain partners (e.g., customers)	No	Important but not an immediate business priority	We are still monitoring internal process thus value chain on water not yet assessed

W2. Business impacts

W2.1

(W2.1) Has your organization experienced any detrimental water-related impacts?

No

W2.2

(W2.2) 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	Fines, enforcement orders, and/or other penalties	Comment
Row 1	No	<Not Applicable>	APP has permission/permit to take and utilize surface water. It is poured on SIPPA permit from government. SIPPA is the authority given to legal entities in carrying out water. One of the content of SIPPA permit is according to amount of water utilize and point location of water intake.

W3. Procedures

W3.1

(W3.1) 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?

	Identification and classification of potential water pollutants	How potential water pollutants are identified and classified	Please explain
Row 1	Yes, we identify and classify our potential water pollutants	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.	<Not Applicable>

W3.1a

(W3.1a) Describe how your organization minimizes the adverse impacts of potential water pollutants on water ecosystems or human health associated with your activities.

Water pollutant category
Inorganic pollutants

Description of water pollutant and potential impacts
acidification impact

Value chain stage
Direct operations

Actions and procedures to minimize adverse impacts
Beyond compliance with regulatory requirements
Water recycling
Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements
Upgrading of process equipment/methods

Please explain
APP has an environmental management system (EMS) policy that 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.

W3.3

(W3.3) Does your organization undertake a water-related risk assessment?
Yes, water-related risks are assessed

W3.3a

(W3.3a) Select the options that best describe your procedures for identifying and assessing water-related risks.

Value chain stage
Direct operations

Coverage
Full

Risk assessment procedure
Water risks are assessed in an environmental risk assessment

Frequency of assessment
Annually

How far into the future are risks considered?
1 to 3 years

Type of tools and methods used
Tools on the market
International methodologies and standards
Databases

Tools and methods used
EcoVadis
Life Cycle Assessment
ISO 14001 Environmental Management Standard

Contextual issues considered
Water availability at a basin/catchment level
Water quality at a basin/catchment level

Stakeholders considered
Customers
Employees
Local communities
NGOs
Regulators
Suppliers

Comment
A Water Footprint Assessment has been undertaken in partnership with Nalco, one of the world's leading innovators in clean water technology and solutions, to conduct a company-wide water foot-printing analysis based on guidelines developed by The Water Footprint Network. The assessment will provide a baseline for APP to develop a more detailed roadmap for sustainable water management in its manufcturing processes, including extended plans for water reduction programmes in each mill. Due to the

intensive and detailed nature of the assessment, we completed the assessment for all mills by 2015. In addition to the on-going Water Footprint Assessment, all of our mills continue to implement various water improvement programmes, including reduction in water consumption, increase efficiency and water quality enhancement.

Value chain stage
Supply chain

Coverage
Full

Risk assessment procedure
Water risks are assessed as part of other company-wide risk assessment system

Frequency of assessment
Annually

How far into the future are risks considered?
1 to 3 years

Type of tools and methods used
Other

Tools and methods used
Other, please specify (scorecard)

Contextual issues considered
Water availability at a basin/catchment level
Water quality at a basin/catchment level

Stakeholders considered
Customers
Employees
Local communities
NGOs
Regulators
Suppliers

Comment
During 2012 and 2013, together with our pulpwood suppliers, we developed a comprehensive scorecard system to enforce and monitor these commitments throughout our supply chain. The scorecard system was developed to measure social and environmental performance of each of our suppliers, in line with regulatory requirements and best practices from internationally recognized Sustainable Forest Management certification standards. Regular assessments using the system enable us to ensure that our suppliers meet our commitment and action plans are developed to address any existing gaps in timely manner. In 2012, we began working together with our pulpwood suppliers in implementing the High Conservation Value (HCV) assessment. The assessment, which is also a part of our Natural Forest Moratorium commitment in line with APP Forest Conservation Policy (FCP), is done to recognize areas with outstandingly significant or critically important ecological, social or cultural value. The HCV assessment will enable APP and its suppliers to develop proper management plan for those valuable areas. Water level in peatland area plays a critical role in ensuring hydrology balance in the surrounding ecosystem. To further ensure sustainable water management in our suppliers' area, together with our pulpwood suppliers we develop Best Practice for Peat Management & Monitoring Plan.

W3.3b

(W3.3b) Describe your organization's process for identifying, assessing, and responding to water-related risks within your direct operations and other stages of your value chain.

	Rationale for approach to risk assessment	Explanation of contextual issues considered	Explanation of stakeholders considered	Decision-making process for risk response
Row 1	APP conducts an assessment and identification of the availability of water sources prior to use, to ensure that our activities do not disturb the river ecosystem.	APP is following up on the water risk assessment evaluation result	APP works closely with the river BWS agency and the Ministry of Public Works and Public Housing and other related agencies with periodic communication and reporting.	Chief Sustainability Officer (CSO)

W4. Risks and opportunities

W4.1

(W4.1) Have you identified any inherent water-related risks with the potential to have a substantive financial or strategic impact on your business?
Yes, both in direct operations and the rest of our value chain

W4.1a

(W4.1a) How does your organization define substantive financial or strategic impact on your business?

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 around the world 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 Unted 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 (meaning "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 during conversion these bacteria produced methane gas 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 series of production efficiency, APP strives to reduce its water consumption as well as improve its waste water quality significantly.

W4.1b

(W4.1b) What is the total number of facilities exposed to water risks with the potential to have a substantive financial or strategic impact on your business, and what proportion of your company-wide facilities does this represent?

	Total number of facilities exposed to water risk	% company-wide facilities this represents	Comment
Row 1	10	100	APP has 10 mills that exposed to water risk. Water is essential to the pulp and paper making process, from stock preparation where the pulp is diluted into water for further processing, through to its conversion to steam for process heat and electricity generation. It's a water intensive process, but one that offers the opportunity to recycle and re-use a significant amount of water, reducing the amount of water our mills withdraw from local sources. As one of the first companies in Indonesia that pledged to The UN Global Compact CEO Water Mandate programme, we have a challenging task to ensure that a responsible approach to water management is implemented not only within our operating facilities but also across our supply chain. It is one of our strategic goals highlighted in our Roadmap and a key metric measured by our mills. Our mills focus on two areas; reducing water consumption and maintaining effluent quality from our mill processes. Reduced water consumption is achieved through reducing absolute consumption and increasing water re-use in our processes. A Water Footprint Assessment has been undertaken in partnership with Nalco, one of the world's leading innovators in clean water technology and solutions, to conduct a company-wide water foot-printing analysis based on guidelines developed by The Water Footprint Network. The assessment will provide a baseline for APP to develop a more detailed roadmap for sustainable water management in its manufacturing processes, including extended plans for water reduction programmes in total 10 mills. Our commitment toward sustainable water management also applies to our pulpwood suppliers. These commitments are reflected in our Forest Conservation Policy. During 2012 and 2013, together with our pulpwood suppliers, we developed a comprehensive scorecard system to enforce and monitor these commitments throughout our supply chain. The scorecard system was developed to measure social and environmental performance of each of our suppliers, in line with regulatory requirements and best practices from internationally recognized Sustainable Forest Management certification standards. Regular assessments using the system enable us to ensure that our suppliers meet our commitment and action plans are developed to address any existing gaps in timely manner. In 2012, we began working together with our pulpwood suppliers in implementing the High Conservation Value (HCV) assessment. The assessment, which is also a part of our Natural Forest Moratorium commitment in line with APP Forest Conservation Policy (FCP), is done to recognize areas with outstandingly significant or critically important ecological, social or cultural value. The HCV toolkit identifies 6 types of high conservation values within a forest that needs to be protected; among them are forest areas that provide basic service of nature in critical situations and forest areas fundamental in meeting basic needs of local communities. The HCV assessment will enable APP and its suppliers to develop proper management plan for those valuable areas. Water level in peatland area plays a critical role in ensuring hydrology balance in the surrounding ecosystem. To further ensure sustainable water management in our suppliers' area, together with our pulpwood suppliers we are currently developing Best Practice for Peat Management & Monitoring Plan (PMMP). The Plan will be developed based on assessment and recommendations from internationally recognized team of peat experts. An assessment to find best approach in peatland management will also be a part of our HCV assessment. APP committed to zero new development on peatland, including canal & infrastructure construction, before assessment and best practice recommendation from peat experts are completed. The result of these various assessments; HCV, Scorecard and Peat assessment, will feed into the Integrated Sustainable Forest Management APP and its suppliers are currently developing. The integrated management system will help ensure, amongst others, improved water and watershed management within the concession areas which will also affect water condition in the surrounding landscape.

W4.1c

(W4.1c) By river basin, what is the number and proportion of facilities exposed to water risks that could have a substantive financial or strategic impact on your business, and what is the potential business impact associated with those facilities?

Country/Area & River basin

Indonesia	Other, please specify (Siak River, Riau)

Number of facilities exposed to water risk

3

% company-wide facilities this represents

1-25

Production value for the metals & mining activities associated with these facilities
<Not Applicable>

% company's annual electricity generation that could be affected by these facilities
<Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities
<Not Applicable>

% company's total global revenue that could be affected
1-10

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

Country/Area & River basin

Indonesia	Other, please specify (Pengabuan River)

Number of facilities exposed to water risk
1

% company-wide facilities this represents
1-25

Production value for the metals & mining activities associated with these facilities
<Not Applicable>

% company's annual electricity generation that could be affected by these facilities
<Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities
<Not Applicable>

% company's total global revenue that could be affected
1-10

Comment
APP have 1 facility using Pengabuang River. There is no issue in this river relate to water scarcity and stress.

Country/Area & River basin

Indonesia	Other, please specify (Citarum River)

Number of facilities exposed to water risk
3

% company-wide facilities this represents
1-25

Production value for the metals & mining activities associated with these facilities
<Not Applicable>

% company's annual electricity generation that could be affected by these facilities
<Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities
<Not Applicable>

% company's total global revenue that could be affected
1-10

Comment
APP have 3 facilities using Citarum River. There is no issue in this river relate to water scarcity and stress.

Country/Area & River basin

Indonesia	Other, please specify (Padang River)

Number of facilities exposed to water risk
1

% company-wide facilities this represents
1-25

Production value for the metals & mining activities associated with these facilities
<Not Applicable>

% company's annual electricity generation that could be affected by these facilities
<Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities
<Not Applicable>

% company's total global revenue that could be affected
1-10

Comment
APP have working with the consultant to study he 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 water demand for future and to evaluate most feasible pumping station location with least risks of salt pulse, pH acid, and metals leaching.

Country/Area & River basin

Indonesia	Brantas

Number of facilities exposed to water risk
1

% company-wide facilities this represents
1-25

Production value for the metals & mining activities associated with these facilities
<Not Applicable>

% company's annual electricity generation that could be affected by these facilities
<Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities
<Not Applicable>

% company's total global revenue that could be affected
1-10

Comment
APP have 1 facility using Brantas River. There is no issue in this river relate to water scarcity and stress.

Country/Area & River basin

Indonesia	Other, please specify (Ciujung River)

Number of facilities exposed to water risk
1

% company-wide facilities this represents
1-25

Production value for the metals & mining activities associated with these facilities
<Not Applicable>

% company's annual electricity generation that could be affected by these facilities
<Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities
<Not Applicable>

% company's total global revenue that could be affected
1-10

Comment
APP have 1 facility using Ciujung River. There is no issue in this river relate to water scarcity and stress.

Country/Area & River basin

Indonesia	Other, please specify (Cisadane River)

Number of facilities exposed to water risk
1

% company-wide facilities this represents
1-25

Production value for the metals & mining activities associated with these facilities
<Not Applicable>

% company's annual electricity generation that could be affected by these facilities
<Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities
<Not Applicable>

% company's total global revenue that could be affected
1-10

Comment
APP have 1 facility using Cisadane River. There is no issue in this river relate to water scarcity and stress.

Country/Area & River basin

Indonesia	Other, please specify (Lesti River)

Number of facilities exposed to water risk
1

% company-wide facilities this represents
1-25

Production value for the metals & mining activities associated with these facilities
<Not Applicable>

% company's annual electricity generation that could be affected by these facilities
<Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities
<Not Applicable>

% company's total global revenue that could be affected
1-10

Comment
APP have 1 facility using Lesti River. There is no issue in this river relate to water scarcity and stress.

W4.2

(W4.2) Provide details of identified risks in your direct operations with the potential to have a substantive financial or strategic impact on your business, and your response to those risks.

Country/Area & River basin

Indonesia	Other, please specify (Siak river, Pangabuan river, Baung river, Citarum river, Ciujung river, Cisadane river, Brantas river, Lesti river)

Type of risk & Primary risk driver

Chronic physical	Declining water quality

Primary potential impact
Increased operating costs

Company-specific description
As many company operates in surrounding of river, it will have a risk to water availability and its quality.

Timeframe
More than 6 years

Magnitude of potential impact
Medium-low

Likelihood
Likely

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure - minimum (currency)
40000

Potential financial impact figure - maximum (currency)
8000000

Explanation of financial impact
Low quality of rivers such as turbidity, conductivity, pH, salinity, etc. will impact to process-water production and reduce production will decrease revenue that may reduce 1 - 5 % revenue per facility

Primary response to risk
Adopt water efficiency, water reuse, recycling and conservation practices

Description of response
We have water treatment and wastewater treatment facility with proper design to make sure all water parameters comply with requirements, both process water specification and effluent water. 3R principles are very important and we believe by doing it, our operation can anticipate abnormalities and even develop a contingency plan in term of incoming raw water quality issues.

To response with the decreasing of quality water issue in water treatment. Some initiatives need to be actioned, such as additional chemical and modification process of water treatment.

Cost of response
2000000

Explanation of cost of response
Investment of additional chemical and modification process of water treatment per facility

Country/Area & River basin

Indonesia	Other, please specify (Siak river, Pangabuan river, Baung river, Citarum river, Ciujung river, Cisadane river, Brantas river, Lesti river)

Type of risk & Primary risk driver

Chronic physical	Water scarcity

Primary potential impact
Increased operating costs

Company-specific description
Continued risks around water quality and availability may have immediate impact to our operations, while other potential risks such as sea water and peat water intrusion might be identified have impact to our operations.

Timeframe
More than 6 years

Magnitude of potential impact
Medium-high

Likelihood
About as likely as not

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure - minimum (currency)
40000

Potential financial impact figure - maximum (currency)
8000000

Explanation of financial impact
Pulp and paper industry use a quite substantial amount of water, therefore the disturbance of water source will affect the operation significantly, and reduce production. It will decrease revenue that may reduce 1 - 5 % revenue per facility

Primary response to risk
Develop drought emergency plans

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 mechanism such as efficiency and 3R implementation as well as working together with government and other stakeholders.

Cost of response
2000000

Explanation of cost of response
APP has water storage (lagoon) to store during dry season. It's as back up if the water scarcity is happened. Furthermore, we have other water intake pump in other branches of the river.

Therefore, to response with 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 maintainance and relocate the water intake pump can be assumed with 2 million USD

W4.2a

(W4.2a) Provide details of risks identified within your value chain (beyond direct operations) with the potential to have a substantive financial or strategic impact on your business, and your response to those risks.

Country/Area & River basin

Indonesia	Other, please specify (river surrounding of forestry operations)

Stage of value chain
Supply chain

Type of risk & Primary risk driver

Chronic physical	Seasonal supply variability/inter annual variability

Primary potential impact
Constraint to growth

Company-specific description
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.

Timeframe
More than 6 years

Magnitude of potential impact
Medium-low

Likelihood
Likely

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure - minimum (currency)
40000

Potential financial impact figure - maximum (currency)
8000000

Explanation of financial impact
Unusual condition such as drought and flooding will impact to pulpwood production and supply to pulp & paper operations.

Primary response to risk

Supplier engagement	Promote investment in infrastructure and technologies for water saving, re-use and recycling among suppliers

Description of response
- Our supplier implements procedures to manage water levels in variety season
- Research on plantation tress which more resistant to flooding and drought
- investment of infrastructure to keep water level

Cost of response
500000

Explanation of cost of response
- cost of research on plantation tress which more resistant to flooding and drought
- cost of investment of infrastructure to keep water level

W4.3

(W4.3) Have you identified any water-related opportunities with the potential to have a substantive financial or strategic impact on your business?
Yes, we have identified opportunities, and some/all are being realized

W4.3a

(W4.3a) Provide details of opportunities currently being realized that could have a substantive financial or strategic impact on your business.

Type of opportunity
Efficiency

Primary water-related opportunity
Improved water efficiency in operations

Company-specific description & strategy to realize opportunity
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 2022 we reused & recycle 14% of our water in processes, meaning we use less fresh water. At the end of 2022, we had achieved a water intensity reduction of 16%, 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 2022:
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

Estimated timeframe for realization
More than 6 years

Magnitude of potential financial impact
Medium-high

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
150000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

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

W5. Facility-level water accounting

W5.1

(W5.1) For each facility referenced in W4.1c, provide coordinates, water accounting data, and a comparison with the previous reporting year.

Facility reference number
Facility 1

Facility name (optional)
PT. Indah Kiat Pulp & Paper Perawang Mills, PT. Pindo Deli Perawang Mills, PT. Univenus Perawang.

Country/Area & River basin

Indonesia	Other, please specify (Siak River, Riau)

Latitude
0.664278

Longitude
101.595668

Located in area with water stress
No

Primary power generation source for your electricity generation at this facility
<Not Applicable>

Oil & gas sector business division
<Not Applicable>

Total water withdrawals at this facility (megaliters/year)
138480

Comparison of total withdrawals with previous reporting year
Lower

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes
138480

Withdrawals from brackish surface water/seawater
0

Withdrawals from groundwater - renewable
0

Withdrawals from groundwater - non-renewable
0

Withdrawals from produced/entrained water
0

Withdrawals from third party sources
0

Total water discharges at this facility (megaliters/year)
112750

Comparison of total discharges with previous reporting year
About the same

Discharges to fresh surface water
112750

Discharges to brackish surface water/seawater
0

Discharges to groundwater
0

Discharges to third party destinations
0

Total water consumption at this facility (megaliters/year)
117598

Comparison of total consumption with previous reporting year
Lower

Please explain
PT. Indah Kiat Pulp & Paper Perawang Mills, PT. Pindo Deli Perawang Mills, PT. Univenus Perawang take 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. Fiberline division savings water by 11.3 m3/ADT in 2022, while paperlines 8 and 9 savings water from pulp making. Additionally, water previously used as white water in pulp was reused, contributing to further water conservation efforts.

Facility reference number
Facility 2

Facility name (optional)
PT. Lontar Papyrus Pulp & Paper Industry

Country/Area & River basin

Indonesia	Other, please specify (Pangabuan River)

Latitude
-1.01

Longitude
103.08

Located in area with water stress
No

Primary power generation source for your electricity generation at this facility
<Not Applicable>

Oil & gas sector business division
<Not Applicable>

Total water withdrawals at this facility (megaliters/year)
28912

Comparison of total withdrawals with previous reporting year
Lower

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes
28912

Withdrawals from brackish surface water/seawater
0

Withdrawals from groundwater - renewable
0

Withdrawals from groundwater - non-renewable
0

Withdrawals from produced/entrained water
0

Withdrawals from third party sources
0

Total water discharges at this facility (megaliters/year)
12366

Comparison of total discharges with previous reporting year
Lower

Discharges to fresh surface water
12366

Discharges to brackish surface water/seawater
0

Discharges to groundwater
0

Discharges to third party destinations
0

Total water consumption at this facility (megaliters/year)
20467

Comparison of total consumption with previous reporting year
Lower

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.

Facility reference number
Facility 3

Facility name (optional)
PT. OKI Pulp & Paper Mills

Country/Area & River basin

Indonesia	Other, please specify (Padang River)

Latitude
-3.329272

Longitude
105.416347

Located in area with water stress
No

Primary power generation source for your electricity generation at this facility
<Not Applicable>

Oil & gas sector business division
<Not Applicable>

Total water withdrawals at this facility (megaliters/year)
73324

Comparison of total withdrawals with previous reporting year
About the same

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes
73324

Withdrawals from brackish surface water/seawater
0

Withdrawals from groundwater - renewable
0

Withdrawals from groundwater - non-renewable
0

Withdrawals from produced/entrained water
0

Withdrawals from third party sources
0

Total water discharges at this facility (megaliters/year)
37978

Comparison of total discharges with previous reporting year
Lower

Discharges to fresh surface water
37978

Discharges to brackish surface water/seawater
0

Discharges to groundwater
0

Discharges to third party destinations
0

Total water consumption at this facility (megaliters/year)
53581

Comparison of total consumption with previous reporting year
About the same

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 and an action plan for 2022 involved optimizing and maximizing water condensate.

Facility reference number
Facility 4

Facility name (optional)
PT. Indah Kiat Pulp & Paper Serang Mills

Country/Area & River basin

Indonesia	Other, please specify (Ciujung River)

Latitude
-6.12

Longitude
106.15028

Located in area with water stress
No

Primary power generation source for your electricity generation at this facility
<Not Applicable>

Oil & gas sector business division
<Not Applicable>

Total water withdrawals at this facility (megaliters/year)
22563

Comparison of total withdrawals with previous reporting year
Higher

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes
22563

Withdrawals from brackish surface water/seawater
0

Withdrawals from groundwater - renewable
0

Withdrawals from groundwater - non-renewable
0

Withdrawals from produced/entrained water
0

Withdrawals from third party sources
0

Total water discharges at this facility (megaliters/year)
15309

Comparison of total discharges with previous reporting year
About the same

Discharges to fresh surface water
15309

Discharges to brackish surface water/seawater
0

Discharges to groundwater
0

Discharges to third party destinations
0

Total water consumption at this facility (megaliters/year)
21899

Comparison of total consumption with previous reporting year
Higher

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.

Facility reference number
Facility 5

Facility name (optional)
PT. Indah Kiat Pulp & Paper Tangerang Mills

Country/Area & River basin

Indonesia	Other, please specify (Cisadane)

Latitude
-6.17833

Longitude
106.63194

Located in area with water stress
No

Primary power generation source for your electricity generation at this facility
<Not Applicable>

Oil & gas sector business division
<Not Applicable>

Total water withdrawals at this facility (megaliters/year)
2262

Comparison of total withdrawals with previous reporting year
About the same

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes
2262

Withdrawals from brackish surface water/seawater
0

Withdrawals from groundwater - renewable
0

Withdrawals from groundwater - non-renewable
0

Withdrawals from produced/entrained water
0

Withdrawals from third party sources
0

Total water discharges at this facility (megaliters/year)
1765

Comparison of total discharges with previous reporting year
Lower

Discharges to fresh surface water
1765

Discharges to brackish surface water/seawater
0

Discharges to groundwater
0

Discharges to third party destinations
0

Total water consumption at this facility (megaliters/year)
2262

Comparison of total consumption with previous reporting year
About the same

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.

Facility reference number
Facility 6

Facility name (optional)
PT. Pindo Deli Karawang Mills

Country/Area & River basin

Indonesia	Other, please specify (Citarum River)

Latitude
-6.3125

Longitude
107.295

Located in area with water stress
No

Primary power generation source for your electricity generation at this facility
<Not Applicable>

Oil & gas sector business division
<Not Applicable>

Total water withdrawals at this facility (megaliters/year)
27570

Comparison of total withdrawals with previous reporting year
Higher

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes
27570

Withdrawals from brackish surface water/seawater
0

Withdrawals from groundwater - renewable
0

Withdrawals from groundwater - non-renewable
0

Withdrawals from produced/entrained water
0

Withdrawals from third party sources
0

Total water discharges at this facility (megaliters/year)
19284

Comparison of total discharges with previous reporting year
About the same

Discharges to fresh surface water
19284

Discharges to brackish surface water/seawater
0

Discharges to groundwater
0

Discharges to third party destinations
0

Total water consumption at this facility (megaliters/year)
26886

Comparison of total consumption with previous reporting year
Higher

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.

Facility reference number
Facility 7

Facility name (optional)
PT. Pabrik Kertas Tjiwi Kimia

Country/Area & River basin

Indonesia	Other, please specify (Brantas River)

Latitude
-7.4716

Longitude
112.44

Located in area with water stress
No

Primary power generation source for your electricity generation at this facility
<Not Applicable>

Oil & gas sector business division
<Not Applicable>

Total water withdrawals at this facility (megaliters/year)
29986

Comparison of total withdrawals with previous reporting year
Much lower

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes
29986

Withdrawals from brackish surface water/seawater
0

Withdrawals from groundwater - renewable
0

Withdrawals from groundwater - non-renewable
0

Withdrawals from produced/entrained water
0

Withdrawals from third party sources
0

Total water discharges at this facility (megaliters/year)
17694

Comparison of total discharges with previous reporting year
Lower

Discharges to fresh surface water
17694

Discharges to brackish surface water/seawater
0

Discharges to groundwater
0

Discharges to third party destinations
0

Total water consumption at this facility (megaliters/year)
25431

Comparison of total consumption with previous reporting year
Much lower

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).

Facility reference number
Facility 8

Facility name (optional)
PT. Ekamas Fortuna

Country/Area & River basin

Indonesia	Other, please specify (Lesti Water)

Latitude
-7.975985

Longitude
112.626878

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility
<Not Applicable>

Oil & gas sector business division
<Not Applicable>

Total water withdrawals at this facility (megaliters/year)
2442

Comparison of total withdrawals with previous reporting year
About the same

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes
2442

Withdrawals from brackish surface water/seawater
0

Withdrawals from groundwater - renewable
0

Withdrawals from groundwater - non-renewable
0

Withdrawals from produced/entrained water
0

Withdrawals from third party sources
0

Total water discharges at this facility (megaliters/year)
2137

Comparison of total discharges with previous reporting year
About the same

Discharges to fresh surface water
2137

Discharges to brackish surface water/seawater
0

Discharges to groundwater
0

Discharges to third party destinations
0

Total water consumption at this facility (megaliters/year)
2506

Comparison of total consumption with previous reporting year
About the same

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.

W5.1a

(W5.1a) For the facilities referenced in W5.1, what proportion of water accounting data has been third party verified?

Water withdrawals – total volumes

% verified
76-100

Verification standard used
Verification conducted by AA 1000 ASv3 type 2 with level assurance is High, GRI Standard

Please explain
<Not Applicable>

Water withdrawals – volume by source

% verified
76-100

Verification standard used
Verification conducted by AA 1000 ASv3 type 2 with level assurance is High, GRI Standard

Please explain
<Not Applicable>

Water withdrawals – quality by standard water quality parameters

% verified
76-100

Verification standard used
Verification conducted by AA 1000 ASv3 type 2 with level assurance is High, GRI Standard, ISO 9001

Please explain
<Not Applicable>

Water discharges – total volumes

% verified
76-100

Verification standard used
Verification conducted by AA 1000 ASv3 type 2 with level assurance is High, GRI Standard

Please explain
<Not Applicable>

Water discharges – volume by destination

% verified
76-100

Verification standard used
Verification conducted by AA 1000 ASv3 type 2 with level assurance is High, GRI Standard, Government Environmental Audit

Please explain
<Not Applicable>

Water discharges – volume by final treatment level

% verified
76-100

Verification standard used
Verification conducted by AA 1000 ASv3 type 2 with level assurance is High, GRI Standard

Please explain
<Not Applicable>

Water discharges – quality by standard water quality parameters

% verified
76-100

Verification standard used
Verification conducted by AA 1000 ASv3 type 2 with level assurance is High, GRI Standard, Government Environmental Audit

Please explain
<Not Applicable>

Water consumption – total volume

% verified
76-100

Verification standard used
Verification conducted by AA 1000 ASv3 type 2 with level assurance is High, GRI Standard

Please explain
<Not Applicable>

W6. Governance

W6.1

(W6.1) Does your organization have a water policy?

Yes, we have a documented water policy that is publicly available

W6.1a

(W6.1a) Select the options that best describe the scope and content of your water policy.

	Scope	Content	Please explain
Row 1	Company-wide	Description of business dependency on water Commitment to align with international frameworks, standards, and widely-recognized water initiatives Commitment to prevent, minimize, and control pollution Commitment to reduce water withdrawal and/or consumption volumes in direct operations Commitment to safely managed Water, Sanitation and Hygiene (WASH) in the workplace Commitment to safely managed Water, Sanitation and Hygiene (WASH) in local communities	APP announced Environmental Stewardship Policy in 2012 that updated in 2022 becomes Environmental Policy which includes water efficiency and water management. It is also supported by our mills that certified ISO 14001, water management and efficiency is put on environmental policy that is required by that certification scheme. We strive to maximize water efficiency by treating and repurposing 14% of wastewater on-site for various applications. Our waste reduction efforts have led to the reuse, recycling, or recovery of 39% of waste. We also run community engagement programs to empower our communities, including waste recycling initiatives that repurpose waste into handicrafts.. We began the Water Sanitation & Hygiene (WASH) started in 2013 the project by surveying the needs in our local community. This programme aims to build latrines and water supply systems, dig and cover sewage systems, create waste management systems, and educate on basic hygiene.

W6.2

(W6.2) Is there board level oversight of water-related issues within your organization?

Yes

W6.2a

(W6.2a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for water-related issues.

Position of individual or committee	Responsibilities for water-related issues
Chief Executive Officer (CEO)	Together with APP's: 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", previously mentioned as Sustainability Committee Board (SCB). 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 Environmental Policy) to the reduce water risk .
Chief Sustainability Officer (CSO)	Chief Sustainability Officer (CSO) responsible for integrating, synergizing, and managing companywide 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. From the Governance side, CSO is one of the members of Sustainability Committee that in-charge evaluating Sustainable Forest Management (SFM) strategy, implementation and its' decision-making process by management. Our CSO approved new published policies (such as Environmental Policy, etc), and making 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 environment impact
Chief Operating Officer (COO)	In terms of how our individual mills are managed, each mill reports to the COO through the respective COO for pulp, paper and tissue divisions. Our mill KPI scorecard helps to track performance against Vision 2030 targets, and we encourage a culture of sharing good practice and working collaboratively where further improvement is required. COO has responsibility to: 1. Control waste water 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 waste water quality, and coordination with paper team to improve waste water quality 4. Work together to maintain enviromenment and increase waste water quality
Director on board	APP has a clear governance structure in place based on APP's Governance Policy, with the operational involvement of the Board of Directors and other governance mechanisms to oversee climate-related risks and opportunities. Director on board directly involve in the development of sustainability target 2030 , this include lead the discussion and workshop related to carbon emission and energy target, mapping current condition, challenge and opportunity as well as strategy to achieve the target.
Board-level committee	APP's Sustainability Committee Board headed by APP's CEO, members include APP's 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). CEO responsible to oversee our sustainability commitments implementation across APP operations. This committee responsible for evaluating and make strategic decisions on sustainability issues to achieve sustainability target according to SRV 2030, national regulations and global relevant standards, including environment, social, energy, forestry, carbon emission reduction, etc. Our sustainability committee held a meeting periodically to discuss progress and challenge APP faced.

W6.2b

(W6.2b) Provide further details on the board's oversight of water-related issues.

	Frequency that water-related issues are a scheduled agenda item	Governance mechanisms into which water-related issues are integrated	Please explain
Row 1	Scheduled - some meetings	Monitoring implementation and performance Monitoring progress towards corporate targets Overseeing acquisitions, mergers, and divestitures Overseeing and guiding public policy engagement Overseeing and guiding scenario analysis Overseeing major capital expenditures Overseeing the setting of corporate targets Overseeing value chain engagement Providing employee incentives Reviewing and guiding annual budgets Reviewing and guiding business plans Reviewing and guiding corporate responsibility strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding strategy Reviewing innovation/R&D priorities Setting performance objectives	The Sustainability Committee Board is headed by APP's CEO, members include APP's Deputy CEO, Managing Director, Business Unit heads and Chief Sustainability Officer. The Sustainability Commitee Board meets monthly, reviewing performance, overall direction and strategy, as well as any issues raised from stakeholders.

W6.2d

(W6.2d) Does your organization have at least one board member with competence on water-related issues?

	Board member(s) have competence on water-related issues	Criteria used to assess competence of board member(s) on water-related issues	Primary reason for no board-level competence on water-related issues	Explain why your organization does not have at least one board member with competence on water-related issues and any plans to address board-level competence in the future
Row 1	Yes	APP Sustainability Committee Board headed by APP's CEO, members include APP's 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). APP Sustainability Commitee Board comes from difference background and knowledge that can drive the strategy related with environmental aspect especially on water issue. With the difference background and knowledge can give broader insight to make sure the strategic implementation is aligned APP Sustainability Roadmap Vision (SRV)	<Not Applicable>	<Not Applicable>

W6.3

(W6.3) Provide the highest management-level position(s) or committee(s) with responsibility for water-related issues (do not include the names of individuals).

Name of the position(s) and/or committee(s)
Chief Executive Officer (CEO)

Water-related responsibilities of this position
Assessing future trends in water demand
Assessing water-related risks and opportunities
Managing annual budgets relating to water security
Managing major capital and/or operational expenditures related to low water impact products or services (including R&D)
Managing water-related acquisitions, mergers, and divestitures
Providing water-related employee incentives

Frequency of reporting to the board on water-related issues
As important matters arise

Please explain
The Sustainability Committee Board is headed by APP's CEO, members include APP's Deputy CEO, Managing Director, Business Unit heads and Chief Sustainability Officer. The Sustainability Committee Board meets monthly, reviewing performance, overall direction and strategy, as well as any issues raised from stakeholders

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Name of the position(s) and/or committee(s)
Chief Sustainability Officer (CSO)

Water-related responsibilities of this position
Managing water-related risks and opportunities
Conducting water-related scenario analysis
Setting water-related corporate targets
Monitoring progress against water-related corporate targets
Managing public policy engagement that may impact water security
Managing value chain engagement on water-related issues
Integrating water-related issues into business strategy
Managing annual budgets relating to water security

Frequency of reporting to the board on water-related issues
More frequently than quarterly

Please explain
Quarterly reported to KPI achievement reports. Other situational conditions are also discussed.

Name of the position(s) and/or committee(s)
Chief Operating Officer (COO)

Water-related responsibilities of this position
Conducting water-related scenario analysis
Setting water-related corporate targets
Monitoring progress against water-related corporate targets

Frequency of reporting to the board on water-related issues
Quarterly

Please explain
In terms of how our individual mills are managed, each mill reports to the COO through the respective COO for pulp, paper and tissue divisions. Our mill KPI scorecard helps to track performance against Vision 2030 targets and we encourage a culture of sharing good practice and working collaboratively where further improvement is required.

W6.4

(W6.4) Do you provide incentives to C-suite employees or board members for the management of water-related issues?

	Provide incentives for management of water-related issues	Comment
Row 1	Yes	Yes, we provide incentives for the management of water issues.

W6.4a

(W6.4a) What incentives are provided to C-suite employees or board members for the management of water-related issues (do not include the names of individuals)?

	Role(s) entitled to incentive	Performance indicator	Contribution of incentives to the achievement of your organization's water commitments	Please explain
Monetary reward	Director on board	Reduction of water withdrawals – direct operations Reduction in water consumption volumes – direct operations Reduction of water withdrawal and/or consumption volumes – supply chain Improvements in water efficiency – direct operations Improvements in water efficiency – product use Improvements in wastewater quality – direct operations	Bonus % increase salary	The incentive(s) encouraged the Director on Board to continue improve performance of APP 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.
Non-monetary reward	Chief Operating Officer (COO)	Reduction of water withdrawals – direct operations Reduction in water consumption volumes – direct operations Improvements in water efficiency – direct operations Improvements in water efficiency – product use Improvements in wastewater quality – direct operations Improvements in wastewater quality – product use Reduction of water pollution incidents	house, transportation	The incentive(s) encouraged the COO to continue improve performance of APP as part of Sustainable Roadmap Vision (SRV) 2030. Incentives plays a crucial role in motivating and driving behavior towards achieving goals.

W6.5

(W6.5) Do you engage in activities that could either directly or indirectly influence public policy on water through any of the following?

Yes, direct engagement with policy makers

W6.5a

(W6.5a) What processes do you have in place to ensure that all of your direct and indirect activities seeking to influence policy are consistent with your water policy/water commitments?

Water is one of vital aspect 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 2022 we reused & recycled more than 41 million m3 of water, meaning we use less fresh water. At the end of 2022, we had achieved a water intensity reduction of 16%, as compared to a 2018 baseline. Furthermore, we have made significant progress in reducing COD emissions through improved wastewater operations and the implementation of new anaerobic wastewater treatment plants andmonitoring tools for COD values. Our efforts have resulted in a 25% reduction in COD emissions at the lowest of all our mills.

We are also member of Pulp Paper Association in Indonesia which is the board for communication and negotiation with Authorities and Stakeholder concerning water related matters.

W6.6

(W6.6) Did your organization include information about its response to water-related risks in its most recent mainstream financial report?

Yes (you may attach the report - this is optional)

W7. Business strategy

W7.1

(W7.1) Are water-related issues integrated into any aspects of your long-term strategic business plan, and if so how?

	Are water-related issues integrated?	Long-term time horizon (years)	Please explain
Long-term business objectives	Yes, water-related issues are integrated	5-10	Vision 2030 was launched in 2020, and it acted as our comprehensive strategy for sustainability. Vision 2030 covers an increased range of issues, and is aligned with the UN Sustainable Development Goals, and the Paris Agreement on Climate Change. Water is part of a vital aspect 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. APP is also fully committed to supporting the SDGs. To devise our strategy of meeting these goals, we utilised the UN's SDG Compass tool to create a detailed map of APP's and our wider supply chain's activities and how these directly support the SDGs.
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	5-10	Vision 2030 was launched in 2020, and it acted as our comprehensive strategy for sustainability from 2021 until 2030. Vision 2030 covers an increased range of issues, and is aligned with the UN Sustainable Development Goals, and the Paris Agreement on Climate Change. Water is part of a vital aspect 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. APP is also fully committed to supporting the SDGs. To devise our strategy of meeting these goals, we utilised the UN's SDG Compass tool to create a detailed map of APP's and our wider supply chain's activities and how these directly support the SDGs. We apply reuse, recycle & reduce '3R' strategy to the resource of water as we do materials—reduce, reuse, and recycle. At the end of 2022, we had achieved a water intensity reduction of 16%, as compared to a 2018 baseline
Financial planning	Yes, water-related issues are integrated	5-10	Vision 2030 was launched in 2020, and it acted as our comprehensive strategy for sustainability. Vision 2030 covers an increased range of issues, and is aligned with the UN Sustainable Development Goals, and the Paris Agreement on Climate Change. Water is part of a vital aspect 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. APP is also fully committed to supporting the SDGs. To devise our strategy of meeting these goals, we utilised the UN's SDG Compass tool to create a detailed map of APP's and our wider supply chain's activities and how these directly support the SDGs. We apply reuse, recycle & reduce '3R' strategy to the resource of water as we do materials—reduce, reuse, and recycle. At the end of 2022, we had achieved a water intensity reduction of 16%, as compared to a 2018 baseline

W7.2

(W7.2) 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?

Row 1

Water-related CAPEX (+/- % change)

15

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

15

Water-related OPEX (+/- % change)

-5

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

-5

Please explain

CAPEX increase for water efficiency program is caused by condensate vacuum evaporator recycle, new aerator, wash press roll overhaul,

W7.3

(W7.3) Does your organization use scenario analysis to inform its business strategy?

	Use of scenario analysis	Comment
Row 1	No, but we anticipate doing so within the next two years	Some of our operation are integrated to raw material (wood), therefore landscape approach assessment is very critical for identification of long term water security. The analysis started in 2019.

W7.4

(W7.4) Does your company use an internal price on water?

Row 1

Does your company use an internal price on water?

Yes

Please explain

Beside water volume, process water price also contribute as a driving factor in controlling the water usage. The price consists of price of water intake paid to the Authority and the processing cost (energy, chemical, labor). The total price is then divided by total volume, to gain the unit price of water, USD/m3.

W7.5

(W7.5) Do you classify any of your current products and/or services as low water impact?

	Products and/or services classified as low water impact	Definition used to classify low water impact	Primary reason for not classifying any of your current products and/or services as low water impact	Please explain
Row 1	No, but we plan to address this within the next two years	<Not Applicable>	Important but not an immediate business priority	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.

W8. Targets

W8.1

(W8.1) Do you have any water-related targets?

Yes

W8.1a

(W8.1a) Indicate whether you have targets relating to water pollution, water withdrawals, WASH, or other water-related categories.

	Target set in this category	Please explain
Water pollution	Yes	<Not Applicable>
Water withdrawals	Yes	<Not Applicable>
Water, Sanitation, and Hygiene (WASH) services	Yes	<Not Applicable>
Other	Yes	<Not Applicable>

W8.1b

(W8.1b) Provide details of your water-related targets and the progress made.

Target reference number
Target 1

Category of target
Product water intensity

Target coverage
Company-wide (direct operations only)

Quantitative metric
Reduction per product

Year target was set
2022

Base year
2018

Base year figure
33

Target year
2030

Target year figure
23.1

Reporting year figure
27.9

% of target achieved relative to base year

Target status in reporting year
Underway

Please explain
Water intensity decreased 16% in 2022 compared to 2018 baseline.

Target reference number
Target 2

Category of target
Water pollution

Target coverage
Company-wide (direct operations only)

Quantitative metric
Reduction in concentration of pollutants

Year target was set
2020

Base year
2020

Base year figure
260

Target year
2030

Target year figure
275

Reporting year figure
261

% of target achieved relative to base year

Target status in reporting year
Underway

Please explain
APP have monitoring tools for COD values, which have helped us achieve 261 mg/liter as highest COD quality generated from all mill which is below threshold limit 350 mg/liter per government regulation. Our efforts have resulted in a 25% reduction in COD emissions at the lowest of all our mills. Generally, the 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 SRV 2030, APP have target to reduce 30% COD emission lower than government regulation

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W9. Verification

W9.1

(W9.1) Do you verify any other water information reported in your CDP disclosure (not already covered by W5.1a)?

Yes

W9.1a

(W9.1a) Which data points within your CDP disclosure have been verified, and which standards were used?

Disclosure module	Data verified	Verification standard	Please explain
W8 Targets	Company wide goal and achievement	AA1000AS	Our water related target and achievement are verified through Sustainability Report verification by SGS (, based on the internationally recognized AA1000(AS) Standard for assurance

W10. Plastics

W10.1

(W10.1) Have you mapped where in your value chain plastics are used and/or produced?

	Plastics mapping	Value chain stage	Please explain
Row 1	Not mapped – and we do not plan to within the next two years	<Not Applicable>	Our business scope does not related to plastic

W10.2

(W10.2) Across your value chain, have you assessed the potential environmental and human health impacts of your use and/or production of plastics?

	Impact assessment	Value chain stage	Please explain
Row 1	Not assessed – and we do not plan to within the next two years	<Not Applicable>	Our business scope does not related to plastic

W10.3

(W10.3) Across your value chain, are you exposed to plastics-related risks with the potential to have a substantive financial or strategic impact on your business? If so, provide details.

	Risk exposure	Value chain stage	Type of risk	Please explain
Row 1	Not assessed – and we do not plan to within the next two years	<Not Applicable>	<Not Applicable>	Our business scope does not related to plastic

W10.4

(W10.4) Do you have plastics-related targets, and if so what type?

	Targets in place	Target type	Target metric	Please explain
Row 1	No – and we do not plan to within the next two years	<Not Applicable>	<Not Applicable>	Our business scope does not related to plastic

W10.5

(W10.5) Indicate whether your organization engages in the following activities.

	Activity applies	Comment
Production of plastic polymers	No	Our business scope does not related to plastic
Production of durable plastic components	No	Our business scope does not related to plastic
Production / commercialization of durable plastic goods (including mixed materials)	No	Our business scope does not related to plastic
Production / commercialization of plastic packaging	No	Our business scope does not related to plastic
Production of goods packaged in plastics	No	Our business scope does not related to plastic
Provision / commercialization of services or goods that use plastic packaging (e.g., retail and food services)	No	Our business scope does not related to plastic

W11. Sign off

W-FI

(W-FI) 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.

Dear Stakeholders,

APP is unwavering in its belief that transparency is vital for us to continuously improve, as evidenced by our Sustainability Report and our ESG ratings such as CDP. We have continued to engage with external partners and experts as we strive to continuously enhance our sustainability efforts. In pursuit of SRV 2030 through our 3 Pillars of Production, Forest, and People, we are committed to enhancing the sustainability of our mill operations, investing in greener and more energy-efficient technology, being more conscious of our environmental and social impact, and continuously educating all our employees and stakeholders on the importance of sustainability.

We remain committed to promoting sustainability and believe it can only be achieved through a multi-stakeholder and holistically integrated approach. Our commitment to sustainability is evident in all aspects of our operations, and we are constantly working to enhance and improve our efforts. For us, sustainability is not just a responsibility - it is a privilege that we take seriously. We are eager to continue our journey towards a more sustainable future and we invite you to read this report of what we have achieved so far. Here you will discover our commitments, progress, challenges, and most importantly, our vision for the way forward. Let's work together to create a brighter, more sustainable tomorrow.

Thank you for your ongoing support.
APP Sustainability Report 2022.pdf

W11.1

(W11.1) Provide details for the person that has signed off (approved) your CDP water response.

	Job title	Corresponding job category
Row 1	The Sustainability Committee headed by APP's CEO, is responsible for addressing sustainability issues, including climate change, and plays a key role in driving APP's sustainability agenda.	Chief Executive Officer (CEO)

SW. Supply chain module

SW0.1

(SW0.1) What is your organization's annual revenue for the reporting period?

	Annual revenue
Row 1	9363000000

SW1.1

(SW1.1) Could any of your facilities reported in W5.1 have an impact on a requesting CDP supply chain member?
Yes, CDP supply chain members buy goods or services from facilities listed in W5.1

SW1.1a

(SW1.1a) Indicate which of the facilities referenced in W5.1 could impact a requesting CDP supply chain member.

Facility reference number
Facility 1

Facility name
PT. Indah Kiat Pulp & Paper Perawang Mills, PT. Pindo Deli Perawang Mills, PT. Univenus Perawang.

Requesting member
Philip Morris International

Description of potential impact on member
Our mill not operated in high risk of water source thus the impact is very low.

Comment
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.

Facility reference number
Facility 4

Facility name
PT. Indah Kiat Pulp & Paper Serang Mills

Requesting member
Philip Morris International

Description of potential impact on member
Our mill not operated in high risk of water source thus the impact is very low.

Comment
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

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SW1.2

(SW1.2) Are you able to provide geolocation data for your facilities?

	Are you able to provide geolocation data for your facilities?	Comment
Row 1	Yes, for all facilities	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

SW1.2a

(SW1.2a) Please provide all available geolocation data for your facilities.

Identifier	Latitude	Longitude	Comment
PT. Indah Kiat Pulp & Paper Perawang Mills, PT. Pindo Deli Perawang Mills, PT. Univenus Perawang.	0.664278	101.595668	Located in Siak River, Riau, Sumatera
PT. Lontar Papyrus Pulp & Paper Industry	-1.01	103.08	Located in Pengabuan River, Jambi, Sumatera
PT. OKI Pulp & Paper Mills	-3.329272	105.416347	Located in Padang River, Palembang, South Sumatra
PT. Indah Kiat Pulp & Paper Serang Mills	-6.12	106.15028	Located in Ciujung River, Serang, Banten, Java Island
PT. Indah Kiat Pulp & Paper Tangerang Mills	-6.17833	106.63194	Located in Cisadane River, Tangerang, Banten, Java Island
PT. Pindo Deli Karawang Mills	-6.3125	107.295	Located in Citarum River, Karawang, West Java
PT. Pabrik Kertas Tjiwi Kimia	-7.4716	112.44	Located in Brantas River, Mojokerto, East Java
PT. Ekamas Fortuna	-7.975985	112.626878	Located in Lesti River, Malang, East Java

SW2.1

(SW2.1) Please propose any mutually beneficial water-related projects you could collaborate on with specific CDP supply chain members.

Requesting member
Philip Morris International

Category of project
Relationship water assessment

Type of project
Assessing products or services' water-related impacts to identify efficiencies

Motivation
to fulfill customer (Philip Morris International) requirement to do water footprint of APP product.

Estimated timeframe for achieving project
Up to 1 year

Details of project
APP identifies the environmental impact from production process regarding water consumption and waste water discharge

Projected outcome
The environmental impact from water footprint from production processes

SW2.2

(SW2.2) Have any water projects been implemented due to CDP supply chain member engagement?
No

SW3.1

(SW3.1) Provide any available water intensity values for your organization's products or services.

Product name
Pulp and paper product

Water intensity value
27.9

Numerator: Water aspect
Water withdrawn

Denominator
Production volume in tonne

Comment
Water intensity value 27.9 M3/Ton in 2022.

Submit your response

In which language are you submitting your response?
English

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

Please indicate your consent for CDP to share contact details with the Pacific Institute to support content for its Water Action Hub website.
Yes, CDP may share our Main User contact details with the Pacific Institute

Please confirm below
I have read and accept the applicable Terms