

W0. Introduction

W0.1

**(W0.1) Give a general description of and introduction to your organization.**

PT Austindo Nusantara Jaya Tbk (ANJ) is a holding company of various agribusiness subsidiaries, mainly integrated oil palm plantation (99% revenue) as well as sago starch and vegetable (edamame). We also have a renewable energy unit that produces electricity from biogas that supplies to the State Electricity Company (PLN) as an Independent Power Producer, using the Crude Palm Oil (CPO) mill waste as feedstock. Our products include Crude Palm Oil, Palm Kernel, Palm Kernel Oil, Sago Starch, and Fresh and Frozen Edamame. Our area of operation includes 141,850 Ha oil palm plantations across Indonesia islands, including in North Sumatra (9,988 Ha in Binanga and 9,412 Ha in Siais), Belitung island (17,360 Ha), West Kalimantan (13,880 Ha), Southwest Papua (91,210 Ha, an area of 9,024 hectares have been developed for oil palm plantations and 81,102 hectares have been set aside for conservation area and the remaining is for infrastructure). We have legal land certificates (HGU) in all locations above. We are also developing a green field plantation in our landbank in South Sumatra (12,800 Ha), on which the land acquisition process is still ongoing.

Our sago is located in Southwest Papua and our edamame business is supported by smallholder farmers in East Java.

We operate our business using the responsible development approach, which consists of targets and projects that strike a balance between prosperity, people and planet. We have a Sustainability Policy that includes no deforestation, no planting of palm oil on peat and no exploitation. Every employee in our company has an individual Key Performance Indicator to contribute to the betterment of people (community) and planet conservation. Many projects (under what we call as Responsible Development Projects) come out from employees' own initiatives. These are managed locally and nationally, depending on the scope of the projects, and monitored by the Head Office, resulting in recognition of our leadership in sustainability efforts. In 2022, our subsidiaries in Belitung (PT Sahabat Mewah dan Makmur/SMM) and in North Sumatra (PT Austindo Nusantara Jaya Agri/ANJA), obtained the Gold PROPER ("PROPER Emas") award, the highest recognition from the Ministry of Forestry and Environment of the Republic of Indonesia for the environmental and social performance by companies operating in Indonesia. SMM has set the landmark in the palm oil industry because it was the first oil palm plantation that received Gold PROPER in 2020 and successfully retained the award in 2021 and 2022 (three consecutive years), while ANJA received the Gold PROPER award in 2021 and retained the award in 2022 (two consecutive years). PROPER award is granted based on strict standardized measurement on various sustainability initiatives and their implementation.

In 2022, we engaged Sustainalytics to rate our ESG performance. We received an excellent score of 18.2 (Low Risk) with ESG Management score of 78.1 (Strong) and ranking first out of 95 global agricultural companies and 10 out of 601 global food industry companies assessed by Sustainalytics. This places ANJ in Sustainalytics' 2023 Top-Rated ESG Companies List for the Food Product Industry.

W-FB0.1a/W-AC0.1a

**(W-FB0.1a/W-AC0.1a) Which activities in the food, beverage, and tobacco and/or agricultural commodities sectors does your organization engage in?**

- Agriculture
- Processing/Manufacturing

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 financial control is exercised

W0.6

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

Yes

W0.6a

(W0.6a) Please report the exclusions.

Exclusion	Please explain
Our edamame business (PT Gading Mas Indonesia Teguh), renewable energy business (AANE) and sago business (PT ANJ Agri Papua) are excluded from 2022 disclosure.	In 2022, we reported our water management within our Palm Oil business unit in our 2022 Sustainability Report as this is one of our company's material topics. The proportion of water withdrawal from our palm oil business is more than 97% of the total estimated water withdrawal for the group. This report excludes water usage in our sago, renewable energy and edamame business units considering the low proportion of water withdrawal, and that the revenue of those business units is less than 1% of the Group's total revenue.

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, an ISIN code	ID1000270002
Yes, a Ticker symbol	ANJT IJ

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	Important	Neutral	Water is an integral part of our operations. The main usage is in the processing of fresh fruit bunches (FFB) to crude palm oil (CPO) in the mills and for domestic consumption by employees for drinking and washing. In the future the rate of importance will change to vital as the impact of climate change and we plan to build additional reservoirs to trap the rainfall.
Sufficient amounts of recycled, brackish and/or produced water available for use	Neutral	Neutral	The water for main mills processing has to meet a certain quality standard and is not from recycled or brackish water. We recycle water components from waste and reuse for composting, and collect rain precipitation in reservoirs for fertigation applications. Therefore, we consider that the importance of recycled brackish water available for use is neutral.

W-FB1.1a/W-AC1.1a

(W-FB1.1a/W-AC1.1a) Which water-intensive agricultural commodities that your organization produces and/or sources are the most significant to your business by revenue? Select up to five.

Agricultural commodities	% of revenue dependent on these agricultural commodities	Produced and/or sourced	Please explain
Palm oil	More than 80%	Produced	98.6% of ANJ's revenue is contributed by palm products (CPO, PK, PKO). In 2022 our total revenue is USD 269.2 million.

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	Direct monitoring (flow meter)	<p>Fresh surface water is the source of the water that we use.</p> <p>All our fresh water is drawn from surface water sources, mainly rivers that sustainably provide water for our manufacturing needs.</p> <p>The water that we used, previously treated at the factory's water treatment center to ensure that water quality is suitable for production and residential activities.</p> <p>We have installed flowmeters to measure and track water withdrawals at each of our locations so that efficiency-related monitoring and control may constantly be maintained.</p> <p>In 2022, 2,452.43 megalitres of water has been withdrawn.</p>
Water withdrawals – volumes by source	100%	Continuously	Direct monitoring (flow meter)	<p>We use flowmeter to monitor the total amount of water taken from each source.</p> <p>We ensure water is available and monitor the watershed capacity as part of our business risk evaluation to maintain the river's natural flow and accommodate changes in water levels.</p> <p>We design and implement mitigation by considering general trends and water risks at the national level.</p> <p>Based on this evaluation, we have determined that none of our regions are water-stressed or face a high to extremely high risk of water stress.</p> <p>This evaluation is consistent with WRI Aqueduct Water Risk Atlas of the World Resource Institute, which shows that all of our locations are in areas with a low risk of water stress.</p>
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	Laboratory testing	<p>We use water whose meets the quality standards of established regulations, in the use of water production and sanitation purposes in our factory.</p> <p>Therefore, monitoring the water quality at the tray water intake point is important.</p> <p>Internal monitoring is done daily to monitor pH, temperature, and TSS (Total Suspended Solids).</p> <p>We also conduct external monitoring by certified laboratories for parameters determined by regulations and reporting per semester.</p> <p>We ensure there is no pollutant contamination in our raw water.</p>
Water discharges – total volumes	100%	Continuously	Direct monitoring (flow meter)	<p>We treat mill wastewater discharges at the Wastewater Treatment Plant (WWTP) to fulfill legal quality criteria to lower the danger of water pollution. While on our domestic wastewater discharges, not completely installed by flowmeter.</p> <p>Most of our mill wastewater is discharged as direct organic fertilizer application to the plantation soil and for compost treatment.</p> <p>Regular measurements are made at the inlet discharge and outlet discharge of water from the mill's processing operations. The volume of domestic discharge is estimated at this point of time.</p> <p>In 2022, we released 1,815 megalitres of effluent into surface waters, both from mill discharges and domestic activity discharges.</p>
Water discharges – volumes by destination	100%	Continuously	Direct monitoring (flow meter)	<p>Wastewater comes from the production process at the mill and from domestic activities in our residential and office areas. We treat most of our mill wastewater to be recycled for composting and land application utilization. We do not discharge any of our mill wastewater except in one of our estates where a small proportion is discharged to nearby rivers</p> <p>Anaerobic and aerobic ponds are used before the wastewater is utilized (land application) or released to surface water.</p> <p>We have installed flowmeters in mill wastewater treatment. Meanwhile we have not installed flowmeters in all of our domestic wastewater discharges point.</p> <p>We constantly monitor our wastewater discharge by destination to comply with standards and regulations.</p> <p>In the future, all domestic water discharges will be properly measured and treated so that the quality parameters of domestic water discharged have good quality.</p>
Water discharges – volumes by treatment method	100%	Continuously	Direct monitoring (flow meter)	<p>We treat our production wastewater in treatment plants using ponds.</p> <p>Wastewater (POME) from the production process is collected and treated in anaerobic and aerobic ponds. We also use aerator treatment in the aerobic ponds of our concessions that discharge to water bodies to optimize the reduction of organic load before it is released into the water.</p> <p>In addition, to further maximize wastewater treatment, geotube and agitator methods are also applied to some anaerobic ponds.</p> <p>At the discharge point, we constantly monitor to ensure that the wastewater we discharge and utilize follows the standards and regulations.</p>

	% of sites/facilities/operations	Frequency of measurement	Method of measurement	Please explain
Water discharge quality – by standard effluent parameters	100%	Daily	Automatic sparing (flow, TSS, COD, pH)	<p>Wastewater is treated at a treatment site before being discharged into surface water.</p> <p>Due to the disposal of wastewater into surface water, we must build a sustainable and online wastewater monitoring system (SPARING) following applicable regulations.</p> <p>Sparing is installed in a monitoring pond with three parameter sensors (pH, COD, TSS) with a flowmeter to measure discharge.</p> <p>Data monitored in Sparing is transmitted realtime to the Ministry of Environment and Forestry.</p> <p>According to environmental permits, our unit also conducts routine testing every month using an accredited external laboratory with six parameters (BOD, COD, TSS, oil and grease, total N, pH), the results of these tests are reported to the Ministry of Environment and Forestry.</p>
Water discharge quality – emissions to water (nitrates, phosphates, pesticides, and/or other priority substances)	100%	Monthly	Laboratorium testing	<p>We constantly monitor the quality of water discharge to prevent contamination to water bodies.</p> <p>Monthly tests were carried out based on parameter required by regulation, including nitrate and total phosphate. We report the results of these tests to the ministry of environment and forestry.</p> <p>The use of chemicals from our production activities has the potential to contaminate the water bodies, either from estate or factory activities. To prevent this from happening, we control and monitor it by collecting the used washing water from spraying activities.</p> <p>The washed water does not flow directly into water bodies but is stored and processed first before heading to the estate, because it still contains pollutants as nutrients. In addition, we also carry out tests on surface water every 6 months.</p>
Water discharge quality – temperature	100%	Daily	Laboratory testing	<p>Each pond of the WWTP (Wastewater Treatment Plant) is monitored for pH and temperature daily.</p> <p>Temperature measurements are also taken throughout routine daily testing.</p> <p>The water is discharged at a temperature equivalent to the surrounding air, typically between 26 and 30 degrees Celsius.</p>
Water consumption – total volume	100%	Monthly	Monthly report mill, flow meter	<p>As water is a natural resource, we acknowledge the importance of water conservation and preservation.</p> <p>Reusing and recycling water can significantly reduce consumption and its negative environmental effects.</p> <p>Water is crucial for human activities, the more activities, the more volume of water is consumed.</p> <p>The volume of water used for production and domestic activities in the plant is constantly monitored.</p> <p>It is essential to evaluate the water demand of each activity so that water consumption can be controlled and streamlined.</p>
Water recycled/reused	100%	Monthly	Water usage monthly report	<p>In these challenging times of climate change, rainfall events is unpredictable.</p> <p>To mitigate this, recycling and reusing water are favoured to preserve and conserve water.</p> <p>When implementing water recycling &amp; reuse, the measurement is essential to understand the impact of water scenario.</p> <p>However, this can be challenging since the process is expensive and the technology is still limited.</p> <p>There are also pre-treatments which make the process difficult.</p> <p>However, in our factory, water from turbine cooling is recycled. Moreover, water from the sterilization process is also recycled &amp; used for dilution for oil clarification process.</p>
The provision of fully-functioning, safely managed WASH services to all workers	100%	Yearly	Internal audit excel tool	<p>Sanitation and hygiene in domestic water are essential for human livelihoods.</p> <p>We provide clean water through water treatment.</p> <p>Clean water is distributed not only for production but also for sanitation and domestic purposes in the Factory office.</p> <p>The sanitation and clean water condition needs to be monitored in each of our units to evaluate and develop the quality of clean water management and sanitation.</p> <p>We have conducted a self-assessment using the WASH questionnaire every year.</p> <p>We are building water treatment systems at various operating sites, including flow meters, to measure water intake and discharge.</p>

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	4656	Higher	Increase/decrease in business activity	Higher	Increase/decrease in business activity	<p>We have set a goal to preserve water and optimize water use in our palm oil company to achieve a water intensity of 1 ton of water per ton of FFB processed.</p> <p>In 2022, our water intensity per ton of FFB processed is 1.09 tons (or m3) of water, while our water usage has increased due to increased production.</p> <p>Total water withdrawal is expected to increase in the next five years in line with the increase of FFB process by approximately 15% in 2027 and the increase of the number of workers.</p>
Total discharges	1815	Higher	Increase/decrease in business activity	About the same	Increase/decrease in business activity	<p>The water discharge is higher compared to last year because we have made improvements in measuring water discharge by installing water meters at the water discharge outlet points of our mill wastewater treatment plant. In the previous years this discharge was not measured but was estimated. However, water discharged from domestic usage are still estimated in locations where there are no flow meters installed. We estimate our domestic usage based on the Water Domestic National Standards issued by The Ministry of Public Works and Housing and Indonesian National Standard (SNI). With our plan to build domestic wastewater treatment plants in all our housing areas with flow meters installed at the outlet, we expect to be able to fully measure actual water discharges.</p>
Total consumption	2841	Higher	Increase/decrease in business activity	Higher	Increase/decrease in business activity	<p>We have made several programs to reduce water consumption such as reuse the water from turbines, land application, and reuse water for composting process. The increase is due to the increase in production compared to last year.</p> <p>Total water withdrawal is expected to increase in the next five years in line with the increase of FFB process by approximately 15% in 2027 and the increase of the number of workers.</p>

**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	<p>According to the WRI Aqueduct Water Risk Atlas of the World Resource Institute, all of our locations are in areas with a low risk of water stress.</p> <p>Based on this evaluation, we have determined that none of our regions are water-stressed or face a high to extremely high risk of water stress.</p>

**W-FB1.2e/W-AC1.2e**

**(W-FB1.2e/W-AC1.2e) For each commodity reported in question W-FB1.1a/W-AC1.1a, do you know the proportion that is produced/sourced from areas with water stress?**

Agricultural commodities	The proportion of this commodity produced in areas with water stress is known	The proportion of this commodity sourced from areas with water stress is known	Please explain
Palm oil	Yes	Not applicable	<p>According to the WRI Aqueduct Water Risk Atlas of the World Resource Institute, all of our locations and the location of our FFB sources are in areas with a low risk of water stress (Sumatra, West Kalimantan, Belitung, and Southwest Papua)</p> <p>Based on this evaluation, we have determined that none of our operational regions are water-stressed or face a high to extremely high risk of water stress.</p>

**W-FB1.2f/W-AC1.2f**

**(W-FB1.2f/W-AC1.2f) What proportion of the produced agricultural commodities reported in W-FB1.1a/W-AC1.1a originate from areas with water stress?**

Agricultural commodities	% of total agricultural commodity produced in areas with water stress	Please explain
Palm oil	0%	<p>According to the WRI Aqueduct Water Risk Atlas of the World Resource Institute, all of our locations are in areas with a low risk of water stress.</p> <p>Based on this evaluation, we have determined that none of our FFB produced are from regions with water-stressed or face a high to extremely high risk of water stress.</p>

**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	4354	Higher	Increase/decrease in business activity	<p>Fresh surface water is the source of the water that we use.</p> <p>All our fresh water is drawn from surface water sources, mainly rivers that sustainably provide water for our manufacturing needs.</p> <p>The higher water withdrawal of fresh surface water is in line with the increase of estate and mills activities. The water that we used, previously treated at the factory's water treatment center to ensure that water quality is suitable for production and residential activities.</p> <p>We have installed flowmeters to measure and track water withdrawals at each of our locations so that efficiency-related monitoring and control may constantly be maintained.</p> <p>In 2022, 4,354 megaliters of water has been withdrawn.</p>
Brackish surface water/Seawater	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	Brackish surface water/seawater is not suitable for processing parameters.
Groundwater – renewable	Relevant	302	Higher	Other, please specify (Improvements in measurement methodology)	Groundwater is mainly use for domestic consumption such as cooking, drinking and washing. This is an important source of water especially in areas where there are no rivers nearby. Ground water depletion is monitored to ensure that there is adequate water supply replenishment. The increase this year is due to improved methodologies where more activities are included in the calculation. (eg. Ground water withdrawal in housing areas in our Southwest Papua operations).
Groundwater – non-renewable	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	The prevalence of ground water is always renewable at this point of time because all concession are in the tropical zones.
Produced/Entrained water	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	The quality of water in entrained areas are not used because of quality and quantity limitations.
Third party sources	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	Operating sites are far away from third party supplies.

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	1815	Much higher	Increase/decrease in business activity	The water discharge is higher compared to last year because we have made improvements in measuring water discharge by installing water meters at the water discharge outlet points of our mill wastewater treatment plant. In the previous years this discharge was not measured but was estimated. However, water discharged from domestic usage are still estimated in locations where there are no flow meters installed. With our plan to build domestic wastewater treatment plants in all our housing areas with flow meters installed at the outlet, we expect to be able to fully measure actual water discharges.
Brackish surface water/seawater	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	We do not discharge brackish surface water/seawater.
Groundwater	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	We do not discharge groundwater
Third-party destinations	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	We do not discharge from third party supplies.

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>	We treat all palm oil mill effluent (POME) by a series of anaerobic digestion which is considered as secondary treatment.
Secondary treatment	Relevant	989	Higher	Increase/decrease in business activity	100%	We treat all palm oil mill effluent (POME) by a series of anaerobic digestion which is considered as secondary treatment. The treatment process by hydraulic retention and digestion helps to gradually reduce the BOD/COD levels.
Primary treatment only	Relevant	12.48	Higher	Increase/decrease in business activity	41-50	Primary treatment is only carried out for domestic usage at certain locations while in others the primary treatment facility will be constructed. This is to ensure that there is a filter before the water is discharged into the external environment. The filter points will also need to be managed so that there is less contamination from the various discharges. This involves regular education and management of water usage to the employees
Discharge to the natural environment without treatment	Relevant	1740	Higher	Increase/decrease in business activity	100%	All palm oil effluents are treated and recycled to ensure there is minimal discharge to external environment. Certain domestic discharges, mainly housing complexes in several locations, are discharged without treatment. We assess the quality of discharges from these location are not polluting or contaminating. However we plan to build wastewater treatment facility in all our housing locations in the future.
Discharge to a third party without treatment	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	We do not discharge to a third party.
Other	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	No other comments

**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	<Not Applicable>	Currently we only monitor the nitrates in the surface water (river). In 2023 we plan to monitor the nitrates in our wastewater treatment plan outlet, before discharged to surface water.

**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	265295150	4656	56979.1988831615	We expect that this trend will change starting next year as our water intensity efficiency programs continue to be implemented.

**W-FB1.3/W-AC1.3**

**(W-FB1.3/W-AC1.3) Do you collect/calculate water intensity for each commodity reported in question W-FB1.1a/W-AC1.1a?**

Agricultural commodities	Water intensity information for this produced commodity is collected/calculated	Water intensity information for this sourced commodity is collected/calculated	Please explain
Palm oil	Yes	Not applicable	We have set a goal to preserve water and optimize water use in our palm oil company to achieve a water intensity of 1 ton of water per ton of FFB processed.

**W-FB1.3a/W-AC1.3a**

(W-FB1.3a/W-AC1.3a) Provide water intensity information for each of the agricultural commodities identified in W-FB1.3/W-AC1.3 that you produce.

**Agricultural commodity**

Palm oil

**Water intensity value (m3/denominator)**

1.09

**Numerator: water aspect**

Total water consumption

**Denominator**

Tons

**Comparison with previous reporting year**

About the same

**Please explain**

Our Palm Oil Mills processed FFB from internal plantation and external sources. We calculate the water intensity based on the total FFB process from those two sources.

In 2022, our water intensity per ton of FFB processed is 1.088 tons (or m3) of water, while our water usage has increased due to increased production. Water intensity is only slightly better compared to 2021 despite our efforts in managing water consumption for FFB processing due to the capacity of our two mills are not yet optimized.

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	We do not use any hazardous substances in our product (CPO, PK, and PKO)

W1.5

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

	Engagement	Primary reason for no engagement	Please explain
Suppliers	Yes	<Not Applicable>	<Not Applicable>
Other value chain partners (e.g., customers)	No	Judged to be unimportant	At the downstream of our value chain are refineries, which may be located far away in other water basin bodies. There are no value chain partners other than our suppliers that are relevant to our water disclosure.

W1.5a

(W1.5a) Do you assess your suppliers according to their impact on water security?

Row 1

**Assessment of supplier impact**

No, we do not currently assess the impact of our suppliers, but we plan to do so within the next two years

**Considered in assessment**

<Not Applicable>

**Number of suppliers identified as having a substantive impact**

<Not Applicable>

**% of total suppliers identified as having a substantive impact**

<Not Applicable>

**Please explain**

In the upstream of our value chain are smallholder farmers. They use water in their plantations, but it is challenging to monitor and measure this water use. Such measurements will need additional systems, including monitoring and evaluation mechanisms, as well as new technologies, which, to our knowledge, are not yet available at a reasonable cost. We currently have limited capacity to assess the impact of our suppliers on water security, but we plan to build this in the near future and have a reasonable assessment within the next two years.

In the meantime, we do engage with our smallholders to apply best agronomic practices, water efficiency, and sustainable production principles.

W1.5b

(W1.5b) Do your suppliers have to meet water-related requirements as part of your organization's purchasing process?

	Suppliers have to meet specific water-related requirements	Comment
Row 1	No, but we plan to introduce water-related requirements within the next two years	



## W1.5d

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(W1.5d) Provide details of any other water-related supplier engagement activity.

**Type of engagement**

Innovation & collaboration

**Details of engagement**

Other, please specify (ESG socialization with our suppliers)

**% of suppliers by number**

1-25

**% of suppliers with a substantive impact**

<Not Applicable>

**Rationale for your engagement**

We currently engage our suppliers, which are smallholder farmers, to raise awareness on sustainable production principles and to help them apply best agronomic principles and water efficiency initiatives, or related initiatives. Our approach aims to build understanding about sustainability from a systemic point of view, touching on multiple aspects from climate change, productivity, social impact, governance, or water-related issues. This will help our suppliers to better understand how all these issues are related to one another and boils down to how sustainable palm oil is practiced in their plantations.

**Impact of the engagement and measures of success**

Currently the engagement is still in its initial phases. We plan to further build upon this and expand in the future.

**Comment**

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## W2. Business impacts

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### W2.1

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

Yes

### W2.1a

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**(W2.1a) Describe the water-related detrimental impacts experienced by your organization, your response, and the total financial impact.**

**Country/Area & River basin**

Indonesia	Other, please specify (Depletion of water in the water reservoir in Belitung)
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**Type of impact driver & Primary impact driver**

Acute physical	Drought
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**Primary impact**

Reduction or disruption in production capacity

**Description of impact**

We have experienced long droughts in 2015-2016 and 2019. In 2015, we bought 4.669,5 tons of water costing about 144.7 million rupiah (about USD 10 thousand) to ensure there is enough water for processing. It is clear that the world is warming and there is plenty of evapo-transpirations. This will cause serious water scarcity across all arable land. Although the financial impact is not huge, the risk on production disruptions is high with reduction of production can be up to 30% (or reduction of CPO sales by 15,000-20,000 MT in Belitung at average price USD 700).

**Primary response**

Secure alternative water supply

**Total financial impact**

10000000

**Description of response**

We constructed another reservoir to ensure enough water reserves are maintained during the long drought periods. Construction costs in Belitung estate for a water reservoir and pump was about USD 27,000. We feel that this is adequate at this point of time and we will apply more intervention if climate change impacts becomes more adverse. Currently we are also doing composting and piloting drip fertigation initiative in Belitung which can help reduce the impact to production during long droughts. Further financial consideration would have to be undertaken if all the measures do not provide adequate resilience. We also invest in installing flow meters in housing area to monitor domestic water usage of our employees. From this data we are able to reduce the domestic water usage.

**Country/Area & River basin**

Indonesia	Other, please specify (Flood in Batang Gadis River in North Sumatra II estate)
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**Type of impact driver & Primary impact driver**

Acute physical	Flood (coastal, fluvial, pluvial, groundwater)
----------------	--

**Primary impact**

Disruption to sales

**Description of impact**

High intensity rainfall and frequent floods can disrupt the accessibility of roads and bridges during harvesting and reduce FFB production by up to 10%, estimated total FFB production ranging from 165,000 – 190,000 MT. The oil extraction rate (OER) 20% and CPO price average 700/MT.

**Primary response**

Develop flood emergency plans

**Total financial impact**

3000000

**Description of response**

Water management and road maintenance cost of USD 2.5 million per annum in all of our estates to mitigate the impact of flood.

**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>	We did not have any fines, enforcement orders, and/or other penalties for water-related regulatory violations.

**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	Our identification and classification are described in our environmental impact assessment document, which has been approved by the government. An example of the classification is based on water source (surface water and ground water).	<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**

Nitrates

**Description of water pollutant and potential impacts**

We tested nitrate parameters in groundwater and surface water quality that may be affected by the Company's activities.

Eutrophication is a process that occurs when water is overloaded with nutrients such as phosphates and nitrates. Eutrophication can reduce biodiversity and the quality of aquatic ecosystems.

**Value chain stage**

Direct operations

**Actions and procedures to minimize adverse impacts**

Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience

Beyond compliance with regulatory requirements

Reduction or phase out of hazardous substances

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

**Please explain**

We minimize the impact of pollution by making wastewater treatment plant. The waste disposal results do not exceed the quality standards required by the government. In addition, we also use waste water for methane capture and land applications. All our efforts through the study of environmental impact.

**Water pollutant category**

Phosphates

**Description of water pollutant and potential impacts**

We tested phosphates parameters in surface water quality that may be affected by the Company's activities.

Eutrophication is a process that occurs when water is overloaded with nutrients such as phosphates and nitrates. Eutrophication can reduce biodiversity and the quality of aquatic ecosystems.

**Value chain stage**

Direct operations

**Actions and procedures to minimize adverse impacts**

Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience

Beyond compliance with regulatory requirements

Reduction or phase out of hazardous substances

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

**Please explain**

We minimize the impact of pollution by making wastewater treatment plant. The waste disposal results do not exceed the quality standards required by the government. In addition, we also use wastewater for methane capture and land applications. All our efforts are made after we have carried out the study of environmental impact.

**Water pollutant category**

Oil

**Description of water pollutant and potential impacts**

Oil pollution can spread over the surface in a thin layer that stops oxygen getting to the plants and animals that live in the water.

We tested oil parameters in wastewater treatment plant and surface water, to check the water quality that may be affected by the Company's activities.

**Value chain stage**

Direct operations

**Actions and procedures to minimize adverse impacts**

Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience

Beyond compliance with regulatory requirements

Reduction or phase out of hazardous substances

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

**Please explain**

We minimize the impact of pollution by making wastewater treatment plant. The waste disposal results do not exceed the quality standards required by the government. In addition, we also use waste water for methane capture and land applications. All our efforts are made after we have carried out the study of environmental impact.

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?**

More than 6 years

**Type of tools and methods used**

Enterprise risk management

Databases

**Tools and methods used**

COSO Enterprise Risk Management Framework

Other, please specify (We evaluate annual precipitation levels and the drying of river tributaries in the various concession units.)

**Contextual issues considered**

Water availability at a basin/catchment level

Water quality at a basin/catchment level

Stakeholder conflicts concerning water resources at a basin/catchment level

Implications of water on your key commodities/raw materials

Water regulatory frameworks

Status of ecosystems and habitats

Access to fully-functioning, safely managed WASH services for all employees

**Stakeholders considered**

Employees

Local communities

NGOs

Regulators

Suppliers

Water utilities at a local level

**Comment**

We review the water availability in all of the river basins of our operations area as a part of our annual review of business risk. We also determine our strategy based on short term risk assessments and build a long term strategy to overcome the extreme weather phenomena. This assessment is done in each area of operation (we have 6 estates spread across different islands in Indonesia) and a detailed mitigation plan is designed and implemented (including water catchment for dry areas and construction of water gate to avoid flooding). We have done a group wide assessment and a location-based assessment on water-related risk (such as the more frequent extreme weather phenomena), and therefore long-term planning on best practice of agriculture to overcome the risk is also undertaken. We plan to also carry out assessment on the water availability risk on the surrounding areas of our plantations because water availability risk may affect the livelihood of our surrounding communities.

**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	We review water availability and quality in all of the river basins of our operations area as a part of our annual review of business risk. We also determine our strategy based on short-term risk assessments and build a long-term strategy to overcome the extreme weather phenomena. We start by mapping and identifying situations or risks in each stage of our water use process. We then assess the risks and create control/mitigation plans to be implemented. Control measures or initiatives are routinely monitored. We also apply internal and external audits to ensure that our existing systems and processes are suitable, effective, and efficient.	This assessment is done in each area of operation (we have 6 estates spread across different islands in Indonesia) and a detailed mitigation plan is designed and implemented (include water catchment for dry areas and construction of water gate to avoid flooding). This is compiled at the Head Office for an assessment of general trends of water-related risks across the group (such as the more frequent extreme weather phenomena), and therefore long-term planning on best practice of agriculture to overcome the risk is also undertaken.	The analysis is incorporated into our overall risk assessments and business strategy, which is assessed and monitored on a continuous basis during the year. In every board meeting we will discuss the progress and new development of water management risk and its mitigation efforts, which i.e. include building river dike, water gate, water efficiency efforts, keeping moisture in the soil, water recycling programs, etc.	We have issued policies for water conservation and develop task forces to implement water management programs. We also set tools for monitoring and measurement of water usage, and reporting metrics of water use and savings metrics. We also engage an external auditor for Water Management (currently PT Sucofindo), to monitor water intensity and trend and to provide recommendation for continuous improvements.

**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, only within our direct operations

## W4.1a

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

We assess risks based on two factors: (1) the likelihood of the inherent risk to happen without any risk mitigation action, based on historical occurrences and readiness of our risk mitigation to control such risk (2) the impact if such risk would occur in the assessment years.

There are five likelihood categories: remote, unlikely, possible, likely, almost certain. The impact scale is ranging from immaterial impact (< USD 10,000), minor (USD 10,000- USD 100,000), moderate (USD 100,000- 1 million), major/high (USD 1-10 million) to catastrophic impact (with a potential financial impact of 10-> USD100 million, representing >20% of our equity book value).

We define substantive risk as risk within the following category:

1. Likelihood: almost certain with catastrophic impact
2. Likelihood: likely with catastrophic impact
3. Likelihood: almost certain with major impact
4. Likelihood: almost certain with moderate impact
5. Likelihood: likely with major impact
6. Likelihood: possible with catastrophic impact

We have a similar process to assess strategic opportunities, categorizing the likelihood and the potential impact to our Company value. There are five likelihood categories: rare, unlikely, possible, prospective, low-hanging fruits. The impact scale ranges from insignificant impact (< USD 10,000), incremental (USD 10,000- USD 100,000), significant (USD 100,000- 1 million), break-through (USD 1-10 million) to game changer impact (with a potential financial impact of 10- > USD100 million, representing >20% of our equity book value).

We define substantive opportunities as opportunities that fall within the following categories:

1. Likelihood: low-hanging fruits with game changer impact
2. Likelihood: prospective with game changer impact
3. Likelihood: low-hanging fruits with break-through impact
4. Likelihood: low-hanging fruits with significant impact
5. Likelihood: prospective with break-through impact
6. Likelihood: possible with game changer impact

Based on this assessment, water scarcity can cause severe financial impact to the group. We experienced long droughts in 2014-2015 as well as 2019, and the year after the production declined to more than 20% from the previous year. Also, the growth of the newly planted palm trees was not as good as expected. Production volume decline will affect the profitability of the whole Company.

## 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	5	100	Water is a significant resource for the profitability and productivity of the company. We use water extensively for processing fresh fruit bunches and domestic usage. Lack of water for processing can cause serious financial business impact.

## 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 (Sionggotan River (North Sumatera), Jangkang River (Belitung), Paraupan River (North Sumatera) , Kepayang River (West Kalimantan), Haman River (South Sorong, Southwest Papua))
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**Number of facilities exposed to water risk**

5

**% company-wide facilities this represents**

100%

**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**

21-30

**Comment**

Water is a significant resource for the profitability and productivity of the company. All of our processing requires water for sterilization, dilution and separation.

We also need water or adequate moisture in the soil to ensure healthy and productive oil-palm trees. Extreme weather or long-drought will effect the productivity of oil-palm trees for approximately up to 2 years. In the last El-Nino, our crop production have gone down, within the range of 20% compared to yield potential. This is fatal for our operation, as most of the cost of production is on fixed cost. Extreme weather phenomena can affect the company's profitability.

Flooding will result in disruption in daily estate activities. Formation of fresh fruit bunch will be interrupted. The measurement of the effect have not been studied as well as the effect of droughts. The level of effect depends on how quick the flood will recede, and therefore water management is very important.

**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 (Jangkang River in Belitung)
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**Type of risk & Primary risk driver**

Acute physical	Drought
----------------	---------

**Primary potential impact**

Reduced revenues from lower sales/output

**Company-specific description**

Water is a significant resource for the profitability and productivity of the company. Water availability impacts the productivity of our oil-palm trees and also capacity to continue mill processing. .

Long drought and water scarcity can cause serious business disruption and financial impact. To ensure we have enough water resilience for our mill processing, we have built big reservoir to contain and hold water during long dry spells. The precipitation level are erratic in certain years.

To ensure that we minimize the water deficit (long drought impact) to our oil-palm trees productivity, we have carried out research and experiment best agronomy practice to minimize risk and efficient use of water (use of compost and fertigation for regenerative agriculture).

**Timeframe**

1-3 years

**Magnitude of potential impact**

High

**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)**

5000000

**Potential financial impact figure - maximum (currency)**

10000000

#### Explanation of financial impact

Long drought and water deficit may reduce the productivity of our oil-palm trees in Belitung by 20% or reduction about 44,000 MT. The potential CPO production loss will be about 10,000 MT with an estimated oil extraction rate (OER) 22% and CPO price between USD 500 - 1,000/MT.

#### Primary response to risk

Adopt regenerative agriculture policies

#### Description of response

We use compost to maintain moisture in the planted areas. We also introduce and implement a trial fertigation project.

We are looking at technological innovation to conserve and recycle water. We have built additional reservoirs to bring resilience in our operational activities to overcome the water risk in the mills.

#### Cost of response

4000000

#### Explanation of cost of response

Composting: This initiative converts empty fruit bunches into organic fertilizers using microbes. The application of compost reduces the use of chemical fertilizers, improves soil moisture, and rejuvenates soil structure. As a result, we have seen yield improvements in young mature palms in Belitung while reducing chemical fertilizer use by more than 50%, meaning that GHG emissions are also reduced. The on time off capital expenditure were amount USD 3.5 million.

Drip Fertigation: By installing small pipeline systems to distribute water and fertilizers that reach each palm tree, to mitigate the impact of drought and dependency on workers. This initiative involves an initial investment of USD 1,850 per hectare, to reduce operational costs by more than 55% while maintaining comparable crop growth, especially during prolonged drought seasons.

In total, the investment to mitigate the impact of long drought in Belitung is estimated around USD 4M.

We are planning to construct new reservoirs if climate patterns adversely change. This will bring about adequate resilience in our operational activities. The reservoirs will collect rain water during rainy season, minimizing effect of floods, and keep water during the dry seasons.

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#### Country/Area & River basin

Indonesia	Other, please specify (Sionggotan River (Norh Sumatera), Paraupan River (North Sumatera) , Kepayang River (West Kalimantan), Haman River (South Sorong, Southwest Papua))
-----------	---

#### Type of risk & Primary risk driver

Acute physical	Flood (coastal, fluvial, pluvial, groundwater)
----------------	--

#### Primary potential impact

Reduced revenues from lower sales/output

#### Company-specific description

High intensity rainfall and frequent floods can disrupt the accessibility of roads and bridges during harvesting and reduce FFB production by up to 10%, estimated total FFB production ranging from 800,000 – 1,000,000 MT. The potential CPO production loss ranging from 16,000 MT to 20,000 MT with oil extraction rate (OER) 20% and CPO price USD 500 - 1,000/MT.

#### Timeframe

1-3 years

#### Magnitude of potential impact

Medium

#### 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)

8000000

#### Potential financial impact figure - maximum (currency)

20000000

#### Explanation of financial impact

High intensity rainfall and frequent floods can disrupt the accessibility of roads and bridges during harvesting and reduce FFB production by up to 10%, estimated total FFB production ranging from 800,000 – 1,000,000 MT. The potential CPO production loss ranging from 16,000 MT to 20,000 MT with oil extraction rate (OER) 20% and CPO price USD 500 - 1,000/MT.

#### Primary response to risk

Introduce/strengthen water management incentives

#### Description of response

Water management and road maintenance

#### Cost of response

2500000

#### Explanation of cost of response

Water management and road maintenance cost of USD 2.5 million per annum. We are also planning to build a new reservoir in some of our estates where impacted by

## W4.2c

**(W4.2c) Why does your organization not consider itself exposed to water risks in its value chain (beyond direct operations) with the potential to have a substantive financial or strategic impact?**

	Primary reason	Please explain
Row 1	Risks exist, but no substantive impact anticipated	<p>At the downstream of our supply chain are oil refineries, which might be located at different parts of the world, far away from our plantations. Therefore, it is impossible for us to assess the effect of their operations on water.</p> <p>We also have many buyers, located in different areas or water basins, therefore although water risk exists in the value chain, we believe that assessing their water risk is not a priority in our business.</p> <p>The effect of water risk is more relevant to our smallholder suppliers that are located at the same basin area as our area of operation. If we are successful in overcoming the water risk in our operational area, then we can share our knowledge to our smallholder suppliers (such as the use of compost).</p>

## 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

Resilience

### Primary water-related opportunity

Increased resilience to impacts of climate change

### Company-specific description & strategy to realize opportunity

Doing regenerative agriculture, especially using compost to keep the moisture content of the soil and minimize the drought impact to the oil-palm trees productivity. We also have a trial fertigation project to improve hydration of soils during long dry seasons. Building additional water reservoirs for processing and water extraction from atmosphere are some of strategic projects we are planning to realize.

### Estimated timeframe for realization

1 to 3 years

### Magnitude of potential financial impact

Medium-high

### 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)

7500000

### Potential financial impact figure – maximum (currency)

15000000

### Explanation of financial impact

The one time investment to build a composting plant costs about USD 3.5 million, which is then depreciated over 5-8 years. The use of compost has proven to minimize productivity decreases. According to our research, the difference of productivity in an area with composting and an area without it during the recovery period of drought seasons can be as much as 4-5 tons of fresh fruit bunch per hectare, or an equivalent of approximately 1 ton of CPO per hectare. Currently, we have 3 composting plant in 3 different estates which have capacity for an area of 15,000 hectares, the compost produced will never be able to cover the whole plantation area. The estimated additional productivity will be equivalent to 15,000 tons of CPO as a result of 1 ton of CPO per hectare times 15,000 hectares, which, at a price of USD 500-1,000/MT, and the depreciation of 3 composting plant of about USD 1,500,000, equals to USD 7.5 – 15.0 million.

## 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. Sahabat Mewah dan Makmur (SMM), Belitung

**Country/Area & River basin**

Indonesia	Other, please specify (Jangkang River)
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**Latitude**

-2.994722

**Longitude**

107.874722

**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)**

1032

**Comparison of total withdrawals with previous reporting year**

About the same

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

1032

**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)**

339

**Comparison of total discharges with previous reporting year**

Higher

**Discharges to fresh surface water**

339

**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)**

693

**Comparison of total consumption with previous reporting year**

About the same

**Please explain**

At PT SMM, our water withdrawal increased slightly from last year due to domestic housing construction activities, but overall the amount of water withdrawal at PT SMM was on par with last year. The water discharge rate has increased because currently we have increased data collection on the Domestic WWTP at PT SMM, while water use has decreased from last year, this is due to the efficient use of water in production processes, such as water dilution and turbine water cooling.

**Facility reference number**

Facility 2

**Facility name (optional)**

PT. Austindo Nusantara Jaya Agri, North Sumatera

**Country/Area & River basin**

Indonesia	Other, please specify (Sionggotan River)
-----------	--

**Latitude**

1.478388

**Longitude**

99.963888

**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)**

1157

**Comparison of total withdrawals with previous reporting year**

Higher

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

1017

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

141

**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)**

368

**Comparison of total discharges with previous reporting year**

About the same

**Discharges to fresh surface water**

368

**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)**

789

**Comparison of total consumption with previous reporting year**

Higher

**Please explain**

At PT ANJA, our water withdrawal increased by 19% from last year due to an increase in CPO production. This is in line with our water usage figures which increased quite a lot due to the increase in production. There is no significant change in the discharge rate at PT ANJA.

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**Facility reference number**

Facility 3

**Facility name (optional)**

PT. Austindo Nusantara Jaya Agri Siais, North Sumatera

**Country/Area & River basin**

Indonesia	Other, please specify (Paraupan River)
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**Latitude**

1.172944

**Longitude**

99.15816

**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)**

773

**Comparison of total withdrawals with previous reporting year**

Higher

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

752

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

21

**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)**

346

**Comparison of total discharges with previous reporting year**

Higher

**Discharges to fresh surface water**

346

**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)**

427

**Comparison of total consumption with previous reporting year**

Higher

**Please explain**

At PT ANJAS, the water withdrawal rate increased by 7% due to an increase in CPO production in 2022 from 2021. This is in line with the increase in water use at PT ANJAS. The water discharge rate also increased from the previous year, this was in line with the increase in water withdrawal rate. Although we recycle the palm oil mill effluent (POME) in PT ANJAS for compost (organic fertilizer), not the entire POME can be recycled. We discharge this water after being treated at our effluent ponds and tested on the parameters of water quality before being discharge.

**Facility reference number**

Facility 4

**Facility name (optional)**

PT. Kayung Agro Lestari, Ketapang, West Kalimantan

**Country/Area & River basin**

Indonesia	Other, please specify (Kepayang River)
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**Latitude**

-1.44722

**Longitude**

110.231944

**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)**

1025

**Comparison of total withdrawals with previous reporting year**

Higher

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

1025

**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)**

413

**Comparison of total discharges with previous reporting year**

About the same

**Discharges to fresh surface water**

413

**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)**

613

**Comparison of total consumption with previous reporting year**

Higher

**Please explain**

At PT KAL, the rate of water withdrawal increased by 11% due to an increase in CPO production from the previous year. This is in line with the increase in water use at PT KAL, moreover, the many construction projects that are running at PT KAL. The water discharge rate also increased from the previous year by 5% from domestic water disposal.

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**Facility reference number**

Facility 5

**Facility name (optional)**

PT. Putera Manunggal Perkasa, South Sorong, Southwest Papua

**Country/Area & River basin**

Indonesia	Other, please specify (Haman River)
-----------	-------------------------------------

**Latitude**

-1.783379

**Longitude**

132.444377

**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)**

619

**Comparison of total withdrawals with previous reporting year**

Much higher

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

497

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

121

**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)**

309

**Comparison of total discharges with previous reporting year**

Much higher

**Discharges to fresh surface water**

309

**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)**

310

**Comparison of total consumption with previous reporting year**

Higher

**Please explain**

At PT PMP, the number of water withdrawals and disposal has increased significantly from the previous year, this is because, in 2022, the data we report also includes domestic housing activities. Whereas in 2021, the data we report only covers production activities at the mill.

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W5.1a

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(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**

Our water accounting data have been audited as part of our ISO 14001 certification audit.

**Please explain**

<Not Applicable>

**Water withdrawals – volume by source**

**% verified**

76-100

**Verification standard used**

Our water accounting data have been audited as part of our ISO 14001 certification audit.

**Please explain**

<Not Applicable>

**Water withdrawals – quality by standard water quality parameters**

**% verified**

76-100

**Verification standard used**

Our water accounting data have been audited as part of our ISO 14001 certification audit.

**Please explain**

<Not Applicable>

**Water discharges – total volumes**

**% verified**

76-100

**Verification standard used**

Our water accounting data have been audited as part of our ISO 14001 certification audit.

**Please explain**

<Not Applicable>

**Water discharges – volume by destination**

**% verified**

76-100

**Verification standard used**

Our water accounting data have been audited as part of our ISO 14001 certification audit.

**Please explain**

<Not Applicable>

**Water discharges – volume by final treatment level**

**% verified**

76-100

**Verification standard used**

Our water accounting data have been audited as part of our ISO 14001 certification audit.

**Please explain**

<Not Applicable>

**Water discharges – quality by standard water quality parameters**

**% verified**

76-100

**Verification standard used**

Our water accounting data have been audited as part of our ISO 14001 certification audit.

**Please explain**

<Not Applicable>

**Water consumption – total volume**

**% verified**

76-100

**Verification standard used**

Our water accounting data have been audited as part of our ISO 14001 certification audit.

**Please explain**

<Not Applicable>

## W6. Governance

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### W6.1

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

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

### W6.1a

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#### (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 Description of business impact 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 Reference to company water-related targets Acknowledgement of the human right to water and sanitation Recognition of environmental linkages, for example, due to climate change	We have a company-wide policy on water and have individual reduction target for our operational activities in the estate and the mills. We consider water as an important natural resource and looking into ways to recycle water, water conservation, and various innovation for water use efficiency, especially to create more resilience of our business to climate change.  We also recognize that access to clean water is a human right and it is one of the SDGs, therefore we also prioritize the access of WASH in the workplace and in local communities.

### W6.2

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

Yes

### W6.2a

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**(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)	The CEO decide based on input from Sustainability Director (Chief Sustainability Officer) on sustainability strategic direction and its implementation and effects after taking into account all C-suite input. In 2022, we upheld Sustainability Policies, which form the basis for the Company commitments to minimizing social and environmental impacts and determine implement the sustainability strategy, including projects for Community Involvement and Development (CID), Biodiversity and Conservation, Compliance with sustainability standards, Plasma and Smallholder Partnership and Stakeholder Relations, including national and local governments, international and national NGOs and other key stakeholders. We revisited our material topics through a facilitated process to ensure that they were still relevant
Director on board	<p>The Board of Directors (BOD) is collectively responsible for managing the Company's interests and objectives in pursuit of its vision and mission, in accordance with the Articles of Association and the prevailing laws and regulations. The BOD is led by the CEO and consists of executive directors.</p> <p>The BOD is accountable to the shareholders through the General Meeting of Shareholders and is supervised by the Board of Commissioners (BOC), which consists of all non-executive directors, and led by the Chairman. The BOC may provide recommendations, inputs and guidance to the BOD.</p>
Board-level committee	<p>The CSR and Sustainability Committee consist of several non-executive directors (BOC) to oversee and monitor the development and implementation by the BOD of the Company's practice of Sustainability, including Responsible Development commitments based on identified environmental, social and economic impacts of the business, as well as related risks and opportunities. The CSR and Sustainability Committee has quarterly meetings with the BOD to discuss issues and aspects reported including updates on sustainability compliance (e.g. RSPO), progress with responsible development projects, environmental and social issues and community grievances, community engagement, government engagement, biodiversity conservation, alignment with SDGs, media attention, and internal sustainability awards system.</p> <p>The CSR and Sustainability Committee then share the meeting result and issues to all BOC (non-executive Board members)</p>
Chief Sustainability Officer (CSO)	<p>CSO or Sustainability Director formulate sustainability strategy as part of overall Company strategy and champion the approval of this strategy with BOD and BOC. CSO then determine relevant program for Sustainability, and provide them to CEO, who will then lead the Board of Directors' meeting to agree on strategy objectives, program to develop and monitoring system of the projects. CSO then lead the translation of the strategy into sustainability projects, monitoring the implementation and need to revise or improve projects based on feedback from the sustainability teams and external parties (NGOs, communities and Government).</p> <p>CSO led several departments, including Conservation, Community Involvement and Development (including cooperative) and Corporate Communications.</p>
Chief Operating Officer (COO)	<p>COO is in charge to:</p> <ul style="list-style-type: none"> <li>- Ensure all management and agronomic operations follow the Sustainability Policy and Implementation Guidance.</li> <li>- Keep up to date with the latest and best sustainability practices, including RSPO requirements for land clearing or replanting, environmentally friendly technologies to optimize GHG reduction and water usage, pesticides &amp; pest management, reforestation efforts, etc.</li> <li>- Share knowledge with latest developments on sustainability practices throughout the organization.</li> <li>- Manage the compliance as per our SOP and RSPO P&amp;C guidelines</li> <li>- COO reports to the CEO and also actively participates in BOD decision making. In 2020, the COO initiated to measure the carbon stock of our standing biomass in the conservation area as a basis to create a new sustainability model to consolidate ANJ's ESG ambitions.</li> <li>- The COO also formulated long term and short term greenhouse reduction plans to reduce GHG emissions going forward with strong emphasis on regenerative agriculture.</li> </ul>
Chief Financial Officer (CFO)	<p>Chief Financial Officer (CFO) CFO is responsible for internal control system to ensure that all practices consider adherence to our sustainability policies:</p> <ul style="list-style-type: none"> <li>* Determine procedures and form to use in various activities, especially to document traceability and monitoring adherence to our sustainability policies by our smallholders' vendor.</li> <li>* Monitor the tracing and recording of certificate of sustainable palm oil is documented properly</li> <li>* Adherence of sustainability covenants within our credit agreement is fulfilled. (Currently we have Sustainability Linked Loan clause on several our credit agreement. The adherence in our credit agreement is good standing as RSPO members and maintenance of RSPO certification)</li> <li>* Manage ESG rating process</li> <li>* Review business possibilities in carbon trading, ensuring that our conservation area can generate fund resources for its own management and maintenance</li> </ul> <p>CFO report to CEO and actively participate in BOD decision making</p>
Other, please specify (Commercial and Logistics)	Commercial and logistics is responsible to ensure that certificates of sustainable palm oil can be sold optimally in the market. They are also responsible to manage and coordinate reply to queries from buyers regarding our sustainability practices, which are prepared by the relevant departments

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 - all meetings	Monitoring implementation and performance Overseeing major capital expenditures 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	ANJ management has arranged regular meetings, including monthly management meetings, bi-weekly board-level leadership team to report and discuss strategy implementation progress, climate-related issues, and any sustainability issues, quarterly audit meetings, risk management committee meetings (minimum six times annually (p.a.)), quarterly sustainability and CSR committee meetings, quarterly combined BOD-BOC meetings, BOC meetings (six times p.a.), cross-functional sustainability working group meetings (as needed), and monthly sustainability department meetings. These various meetings discuss sustainability issues, climate-related, water-related and forest-related issues as part of their agenda, including related project progress in each business unit, strategy implementation, risk management, mitigation initiatives. Board-level executives and supervising commissioners are involved in the meetings.

**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	We have a Nomination and Remuneration Committee (NRC) that nominates and select board members, including their competence on environmental, as well as political, social, and legal aspects, including water-related issues because it has a critical importance in our business. The annual performance of Directors is assessed by the President Director, and in the case of the President Director, by the NRC. Evaluation of the directors in charge for water issues include assessments of their performance in managing water and peatlands. The NRC is chaired by an Independent Commissioner (non-executive director) to ensure that nomination, selection, and evaluation processes are unbiased.  We take measures to ensure that our BOD members have sufficient knowledge and skills in sustainability and sustainable development. Board members receive climate change and sustainability training and awareness through short courses, workshops and seminars, self-study, and involvement in sustainability-oriented projects.	<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 Operating Officer (COO)

**Water-related responsibilities of this position**

- Assessing water-related risks and opportunities
- Managing water-related risks and opportunities
- Setting water-related corporate targets
- Monitoring progress against water-related corporate targets
- Integrating water-related issues into business strategy

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

More frequently than quarterly

**Please explain**

Our COO/Vice President Director (VPD), who directly reports to the CEO, is in charge for water-related risks and opportunities. Decision of which will rely heavily on VPD's acumen to identify and mitigate water-related risks or realize opportunities to carry out his responsibility to improve resilience to climate change in our estates, water use efficiency in mill and WASH management for our employees.

Progresses in implementation of projects to manage water-related risks and opportunities (such as progress of river bund construction, water catchment construction) and rise of new risks and opportunities (risk of el Nino or La Nina based on IOD analysis) is reported during the bi-weekly meeting of Board of Director and quarterly to our non-executive Board. As part of our annual review of our strategy, risk and opportunities assessment, work plan and budget preparation new projects are suggested, reviewed, analysed and approved for implementation.

**Name of the position(s) and/or committee(s)**

Chief Sustainability Officer (CSO)

**Water-related responsibilities of this position**

- Assessing water-related risks and opportunities
- Managing water-related risks and opportunities
- Managing annual budgets relating to water security

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

More frequently than quarterly

**Please explain**

The CSO report to the CEO and share any water-related risk and its mitigation in bi-weekly Board meeting, emphasizing issues emerging and risk management of water-relation, incl. potential issues, if any, in company area, mitigation or management of the issues.

**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	Water management links directly with our production target and the performance of the COO/Vice President Director is heavily dependent on the fulfilment of this target. Hence, success in managing water will be reflected in the achievement of our production targets which will also affect the bonus achievement of the COO/Vice President Director.

**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	Board/Executive board Director on board Chief Executive Officer (CEO) Chief Financial Officer (CFO) Chief Operating Officer (COO) Chief Sustainability Officer (CSO)	Reduction in water consumption volumes – direct operations Improvements in water efficiency – direct operations Implementation of water-related community project	Achievement of production target at a certain level of cost will result in bonuses for the Board. We can improve to determine the Board's Key Performance Indicators to link explicitly and more directly with water-related projects in their performance indicators.  As part of performance evaluation, we include 15% weight on responsible development initiatives, including water-related management, sustainability certification and Community Involvement and Development projects. Every year the achievement of project initiatives to target will impact the total grading in performance appraisal, which will effect the amount of bonus earned.	Each employee and board member has its own annual KPIs for water-related issues and community involvement and development issues. Achievement will mean good performance appraisal that will link to bonus earned.  Supply chain engagement is monitored by the procurement / purchasing manager. Each General manager in the estate is responsible for traceability of its external Fresh Fruit Bunch procurement from smallholders, and traceability report is reviewed by Board of Directors on a monthly basis.
Non-monetary reward	Corporate executive team Other, please specify (Any employee which has carried out water-related initiatives to improve efficiency and manage water usage)	Reduction in water consumption volumes – direct operations Improvements in water efficiency – direct operations Improvements in water efficiency – supply chain Improvements in water efficiency – product use Improvements in wastewater quality – direct operations Improvements in wastewater quality – supply chain Improvements in wastewater quality – product use Increased access to workplace WASH – direct operations Implementation of employee awareness campaign or training program on water-related issues Implementation of water-related community project	Every year we have an employee appreciation day where employees are being recognized and specially mentioned for actions they have taken in innovating or implementing ideas to improve efficiency, including water usage and management of water-related risks. Being representative of the Company in various awarding ceremony, seminars and talk increase employee satisfaction and engagement to achieve the target.	We ask the people responsible for projects to represent the Company in Award receiving ceremony in relation to sustainability.  Internally we started providing appreciation and award night, specially mentioning any contribution of each staff.  Also, featuring staff in Instagram, Facebook, internal communication magazines, featuring in our Sustainability Report, all is small reward.  Our non-executive board can also spend their holiday visiting our conservation area with our staff guiding them.

**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, funding research organizations

**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?**

As our operation rely heavily on water and soil moisture, we work closely with the local Government to understand their water management plans. Any approval or licenses given to other significant water users (such as mining companies) will affect the balance of water in the area. We also work closely with universities and academics to provide us with research reports in relation to water and water-related risks (natural risks) in our operation area.

**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)  
SR 2022 - ANJT -EN (110523) LOW RES.pdf

**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	11-15	<p>As per our commitment to Water Conservation which is detailed in our Sustainability Policy, the Board of Directors has tasked the Chief Operation Officer (COO) / Vice President Director (VPD) to initiate policies and implement initiatives to mitigate depletion of natural water resources and conservation.</p> <p>In the long term, we have set a goal to preserve water and optimize water use in our palm oil company to achieve a water intensity of 1 ton of water per ton of FFB processed. This target is disclosed in our website as our commitment towards part of ESG long term objectives.</p> <p>The analysis of climate change is incorporated into our regular risk assessments.</p> <p>In all board meetings, discussions are carried out on the progress of our water management and conservation which is including building river bunds for flood mitigation, constructing water reservoir and ponds for forest fire mitigation, deep closed canal boundary to maintain water level, water efficiency efforts, keeping moisture in the soil, water recycling program, etc.</p> <p>Our Capital Expenditures relating to water management (mitigation of flood, fire and drought) amounted to more than USD 5.000.000,-</p> <p>The precipitation intensity is going to be very high and thus our long term strategy is to capture this volume by building many reservoirs for ultimate use for Fertigation.</p> <p>This will enhance yields and reduce costs which will ensure the sustainability of our palm oil operations in the difficult years ahead.</p>
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	11-15	<p>We have developed the following strategies:</p> <ol style="list-style-type: none"> <li>1. Issued policies for water conservation and develop task forces to implement water management programs.</li> <li>2. Build water related infrastructures to mitigate water related issues i.e. including building river bunds for flood mitigation, water reservoir and ponds for forest fire mitigation, deep closed canal boundary to maintain water level, water efficiency efforts, keeping moisture in the soil, water recycling program, etc. Our Capital Expenditures relating to integrated water management are more than USD 5,000,000.</li> <li>3. Set tools for monitoring and measurement of water usage, and reporting metrics of water use and savings metrics.</li> <li>4. Engaged an external auditor for Water Management, to monitor water intensity, peat subsidence and provide recommendations for continuous improvements."</li> <li>5. Engaged a reputable hydrologist to look at water drainage network, water gradient within and outside the concession.</li> <li>6. Introduced water consumption meters in all of our main operating sites, including the mills and housing.</li> <li>7. Constructed water gates and bunds to manage water drainages during dry seasons.</li> <li>8. Minimize water withdrawal in process and domestic through recycling and reusing treated waste water.</li> <li>9. Provide training and socialization on water conservation program, including water for domestic use, to our employees.</li> </ol>
Financial planning	Yes, water-related issues are integrated	11-15	<p>During long term financial planning, the resource required for water security is included in the capital expenditures.</p> <p>The resource allocation that is currently in our long term financial planning including:</p> <ol style="list-style-type: none"> <li>1. River bund normalization to prevent flood in North Sumatera plantation, budget allocation of 11 billion rupiahs across 4 years</li> <li>2. Forest fire mitigation, including building reservoir, ponds, canal and pumping pipeline in Kalimantan plantation, budget allocation of USD 3 million across 3 phases and 3 years of implementation</li> </ol> <p>Other mitigation for drought and water scarcity including assessment and R&amp;D for:</p> <p>Drip Fertigation project, Composting project to maintain soil moisture.</p> <p>Financial planning for water conservation and preservation is an integral part of the Sustainability of our Palm oil business. Its extremely important the investment in the capital for water conservation and preservation is prepared as a first major step to commence a palm oil operation. The challenges of climate and the higher evapotranspiration risk for tropical agriculture requires considerable financial investment in water management.</p> <p>The payback on these investments mentioned in the opportunity section (W4.3).</p> <p>Development in low lying areas and constructing of huge drainages are part of water network we create in palm oil concession. The desalting programs for these drains is done in once in two years period. The size of drainages bucket are all studied before any construction begin.</p>

**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)**

197

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

98

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

31

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

63

**Please explain**

Water related expenditure are separately identified in the capital budget. As we realized how important is water management to our operation, we have prepared a work plan for building infrastructures to improve our resilience. We are building water gates, river bunds, and water catchments in all estates.

In 2022, we have significant water capital expenditure to build additional water reservoir and drip fertigation pilot project in Ketapang. In 2023, we have budgeted an increase in the capex for the flood prevention in SIAIS and extension of drip fertigation and continuing work from the water reservoir in Ketapang.

There will be a higher depreciation expense from the capital investment cost which depreciated over 20 years, however we will also have a reduction in labor, material, logistics, carbon footprint and improvement in productivity which will bring added financial value under the umbrella of sustainability.

**W7.3**

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

	Use of scenario analysis	Comment
Row 1	Yes	We use water-related scenario analysis to maneuver our business strategy. Oil palm trees are perennial crop with a life cycle of 25-35 years. This crop is quite resilient to the temperature increases but productivity will be affected and decrease. While the crop may stand temperature increases, the inevitable water deficit that come with this increase may materially effect productivity and hence profitability of our Company. Our scenario analysis has brought us to efforts to improve water management and build various infrastructure to overcome water deficit and flood if the temperature does increase.

**W7.3a**

**(W7.3a) Provide details of the scenario analysis, what water-related outcomes were identified, and how they have influenced your organization’s business strategy.**

	Type of scenario analysis used	Parameters, assumptions, analytical choices	Description of possible water-related outcomes	Influence on business strategy
Row 1	Water-related	1. Quantity of water available in reservoirs for mill operation. 2. Water stress indicator in our plantation 3. Fire hotspots	1. Frequency of extreme weather, long drought and frequent flooding. 2. Temperature and increase in rainfall will reduce the activity of insects that pollinate the fruit set 3. Increase possibility of forest fire 4. Increase possibility of rotten roots and other pest that will affect the health of our oil-palm trees 5. All of the above stated outcome will result in lower productivity, lower production outcome, higher operation expenses and less profitability for our oil-palm business	Water availability has a direct relationship with our productivity. If water are scarce, our productivity will decrease. Hence, we apply best agronomic practices and initiative such as composting to manage and ensure the availability of water for our crops and mill operation as part of our overall business strategy. Aside from water scarcity and droughts, extreme weather due to climate change also cause flooding in some estates which require long-term strategy and management to protect our crops and our infrastructures.

**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**

The company pay tax to the local government for the usage of deep well water as well as surface water from the river. In our housing complex where the staff and workers live with their family, the water is taken from the available water sources. The water is treated with filter technology for consumption, mostly using Reverse Osmosis technology. The cost of the water is calculated based on the processing cost, including: water tax to Government, energy cost to pump, processing cost for the Reverse Osmosis system and maintenance cost for the facility. For example: Cost for Reverse Osmosis water in Ketapang (West Kalimantan) is Rp 132/liter (about USD 10 cents/ liter).

This valuation of water cost is used to consider investment in relation to water sourcing, e.g. atmospheric water generator for drinking.

**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	Yes	We have a target to achieve water intensity 1 ton of water used for each ton of fresh fruit bunch (FFB) processed by 2027. That target can be used as our internal definition for low water impact.	<Not Applicable>	The industry average for water intensity is 1.5 tons of water for every ton of FFB processed. We believe that achieving 1 ton of water for every ton of FFB processed is well-below the industry average and can thus be understood as being low water impact in the context of our product and industry.

**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	No, but we plan to within the next two years	We plan to set a water withdrawal target after our mill utilization reach optimal levels.
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 unit of production

**Year target was set**

2021

**Base year**

2020

**Base year figure**

1.16

**Target year**

2027

**Target year figure**

1

**Reporting year figure**

1.09

**% of target achieved relative to base year**

43.74999999999999

**Target status in reporting year**

Underway

**Please explain**

Our Sustainability and Environmental Policies contain commitments to guarantee that sufficient, high-quality water is accessible to our operations and more critically, our surrounding communities and stakeholders. We have set a goal to preserve water and optimize water use in our palm oil company to achieve a water intensity of 1 ton of water per ton of FFB processed. In 2022, our water intensity per ton of FFB processed is 1.088 tons (or m3) of water, while our total water usage has increased due to increased production.

**Target reference number**

Target 2

**Category of target**

Water, Sanitation and Hygiene (WASH) services

**Target coverage**

Company-wide (direct operations only)

**Quantitative metric**

Increase in the proportion of employees using safely managed drinking water services

**Year target was set**

2022

**Base year**

2021

**Base year figure**

20.15

**Target year**

2030

**Target year figure**

100

**Reporting year figure**

29.81

**% of target achieved relative to base year**

12.0976831559173

**Target status in reporting year**

Underway

**Please explain**

Most of the housing areas in our estates have access to water services, either provided by external parties or internally. The exception is our operations in Southwest Papua which is located in remote areas with limited access to clean and drinkable water. Our target is to provide our own drinking water services to be used by 100% of employees in our estates by 2030. This will ensure that everyone has access to safely managed drinking water.

To this end, we are building water purification systems using reverse osmosis technology in our employee housing areas. Water from various sources, depending on the area, will be purified into safe drinking water that can easily be accessed and used by our employees and their families. Our priority is to build a water purification system in Southwest Papua because they do not have any access to drinking facilities. We have built a water purification system there since 2016 and it provides drinkable water access to 100% of employees in that estate.

We are planning to build more of these facilities in our other estates in Belitung and North Sumatra so that employees do not have to rely on buying drinkable water from external parties. This will ensure the safety of the water they use (because we cannot ensure the safety of water provided by external parties) and improve the accessibility of water for our employees and their families because it can be accessed free of charge. As of 2022, 29.81% of our employees have access to water services provided by the company.

**Target reference number**

Target 3

**Category of target**

Water pollution

**Target coverage**

Company-wide (direct operations only)

**Quantitative metric**

Reduction in concentration of pollutants

**Year target was set**

2022

**Base year**

2019

**Base year figure**

98.42

**Target year**

2030

**Target year figure**

95

**Reporting year figure**

96.33

**% of target achieved relative to base year**

61.1111111111112

**Target status in reporting year**

Underway

**Please explain**

This target only covers mill processing activities and does not include domestic water pollution. In all of our mills, except in Siais, North Sumatra, we do not discharge water to water bodies. In Siais, we have water discharged to nearby rivers. The volume of discharged water has decreased significantly since we have implemented our composting program in 2016. We monitor the quality of the water we discharge by measuring its Biological Oxygen Demand (BOD), which indicates the level of pollutants, such as ammonia and nitrates, contained in the water. All the water discharged in Siais already meet the quality standards set by environmental authorities, which is a BOD level of 100 mg/l. Our target is to further decrease the concentration level below environmental compliance levels of 95 mg/l. As of 2022, we have a BOD of 96.33 mg/l.

**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
W1 Current state	ANJ Water impacts Water intensity (M3/Ton FFB) Total water withdrawal, discharge and consumption ANJ management of water and wastewater	AA1000AS	Sustainability Report 2022 is verified by TUV Rheinland with a type 2 Moderate level assurance using AA1000 Assurance Standard (2008) with 2018 Addendum.

**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	Yes	Supply chain	We have mapped plastics used in our operations as part of our waste management and waste monitoring initiative. These include plastic packaging or materials that we obtain from our suppliers. This includes plastic materials purchased from suppliers for our nurseries (poly bag), plastic packaging of agricultural pesticides and fertilizers for plantation upkeep, protective personal equipment for our employees, and plastic containers used in our water treatment plant.

**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>	Although we have mapped the use of plastics in our operations, we are yet to have an in-depth assessment of the potential impacts of this use on the environment and/or human health. We believe that this will require a sufficient understanding on the potential impacts of plastics/microplastics in agriculture and in our operations specifically, which are still being explored at this stage. For this reason, we will not be able to assess this topic within the next two years in a comprehensive manner. Nevertheless, we recognize that this is a significant issue that will need to be addressed properly in the future.

**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	No, risks assessed, and none considered as substantive	<Not Applicable>	<Not Applicable>	We have a risk assessment process to identify what topics and issues can have a significant impact on our business. This includes assessing risks related to our waste and waste management, in which plastic-related risks are part of. Plastics do not play a big role for the production of our palm products (CPO, PK, and PKO). However, we use plastic materials in the plantation such as packaging, equipment, containers, or poly bags. Plastics are also used for domestic activities of our employees living in our estates.  Our risk assessment is based on the likelihood (the possibility of the risk occurring, from remote to uncertain) and the magnitude of the financial impact ranging from immaterial (< USD 10,000) to catastrophic (> USD 10 million). Our assessment concluded that plastic-related risks are not significant to our business.

**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>	Although we monitor our waste production each year and have set targets for our waste management, we are yet to make specific plastics-related targets.  However, at this point in time, we believe that it is not yet necessary to have specific plastic-related targets and continue to monitor it as part of our waste management system. We recognize that this assessment may change in the future as our understanding of the potential impacts of plastic use in our operations continue to evolve.  As part of our 3R (reduce, reuse, recycle) programs, our plan is to manage and minimize plastic waste generation by reusing or recycling plastics. At this time, our poly bag waste is already recycled as block paving used in our office and residential areas. Some of the plastics we use are given to licensed third parties for disposal because they are considered waste containing with hazardous and toxic material/residues.

**W10.5**



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

	Activity applies	Comment
Production of plastic polymers	No	
Production of durable plastic components	No	
Production / commercialization of durable plastic goods (including mixed materials)	No	
Production / commercialization of plastic packaging	No	
Production of goods packaged in plastics	No	
Provision / commercialization of services or goods that use plastic packaging (e.g., retail and food services)	No	

## 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.

No additional information or context

### 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	Vice President Director	Director on board

## 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