Musim Mas Holdings Pte Ltd - Forests 2023



F0. Introduction

F0.1

(F0.1) Give a general description of and introduction to your organization.

Headquartered in Singapore, Musim Mas Group is a fully integrated palm oil corporation that delivers the highest quality and innovative palm oil products and derivatives used across multiple industries worldwide.

As one of the most prominent players in the palm oil industry, we aspire to be a responsible leader in the evolution of the industry, driving a new era of sustainability with innovation across the globe. To that aim, our dedicated, global team of professionals across the entire palm oil supply chain work closely with local and international stakeholders, ensuring that our products are economically viable, socially responsible, and environmentally appropriate.

Since 1972, Musim Mas has established deep and long-standing relationships with our customers and stakeholders worldwide. Our multi-cultural and multi-disciplinary workforce, located in 13 countries, brings innovation to meet the growing needs of our customers.

We are proud to be the preferred supply chain partner for palm oil and its derivatives. From our plantations, mills, refineries, kernel crushing plants, oleochemicals, and specialty fats plants, we manufacture palm oil and value-added derivatives before exporting these to customers via our extensive fleet of tankers and barges. Today, Musim Mas is Indonesia's largest palm oil exporter to customers located all around the world.

The steady growth of Musim Mas is underpinned by the quality of our management and supported by professionals dedicated to the highest standards of quality, safety, and efficiency. Our global marketing activities are undertaken by Inter-Continental Oils and Fats (ICOF), a member of Musim Mas Group.

Despite these achievements, our business continues to face new challenges. As we have progressed, so have expectations from stakeholders for a responsible supply base. To achieve this, environmental stewardship has been a core pillar of our sustainability measures. Musim Mas strives to minimise and mitigate adverse impacts on the environment, by regularly assessing the impact of our operations through tools or exercises such as RSPO PalmGHG and CDP. We initiated our first Life Cycle Assessment (LCA) in 2019, to evaluate the impact of our operations on the environment, as well as develop holistic mitigation plans to minimize those impacts.

Musim Mas takes the impact of climate change seriously and is strongly committed to minimising GHG emissions within our operations. Our sustainability teams, senior management, and the Board are involved in decision-making pertaining to our climate-related risks and opportunities to ensure emission reductions are adequately managed throughout our operations.

F0.2

(F0.2) 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

F0.3

(F0.3) Select the currency used for all financial information disclosed throughout your response.

USD

F0.4

(F0.4) Select the forest risk commodity(ies) that you are, or are not, disclosing on (including any that are sources for your processed ingredients or manufactured goods); and for each select the stages of the supply chain that best represents your organization's area of operation.

Timber products

Commodity disclosure

This commodity is not produced, sourced or used by our organization

Stage of the value chain

<Not Applicable>

Are you disclosing information on embedded commodities?

<Not Applicable>

Explanation if not disclosing

<Not Applicable>

Palm oil

Commodity disclosure

Disclosing

Stage of the value chain

Production

Processing

Trading

Manufacturing

Retailing

Are you disclosing information on embedded commodities?

Yes

Explanation if not disclosing

<Not Applicable>

Cattle products

Commodity disclosure

This commodity is not produced, sourced or used by our organization

Stage of the value chain

<Not Applicable>

Are you disclosing information on embedded commodities?

<Not Applicable>

Explanation if not disclosing

<Not Applicable>

Soy

Commodity disclosure

This commodity is not produced, sourced or used by our organization

Stage of the value chain

<Not Applicable>

Are you disclosing information on embedded commodities?

<Not Applicable>

Explanation if not disclosing

<Not Applicable>

Other - Rubber

Commodity disclosure

This commodity is not produced, sourced or used by our organization

Stage of the value chain

<Not Applicable>

Are you disclosing information on embedded commodities?

<Not Applicable>

Explanation if not disclosing

<Not Applicable>

Other - Cocoa

Commodity disclosure

This commodity is not produced, sourced or used by our organization

Stage of the value chain

<Not Applicable>

Are you disclosing information on embedded commodities?

<Not Applicable>

Explanation if not disclosing

<Not Applicable>

Other - Coffee

Commodity disclosure

This commodity is not produced, sourced or used by our organization

Stage of the value chain

<Not Applicable>

Are you disclosing information on embedded commodities?

<Not Applicable>

Explanation if not disclosing

<Not Applicable>

F0.5

(F0.5) Select the option that describes the reporting boundary for which forests-related impacts on your business are being reported

Operational control

F0.6

(F0.6) Select the countries/areas in which you operate.

Brazil

China

Germany

India

Indonesia

Italy

Malaysia Netherlands

Singapore

Spain

United Kingdom of Great Britain and Northern Ireland

United States of America

Viet Nam

F0.7

(F0.7) Are there any parts of your direct operations or supply chain that are not included in your disclosure?

No

F0.8

(F0.8) 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

F1. Current state

F1.1

(F1.1) How does your organization produce, use or sell your disclosed commodity(ies)?

Palm oil

Activity

Growing/production of raw materials

Harvesting

Milling

Crushing

Refining & processing

Refining & fractionation

Exporting/trading

Using as input into manufacturing process for power generation

Form of commodity

Fresh fruit bunches (FFB)

Crude palm oil (CPO)

Crude palm kernel oil (CPKO)

Palm kernel meal (PKM)

Refined palm oil

Palm oil derivatives

Palm kernel oil derivatives

Palm biodiesel

Source

Owned/managed land

Smallholders

Trader/broker/commodity market

Country/Area of origin

Indonesia

% of procurement spend

100%

Comment

Musim Mas Group is a fully integrated palm oil corporation, our business activities run the gamut of the palm oil supply chain including:

- o Managing oil palm plantations to produce fresh fruit bunch (FFB)
- o Milling oil palm fruits to produce crude palm oil (CPO) and Palm Kernel (PK)
- o Crushing PK to obtain crude palm kernel oil (PKO)
- o Refining CPO and PKO
- o Further processing to produce value-added products such as specialty fats, oleochemicals, biodiesel, soap, palm wax, and functional products such as emulsifiers
- o Manufacturing consumer goods such as cooking oil and personal care products
- o Shipping and merchandising value-added products to global destinations

In line with our Sustainability Policy, Musim Mas is working toward a fully traceable and transparent supply chain. More detailed information on traceability can be accessed via our website https://www.musimmas.com/sustainability/traceability/. Additionally, we organized workshops, and hands-on training, and collaborated with the Consortium of Resource Experts (CORE) to effectively communicate and help suppliers understand our NDPE policy. As a result, we can monitor and track our progress in achieving our NDPE commitment across the supply chain.

F1.2

(F1.2) Indicate the percentage of your organization's revenue that was dependent on your disclosed forest risk commodity(ies) in the reporting year.

	% of revenue dependent on commodity	Comment
Timber products	<not applicable=""></not>	<not applicable=""></not>
Palm oil	91-99%	Musim Mas Group is a vertically integrated palm oil corporation which derives all of its revenue from oil palm.
Cattle products	<not applicable=""></not>	<not applicable=""></not>
Soy	<not applicable=""></not>	<not applicable=""></not>
Other - Rubber	<not applicable=""></not>	<not applicable=""></not>
Other - Cocoa	<not applicable=""></not>	<not applicable=""></not>
Other - Coffee	<not applicable=""></not>	<not applicable=""></not>

F1.3

(F1.3) Provide details on the land area you control and/or manage that is used for the production of your disclosed commodity(ies).

Forest risk commodity

Palm oil

Type of control

Concession/lease

Country/Area

Indonesia

Land type

<Not Applicable>

Area (Hectares)

192364

% Area certified

76

Certification scheme

RSPO producer/grower certification

International Sustainability and Carbon Certification (ISCC)

Other, please specify (Indonesian Sustainability Palm Oil (ISPO), Palm Oil Innovation Group Charter (POIG))

Conversion of natural ecosystems monitored during the reporting year, the last 5 years and/or since specified cutoff date

We have monitored conversion of natural ecosystems since specified cutoff date, please specify year (2007)

Area of natural ecosystems converted during the reporting year (hectares)

<Not Applicable>

Area of natural ecosystems converted since specified cutoff date (hectares)

0

Area of natural ecosystems converted during the last 5 years (hectares)

<Not Applicable>

Please explain

In accordance with our Sustainability Policy, Musim Mas pledges to No Deforestation of High Carbon Stock (HCS) forests, No Conversion of High Conservation Value (HCV) areas, and No New Developments on Peatlands. Musim Mas conducts HCV and HCS assessments prior to all new land development following the requirements and definitions set out by the HCS Approach (HCSA) and the HCV Resource Network Assessor Licensing Scheme (ALS). We engage with HCV ALS accredited assessors for HCV assessments and have engaged with approved external assessors such as HCS Approach Registered Practitioner Organizations to lead our HCS evaluations, further ensuring the credibility of our HCV and HCS assessments. The list of our companies that have completed the HCV/HCS assessments can be found on these websites https://hcvnetwork.org/find-report/ and http://highcarbonstock.org/registered-hcsa-and-hcv-hcsa-assessments/.

Forest risk commodity

Palm oil

Type of control

Scheme/Plasma smallholders

Country/Area

Indonesia

Land type

<Not Applicable>

Area (Hectares)

7015

% Area certified

86

Certification scheme

RSPO producer/grower certification

International Sustainability and Carbon Certification (ISCC)

Other, please specify (Palm Oil Innovation Group Charter (POIG))

Conversion of natural ecosystems monitored during the reporting year, the last 5 years and/or since specified cutoff date

We have monitored conversion of natural ecosystems since specified cutoff date, please specify year (2007)

Area of natural ecosystems converted during the reporting year (hectares)

<Not Applicable>

Area of natural ecosystems converted since specified cutoff date (hectares)

0

Area of natural ecosystems converted during the last 5 years (hectares)

<Not Applicable>

Please explain

In accordance with our Sustainability Policy, Musim Mas pledges to No Deforestation of High Carbon Stock (HCS) forests, No Conversion of High Conservation Value (HCV) areas, and No New Developments on Peatlands along its supply chain. Musim Mas conducts HCV and HCS assessments prior to all new land development following the requirements and definitions set out by the HCS Approach (HCSA) and the HCV Resource Network Assessor Licensing Scheme (ALS). We engage with HCV ALS accredited assessors for HCV assessments and have engaged with approved external assessors such as HCS Approach Registered Practitioner Organizations to lead our HCS evaluations, further ensuring the credibility of our HCV and HCS assessments. The list of our companies that have completed the HCV/HCS assessments can be found on these websites https://hcvnetwork.org/find-report/ and http://highcarbonstock.org/registered-hcsa-and-hcv-hcsa-assessments/.

(F1.4) Provide details on the land you control and/or manage that was not used for the production of your disclosed commodity(ies) in the reporting year.

Forest risk commodity

Palm oil

Country/Area

Indonesia

Type of control

Concession/lease

Land type

Set-aside land

Area (hectares)

28000

% covered by natural forests

0

Please explain

In accordance with our Sustainability Policy, Musim Mas pledges to No Deforestation of High Carbon Stock (HCS) forests, No Conversion of High Conservation Value (HCV) areas, and No New Developments on Peatlands. Musim Mas conducts HCV and HCS assessments prior to all new land development following the requirements and definitions set out by the HCS Approach (HCSA) and the HCV Resource Network Assessor Licensing Scheme (ALS). We engage with HCV ALS accredited assessors for HCV assessments and have engaged with approved external assessors such as HCS Approach Registered Practitioner Organizations to lead our HCS evaluations, further ensuring the credibility of our HCV and HCS assessments. The list of our companies that have completed the HCV/HCS assessments can be found on these websites https://hcvnetwork.org/find-report/ and http://highcarbonstock.org/registered-hcsa-and-hcv-hcsa-assessments/. Further information on conservation can be found at https://www.musimmas.com/sustainability/environmental-protection/.

F1.5

(F1.5) Does your organization collect production and/or consumption data for your disclosed commodity(ies)?

	Data availability/Disclosure
Timber products	<not applicable=""></not>
Palm oil	Consumption and production data available, disclosing
Cattle products	<not applicable=""></not>
Soy	<not applicable=""></not>
Other - Rubber	<not applicable=""></not>
Other - Cocoa	<not applicable=""></not>
Other - Coffee	<not applicable=""></not>

F1.5a

(F1.5a) Disclose your production and/or consumption figure, and the percentage of commodity volumes verified as deforestation- and/or conversion-free.

Forest risk commodity

Palm oil

Data type

Production data

Commodity production/ consumption volume

762201

Metric for commodity production/ consumption volume

Metric tons

Data coverage

Full commodity production/consumption

Have any of your reported commodity volumes been verified as deforestation- and/or conversion-free?

Vac

% of reported volume verified as deforestation- and/or conversion-free

100

Please explain

The verified volume corresponds to CPO production volumes from all of our 15 RSPO-certified mills, ensuring the credibility and transparency of our sustainability practices and sourcing areas.

Forest risk commodity

Palm oil

Data type

Consumption data

Commodity production/ consumption volume

3303632

Metric for commodity production/ consumption volume

Metric tons

Data coverage

Full commodity production/consumption

Have any of your reported commodity volumes been verified as deforestation- and/or conversion-free?

Yes

% of reported volume verified as deforestation- and/or conversion-free

100

Please explain

The verified volume corresponds to the FFB volumes purchased for our own operations, ensuring the credibility and transparency of our sustainability practices and sourcing areas.

F1.5b

(F1.5b) Provide a breakdown of your DCF and non-DCF volumes relevant to your stage in the supply chain according to how verification is achieved and the highest level of traceability, respectively.

Palm oil - DCF

% of DCF production/consumption volume from areas with no or negligible risk of deforestation/conversion

% of DCF production/consumption volume verified through monitoring systems

% of DCF production/consumption volume physically certified

% of non-DCF production/consumption volume from unknown origin

<Not Applicable>

% of non-DCF production/consumption volume traceable only as far as country level

<Not Applicable>

% of non-DCF production/consumption volume traceable only as far as sub-national area

<Not Applicable>

% of non-DCF production/consumption volume traceable only as far as processing facility level

<Not Applicable>

% of non-DCF production/consumption volume traceable to production unit level

<Not Applicable>

Total percentage of production/consumption volume reported (DCF) [auto-calculated]

Total percentage of production/consumption volume reported (non-DCF) [(auto-calculated)]

<Not Applicable>

Palm oil - Non DCF

% of DCF production/consumption volume from areas with no or negligible risk of deforestation/conversion

% of DCF production/consumption volume verified through monitoring systems

% of DCF production/consumption volume physically certified

<Not Applicable>

% of non-DCF production/consumption volume from unknown origin

% of non-DCF production/consumption volume traceable only as far as country level

% of non-DCF production/consumption volume traceable only as far as sub-national area

% of non-DCF production/consumption volume traceable only as far as processing facility level

% of non-DCF production/consumption volume traceable to production unit level

Total percentage of production/consumption volume reported (DCF) [auto-calculated]

Total percentage of production/consumption volume reported (non-DCF) [(auto-calculated)]

F1.5c

(F1.5c) For your disclosed commodity(ies), indicate the percentage of the production/consumption volume sourced by national and/or sub-national jurisdiction of origin.

Forest risk commodity

Palm oil

Country/Area of origin

Indonesia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction (Riau Province)

% of total production/consumption volume

22.66

Please explain

Percentage of palm oil produced and FFB consumed in Riau Province compared to total Musim Mas production and consumption volume.

Forest risk commodity

Palm oil

Country/Area of origin

State or equivalent jurisdiction

Specify state/equivalent jurisdiction (North Sumatra)

% of total production/consumption volume

8.19

Please explain

Percentage of palm oil produced and FFB consumed in North Sumatra Province compared to total Musim Mas production and consumption volume.

Forest risk commodity

Palm oil

Country/Area of origin

Indonesia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction (West Sumatra)

% of total production/consumption volume

5.16

Please explain

Percentage of palm oil produced and FFB consumed in West Sumatra Province compared to total Musim Mas production and consumption volume.

Forest risk commodity

Palm oil

Country/Area of origin

Indonesia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction (South Sumatra)

% of total production/consumption volume

9.61

Please explain

Percentage of palm oil produced and FFB consumed in South Sumatra Province compared to total Musim Mas production and consumption volume.

Forest risk commodity

Palm oil

Country/Area of origin

Indonesia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction (Central Kalimantan)

% of total production/consumption volume

45 1

Please explain

Percentage of palm oil produced and FFB consumed in Central Kalimantan Province compared to total Musim Mas production and consumption volume.

Forest risk commodity

Palm oil

Country/Area of origin

Indonesia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction (West Kalimantan)

% of total production/consumption volume

9.28

Please explain

Percentage of palm oil produced and FFB consumed in West Kalimantan Province compared to total Musim Mas production and consumption volume.

F1.5f

(F1.5f) How does your organization produce or consume biofuel derived from palm oil?

Does your organization produce or consume biofuel derived from palm oil?

Yes

Data type

Consumption

Volume produced/consumed

10096160

Metric

Liters

Country/Area of origin

Indonesia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction (Sumatera and Kalimantan)

% of total production/consumption volume

100%

Does the source of your organization's biofuel material come from smallholders?

Yes

Comment

Since 2020, our mills have used biofuel as our fuel option.

F1.6

(F1.6) Has your organization experienced any detrimental forests-related impacts?

Nο

F1.7

(F1.7) Indicate whether you have assessed the deforestation or conversion footprint for your disclosed commodities over the past 5 years, or since a specified cutoff date, and provide details.

Forest risk commodity

Palm oil

Have you monitored or estimated your deforestation/conversion footprint?

Yes, we estimate deforestation/conversion footprint based on sourcing area

Coverage

Full consumption volume

Reporting deforestation/conversion since a specified cutoff date or during the last five years?

Since a specified cutoff date, please specify year (2007)

Known or estimated deforestation/ conversion footprint (hectares)

0

Describe methods and data sources used to monitor or estimate deforestation/ conversion footprint

In the NDPE policy, Musim Mas has publicly committed to No Deforestation of High Carbon Stock (HCS) forests, no conversion of High Conservation Value (HCV) areas, and no new developments on peatlands (regardless of depth) after 31 December 2015 (no development on peat since 2014 for our own operations). Musim Mas conducted HCS and HCV assessments through verified external parties to identify the HCV and HCS areas. To monitor deforestation, Musim Mas also uses tools such as RADD, Earthqualizer platform, Satellite Images as well as on-site observation such as daily patrol. Monthly reports from both Satellite Images and onsite patrol are available to ensure proper documentation and no deforestation. Moreover, Earthqualizer also provides bi-weekly reports. For more information, please refer to https://www.musimmas.com/sustainability/environmental-protection/.

F2. Procedures

F2.1

(F2.1) Does your organization undertake a forests-related risk assessment?

Yes, forests-related risks are assessed

F2.1a

(F2.1a) Select the options that best describe your procedures for identifying and assessing forests-related risks.

Palm oil

Value chain stage

Direct operations

Supply chain

Coverage

Full

Risk assessment procedure

Assessed as part of other company-wide risk assessment system

Frequency of assessment

More than once a year

How far into the future are risks considered?

> 6 years

Tools and methods used

Internal company methods

External consultants

Global Forest Watch Pro

Sustainability Policy Transparency Toolkit (SPOTT)

National specific tools and databases

Jurisdictional/landscape assessment

Other, please specify (Controlled Purchase Protocol (CPP), Musim Mas Self - Assessment Tool (SAT), High Conservation Value Assessment (HCV), High Carbon Stock Assessment (HCSA))

Issues considered

Availability of forest risk commodities

Quality of forests risk commodities

Impact of activity on the status of ecosystems and habitats

Regulation

Climate change

Impact on water security

Loss of markets

Brand damage related to forests risk commodities

Social impacts

Stakeholders considered

Customers

Employees

Investors

Local communities

NGOs

Regulators

Suppliers

Please explain

Following our sustainability policy, Musim Mas applies the followings tools and methods to ensure compliance with our commitments:

- Internal company methods: We proactively monitor our supply chain to detect deforestation, development of peat, and fires. Our suppliers share maps and information about their supply base, enabling us to conduct risk assessments and establish Traceability to Plantation (TTP) measures
- External consultants: Earthqualizer provides oversight of our supply chain, assessing and monitoring supplier performance to identify deforestation risks more efficiently
- Global Forest Watch Pro: This centralized system monitors and assesses sustainability changes at regional, national, and supplier levels in fiber-supplying regions. We collect, update, and crosscheck information from public sources such as GeoRSPO, Greenpeace, and GFW
- SPOTT: assesses commodity producers, processors, and traders on their public disclosure regarding ESG issues. In 2022, we received a SPOTT score of 90.7%, ranking among the top six out of 100 companies
- National-specific tools and databases: We use tools like BPN to check the legality of supplier concessions
- Jurisdictional/landscape assessment: We have identified Aceh, Riau, South Sumatra, and West Kalimantan as priority landscapes based on our sourcing areas, palm oil volumes, and the significance of NDPE risks in these areas. Through our 7 smallholder hubs, we have trained 40,710 ISH with 3,537 achieving RSPO certification in 2022
- Controlled Purchase Protocol (CPP): a process supporting the resolution of grievances while maintaining business relationships. This protocol is based on three principles: suppliers' willingness to engage, positivity to act, and proof of progress against agreed-upon milestones and criteria. In 2022, no supplier was excluded due to NDPE commitment breaches
- Musim Mas's SAT: a self-administered questionnaire developed in line with our sustainability commitments. Suppliers' responses help us identify potential areas of improvement against our policy commitments and develop tailored roadmaps with timebound plans specific to each supplier. In 2022, 84% of our suppliers have completed their assessments
- HCV and HCSA: We utilize these methodologies to identify and protect natural areas, indigenous peoples' livelihoods, and local communities from the impacts of land-use change

F2.2

(F2.2) For each of your disclosed commodity(ies), has your organization mapped its value chains?

	Value chain mapping	, , , , , , , , , , , , , , , , , , , ,	Explain why your organization does not map its value chain and outline any plans to introduce it
Timber products	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Palm oil	Yes, we have mapped the entire value chain	<not applicable=""></not>	<not applicable=""></not>
Cattle products	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Soy	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Other - Rubber	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Other - Cocoa	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Other - Coffee	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>

F2.2a

(F2.2a) Provide details of your organization's value chain mapping for its disclosed commodity(ies).

Forest risk commodity

Palm oil

Scope of value chain mapping

Own operations
Tier 1 suppliers
Tier 2 suppliers

Smallholders

% of total suppliers covered within selected tier(s)

100

Description of mapping process and coverage

We are working with our direct suppliers in various aspects including engagement to our NDPE policy. In 2019, we began trialing NDPE Implementation Reporting Framework (IRF) to track progress on deforestation/peat commitments of suppliers. After that, the No Deforestation, No Peat (NDP) Risk Management Framework was released in September 2021 which outlines our approaches to risk identification, assessment, mitigation, and monitoring. We also conduct workshops on NDPE commitments along with Musim Mas Self-Assessment Tool (SAT). Moreover, we work with the Consortium of Resource Experts (CORE) – Proforest and Daemeter – on implementing NDPE commitments, the Extension Services Programme, and landscape collaborations. As of 2022, 96% of suppliers have either an NDPE policy or adopted the Musim Mas Sustainability Policy.

More on NDPE engagement can be found at https://www.musimmas.com/sustainability/third-party-suppliers/ and a list of our suppliers can be found at https://www.musimmas.com/sustainability/traceability/.

Your own production and primary processing sites: attach a list of facility names and locations (optional)

Your suppliers' production and primary processing sites: attach a list of names and locations (optional)

F2.3

(F2.3) Do you use a classification system to determine risk of deforestation and/or conversion of other ecosystems for your sourcing areas, and if yes, what methodology is used, and what is the classification used for?

Use of a classification system to determine deforestation and/or conversion risk of sourcing areas		Use of risk classification	Attachment indicating risk classification for each sourcing area (optional)
1 Yes, we use a classification system	In addition to our NDPE Roadmap which outlines how our engagement with operations and suppliers on No Deforestation, No Peat, No Exploitation (NDPE) commitments, we recognize the need for a better-defined procedure to quantify and mitigate NDPE risks at our independent mills and those of our third-party supplying mills. Our No Deforestation, No Peat (NDP) Risk Management Framework was released in September 2021 and clearly outlines our approaches to risk identification, assessment, mitigation, and monitoring. It was developed to inform, not replace, programs that independently verify compliance with NDPE requirements. Musim Mas mills that rely entirely on FFB from our own concession areas and scheme smallholders are verified as fully NDPE compliant through Palm Oil Innovation Group (POIG) or Roundtable on Sustainable Palm Oil (RSPO) certification and adherence to High Carbon Stock Approach (HCSA) requirements. However, we also source from third-party mills, and knowing the exact composition of their FFB supply sheds is key to assessing the risk of deforestation and peat development. Using traceability to plantation (TTP) data and overlaying supply shed maps with conservation and peat areas, we categorize all the mills in our supply chain as low, medium, or high risk. Our assessment approach was initially piloted at our Aceh sourcing area before being rolled out for all suppliers.	Musim Mas sourced from a total of 602 CPO and palm kernel (PK) suppliers in 2022, and all were assessed against the criteria to determine their risk levels. Of these, we identified that only 0% was high risk. We have collaboratively developed time-bound action plans to mitigate these risks, and have engaged with the high-risk mill identified during the year. We will continue to engage with identified high-risk mills at least annually. A further 2.7% was medium risk, while 97.3% was low risk. We plan to work with medium-risk mills in the future.	NDPE-Risk- Management- Framework- Report- 2021.pdf

F3. Risks and opportunities

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F3.1

(F3.1) Have you identified any inherent forests-related risks with the potential to have a substantive financial or strategic impact on your business?

	Risk identified?
Timber products	<not applicable=""></not>
Palm oil	Yes
Cattle products	<not applicable=""></not>
Soy	<not applicable=""></not>
Other - Rubber	<not applicable=""></not>
Other - Cocoa	<not applicable=""></not>
Other - Coffee	<not applicable=""></not>

F3.1a

(F3.1a) How does your organization define substantive financial or strategic impact on your business?

Definition: Musim Mas defines substantive financial impact as impacts that significantly affect and disrupt our supply chains which in turn affect the financial performance of the company.

We identify substantive financial impact in the following ways:

- Any impact that could potentially inflict a financial loss of around 10 percent or higher of current EBITDA estimates.
- Any climatic event that will drastically affect the yield and productivity of oil palm crops as well as palm oil supply.
- Any drastic drop in supply (of raw materials) of 20 percent or more, which affects our production cost as well as production volume.

Recognizing the climate-related risks, Musim Mas implements a robust corporate governance and risk management framework to continuously monitor, identify, and manage the arising risks. This framework is managed and aligned with our NDPE and sustainability policies which include no deforestation, no peatland development regardless of its depth, biodiversity, waste management, traceability to plantations, etc.

F3.1b

(F3.1b) For your disclosed forest risk commodity(ies), provide details of risks identified with the potential to have a substantive financial or strategic impact on your business, and your response to those risks.

Forest risk commodity

Palm oil

Type of risk

Acute physical

Geographical scale

Country

Where in your value chain does the risk driver occur?

Direct operation

Supply chain

Primary risk driver

Drought

Primary potential impact

Reduction or disruption in production capacity

Company-specific description

Musim Mas is a fully integrated palm oil company with all of our oil palm plantations located in Indonesia. The occurrence of extreme weather such as drought and flood can lower the productivity of our operations and disrupt our palm oil sales, which in turn, affects the performance of the company. In 2015, Indonesia experienced the climatic phenomenon of El Nino. The El Nino phenomenon has led to lower rainfalls and higher temperatures contributing to drought stress for crops including oil palm crops. Our data suggested that a prolonged drought can lower the oil palm fruits (FFB) yield by approximately 15%. Moreover, prolonged drought may also increase the risk of fire. Other extreme weather occurrences such as floods can affect the fertilizer application schedule, leading to a lower yield. Thus, this poses risks to Musim Mas operations.

Timeframe

>6 years

Magnitude of potential impact

Medium-high

Likelihood

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

675

Potential financial impact figure - maximum (currency)

810

Explanation of financial impact

Adverse weather conditions can have significant impacts on the productivity of our operations, specifically, prolonged drought or floods that occur over several weeks. Our average CPO yield is estimated to be in the range of 5-6 MT CPO/ha. Hence, taking a reduction of yield by 15% due to extreme weather (i.e. prolonged drought), CPO production can drop to 4.25 - 5.1 MT CPO/ha (or lowered by 0.75 - 0.9 MT CPO/ha). Consequently, taking an average CPO price (2020-2022) of USD 900 per MT CPO, the potential financial impact varies between USD 675 - USD 810 per hectare.

Calculations:

(A) = average CPO yield = 5-6 MT CPO/ha

(B) = average CPO price (2020-2022) = \$900/MT CPO

(C) = estimated reduction of yield due to prolonged drought = 15%

(D) = potential financial impact due to reduction of CPO production = (A) x (B) x (C) = \$675 - \$810/ha

Primary response to risk

Implementation of environmental best practices in direct operations

Description of response

As stipulated in our Sustainability Policy (covering 2020-2025), we are committed to no deforestation of HCS forests, no conversion of HCV areas, and no new developments on peatlands (regardless of depth) after 31 Dec 2015. Best management practices are carried out to alleviate the impacts of extreme weather such as drought, the practices with respective timescales are as follows:

- Satellite monitoring such as the MODIS, NOAA, and VIIRS is used to monitor hotspots at and around our concessions with monthly reports available (no end date).
- Provide training and equip firefighting teams to take action at the first sign of an outbreak as well as install fire breaks to slow the spread, should a fire occur (no end date).
- Launch a Fire Free Village Programme (FFVP) to engage and educate local communities on fire risks that may arise due to prolonged drought (no end date). In 2022, our FFVP covered 74 villages spanning 450,769 hectares and has conducted 127 trainings in the communities with 46 villages awarded for being fire-free. These initiatives are still ongoing in 2022.
- Operate 100% zero waste mills utilizing dried decanter solids, boiler ash, and POME to be repurposed as organic fertilizer and land application respectively which improves the soil nutrition and moisture retention capability to ameliorate the drought effects (no end date).
- Construct water ponds in our upstream operations areas to be used as water reserves in mitigating the risk of long drought and fire.

Cost of response

30000

Explanation of cost of response

The cost of response corresponds to the construction of water ponds in our operations. The total cost of \$30,000 (A x B) is derived from the estimated cost of a water pond of \$1000 (A) multiplied by the approximated number of water ponds constructed in our operations (B). The actual construction cost may fluctuate depending on the location, soil type, and size of each water pond.

Forest risk commodity

Palm oil

Type of risk

Reputational and markets

Geographical scale

Global

Where in your value chain does the risk driver occur?

Direct operation

Supply chain

Primary risk driver

Shifts in consumer preference

Primary potential impact

Increased compliance costs

Company-specific description

With the growing international agreements concerning deforestation, the implementation of stricter International and/or national regulations becomes inevitable. For example, the decision of the International market to pose stricter guidelines on the import of palm oil has impacted the market. Consequently, more customers prefer sustainably certified palm oil products and derivatives. With the variability of international regulations and decisions imposed on the palm oil sector, the financial impact on our business varies accordingly. Failure to comply may result in fines and/or loss of market. Moreover, rather than self-declarations by companies, independent third parties verifications will be required in terms of demonstrating credibility and transparency leading to an increase in compliance costs. Thus, this poses a risk to Musim Mas.

Timeframe

>6 years

Magnitude of potential impact

Medium

Likelihood

Likely

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact (currency)

90000

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact

Financial impact due to changes in customers' behavior and preferences could range widely from mild to severe. For example, if the European market shifts its preferences solely to demand more sustainable and certified palm oil products, then the financial impact will be milder in comparison to if the palm oil products are to be rejected completely. The impact on stricter sustainable demand is only limited to the cost needed in fulfilling the third-party verifications (including the operational cost to comply with the certification scheme standards) and supplier engagement costs, whereas the latter, the financial impact will be severe due to the loss of our major market.

The certification cost per unit to be able to enter the European Market i.e. ISCC is \$5000. In 2022, 18 of our processing units have been ISCC certified. Hence, the financial impact corresponds to the estimated certification costs of MMG operations derived from the certification cost per unit (\$5000) x total units (18) = \$90,000. All our ISCC certificates are available publicly on the ISCC website https://www.iscc-system.org/certificates/valid-certificates/.

Primary response to risk

Implementation of environmental best practices in direct operations

Description of response

To prepare for the new possible requirements of regulations and standards, we take measures with respective timescales as follows:

- Participates in working groups of various certification schemes to maintain compliance with the up-and-coming standards (no end date). For example, Musim Mas actively participates in RSPO working groups.
- Achieves and maintains 100% sustainability certification schemes such as RSPO, ISCC, MSPO, ITSNC, and ISPO in our operations (no end date). These will serve as a credible benchmark in our operation to keep track of our sustainability progress. As of 2022, all 15 integrated mills and 18 mills have been RSPO and ISCC certified respectively.
- Promotes traceability tools such as Musim Mas Self-Assessment Tool to engage with suppliers. As of 2022, 84% of suppliers have completed the form. We are on track to achieve 100% of suppliers completing the SAT by 2025.
- Participates in various known public assessment programs including CDP and Ecovadis (no end date). We received a gold rating in our 2022 Ecovadis assessment and will continue to participate in 2023.
- Implements best agricultural practices and pledges to no deforestation, no peatland development regardless of its depth, emission reduction, waste management, traceability to plantations, etc (no end date).
- Collaborate with multiple stakeholders in sustainability initiatives to assist surrounding communities and communicate our brand values (no end date). For example, the Aceh landscape

Cost of response

60000000

Explanation of cost of response

To ensure compliance and reduction in our GHG emissions, we have built 17 methane capture plants in our mills as of December 2022 with a total of 619,749 MT CO2e emissions avoided. The cost of response corresponds to the total cost for the methane capture installation in our operations. The calculation is derived from the capital cost of one methane capture plant (USD 3-4 million) multiplied by the total methane capture built (17) resulting in an estimated investment of \$60,000,000. Full information on our sustainability practices can be found at https://www.musimmas.com/sustainability-report/

F3.2

(F3.2) Have you identified any forests-related opportunities with the potential to have a substantive financial or strategic impact on your business?

	Have you identified opportunities?
Timber products	<not applicable=""></not>
Palm oil	Yes
Cattle products	<not applicable=""></not>
Soy	<not applicable=""></not>
Other - Rubber	<not applicable=""></not>
Other - Cocoa	<not applicable=""></not>
Other - Coffee	<not applicable=""></not>

F3.2a

(F3.2a) For your selected forest risk commodity(ies), provide details of the identified opportunities with the potential to have a substantive financial or strategic impact on your business.

Forest risk commodity

Palm oil

Type of opportunity

Markets

Where in your value chain does the opportunity occur?

Direct operation

Supply chain

Primary forests-related opportunity

Increased brand value

Company-specific description

With the growing focus on climate change and deforestation, sustainability metrics have become important for companies to source sustainably and shared that responsibility. As such, increasing brand value through sustainability certifications and environmental disclosure is beneficial for our business performance. Hence, there is an opportunity for Musim Mas to increase our brand value by demonstrating sustainability commitments, progress, and achievements in our operations and supply chains which lead to an increase in sales volume.

To achieve real transformation on the ground, we look beyond our own supply chains and work together with all stakeholders across the palm oil sector to tackle issues that impact both our industry and the global landscape at large. For example, Musim Mas partners with AAK and Nestlé to address deforestation outside of concession areas in Aceh, Indonesia. AAK and Nestlé have pledged to fund the first two years of the five-year program, reaching out to approximately 1,000 oil palm independent smallholders within two years and enrolling them in Musim Mas' smallholders program supported by Smallholders Hub. These collaborations and partnerships are not only beneficial to the environment (i.e. NDPE commitments) but also to the livelihood of our smallholders. Musim Mas will continue to demonstrate leadership in the space and promote our brand as a sustainable conscience company.

Estimated timeframe for realization

1-3 years

Magnitude of potential impact

Medium

Likelihood

Likely

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

12000000

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact figure

As customers become more aware of the importance of sustainability practices, the preferences in the market toward sustainably labeled products have increased. It is assumed that the increase in brand value is in line with the potential increase in sales of certified palm oil. The potential financial impact figure is then derived from (A) the estimated year-to-year increase in sales of certified palm oil by 2% and (B) the estimated revenue from sales of certified palm oil. In 2022, the sales of certified palm oil are estimated to represent around 600 million USD. Hence, the potential financial impact figure is estimated to be A X B = USD 12 million.

Cost to realize opportunity

250000

Strategy to realize opportunity

To seize this opportunity, Musim Mas takes actions with respective timescale as follows:

- Adopts and maintains various well-recognized certification schemes in our operations (no end date) such as RSPO, POIG, ISCC, and ISPO to track and rate our sustainability progress including GHG emissions. Since 2021, we continue to maintain respective schemes (RSPO-certified and POIG-verified) for all of our 15 integrated mills
- Publicly disclose our annual progress, milestones, and targets of our sustainability commitments and practices through Musim Mas websites, stakeholders meetings, and Sustainability Report according to GRI standards (no end date). For more information, please refer to https://www.musimmas.com/sustainability-report/
- Achieves full traceability to plantation throughout our supply chain. Presently, we have achieved 100% traceability to mill since 2015 and 97% traceability to plantation (TTP) as of December 2022. We are on track to achieve 100% TTP by 2025.
- Promote traceability tools such as the Self-Assessment Tool to assess suppliers' profiles including NDPE risks at the mill level. In 2022, 84% of our suppliers have completed the SAT. By 2025, we aim to engage with 100% of our suppliers on NDPE requirements and complete the SAT
- Promote our sustainability practices and brand through public assessments (no end date). In 2022, we received a Gold medal in our 2022 Ecovadis assessment and will continue to participate in 2023.
- Partner and collaborate with other stakeholders to engage in landscape approaches to mitigate the risk of NDPE in our supply chains and communicate our brand values (no end date).

COST TO REALIZE OPPORTUNITY

We have entered a partnership with General Mills, Nestlé, and AAK to address deforestation outside of palm oil concession areas in Aceh. The target of the program will positively impact some 2,000 smallholders in two years. The cost to realize the opportunity corresponds to the annual estimated funding in two locations in the Aceh landscape. The funding for each location is estimated to be \$125,000 per year (A). The cost of \$250,000 (A x B) is then calculated by multiplying the estimated funding (A) by the number of locations (B). The fund will be used to conduct Musim Mas' smallholder program where government extension officers will be trained in good agricultural practices and NDPE.

Forest risk commodity

Palm oil

Type of opportunity

Resilience

Where in your value chain does the opportunity occur?

Direct operation

Supply chain

Primary forests-related opportunity

Increased supply chain resilience

Company-specific description

Stakeholders such as customers and investors have taken ESG metrics such as deforestation, climate change, and other sustainability topics when conducting business. Therefore, transparency in sustainability practices is important to boost the company's reputation which leads to an increase in sales and revenue. Traceability exercises such as Traceability to Plantation (TTP) measures enable us to understand where and how oil palm fruits or fresh fruit bunches (FFB) are sourced and thus increase our supply chain transparency and resilience. To effectively communicate and ensure sustainability transparency, we published our sustainability progresses, milestones, and targets as well as materiality matrix in our Sustainability Report annually (https://www.musimmas.com/sustainability-report/).

Estimated timeframe for realization

1-3 years

Magnitude of potential impact

Medium

Likelihood

Likely

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact figure

As Musim Mas is a private company, the financial impact is yet to be publicly disclosed.

Cost to realize opportunity

0

Strategy to realize opportunity

Musim Mas carries out due diligence on all new suppliers before being accepted as our suppliers to check whether it complies with our sustainability and NDPE policies. In the due diligence process, we also assess the commitment and implementation of emissions in the supplier's operation. Our suppliers are enrolled in our engagement process. Recognizing the importance of traceability in our operations, since 2015, we have achieved 100% traceability to mill with 97% of the total supply to plantation being traceable in 2022. We are on track and gearing toward 100% traceability to plantation by 2025. Moreover, we engage and work closely with both our third-party supplier groups and independent smallholders. For example, besides training and workshops, suppliers are to complete the Musim Mas Self-Assessment Tool (SAT) which is an exhaustive set of questions against our NDPE requirements. This evaluation enables suppliers to self-declare information about their operations which allows Musim Mas to identify potential risk areas at the mill level. As of December 2022, 84% of our suppliers have completed their assessments. Through these initiatives, we can work towards eliminating all deforestation and ensuring traceability within our supply chains, thus ensuring compliance with our strict sourcing policies. Our traceability progress can be found at https://www.musimmas.com/sustainability/traceability/. As Musim Mas is a private company, the cost to realize is yet to be publicly disclosed.

F4. Governance

F4.1

(F4.1) Is there board-level oversight of forests-related issues within your organization?

Yes

F4.1a

(F4.1a) Identify the position(s) of the individual(s) (do not include any names) on the board with responsibility for forests-related issues.

Position	Responsibilities for forest-related issues
of	
individual	
or	
committee	
	The director on board, senior management, and relevant sustainability teams meet quarterly to assess and review key ESG issues including overseeing and monitoring forest-related risks and
board	opportunities such as deforestation, landscape restoration, conservation, and wildlife protection. Led by our Director on Board, the NDP Risk Management Framework report was published detailing
	the approach used in addressing the risks of deforestation and peat development on existing concession areas of our operations and those of our suppliers in 2021. We conduct traceability exercise
	where we achieved 97% traceability to plantation (up from 94% in 2021) to mitigate NDPE risk. We are on track to reach 100% traceability to plantation by 2025. In 2022, we published the Biodiversity
	and Climate Resiliency Action Plan outlining our efforts and targets within our own operations and global supply chain to address biodiversity conservation that is linked to the context of global climate
	change.

F4.1b

	1_	1-	
		Governance	Please explain
	that	mechanisms	
	forests-	into which	
	related	forests-	
		related issues	
	a scheduled	are integrated	
	agenda item		
		M	ADD:
Row 1	Scheduled - all		Sustainability objectives in climate change, NDPE commitments, and reduction of GHG emissions continue to become the major factors in our operational actions, decision-making, and business strategy. To achieve our sustainability goals, these issues are periodically discussed through a Quarterly Meeting. The quarterly meeting serves as a
'	meetings	and	discussion platform among the Board, Directors, and Head of Departments to discuss the progression of all ongoing projects and matters, including climate change,
	moonings	performance	deforestation, and GHG emission reduction issues. The Director of Sustainability together with the relevant Sustainability Team will brief the board on all of the sustainability
		Monitoring	issues covering the environment as well as social aspects, including climate-related issues and landscape. The outcome of this discussion includes plans of action, risk
		progress	management policies, annual budgets, business plans and so on. Consequently, the results of discussions and action plans will be shared and communicated throughout all
		towards	relevant departments, ensuring the messages are conveyed to all layers of workers. In alignment with the GRI reporting standard, we publicly communicate our annual
		corporate	sustainability progress through Sustainability Report (https://www.musimmas.com/sustainability-report/).
		targets	
		Overseeing	
		acquisitions,	
		mergers, and	
		divestitures	
		Overseeing	
		major capital	
		expenditures Overseeing the	
		setting of	
		corporate	
		targets	
		Overseeing	
		value chain	
		engagement	
		Providing	
		employee	
		incentives	
		Reviewing and	
		guiding annual budgets	
		Reviewing and	
		guiding	
		business plans	
		Reviewing and	
		guiding	
		corporate	
		responsibility	
		strategy	
		Reviewing and	
		guiding major	
		plans of action Reviewing and	
		guiding public	
		policy	
		engagement	
		Reviewing and	
		guiding risk	
		management	
		policies	
		Reviewing and	
		guiding	
		strategy Reviewing	
		innovation /	
		R&D priorities	
		Setting	
		performance	
		objectives	

F4.1d

(F4.1d) Does your organization have at least one board member with competence on forests-related issues?

Row 1

Board member(s) have competence on forests-related issues

Yes

Criteria used to assess competence on forests-related issues

Musim Mas is fully committed to implementing sustainability practices at the highest level across our operations. Our board member is extensively involved with the latest forest-related issues and standards. As such, he co-chaired the Standing Committee for Standards and has been actively involved in the RSPO over the years, co-chaired the Biodiversity and HCV working group, the Compensation task force, and currently sits on the board of the RSPO. Moreover, he is a member of the High Carbon Stock Approach Executive Committee. Accordingly, sustainability achievements such as full and beyond compliance with national and international certification schemes including RSPO, ISCC, POIG, ISPO, MSPO, and ITSNC principles and guidelines are continuously maintained. We received a Gold rating in our 2022 Ecovadis assessment.

Primary reason for no board-level competence on forests-related issues

<Not Applicable>

Explain why your organization does not have at least one board member with competence on forests-related issues and any plans to address board-level competence in the future

<Not Applicable>

(F4.2) Provide the highest management-level position(s) or committee(s) with responsibility for forests-related issues (do not include the names of individuals).

Name of the position(s) and/or committee(s)	Forests-related responsibilities of this position	Frequency of reporting to the board on forests-related issues	Please explain
	Managing annual budgets relating to the implementation of forest-related policies and commitments Managing major capital and/or operational expenditures, related to low-impact forest products or services (including R&D) Managing forests-related acquisitions, mergers, and divestitures Providing forests-related employee incentives Integrating forests-related issues into business strategy Setting forests-related corporate targets Monitoring progress against forests-related corporate targets Managing public policy engagement that may impact forests Managing value chain engagement on forests-related issues Assessing forests-related risks and opportunities Managing forests-related risks and opportunities Assessing future trends in forest risk commodity demand	More frequently than quarterly	In the sustainability governance structure, the Director of Sustainability is reporting to the Board of Directors. The Director of Sustainability delegates and oversees the implementation and execution of our sustainability policy commitments, and an external senior strategic advisor supports their work. The forest-related issues reported include but are not limited to standards and certifications, impact and monitoring, and assurance and compliance. In all, the objectives are to address climate-related issues including forest-related ones and manage environmental strategies into the core of our business.

F4.3

(F4.3) Do you provide incentives to C-suite employees or board members for the management of forests-related issues?

	Provide incentives for management of forests-related issues	Comment
Row 1	Yes	Yes, we do provide incentives for the board members.

F4.3a

(F4.3a) What incentives are provided to C-Suite employees or board members for the management of forests-related issues (do not include the names of individuals)?

Role(s)	Performance	Contribution of incentives to the
entitled to	indicator	achievement of your organization's
incentive?		forests-related commitments

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	Role(s)	Performance	Contribution of incentives to the	Please explain
	entitled to	indicator	achievement of your organization's	
	incentive?		forests-related commitments	
Monetary	Director on	Ending	Musim Mas uses progress toward its	Our Director on board oversees and resolves any sustainability matter including forest-related issues such as conservation of
reward	board	deforestation	sustainability targets as the threshold of	biodiversity, High Conservation Value (HCV), High Carbon Stock (HCS), traceability, NDPE risk management framework,
		and/or	success. Therefore, incentives are provided	
		conversion of	if progress is either linear to the overall	board develops forest management programs and action plans related to conservation initiatives at the group level. Our Director
		other natural	target or exceeds a linear trend. Below are	on Board works and is evaluated annually based on the Key Performance Indicator (KPI) where compensation and benefits are
		ecosystems Securing	some of the performance indicators and the progresses as of 2022:	awarded accordingly. Examples of performance indicators include but are not limited to full compliance with NDPE, HCV, and HCS guidelines as well as RSPO NPP. Others include awards and recognitions related to sustainability such as the SPOTT
		Free, Prior	progresses as of 2022.	ranking, CDP scorecard, and Ecovadis scorecard. Among many, these indicators were selected as they are aligned with the
		and Informed	Traceability to plantations	company's vision and they allow Musim Mas to objectively quantify the progress of the company in the field of sustainability
		Consent	We proactively monitor our supply chain to	including forest management.
		(FPIC) of	detect deforestation, development of peat,	
		indigenous	and fires. Our suppliers share maps and	
		peoples and	information about their supply base,	
		local	enabling us to conduct risk assessments	
		communities	and establish Traceability to Plantation	
		Increasing	(TTP) measures. We are aiming to achieve	
		commodity volumes with	100% traceability to plantations by 2025. As of 2022, we have achieved 97% and are on	
		credible third-	track to achieve the target.	
		party	l and the desired the tangen	
		certification	2. Musim Mas Self Assessments Tool	
		Adopting UN	(SAT)	
		International	A self-administered questionnaire	
		Labour	developed in line with our sustainability	
		Organization	commitments to identify potential areas of	
		principles Increasing	improvement against our policy commitments and develop tailored	
		traceability of	roadmaps with timebound plans specific to	
		commodity	each supplier. In 2022, 84% of our suppliers	
		volumes	have completed their assessments and are	
		Increased	on track to achieve 100% by 2025.	
		engagement		
		with suppliers	Sustainability certification schemes and	
		on forests-	landscape approaches	
		related issues Improvements		
		in commodity	operations such as RSPO, ISCC, and	
		production	ISPO. In 2022, 15 out of 17 PTs have	
		efficiency -	achieved ISPO certifications and are on	
		direct	track to achieve 100% ISPO-certified	
		operations	operations prior to 2025. We also	
		Company	collaborate with multiple stakeholders in the	
		performance	landscape approaches (i.e. Aceh).	
		against a		
		sustainability index with		
		forest-related		
		factors (e.g.,		
		CDP Forests		
		Score)		
		Engagement		
		in landscape		
		and/or		
		jurisdictional		
		approaches		

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	Role(s)	Performance	Contribution of incentives to the	Please explain
	entitled to		achievement of your organization's	r lease explain
	incentive?		forests-related commitments	
Non-	Director on	Endina	Musim Mas uses progress toward its	Our Director on board oversees and resolves any sustainability matter including forest-related issues such as conservation of
	board	deforestation	sustainability targets as the threshold of	biodiversity, High Conservation Value (HCV), High Carbon Stock (HCS), traceability, NDPE risk management framework,
reward		and/or	success. Therefore, incentives are provided	smallholders engagement, landscape approaches, grievances as well as supply chain engagement. Additionally, Director on
		conversion of	if progress is either linear to the overall	board develops forest management programs and action plans related to conservation initiatives at the group level. Our Director
		other natural	target or exceeds a linear trend. Below are	on Board works and is evaluated annually based on the Key Performance Indicator (KPI) where compensation and benefits are
		ecosystems	some of the performance indicators and the	awarded accordingly. These indicators were selected as they are aligned with the company's vision and they allow Musim Mas to
		Securing	progresses as of 2022:	objectively quantify the progress of the company in the field of sustainability including forest management. In complement to the
		Free, Prior		monetary reward, non-monetary reward such as special assignment is also given to those who perform. They are given the
		and Informed	Traceability to plantations	authority to form, develop, and budget projects/teams/action plans to improve the key performance indicators.
		Consent	We proactively monitor our supply chain to	
		(FPIC) of	detect deforestation, development of peat,	Examples of performance indicators include but are not limited to full compliance with HCV and HCS guidelines as well as RSPO
		indigenous	and fires. Our suppliers share maps and	NPP. Others include awards and recognitions related to sustainability such as the SPOTT ranking, CDP scorecard, and
		peoples and	information about their supply base,	Ecovadis scorecard.
		local	enabling us to conduct risk assessments	
		communities	and establish Traceability to Plantation	
		Increasing	(TTP) measures. We are aiming to achieve	
		commodity volumes with	100% traceability to plantations by 2025. As of 2022, we have achieved 97% and are on	
		credible third-	track to achieve the target.	
		party	track to achieve the target.	
		certification	2. Musim Mas Self Assessments Tool	
		Increasing	(SAT)	
		traceability of	A self-administered questionnaire	
		commodity	developed in line with our sustainability	
		volumes	commitments to identify potential areas of	
		Increased	improvement against our policy	
		engagement	commitments and develop tailored	
		with suppliers	roadmaps with timebound plans specific to	
		on forests-	each supplier. In 2022, 84% of our suppliers	
		related issues	have completed their assessments and are	
		Improvements	on track to achieve 100% by 2025.	
		in commodity		
		production	3. Sustainability certification schemes and	
		efficiency –	landscape approaches	
		direct operations	We will continue to achieve and maintain 100% certification schemes in our	
		Company	operations such as RSPO, ISCC, and	
		performance	ISPO. In 2022, 15 out of 17 PTs have	
		against a	achieved ISPO certifications and are on	
		sustainability	track to achieve 100% ISPO-certified	
		index with	operations prior to 2025. We also	
		forest-related	collaborate with multiple stakeholders in the	
		factors (e.g.,	landscape approaches (i.e. Aceh).	
		CDP Forests		
		Score)		
		Engagement		
		in landscape		
		and/or		
		jurisdictional		
		approaches		

F4.4

(F4.4) Did your organization include information about its response to forests-related risks in its most recent mainstream financial report?

Yes (you may attach the report – this is optional)
Musim-Mas-SR2021.pdf

Musim Mas is a private company, and we do not publish financial report. However, we do include information about our response to forest-related risks in our Sustainability Report. We attached our Sustainability Report for 2021, forest-related discussion can be found on page 39-53.

F4.5

(F4.5) Does your organization have a policy that includes forests-related issues?

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

F4.5a

(F4.5a) Select the options to describe the scope and content of your policy.

Row 1

Scope

Company-wide

Commodity coverage

Palm oil

Content

Commitment to eliminate conversion of natural ecosystems

Commitment to no land clearance by burning or clearcutting

Commitment to eliminate deforestation

Commitment to no deforestation, to no planting on peatlands and to no exploitation (NDPE)

Commitment to remediation, restoration and/or compensation of past harms

Secure Free, Prior and Informed Consent (FPIC) of indigenous people and local communities

Adoption of the UN International Labour Organization principles

Commitment to best management practices for soils and peat

Commitment to take action beyond own supply chain to tackle environmental issues

Commitment to resolving both social and environmental issues in own operations and supply chain

Commitment to protect rights and livelihoods of local communities

Commitments beyond regulatory compliance

Commitment to transparency

Commitment to stakeholder awareness and engagement

Commitment to align with the SDGs

Recognition of the overall importance of forests and other natural ecosystems

Description of business dependency on forests

Recognition of potential business impact on forests and other natural ecosystems

Description of forest risk commodities, parts of the business, and stages of value-chain covered by the policy

List of timebound milestones and targets

Description of forests-related performance standards for direct operations

Description of forests-related standards for procurement

Document attachment

Musim-Mas-Biodiversity-and-Climate-Resiliency-Action-Plan-2022.pdf

Musim-Mas-SR2021.pdf

Musim-Mas-2020-Sustainability-Policy-1.pdf

NDPE-Risk-Management-Framework-Report-2021.pdf

Musim-Mas-Controlled-Purchase-Protocol.pdf

Please explain

Our Sustainability Policy covers our entire global operations, including that of our third-party suppliers. First launched in 2014, the Policy established the framework for our no deforestation, no peat, and no exploitation (NDPE) commitments. To ensure continuous compliance with local, national, and international laws, we actively review our policies with the scheduled substantial revisions occurring on a 5-year cycle. Dedicated teams are established to regularly review and update the current sustainability policy. In September 2020, Musim Mas refreshed the Policy, which lays out a renewed and deepened commitment to improving the livelihoods of smallholders, workers, and communities; while maintaining a strict stance on NDPE. The new Policy focuses primarily on our suppliers and aims to strengthen the sustainability of small and mid-sized supplier groups and smallholders. We will continue to track our progress against the Supplier NDPE Roadmap and report these through public platforms such as the Sustainability Reports. The following are the key pillars of our Policy, which rest on the core components of sustainability – people, planet, and profit. They are:

- 1. Improve the lives of smallholders, workers, and communities
- 2. Deliver positive environmental impact, including but not limited to No deforestation of the High Conservation Value (HCV) area and High Carbon Stock (HCS) forest, No development of peatland regardless of depth
- 3. Maintain responsible and enduring relationships with suppliers, customers, and stakeholders
- 4. Driving innovation in sustainable practices

These pillars are incorporated into our daily operations through standard operating procedures (SOPs), due diligence, and verification procedures or subsidiary policies. Immediate actions will be undertaken to address any non-conformances to our policy. To communicate and ensure consistency with our sustainability policy, we report our annual sustainability progress through the Sustainability report in alignment with the GRI reporting standard. This report contains our sustainability milestones, targets, action plans, and other objectives, such as landscape strategies and jurisdictional approaches. For more information, please refer to https://www.musimmas.com/sustainability-report/ and http://www.musimmas.com/sustainability-policy.

F4.6

(F4.6) Has your organization made a public commitment to reduce or remove deforestation and/or forest degradation from its direct operations and/or supply chain?

Forest risk commodity	Public commitments made
Palm oil	Yes

F4.6a

(F4.6a) Has your organization endorsed any of the following initiatives as part of its public commitment to reduce or remove deforestation and/or forest degradation?

New York Declaration on Forests

Tropical Forest Alliance

Other, please specify (Palm Oil Innovation Group (POIG), Roundtable on Sustainability Palm Oil (RSPO), International Sustainability Carbon Certification (ISCC), Italian National Sustainability Certification System (ITNSC))

F4.6b

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(F4.6b) Provide details on your public commitment(s), including the description of specific criteria, coverage, and actions.

Forest risk commodity

Palm oil

Criteria

No conversion of natural ecosystems

Zero gross deforestation/ no deforestation

No new development on peat regardless of depth

Best management practices for existing cultivation on peat

Restoration and compensation to address past deforestation and conversion

Avoidance of negative impacts on threatened and protected species and habitats

No trade of CITES listed species

No land clearance by burning or clearcutting

No conversion of High Conservation Value areas

No conversion of High Carbon Stock forests

Collaborate in landscapes/jurisdictions to progress shared sustainable land use goals

Implementation of Nature-based Solutions that support landscape restoration and long-term protection of natural ecosystems

Secure Free, Prior and Informed Consent (FPIC) of indigenous people and local communities

Operations are in accordance with the UN Declaration on the Rights of Indigenous Peoples

Promotion of gender equality and women's empowerment

Remediate any adverse impacts on indigenous people and local communities

Adoption of the UN International Labour Organization principles

Resolution of complaints and conflicts through an open, transparent and consultative process

Facilitate the inclusion of smallholders into the supply chain

Build community capacity and incentivize engagement in multi-stakeholder processes

No sourcing of illegally produced and/or traded forest risk commodities

No sourcing of forest risk commodities from unknown/controversial sources

Restricting the sourcing and/or trade of forest risk commodities to credible certified sources

Recognition of legal and customary land tenure rights

Operational coverage

Direct operations and supply chain

% of total production/ consumption covered by commitment

100%

Cutoff date

2014

Forest risk countries/areas that the cutoff date applies to

Indonesia

Reason for selecting cutoff date

Specific to commitment

Commitment target date

2021-25

Please explain

First launched in 2014, the Policy established the framework for our no deforestation, no peat, and no exploitation (NDPE) commitments. Refresh every 5 years, Musim Mas updated the Policy in September 2020 which lays out a renewed and deepened commitment to improving the livelihoods of smallholders, workers, and communities; while maintaining a strict stance on NDPE. Below are some of our specific actions in 2022 to meet our sustainability commitment:

- 1. In ensuring NDPE compliance across our operations, we proactively monitor our supply chain to detect deforestation, development of peat, and fires. Our suppliers share maps and information about their supply base, enabling us to conduct risk assessments and establish Traceability to Plantation (TTP) measures. In 2022, we have achieved 97% Traceability to Plantation and are on track to reach 100% by 2025. As of 2022, we monitor more than nine million hectares across Indonesia and Malaysia covering all of our suppliers for deforestation and peat development through various monitoring methods such as Earthqualizer and the RADD satellite monitoring platform. We also implement the Controlled Purchase Protocol (CPP), a process supporting the resolution of grievances while maintaining business relationships. This protocol is based on three principles: suppliers' willingness to engage, positivity to act, and proof of progress against agreed-upon milestones and criteria. In 2022, no supplier was excluded due to NDPE commitment breaches
- 2. Following our Sustainability Policy of Pillar 1 and RSPO guidelines, Musim Mas respects the rights of smallholders' prerogative to grant or withhold Free, Prior and Informed Consent (FPIC) for all new developments or conservation areas identified which may affect the surrounding communities where we are operating. Moreover, We adhere to the RSPO New Planting Procedure (NPP) and undertake a Social and Environmental Impact Assessment (SEIA) to review the social conditions of local and surrounding communities in relation to any new development. All our upstream operations in Kalimantan and Sumatra regions continuously maintain FPIC integrated into their operations. Moreover, Musim Mas is trialing HCSA SR 13 at a Central Kalimantan plantation to determine how we can adapt it to our other existing plantations. HCSA SR 13 was specifically developed to guide the application of the other Social Requirements when applying the HCSA to existing operations.
- 3. We are committed to zero conversion of the natural ecosystems within our operations, particularly in HCV areas, peatlands, and HCS forests after the 31st of Dec 2015. Once we have assessed and identified our HCV and HCS areas through verified external parties, we then use dedicated conservation management and monitoring plans to safeguard our conservation areas. In 2022, our conservation area is now amounting to approximately 28,000 hectares across Kalimantan and Sumatra regions. Conservation and protection measures include restoring areas that are degraded and managing riparian buffer zones, regularly conducting biodiversity surveys by our conservation teams, patrolling grounds, and monitoring for encroachment through satellite surveillance to prevent illegal development and hunting. We strictly prohibit the hunting of rare, threatened, and endangered species as well as educate workers, families, and communities on the importance of conservation. Surrounding communities are also involved in designating these areas and play a part in developing and executing conservation management plans. In 2022, we also released our Biodiversity and Climate Resiliency Action Plan to communicate our efforts within our own operations, as well as our global supply chain to address biodiversity conservation linked with the context of climate change and communities. By 2030, we aim to enhance the connectivity of existing HCV/HCS areas through the establishment of wildlife corridors, where feasible.

F5. Business strategy

(F5.1) Are forests-related issues integrated into any aspects of your long-term strategic business plan, and if so how?

	Are forests- related issues integrated?	Long- term time horizon (years)	Please explain
Long- term business objectives	Yes, forests- related issues are integrated	21-30	Forest-related topics such as NDPE, smallholders, and biodiversity have become a crucial edge in maintaining and achieving profitable business. Moreover, droughts and fire risks can lead to disruption in the supply chain leading to a substantive impact on our operations. Hence, we have integrated forest-related issues into the core of our operations. LONG-TERM OBJECTIVES AND TIMEFRAME First launched in 2014, our sustainability policy is refreshed every five years to ensure compliance with the latest regulations and standards. To demonstrate compliance with our commitments, Musim Mas annually undergoes various certification scheme audits (i.e. RSPO, ISCC, ISPO, MSPO, ITSCN) in a transparent and independent manner. In alignment with the 1.5C world, we signed up to the Agriculture Sector Roadmap to 1.5C at COP27 in Egypt and are working on the decarbonization pathway following the SBTi and SBTi FLAG framework to set near-term by 2030 and net-zero by 2050 targets. In relation to the climate transition, we are planning to initiate at least two pilot projects to trial regenerative agriculture in smallholder and potentially plantation settings by 2025. Beyond our own operations, our roadmap reflects our target for Responsible Supply Base 2025 covering our 3rd party supply bases, including 100% Traceability to Plantation (TTP); obtaining a commitment from 100% of supplying mills to abide by NDPE principles; ensuring 100% of suppliers have completed the Musim Mas Self-Assessment Tool (SAT) by 2025. These measures are crucial in fighting deforestation and/or other conversion of other natural ecosystems along our supply chains. Recognizing the importance of smallholders, Musim Mas has developed programs to integrate independent smallholders into the palm oil supply chain since 2015. We engage smallholders and assist them in adopting efficient farming standards covering good agricultural practices and NDPE commitments. Since 2015, we have rolled out three main programs: the Musim Mas-IFC Program (2015-2020), the Extensi
Strategy for long- term objectives	Yes, forests- related issues are integrated	21-30	Forest-related issues are integrated into Musim Mas operations. With sustainability policy becoming our core value, Musim Mas has implemented the following practices as of 2022: - Develop roadmap and set near-term by 2030 and net-zero by 2050 targets following the SBTi (FLAG) framework - Publish Biodiversity and Climate Resiliency Action Plan. As such, we plan to initiate pilot projects to trial regenerative agriculture in smallholder and potentially plantation settings by 2025 - Ensure that all primary supplier groups are covered by roadmaps leading to the implementation of milestones towards NDPE commitments - Impose traceability to plantation exercise. In 2022, we have achieved 97% traceability to plantation with 96% of suppliers having either an NDPE policy or adopted Musim Mas Sustainability Policy. We are on track to achieve 100% TTP to plantation by 2025 Maintain and achieve full and beyond regulatory compliance with recognized certification schemes such as RSPO, ISCC, and ISPO in our operations - Completed group-level supplier profiles for all supplier groups - Engage with suppliers to complete the Self-Assessment Tool to assess NDPE risks at the mill level. In 2022, 84% have completed the form and are on track to achieve 100% completion by 2025 - Ensure that 100% of supply base/suppliers' mill with concession (> 9 million ha) is monitored via satellite imagery for deforestation and peatland development such as Earthqualizer, RADD - Monitor hotspots at and around our concessions using methods such as satellite monitoring (NOAA, MODIS) and regular site patrol - Equip 17 mills with methane capture to reduce GHG emissions - Grievance Channels and Controlled Purchase Protocol (CPP) are available to resolve issues, secure remedy and remediation, and exclude errant suppliers - Work closely with relevant stakeholders. For example, landscape approaches in Aceh Tamiang, Aceh Singkil, Siak, Pelalawan, Musi Banyuasin, and Sambas with key stakeholders including downstream actors, governments, NGOs and CSOs, and
Financial planning	Yes, forests- related issues are integrated	21-30	The vision in our long-term business objectives and strategy has altered the way we budget and finance our operations. In line with our climate transition plan of 1.5C to set near-term by 2030 and net-zero by 2050 targets following the SBTi framework, we invest in new technologies such as methane capture plants to mitigate our GHG emissions. We also invest in resources and tools to ensure NDPE commitments and monitor hotspots across our supply chains such as satellite monitoring platforms (GFW, NOAA, MODIS), raceability exercises, and suppliers' workshops. Additionally, dedicated teams are established to ensure continual compliance and implementation of the respective certification's sustainable criteria into our supply chain including RSPO, ISCC, ITSNC, etc. In light of these, we plan and budget our finances accordingly. Beyond our own operations, we also participate in multiple multi-stakeholder platforms and develop working partnerships with key stakeholders on landscape and sector-wide levels to broaden our efforts towards a truly sustainable palm oil supply chain. For example, Aceh and Siak Pelalawan landscapes. By 2025, we also plan to initiate pilot projects to trial regenerative agriculture in smallholder and potentially plantation settings. Accordingly, financial planning will also be allocated to these projects. As Musim Mas is not a public company, thus, internal figures relating to budget, sales, and profits are not shared externally.

F6. Implementation

F6.1

(F6.1) Did you have any forests-related timebound and quantifiable targets that were active during the reporting year?

Yes

F6.1a

(F6.1a) Provide details of your forests-related timebound and quantifiable target(s) and progress made.

Target reference number

Target 1

Forest risk commodity

Palm oil

Year target was set

2018

Target coverage

Company-wide

Target category

Traceability

Metric

% of volume traceable to traceability point

Traceability point

Plantation

Third-party certification scheme

<Not Applicable>

Base year

2015

Base year figure

0

Target year

2025

Target year figure

100

Reporting year figure

97

% of target achieved relative to base year [auto-calculated]

01

Target status in reporting year

Underway

Is this target linked to a commitment?

Zero net/gross deforestation

Please explain

To fully address deforestation and peat development risks, we require detailed knowledge of the supply sheds of our independent mills and third-party suppliers in addition to our own mills. Therefore, we have focused our efforts on achieving traceability to plantation (TTP) or place of production as part of our NDPE Roadmap and have arrived at full visibility across our plantations. In 2022, we achieved 100% TTP to our supply base of independent smallholders supplying our own mills and 96% TTP to third-party supplier mills. This means our overall traceability to plantation is 97% in 2022, up from 94% in 2021. In all, we are on track to reach 100% by 2025.

Additionally, to ensure top-down NDPE compliance, suppliers are to complete Musim Mas Self Assessment Tool (SAT) which is an exhaustive set of questions against our NDPE requirements. This evaluation enables suppliers to self-declare information about their operations, thus, allowing us to identify potential risk areas at the mill level. As of December 2022, 84% of our suppliers have completed the assessment. Moreover, we also conduct workshops to engage with suppliers, and thus, are able to track their progress towards making and achieving NDPE commitments. In 2022, 96% of our suppliers have either an NDPE policy or adopted Musim Mas Sustainability Policy. For more information, please refer to: https://www.musimmas.com/sustainability/traceability/.

Target reference number

Target 2

Forest risk commodity

Palm oil

Year target was set

2021

Target coverage

Company-wide

Target category

Engagement with smallholders

Metric

% of smallholders engaged

Traceability point

<Not Applicable>

Third-party certification scheme

<Not Applicable>

Base year

2021

Base year figure

0

Target year

2025

Target year figure

100

Reporting year figure

25

% of target achieved relative to base year [auto-calculated]

25

Target status in reporting year

Underway

Is this target linked to a commitment?

Zero net/gross deforestation

Please explain

Engagement with smallholders can lead to an increase in yields (i.e. socialization on good agricultural practices), better access to national and international markets, improvement in livelihoods, and a reduction in the risk of land conversion. To ensure credibility that Musim Mas's supply chain is in full and beyond compliance with the highest sustainability standards, Musim Mas aims to achieve 100% ISPO certification for our scheme smallholders by 2025. As of 2022, approximately 25% of scheme smallholders have obtained ISPO certification.

Our Smallholders Program embeds valuable skills within the smallholders and communities through the Smallholders Hub approach. Instead of training the smallholders directly, we build greater capacity by training local government agricultural officers, also known as Village Extension Officers (VEOs). We train VEOs on Good Agricultural Practices (GAP) and No Deforestation, No Peat, and No Exploitation (NDPE) principles. These officers then share their expertise with independent smallholder farmers and equip them with the knowledge needed for responsible farming. In 2022, Musim Mas established 7 smallholder hubs across Kalimantan and Sumatra regions. In all, Musim Mas will continue to engage and socialize the importance of sustainability certification to relevant smallholders. For more information, please refer to https://www.musimmas.com/sustainability/smallholders/independent-smallholders/.

F6.2

(F6.2) Do you have traceability system(s) in place to track and monitor the origin of your disclosed commodity(ies)?

	have chain system(s) coverage in place?		Description of traceability system	Exclusions	Description of exclusion
Timber products	<not Applicable ></not 				
Palm oil	Yes	Volume Our traceability systems include traceability to the Group's plantations, Group's direct supply base of independent smallholders, third-party supply to			<not Applicable></not
Cattle products	<not Applicable ></not 	<not Applicabl e></not 	<not applicable=""></not>		<not Applicable></not
Soy	<not Applicable ></not 	<not Applicabl e></not 	<not applicable=""></not>	<not Applicable></not 	<not Applicable></not
Other - Rubber	- <not <not="" applicable=""></not>		<not Applicable></not 	<not Applicable></not 	
Other - Cocoa	<not Applicable ></not 	<not Applicabl e></not 	<not applicable=""></not>		<not Applicable></not
Other - Coffee	<not Applicable ></not 	<not Applicabl e></not 	<not applicable=""></not>	<not Applicable></not 	<not Applicable></not

F6.2a

(F6.2a) Provide details on the level of traceability your organization has for its disclosed commodity(ies).

Forest risk commodity	Point to which commodity is traceable	Countries/areas to which this traceability point applies	% of total production/consumption volume traceable	
Palm oil	Plantation	Indonesia	97	

F6.3

(F6.3) Have you adopted any third-party certification scheme(s) for your disclosed commodity(ies)?

	Third-party certification scheme adopted?	% of total production and/or consumption volume certified
Timber products	<not applicable=""></not>	<not applicable=""></not>
Palm oil	Yes	99
Cattle products	<not applicable=""></not>	<not applicable=""></not>
Soy	<not applicable=""></not>	<not applicable=""></not>
Other - Rubber	<not applicable=""></not>	<not applicable=""></not>
Other - Cocoa	<not applicable=""></not>	<not applicable=""></not>
Other - Coffee	<not applicable=""></not>	<not applicable=""></not>

F6.3a

(F6.3a) Provide a detailed breakdown of the volume and percentage of your production and/or consumption by certification scheme.

Forest risk commodity

Palm oil

Third-party certification scheme

RSPO producer/grower certification

Chain-of-custody model used

<Not Applicable>

% of total production/consumption volume certified

99

Form of commodity

Crude palm oil (CPO)

Volume of production/ consumption certified

755780

Metric for volume

Metric tons

Is this certified by more than one scheme?

No

Is embedded soy certified through this scheme?

<Not Applicable>

Please explain

The certified volume corresponds to the RSPO-certified sustainable palm oil (CSPO) produced in 2022. The % volume certified is then calculated by dividing the certified volume by the total production volume in 2022. Third-party certifications ensure that audits have been conducted independently, thus, ensuring proper implementation and compliance with the strict principles and criteria of the respective sustainability certification schemes. Since 2021, all 15 of our integrated mills have been RSPO certified. To improve and maintain certifications, we annually conduct internal audits against principles and guidances of relevant certification schemes such as RSPO for all our units. Moreover, Musim Mas actively monitors more than nine million hectares across Indonesia and Malaysia covering 100% of suppliers' mills with concession for deforestation and peat development. If our supplier is found to be non-compliant with the NDPE policy, we will engage with the supplier in question and exclude them if necessary. In case of complaints and grievances, Grievance Channels and Controlled Purchase Protocol (CPP) are available to resolve issues. For more details, please refer to https://www.musimmas.com/sustainability/certifications/.

F6.4

(F6.4) For your disclosed commodity(ies), do you have a system to control, monitor, or verify compliance with no conversion and/or no deforestation commitments?

	A system to control, monitor or verify compliance	Comment
Timber products	<not applicable=""></not>	<not applicable=""></not>
Palm oil	Yes, we have a system in place for our no conversion and/or deforestation commitments	<not applicable=""></not>
Cattle products	<not applicable=""></not>	<not applicable=""></not>
Soy	<not applicable=""></not>	<not applicable=""></not>
Other - Rubber	<not applicable=""></not>	<not applicable=""></not>
Other - Cocoa	<not applicable=""></not>	<not applicable=""></not>
Other - Coffee	<not applicable=""></not>	<not applicable=""></not>

F6.4a

(F6.4a) Provide details on the system, the approaches used to monitor compliance, the quantitative progress, and the non-compliance protocols, to implement your no conversion and/or deforestation commitment(s).

Forest risk commodity

Palm oi

Operational coverage

Direct operations Supply chain

Description of control systems

Musim Mas has its own NDPE policy to ensure there are No Deforestation, No Peat and No Exploitation in our operations. Internally, we conduct a risk assessment in accordance with our No Deforestation, No Peat (NDP) Risk Management Framework as well as monitoring using remote sensing methods and site patrol with monthly reports available. We also have daily hotspot monitoring covering our own and supplier concessions. Moreover, suppliers are to complete Self Assessment Tool to self-declare information, allowing Musim Mas to identify potential risk areas at the mill level. If there is an allegation of NDPE violation across our supply chain, we will extensively study the allegation through tools such as RADD and Earthqualizer. If a breach of NDPE policy is confirmed, we will engage with the relevant suppliers in question. Our Grievance Channels and Controlled Purchase Protocol are available to resolve issues, secure remedy and remediation, and exclude errant suppliers as the last resort.

Monitoring and verification approach

Geospatial monitoring tool Ground-based monitoring system Community-based monitoring First-party verification Third-party verification

% of total volume in compliance

100%

% of total suppliers in compliance

100%

Response to supplier non-compliance

Retain & engage Exclude

% of non-compliant suppliers engaged

<Not Applicable>

Procedures to address and resolve non-compliance with suppliers

Developing time-bound targets and milestones to bring suppliers back into compliance
Providing information on appropriate actions that can be taken to address non-compliance
Assessing the efficacy and efforts of non-compliant supplier actions through consistent and quantified metrics
Re-integrating suppliers back into supply chain based on the successful and verifiable completion of activities

Please explain

Initially established in 2015, the Controlled Purchase Protocol (CPP) is a comprehensive process supporting the resolution of grievances by linking business and grievance resolutions. For any grievance, we expect our suppliers to adhere to the three fundamental principles outlined below.

(1)Supplier engagement: continuous monitoring of suppliers is essential for ensuring overall group-level progress towards our NDPE policy compliance and that violations are not taking place within our supply chains. Musim Mas uses various methods including deforestation monitoring platforms, supplier roadmaps for monitoring progress with our priority suppliers, and data collected through self-assessment tools. For example, Musim Mas collaborates with Earthqualizer to monitor deforestation with biweekly reports available.

(2) Grievance management: our grievance procedure outlines our process for receiving, logging and verifying all grievances raised against us or our suppliers. Once a grievance is verified as factual, the supplier will undergo our CPP process while the grievance is being addressed. For a specific critical grievance such as new deforestation and peat development, the supplier is directly engaged and subject to a cessation of business until they meet defined milestones. Other non-critical grievances will undergo the CPP procedure.

(3)CPP: grievance resolution milestones are agreed upon and closely monitored. Suppliers will exit the CPP once all conditions and actions are met.

F6.6

(F6.6) For your disclosed commodity(ies), indicate if you assess your own compliance and/or the compliance of your suppliers with forest regulations and/or mandatory standards.

	Assess legal compliance with forest regulations	Comment
Timber products	<not applicable=""></not>	<not applicable=""></not>
Palm oil	Yes, from both suppliers and owned/managed land	<not applicable=""></not>
Cattle products	<not applicable=""></not>	<not applicable=""></not>
Soy	<not applicable=""></not>	<not applicable=""></not>
Other - Rubber	<not applicable=""></not>	<not applicable=""></not>
Other - Cocoa	<not applicable=""></not>	<not applicable=""></not>
Other - Coffee	<not applicable=""></not>	<not applicable=""></not>

F6.6a

(F6.6a) For your disclosed commodity(ies), indicate how you ensure legal compliance with forest regulations and/or mandatory standards.

Palm oil

Procedure to ensure legal compliance

The corporate affairs team constantly monitors our compliance with the relevant local and national regulations. In support, the Sustainability team constantly monitors our compliance with our NDPE policy including maintaining recognised third-party certifications schemes including RSPO, ISCC, POIG, and ISPO in our operations. Since annual audits are conducted to achieve these certification schemes, they are used to track and monitor legal adherence to our sustainability practices and standards of the highest level. In complementary, our GIS and biodiversity teams perform monitoring of deforestation and peat development in our own and supplier's concessions using remote sensing methods and site patrol.

Additionally, we also maintain POIG verification as POIG guidelines and standards are considered to exceed those of RSPO standards and country-specific mandatory standards of ISPO. As of 2022, 15 out of 17 PTs are certified against the ISPO standard and are well on track to achieve 100% ISPO certification prior to 2025. Moreover, since 2021, all 15 of our integrated mills are RSPO and POIG verified. In line with our 2020 NDPE policy vision, we also conduct quarterly checks on suppliers' RSPO certification status, which is renewed annually, to ensure that they continue to be compliant with legal requirements set out in the RSPO framework.

Country/Area of origin

Indonesia

Law and/or mandatory standard(s)

ISPO

Comment

We maintain ISPO certification for our operational units.

F6.7

(F6.7) Are you working with smallholders to support good agricultural practices and reduce deforestation and/or conversion of natural ecosystems?

	Are you working with smallholders?	Type of smallholder engagement approach	Smallholder engagement approach	Number of smallholders engaged	Please explain
Timber products	<not Applicable></not 	<not Applicable></not 	<not Applicable></not 	<not Applicable></not 	<not applicable=""></not>
Palm oil	Yes, working with smallholders	Supply chain mapping Capacity building Financial and commercial incentives	Supplier questionnaires on environmental and social indicators Developing or distributing supply chain mapping tool Offering on-site technical assistance and extension services Providing agricultural inputs Disseminating technical materials Organizing capacity building events Investing in pilot projects Supporting smallholders to clarify and secure land tenure Prioritizing support for smallholders in high-risk deforestation regions	40710	Musim Mas works closely with smallholders in various programs as follows: 1. Scheme Smallholder Program. The curriculum modules within components of the smallholder program are designed such that smallholders work towards NDPE policy compliance. The modules and components are geared towards improving the livelihoods of smallholders. It covers good agricultural practices, financial literacy, and personal nutrition. 2. Musim Mas - IFC (International Finance Corporation) Smallholder Program. Together with IFC, we developed and implemented the pilot programs in North Sumatra (Rantauprapat) and Riau (Pelalawan, Rokan Hillir, and Rokan Hulu), Indonesia. Our modules mirror the RSPO's Principles and Criteria (P&C) as we prepare them for RSPO certification. The program modules focus on four pillars: Environment (i.e. No burning); Business management (i.e. Market access, Good Agricultural Practices); Social (i.e. food security); and Other issues that smallholders may face in their journey towards sustainable palm oil (i.e. administration process). 3. Musim Mas is working on the implementation of an Extension Service Platform for their landscape areas to extend services to independent smallholders in the third-party supply chain. This is to be piloted and based on the principles involving all stakeholders of the respective landscape. 4. As of 2022, we have established 7 smallholder hubs across Kalimantan and Sumatra regions. We have socialized and trained more than 40,000 independent smallholders with 3,537 and 1,600 smallholders achieving RSPO and ISPO certifications respectively in 2022. 5. We work closely in landscape approaches such as Aceh Tamiang, Aceh Singkil, Siak, Pelalawan, Musi Banyuasin, and Sambas. 6. As a founding member of Fire Free Alliance (FFA), Musim Mas initiates Fire Free Village Program (FPA) lealed Masyraskal Bebas Api to engage local communities in protecting forests from fire. As of December 2022, our FFVP covered 74 villages spanning 450,769 hectares and has conducted 12 trainings in the co
Cattle products	<not Applicable></not 	<not Applicable></not 	<not Applicable></not 	<not Applicable></not 	<not applicable=""></not>
Soy	<not Applicable></not 	<not Applicable></not 	<not Applicable></not 	<not Applicable></not 	<not applicable=""></not>
Other - Rubber	<not Applicable></not 	<not Applicable></not 	<not Applicable></not 	<not Applicable></not 	<not applicable=""></not>
Other - Cocoa	<not Applicable></not 	<not Applicable></not 	<not Applicable></not 	<not Applicable></not 	<not applicable=""></not>
Other - Coffee	<not Applicable></not 	<not Applicable></not 	<not Applicable></not 	<not Applicable></not 	<not applicable=""></not>

(F6.8) Indicate if you are working with your direct suppliers to drive action on forests-related issues and if so, provide details of the engagement.

Forest risk commodity

Palm oil

Are you working with direct suppliers?

Yes, working with direct suppliers

Action(s) on forests-related issues driven by engagement

Ending deforestation and/or conversion of other ecosystems

Type of engagement

Supply chain mapping Capacity building Innovation and collaboration

Details of engagement

Supplier questionnaires on environmental and social indicators Developing or distributing supply chain mapping tool Offering on-site training and technical assistance Disseminating technical materials

Organizing capacity building events

Investing in pilot projects

Support suppliers to set their own no deforestation/conversion commitments across their entire commodity operation

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

Collaborate with suppliers on innovations to reduce forest-related impacts in products and services

Encourage suppliers to work collaboratively in sectors, landscapes, or jurisdictions

Description of engagement

Musim Mas sourced from a total of 602 CPO and palm kernel (PK) suppliers in 2022. Beyond our own operations, we proactively monitor our supply chain to detect deforestation, development on peat, and fires. Our suppliers share maps and information about their supply base, enabling us to conduct risk assessments and establish Traceability to Plantation (TTP) measures. As of 2022, we have achieved 97% TTP and we are on track to reach 100% by 2025.

Additionally, we also expect suppliers to complete the Musim Mas Self-Assessment Tool (SAT), a self-administered questionnaire developed in line with our sustainability commitments. In 2022, 84% of suppliers have completed the form. Suppliers' responses help us identify potential areas of improvement against our policy commitments and develop tailored roadmaps with timebound plans specific to each supplier. When there is any grievance, we have a Controlled purchase protocol (CPP) put in place which is a process supporting the resolution of grievances while maintaining business relationships. This protocol is based on three principles: suppliers' willingness to engage, positivity to act, and proof of progress against agreed-upon milestones and criteria.

Through our NDPE workshop, we have engaged 93% of our direct suppliers in actions to end deforestation and/or conversion of other ecosystems as of 2022. Furthermore, in 2019, we began trialing NDPE Implementation Reporting Framework (IRF) as a tool to track progress on deforestation/peat commitments in our supply chains. In 2021, our NDPE IRF reporting for all our refineries in Indonesia has been independently verified by Control Union (CU). As of 2022, 96% of suppliers have either an NDPE policy or adopted the Musim Mas Sustainability Policy.

Examples of engagements:

In 2019, one of our palm oil suppliers located in Aceh was highlighted for possibly clearing forests within the Aceh Leuser Ecosystem. Since then, we worked closely and constructively with the supplier to support them to develop public time-bound action plans with clear milestones and set their own no-deforestation/conversion commitments. The engagement is still ongoing in 2022.

% of suppliers engaged by procurement spend covered by engagement

96

Explain the impact of your engagement on the selected action

Following the engagement with one of our palm oil suppliers in Aceh, we have seen significant headway in their progress to prove their commitment since 2019. In 2020, the supplier created a Sustainable Palm Oil Policy which included critical elements of the NDPE. Relevant to the commitment, the supplier is currently carrying out a High Conservation Value (HCV) Assessment, reaffirming their commitment towards responsible labor practices, and continuing their efforts to bring benefits for their employees and the surrounding community. We also helped the supplier to achieve 100% Traceability to Plantation (TTP) on as a critical step in ensuring their NDPE compliance. In all, we have seen much progress towards sustainable palm oil which contributes to ending deforestation and/or conversion of other ecosystems.

Is this engagement helping your suppliers engage with their suppliers on the selected action?

Yes

Does this engagement contribute to achieving a reported target?

Yes, please specify target ID(s) (Target 1 and Target 2)

F6.9

(F6.9) Indicate if you are working beyond your first-tier supplier(s) to drive action on forests-related issues, and if so, provide details of the engagement.

Forest risk commodity

Palm oil

Are you working beyond first tier?

Yes, working beyond first tier

Action(s) on forest-related issues driven by engagement

Ending deforestation and/or conversion of other ecosystems

Type of engagement

Supply chain mapping
Capacity building
Innovation and collaboration

Details of engagement

Developing or distributing supply chain mapping tool
Supplier questionnaires on environmental and social indicators
On-site meetings with indirect suppliers

Supplier audits

Offering on-site training and technical assistance

Disseminating technical materials

Participating in workshops

Investing in pilot projects

Collaborate with suppliers on innovations to reduce forest-related impacts in products and services

Encourage suppliers to work collaboratively in sectors, landscapes, or jurisdictions

Description of engagement

Our sustainability policy encompasses all our operations and business units including direct suppliers, their supplier groups & their third-party supply chains. We have mapped our indirect suppliers and held socialization to promote sustainability in accordance with our Sustainability and NDPE policies. To further promote our sustainability practices across our supply chains, Musim Mas has established its first Smallholder Hub in Sambas on 14 February 2022 collaborating with the local government and key stakeholders. The Smallholders Hubs are one of Musim Mas' approaches to scaling up its Smallholders Program and embedding valuable skills within the community, contributing to a deforestation-free and exploitation-free supply chain. The hubs train local government agricultural officers, or Village Agricultural Officers (VEO), on Good Agricultural Practices (GAP) and NDPE (No Deforestation, No Peat, and No Exploitation). These officers then share their expertise with independent smallholder farmers and equip them with the knowledge needed for responsible farming.

Example of engagement activities:

We established Smallholders Hubs in Aceh Tamiang, Aceh Timur and Aceh Singkil. As such, we have trained 265 village extension officers and 3,857 independent smallholders across our three Smallholders Hubs. Moreover, in 2022, we have engaged our 34 suppliers in Aceh to conduct socialization on Musim Mas NDPE with their respective FFB suppliers. As of 2022, Musim Mas has established 7 Smallholders Hubs across Kalimantan and Sumatra regions to boost our engagement activities.

For further details please refer to:

https://www.musimmas.com/wp-content/uploads/2021/11/Projects-in-Aceh-Landscape-2021-FINAL.pdf

https://www.musimmas.com/how-do-we-train-independent-smallholder-farmers-and-enable-them-to-produce-sustainably/sustainable/

Explain the impact of your engagement on the selected action

With the established 7 Smallholders Hubs across Kalimantan and Sumatra regions, Musim Mas has trained over 40,000 independent smallholders in 2022. Training and engagement with smallholders can lead to an increase in yields (i.e. socialization on good agricultural practices), better access to national and international markets (through awareness of certification schemes), improvement in livelihoods, and a reduction in the risk of land conversion. As a result, in 2022, 3,537 and 1,600 independent smallholders achieved RSPO and ISPO certification respectively.

Does this engagement contribute to achieving a reported target?

Yes, please specify target ID(s) (Target 1 and Target 2)

F6.10

(F6.10) Do you engage in landscape (including jurisdictional) approaches to progress shared sustainable land use goals?

Do you engage in landscape/jurisdictional approaches?		Explain why your organization does not engage in landscape/jurisdictional approaches, and describe plans to engage in the future
Yes, we engage in landscape/ jurisdictional approaches	<not applicable=""></not>	<not applicable=""></not>

F6.10a

(F6.10a) Indicate the criteria you consider when prioritizing landscapes and jurisdictions for engagement in collaborative approaches to sustainable land use and provide an explanation.

	Criteria for prioritizing landscapes/jurisdictions for engagement	Explain your process for prioritizing landscapes/jurisdictions for engagement
Row 1	human well-being in area Risk of deforestation, forests/land degradation, or	Since our policy was established in 2014, we recognize that sustainability issues such as the well-being of forests, food security, biodiversity, and livelihoods are interconnected. The best chance for maximizing impact is to integrate these themes in the same communities or geographical areas. As we aspire to be the leading sustainable palm oil company, we want to show leadership through the landscape approach and our commitment to our roadmap towards a responsible supply chain, including setting targets for supplier engagement and independent smallholders. For more information, please visit https://www.musimmas.com/sustainability/landscape/.

F6.10b

(F6.10b) Provide details of your engagement with landscape/jurisdictional approaches to sustainable land use during the reporting year.

Landscape/Jurisdiction ID

LJ1

Country/Area

Indonesia

Name of landscape or jurisdiction area

Aceh Landscape

Types of partners engaged in the initiative design and implementation

Subnational government

International civil society organization(s)

National civil society organization(s)

Local civil society organization(s)

Local forest/rural associations

Local communities

Local producers/smallholder

International company(ies)

National/local company(ies)

External consultants

Workers union(s)

Type of engagement

Partner: Shared responsibility in the implementation of multiple goals

Supporter: Implement activities to support at least one goal

Funder: Provides full or partial financial support

Goals supported by engagement

Avoided deforestation/conversion of natural ecosystems and/or decreased degradation rate

Forest fires monitored and prevented

Increased and/or maintained protected areas

Natural ecosystems conserved and/or restored

Biodiversity protected and/or restored

Ecosystem services maintained and/or enhanced

Promotion of transparency, participation, inclusion, and coordination in landscape policy, planning, and management

Governance forums that represent all relevant stakeholders in place and maintained

Respect, protect, and fulfil human rights

Rights to land and resources recognized and protected, and related conflicts reduced

mproved business models that enable inclusion (including smallholders)

Improved capacity for community engagement in multi-stakeholder processes

Income diversification amongst producers in area

Ensuring local communities and smallholders benefit from the outcomes of LA/JA approach

Implementation of livelihood activities/practices that reduce pressure on forests

Increased adoption of sustainable production practices (e.g., input use efficiency and water management practices)

 $\label{lem:commodity} \ \ \text{Reliable commodity traceability and landscape monitoring/data collection system} (s)$

Company actions supporting approach

Collaborate on management/land use planning in the landscape/jurisdiction

Collaborate on landscape sustainability assessments through participatory mapping

Collaborate on establishing and managing monitoring system(s) for deforestation, natural ecosystem conversion and/or degradation

Collaborate to maintain representation from all relevant stakeholders within governance structure of initiative

Share spatial data and land management plans with other stakeholders in the landscape/jurisdiction

Share information on supplier non-compliance, supply chain mapping and traceability with other stakeholders in the landscape/jurisdiction

Capacity building for farmers, smallholders and local communities to implement good agricultural practices (including improved efficiency, crop diversification and adoption of certification)

Support indigenous peoples and local communities to clarify and secure land tenure rights

Collaborate on commodity traceability

Description of engagement

The Aceh landscape covers 142 villages with 42,644 oil palm farmers in Aceh Singkil, Aceh Selatan, Subulussalam and Aceh Tamiang. Align with our sustainability policy in improving the Lives of Smallholders, Workers, and Communities, Musim Mas engages closely with third-party suppliers, independent smallholders and stakeholders in three priority areas — Aceh Tamiang, Subulussalam and Aceh Singkil — to address risks of encroachment into the Leuser Ecosystem, specifically in Aceh Tamiang and

the South Aceh region. Musim Mas collaborates with IDH (the Sustainable Trade Initiative), the Government of Aceh, Forum Konservasi Leuser (FKL), Pusat Unggulan Perkebunan Lestari (PUPL), downstream actors (Unilever, PepsiCo, etc), local civil society organisations (Earthqualizer & Earthworm Foundation) and suppliers, including those outside our supply chain to have Aceh Tamiang verified as a deforestation-free and traceable commodities producer. (VSA Verified Sourcing Area – an IDH initiative that Musim Mas supports).

Musim Mas's Aceh strategy comprises of three main objectives. Firstly, the engagement objective entails outreach to smallholders and mills to convey NDPE requirements and the possible consequences of non-compliance through Suppliers Workshops and our Smallholders Hub Program. Topics such as NDPE Policy, Traceability to Plantation (TTP), Self-Assessment Tool (SAT), capacity building, Good Agricultural Practices (GAP), financial literacy, and certification requirements are covered. Secondly, the Assurance objective has components to ensure that the mills supplying crude palm oil and palm kernels to Musim Mas are NDPE compliant. We will use the NDP Risk management framework to build on the Assurance component laid out in our Aceh Strategy. Finally, the Monitoring and Response objective contains proactive elements to detect and verify deforestation at the landscape or jurisdictional level. Methods used include deforestation monitoring platforms (i.e. RADD, EQs) and outreach programs to external stakeholders to collaborate and tackle issues on the ground. All three objectives have a stated set of measurable targets to indicate progress.

Engagement start year

2019

Engagement end year

Please specify (2023)

Estimated investment over the project period (currency)

0

Is a collective monitoring framework used to measure progress?

Yes, progress is collectively monitored using a shared external framework, please specify (IDH SourceUp)

State the achievements of your engagement so far, and how progress is monitored

Through the landscape project, Musim Mas has contributed not only toward natural ecosystems and biodiversity, but also farmers and communities. Below are some of the progress and achievements of the project in 2022:

- All Aceh suppliers have participated in Musim Mas' supplier workshops with 100% of our suppliers in Aceh have since committed to our Musim Mas NDPE policy
- We trained 265 village extension officers and 3,857 independent smallholders across our three Smallholders Hubs in Aceh Tamiang, Aceh Singkil, and Subulussalam
- The two plantations and 500 independent smallholders also receive training on GAP & NDPE delivered by Musim Mas, PUPL, and FKL. The two plantations and 1,989 independent smallholders also receive training on GAP & NDPE delivered by Musim Mas, PUPL, and FKL in totaling 2,489 smallholders since the beginning of the training
- Following our NDP Risk Management Framework, 77.42% risk-based traceability was conducted for Aceh
- The protected areas are 702 ha in Bawan, 586 ha in Singgersing, and 1,237.26 ha in Pasir Belo. Restoration of the riparian zone also has been started, coalition-supported community planting with a number of 1,590 durian trees on 18.4 ha in Singgersing and 20.15 ha in Pasir Belo with different tree varieties (avocado, longan, and iengkol) a number of 2,033 trees
- A front-running group of smallholders (Pesatri) is supported towards ISPO & improving the governments' land conflict resolution schemes. In collaboration with FKL supported by the VSA program and other donors, 28,040 agroforestry trees have been distributed and planted in the conservation area by Karya Bersama, Mudah Sepakat, Subur Lestari, Sungai Rambe, Tukul Lestari and Indah Maju farmer groups

Moreover, we also publish an annual report on Aceh to inform and share our landscape progresses with our stakeholders (https://www.musimmas.com/aceh-report/)

Landscape/Jurisdiction ID

LJ2

Country/Area

Indonesia

Name of landscape or jurisdiction area

Siak & Pelalawan

Types of partners engaged in the initiative design and implementation

Subnational government

International civil society organization(s)

National civil society organization(s)

Local civil society organization(s)

Local forest/rural associations

Local communities

Local producers/smallholder

International company(ies)

National/local company(ies)

External consultants

Workers union(s)

Type of engagement

Partner: Shared responsibility in the implementation of multiple goals

Supporter: Implement activities to support at least one goal

Funder: Provides full or partial financial support

Goals supported by engagement

Avoided deforestation/conversion of natural ecosystems and/or decreased degradation rate

Forest fires monitored and prevented

Increased and/or maintained protected areas

Natural ecosystems conserved and/or restored

Biodiversity protected and/or restored

Ecosystem services maintained and/or enhanced

Promotion of transparency, participation, inclusion, and coordination in landscape policy, planning, and management

Governance forums that represent all relevant stakeholders in place and maintained $% \left(1\right) =\left(1\right) \left(1\right$

Respect, protect, and fulfil human rights

Rights to land and resources recognized and protected, and related conflicts reduced

Improved standard of living, especially for vulnerable and/or marginalized groups

mproved business models that enable inclusion (including smallholders)

Improved capacity for community engagement in multi-stakeholder processes

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Income diversification amongst producers in area

Ensuring local communities and smallholders benefit from the outcomes of LA/JA approach

Implementation of livelihood activities/practices that reduce pressure on forests

Increased adoption of sustainable production practices (e.g., input use efficiency and water management practices)

Reliable commodity traceability and landscape monitoring/data collection system(s)

Company actions supporting approach

Collaborate on management/land use planning in the landscape/jurisdiction

Collaborate on landscape sustainability assessments through participatory mapping

Collaborate on establishing and managing monitoring system(s) for deforestation, natural ecosystem conversion and/or degradation

Collaborate to maintain representation from all relevant stakeholders within governance structure of initiative

Share spatial data and land management plans with other stakeholders in the landscape/jurisdiction

Share information on supplier non-compliance, supply chain mapping and traceability with other stakeholders in the landscape/jurisdiction

Capacity building for farmers, smallholders and local communities to implement good agricultural practices (including improved efficiency, crop diversification and adoption of certification)

Support indigenous peoples and local communities to clarify and secure land tenure rights

Collaborate on commodity traceability

Description of engagement

In 2020, Musim Mas joined the Siak Pelalawan Landscape Programme, a private sector-driven initiative in the districts of Siak and Pelalawan in Riau province, Indonesia, supported by Proforest and Daemeter. The programme supports and builds on existing government led initiatives including the Green Siak Green Growth District plan and the Pelalawan District Action Plan for Sustainable Palm Oil, and has 4 long term goals:

- 1) Protect and enhance forests, peatlands and natural ecosystems;
- 2) Empower palm oil smallholders to achieve improved livelihoods;
- 3) Respect of labour and community rights within the palm oil sector and;
- 4) Pursue sustainable palm oil production.

Siak and Pelalawan districts are long-established palm oil production areas with significant numbers of independent smallholder producers. For this, Musim Mas involves in village engagement programme to support peat and forest conservation and focusing on fire prevention as this landscape is prone to fires in its peatland. Independent smallholders also are trained by applicated GAP (Good Agriculture Practice), Financial literation, and NDPE policy (No Deforestation, No Peatland, and No Exploitation) training.

This financial commitment from Musim Mas has been formalized in 2020 through a collaboration agreement with Daemeter and Proforest. Project deliverables are monitored at least annually and publicly reported. Musim Mas participates in all bi-monthly Coalition meetings to give feedback on the progress and reporting structure and collaborate with other coalition members, including village support program and T1, T2 and T3 suppliers, among many.

Engagement start year

2019

Engagement end year

Please specify (2024)

Estimated investment over the project period (currency)

0

Is a collective monitoring framework used to measure progress?

Yes, progress is collectively monitored using a shared external framework, please specify (SPLP)

State the achievements of your engagement so far, and how progress is monitored

Through its participation to the Siak Pelalawan landscape programme, Musim Mas has contributed to reach the following progress concerning natural ecosystems and biodiversity as well as farmers and communities. Below are some of the progress and achievements of the project in 2022:

- 23 CSO/NGOs were engaged, continuing engagement since previous years;
- 1,436 oil palm smallholders were mapped and 53 mills were engaged on the importance of and need for conservation, restoration and/or rehabilitation;
- 77 oil palm smallholders received Plantation Registry Letter (STDB) by district government ensuring compliance of land with sustainability and business norms in 2022;
- 153,002 hectares of priority areas for conservation or responsible agriculture in the landscape were mapped through participatory approaches;
- 149,404 hectares of peatland were mapped;
- 2 district government committed to a no-deforestation and natural ecosystem management plan. These are continued support from 2020;
- 709 people were trained on good agricultural practices;
- 3 groups of key stakeholders consisting of 2 plantation agencies of Siak & Pelalawan governments, 2 manpower agencies of Siak & Pelalawan governments, 2 women & children protection agencies of Siak & Pelalawan governments, 2 palm oil associations and 8 trade unions were committed to engaging in social dialogue
- Progressed with activities in the existing 15 villages supported since 2020 and started in 2023 village support program in 13 new villages within the landscape committed to participating in conservation activities and supported to get access to incentives since 2020. 8 village regulations were issued to regulate conservation activities and/or a natural ecosystem:

F6.10c

(F6.10c) For each of your disclosed commodities, provide details of the production/consumption volumes from each of the jurisdictions/landscapes you engage in.

	Does any of your commodity production/consumption volume originate from this landscape/jurisdiction, and are you able/willing to disclose information on this volume?		% of total production/consumption volume from this landscape/jurisdiction
LJ1	Yes, we do produce/consume from this landscape/jurisdiction, and we are able/willing to disclose volume data	Palm oil	6
LJ2	Yes, we do produce/consume from this landscape/jurisdiction, and we are able/willing to disclose volume data	Palm oil	8

F6.11

(F6.11) Do you participate in any other external activities and/or initiatives to promote the implementation of your forests-related policies and commitments?

Forest risk commodity

Palm oil

Do you participate in activities/initiatives?

Yes

Activities

Involved in multi-partnership or stakeholder initiatives

Country/Area

Indonesia

Subnational area

Please specify (Aceh)

Global Reporting Initiative (GRI) Community Member High Conservation Value (HCV) Resource Network Roundtable on Sustainable Palm Oil (RSPO) Palm Oil Innovation Group (POIG)

High Carbon Stock Approach Steering Group

International Sustainability & Carbon Certification (ISCC)

Fire Free Alliance (FFA)

Chinese Sustainable Palm Oil Alliance (CSPOA)

Other, please specify (Indonesian Sustainable Palm Oil (ISPO))

Please explain

The Aceh landscape covers 142 villages with 42,644 oil palm farmers in Aceh Singkil, Aceh Selatan, Subulussalam and Aceh Tamiang. Align with our sustainability policy in improving the Lives of Smallholders, Workers, and Communities, Musim Mas engages closely with third-party suppliers, independent smallholders and stakeholders in three priority areas — Aceh Tamiang, Subulussalam and Aceh Singkil — to address risks of encroachment into the Leuser Ecosystem, specifically in Aceh Tamiang and the South Aceh region. Musim Mas collaborates with IDH (the Sustainable Trade Initiative), the Government of Aceh, Forum Konservasi Leuser (FKL), Pusat Unggulan Perkebunan Lestari (PUPL), downstream actors (Unilever, PepsiCo, etc), local civil society organizations (Earthqualizer & Earthworm Foundation) and suppliers, including those outside our supply chain to have Aceh Tamiang verified as a deforestation-free and traceable commodities producer.

Musim Mas's Aceh strategy comprises of three main objectives. Firstly, the engagement objective entails outreach to smallholders and mills to convey NDPE requirements and the possible consequences of non-compliance through Suppliers Workshops and our Smallholders Hub Program, Topics such as NDPE Policy, Traceability to Plantation (TTP), Self-Assessment Tool (SAT), capacity building, Good Agricultural Practices (GAP), financial literacy, and certification requirements are covered. Secondly, the Assurance objective has components to ensure that the mills supplying crude palm oil and palm kernels to Musim Mas are NDPE compliant. We will use the NDP Risk management framework to build on the Assurance component laid out in our Aceh Strategy. Finally, the Monitoring and Response objective contains proactive elements to detect and verify deforestation at the landscape or jurisdictional level. Methods used include deforestation monitoring platforms (i.e. RADD, EQs) and outreach programs to external stakeholders to collaborate and tackle issues on the ground. All three objectives have a stated set of measurable targets to indicate progress. All Aceh suppliers have participated in Musim Mas' supplier workshops with 100% of our suppliers in Aceh have since committed to our Musim Mas NDPE policy. Moreover, We trained 265 village extension officers and 3,857 independent smallholders across our three Smallholders Hubs.

F6.12

(F6.12) Is your organization supporting or implementing project(s) focused on ecosystem restoration and long-term protection?

Yes

F6.12a

(F6.12a) Provide details on your project(s), including the extent, duration, and monitoring frequency. Please specify any measured outcome(s).

Project reference

Project 1

Project type

Agriculture

Expected benefits of project

Further transformative change through sharing of project design, implementation and lessons learnt Improvement of standard of living, especially for vulnerable and/or marginalized groups

Improvement to soil health

Improvement to sustainability of production practices

Net gain in biodiversity and ecosystem integrity

Is this project originating any carbon credits?

Description of project

Siak district is home to vulnerable communities and ecosystems that have been adversely affected by agricultural expansion in the past. Siak and Pelalawan also are carbon-rich peatlands, approximately 52% of Pelalawan and 62% of Siak. With the carbon-dense Kampar Peninsula spanning both districts and some 465,000 ha of forest remaining, this creates important natural areas for threatened species such as elephants, tigers, sun bears and endemic peat swamp species. The district is also home to protected areas such as the Giam Siak Kecil Biosphere Reserve and Zamrud National Park, which would benefit from enhanced, long-term protection. As for Pelalawan, it makes up 10% of the oil palm plantation land in Riau, with approximately more than a third of the land area owned by smallholders who need counseling and assistance with various agricultural challenges. Historical rates of deforestation and wildfire are extremely high in both districts. Rates have fallen considerably since 2015, to less than 15% of the historical average, but remaining forest and environmental values are still at risk from fire and agriculture expansion. Moreover, 55% of the oil palm hectarage is carbon-dense peatlands. In all, Siak and Pelalawan districts are long-established palm oil production areas with significant numbers of independent smallholder producers.

As the information of this, smallholders contribute to 50% of the palm oil production in the district.

Musim Mas collaborates with District government heads, plantation and planning departments, consultants (Daemeter and Proforest), downstream actors (i.e. Cargill, Unilever, Neste, PepsiCo, Danone, L'Oréal Peers: GAR, and Local NGOs (Sedagho Siak). Musim Mas involves in a village engagement programme to support peat and forest conservation and focusing on fire prevention as this landscape is prone to fires in its peatland. The plan of action includes but is not limited to conserving plots of land and preventing deforestation by training independent smallholders and supporting suppliers on traceability and NDPE commitments. Annually, we publicly disclosed our sustainability progress, milestones, and targets including landscape and jurisdictional approaches through our sustainability report (https://www.musimmas.com/sustainability-report/).

Where is the project taking place in relation to your value chain?

Project based in area with direct operations

Project based in sourcing area(s)

Start year

2019

Target year

2024

Project area to date (Hectares)

45498

Project area in the target year (Hectares)

45000

Country/Area

Indonesia

Latitude

0.655468

Longitude

102.014789

Monitoring frequency

Six-monthly or more frequently

Total investment over the project period (currency)

0

For which of your expected benefits are you monitoring progress?

Further transformative change through sharing of project design, implementation and lessons learnt

Improvement of standard of living, especially for vulnerable and/or marginalized groups

Improvement to environmental regulation

Net gain in biodiversity and ecosystem integrity

Please explain

Towards deforestation and exploitation of free palm oil production, the Coalition of companies has agreed on 4 long-term goals, including:

- 1.Protect and enhance forests, peatlands and natural ecosystems
- 2.Empower oil palm smallholders and surrounding communities to achieve improved livelihoods
- $3.\mbox{Respect}$ labour and community rights within the palm oil sector
- 4. Pursue sustainable palm oil production goals through improved district policies and plans

Below are some of the progresses in 2022:

1. Progress monitored related to Further transformative change through sharing of project design, implementation and lessons learnt and Improvement of standard of living benefits

In 2022, 1,436 people consisting of multi-stakeholders such as smallholders, government and village representatives, and facilitators with 53 mills engaged on the importance to conserve, restore and/or rehabilitate high priority areas. 709 people were trained on Good Agricultural Practices (GAP) including agroforestry, water management, IPM, harvesting, etc. Moreover, 15 villages committed to participating in conservation activities and supported to get access to incentives (e.g. support achieving certification, getting land title, packaging access to loans, preferential sourcing etc.). Then, 13 villages have been come up with CORE by conducting rapid assessment becoming 28 villages support in total.

 $2.\ Progress\ monitored\ related\ to\ Net\ gain\ in\ biodiversity\ and\ ecosystem\ integrity\ benefits$

153,002 ha of priority areas were mapped which the total area mapped (188,046 ha) mapped. Priority areas are defined as areas that communities are aware of that cannot be converted, including remaining forest and peatlands. Priority areas consist of 149,404 ha peatland cumulatively 181,824 ha of total and 3,598 ha forest in were mapped in cumulatively 6,222 ha have been mapped. In 2022, the Pelalawan district government made a commitment to no deforestation through Pelalawan Sejuk and NDPE. The commitment is in the early stages. 1,343 individuals consisting of oil palm smallholders, government, mills, village representatives, and facilitators have trained and received capacity building on the protection and monitoring of forests and natural ecosystems. Progress is monitored through monthly coordination meetings with the field team.

Project reference

Project 2

Project type

Agriculture

Expected benefits of project

Further transformative change through sharing of project design, implementation and lessons learnt Improvement of standard of living, especially for vulnerable and/or marginalized groups

Improvement to environmental regulation

Net gain in biodiversity and ecosystem integrity

Is this project originating any carbon credits?

Description of project

The Aceh landscape covers 142 villages with 42,644 oil palm farmers in Aceh Singkil, Aceh Selatan, Subulussalam and Aceh Tamiang. Align with our sustainability policy, Musim Mas engages closely with third-party suppliers, independent smallholders and stakeholders in three priority areas — Aceh Tamiang, Subulussalam and Aceh Singkil — to address risks of encroachment into the Leuser Ecosystem, specifically in Aceh Tamiang and the South Aceh region. For this, Musim Mas collaborates with IDH (the Sustainable Trade Initiative), the Government of Aceh, Forum Konservasi Leuser (FKL), Pusat Unggulan Perkebunan Lestari (PUPL), downstream actors (Unilever, PepsiCo, General Mills, Nestle, AAK), local civil society organisations (Earthqualizer & Earthworm Foundation) and suppliers, including those outside our supply chain to have Aceh Tamiang verified as a deforestation-free and traceable commodities producer. Moreover, the initiative assists villages in developing land use plans via a participatory planning approach and assists in the planning and drafting of village policy in Aceh Singkil and the South Aceh district.

Musim Mas's Aceh strategy comprises of three main objectives. Firstly, the engagement objective entails outreach to smallholders and mills to convey NDPE requirements and the possible consequences of non-compliance through Suppliers Workshops and our Smallholders Hub Program. Secondly, the Assurance objective has components to ensure that the mills supplying crude palm oil and palm kernels to Musim Mas are NDPE compliant. We will use the NDP Risk management framework to build on the Assurance component laid out in our Aceh Strategy. Finally, the Monitoring and Response objective contains proactive elements to detect and verify deforestation at the landscape or jurisdictional level. Methods used include deforestation monitoring platforms (i.e. RADD, EQs) and outreach programs to external stakeholders to collaborate and tackle issues on the ground.

Key expected outcomes include mapping of the two Mopoli Plantations & 500 independent smallholders (location, legality status and risk identification, HCV - HCS and production figures), at least 300 hectares of forest and land were rehabilitated using an agroforestry approach.

Where is the project taking place in relation to your value chain?

Project based in sourcing area(s)

Start year

2019

Target year

2023

Project area to date (Hectares)

300

Project area in the target year (Hectares)

800

Country/Area

Indonesia

Latitude

4.113549

Longitude

97.980736

Monitoring frequency

Six-monthly or more frequently

Total investment over the project period (currency)

0

For which of your expected benefits are you monitoring progress?

Further transformative change through sharing of project design, implementation and lessons learnt Improvement of standard of living, especially for vulnerable and/or marginalized groups Improvement to environmental regulation Net gain in biodiversity and ecosystem integrity

Please explair

We publicly disclosed the progress through Aceh report https://www.musimmas.com/aceh-report/. Below are some of the progresses of the project in 2022:

1. Progress monitored related to Further transformative change through sharing of project design, implementation and lessons learnt and Improvement of standard of living benefits

Through Suppliers Workshops and our Smallholders Hub Program, topics such as NDPE Policy, Traceability to Plantation (TTP), Self-Assessment Tool (SAT) requirements, capacity building, Good Agricultural Practices (GAP), financial literacy and certification requirements are covered. The two plantations and 500 independent smallholders also receive training on GAP & NDPE delivered by Musim Mas, PUPL, and FKL. The two plantations and 1,989 independent smallholders also receive training on GAP & NDPE delivered by Musim Mas, PUPL, and FKL in totalling 2,489 smallholders since the beginning of the training. Moreover, We have trained 265 village extension officers and 3,857 independent smallholders across our three Smallholders Hubs in Aceh Tamiang, Aceh Singkil, and Subulussalam. Following our NDP Risk Management Framework, 77.42% risk-based traceability was conducted for Aceh.

2. Progress monitored related to Net gain in biodiversity and ecosystem integrity benefits

The draft village regulations to protect forest areas and key natural resources were passed in 3 villages (Bawan, Singgersing and Pasir Belo). The protected areas are 702 ha in Bawan, 586 ha in Singgersing, and 1,237.26 ha in Pasir Belo. Restoration of the riparian zone also has been started, coalition supported community planting with a number of 1,590 durian tress on 18.4 ha in Singgersing and 20.15 ha in Pasir Belo with different tree varietas (avocado, longan, and jengkol) a number of 2,033 trees. Moreover, a front-running group of smallholders (Pesatri) is supported towards ISPO & improving the governments' land conflict resolution schemes. In collaboration with FKL supported by the VSA program and other donors, 28,040 agroforestry trees have been distributed and planted in the conservation area by Karya Bersama, Mudah Sepakat, Subur Lestari, Sungai Rambe, Tukul Lestari and Indah Maju farmer groups. All Aceh suppliers have participated in Musim Mas' supplier workshops with 100% of our suppliers in Aceh have since committed to our Musim Mas NDPE policy.

F7. Verification

(F7.1) Do you verify any forests information reported in your CDP disclosure?

Yes

F7.1a

(F7.1a) Which data points within your CDP disclosure have been verified, and which standards were used?

Disclosure module

F6. Implementation

Data points verified

The Traceability to Plantation (TTP) value of 97%

Verification standard

The figure in F6.2a is verified by the independent third-party of the Control Union.

Please explain

To ensure NDPE commitments across our supply chain, we implement traceability system in our operations including establishing TTP measures in addition to our monitoring system. Our TTP achievements of 97% in 2022 are independently verified by third-party to ensure credibility and transparency.

F8. Barriers and challenges

F8.1

(F8.1) Describe the key barriers or challenges to eliminating deforestation and/or conversion of other natural ecosystems from your direct operations or from other parts of your value chain.

Forest risk commodity

Palm oil

Coverage

Supply chain

Primary barrier/challenge type

Value chain complexity

Comment

Third-party suppliers such as outgrowers, smallgrowers, independent smallholders have little knowledge of the HCV and/or HCS areas and their importance to ecosystem and environment. Thus, we are conducting socialization, training, and knowledge sharing to educate them on conservation areas such as HCV, HCS and the importance to maintain the conservation area and pursuing certification schemes.

F8.2

(F8.2) Describe the main measures that would improve your organization's ability to manage its exposure to deforestation and/or conversion of other natural ecosystems.

Forest risk commodity

Palm oil

Coverage

Supply chain

Main measure

Investment in monitoring tools and traceability systems

Comment

In accordance with our sustainability policy, we are committed to achieve a fully traceable supply chain and implementing NDPE practices across our operations. For this, we actively engage with suppliers through training and workshops as well as Musim Mas Self-Assessment Tool. Through a combination of monitoring methods such as Earthqualizer and the RADD satellite monitoring platform, as of 2022, we monitor more than nine million hectares across Indonesia and Malaysia covering all of our suppliers for deforestation and peat development. If our supplier is found to be non-compliant with the NDPE policy, we will engage with the supplier in question and exclude them if necessary. Presently, we have achieved 100% traceability to mill since 2015 and 97% traceability to plantation as of December 2022. We are on track and gearing toward 100% full traceability to plantation by December 2025. Moreover, suppliers are to complete the Musim Mas Self-Assessment Tool (SAT) which is an exhaustive set of questions against our NDPE requirements. As of December 2022, 84% of our suppliers have completed their assessments. In Q4 2021, we published our No Deforestation, No Peat (NDP) Risk Management Framework to address the risks of deforestation and peat development on our operations and those of our suppliers.

F17 Signoff

F-FI

(F-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.

N/A

F17.1

(F17.1) Provide the following information for the person that has signed off (approved) your CDP forests response.

	Job Title	Corresponding job category
Row 1	Director of Sustainability	Director on board

SF. Supply chain module

SF0.1

(SF0.1) What is your organization's annual revenue for the reporting period?

	Annual revenue
Row 1	1080000000

SF1.1

(SF1.1) In F6.3 you were asked "Have you adopted any third-party certification scheme(s) for your disclosed commodity(ies)? Indicate the volume and percentage of your certified production and/or consumption". Can you also indicate, for each of your disclosed commodity(ies), the percentage of certified volume sold to each requesting CDP supply chain member?

Partially

SF1.1a

(SF1.1a) For each of your requesting CDP supply chain members, indicate the percentage of certified volume sold per disclosed commodity(ies).

SF1.1b

(SF1.1b) Why can you not indicate the percentage of certified volume sold to each of your requesting CDP supply chain members? Describe any future plans for adopting and communicating levels of certification to requesting members.

SF2.1

(SF2.1) Please propose any mutually beneficial forests-related projects you could collaborate on with specific CDP supply chain members.

SF2.2

(SF2.2) Have requests or initiatives by CDP supply chain members prompted your organization to take organizational-level action to reduce or remove deforestation/forest degradation from your operations or your supply chain?

No

SF3.1

(SF3.1) For your disclosed commodity(ies), do you estimate the GHG emission reductions and/or removals from land use and land use change that have occurred in your direct operations and/or supply chain?

Palm oil

Estimate GHG emissions and removals from land use and land use change

Yes, but not willing to share details

Please explain

n/a

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 confirm below

I have read and accept the applicable Terms