Welcome to your CDP Forests Questionnaire 2021

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.

<table>
<thead>
<tr>
<th>Start Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 1, 2020</td>
<td>December 31, 2020</td>
</tr>
</tbody>
</table>

**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.

<table>
<thead>
<tr>
<th>Commodity disclosure</th>
<th>Stage of the value chain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timber products</td>
<td>This commodity is not produced, sourced or used by our organization</td>
</tr>
<tr>
<td>Palm oil</td>
<td>Disclosing</td>
</tr>
<tr>
<td>Cattle products</td>
<td>This commodity is not produced, sourced or used by our organization</td>
</tr>
<tr>
<td>Soy</td>
<td>This commodity is not produced, sourced or used by our organization</td>
</tr>
<tr>
<td>Other - Rubber</td>
<td>This commodity is not produced, sourced or used by our organization</td>
</tr>
<tr>
<td>Other - Cocoa</td>
<td>This commodity is not produced, sourced or used by our organization</td>
</tr>
<tr>
<td>Other - Coffee</td>
<td>This commodity is not produced, sourced or used by our organization</td>
</tr>
</tbody>
</table>
F0.5

(F0.5) Are there any parts of your direct operations or supply chain that are not included in your disclosure?
No

F1. Current state

F1.1

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

Palm oil

<table>
<thead>
<tr>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growing/production of raw materials</td>
</tr>
<tr>
<td>Harvesting</td>
</tr>
<tr>
<td>Milling</td>
</tr>
<tr>
<td>Crushing</td>
</tr>
<tr>
<td>Refining &amp; processing</td>
</tr>
<tr>
<td>Refining &amp; fractionation</td>
</tr>
<tr>
<td>Exporting/trading</td>
</tr>
<tr>
<td>Using as input into manufacturing process for power generation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Form of commodity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresh fruit bunches (FFB)</td>
</tr>
<tr>
<td>Crude palm oil (CPO)</td>
</tr>
<tr>
<td>Crude palm kernel oil (CPKO)</td>
</tr>
<tr>
<td>Palm kernel meal (PKM)</td>
</tr>
<tr>
<td>Refined palm oil</td>
</tr>
<tr>
<td>Palm oil derivatives</td>
</tr>
<tr>
<td>Palm oil derivatives</td>
</tr>
<tr>
<td>Palm kernel oil derivatives</td>
</tr>
<tr>
<td>Palm biodiesel</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owned/managed land</td>
</tr>
<tr>
<td>Smallholders</td>
</tr>
<tr>
<td>Trader/broker/commodity market</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Country/Area of origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>% of procurement spend</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
</tr>
</tbody>
</table>

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

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

In line with our Sustainability Policy, Musim Mas is working towards a fully traceable and transparent supply chain. A more detail information on traceability can be accessed via our website https://www.musimmas.com/sustainability/traceability/. Additionally, we organized workshops, hands-on training, and collaborates with Consortium of Resource Experts (CORE) to effectively communicate and help suppliers in understanding our NDPE policy. As a result, we are able to 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.

<table>
<thead>
<tr>
<th>% of revenue dependent on commodity</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palm oil 100%</td>
<td>Musim Mas Group is a vertically integrated palm oil corporation which derives all of its revenue from oil palm.</td>
</tr>
</tbody>
</table>

**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).

<table>
<thead>
<tr>
<th>Forest risk commodity</th>
<th>Type of control</th>
<th>Country/Area</th>
<th>Area (Hectares)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palm oil</td>
<td>Concession/lease</td>
<td>Indonesia</td>
<td>117,000</td>
</tr>
</tbody>
</table>
% Area certified
71

Certification scheme
RSPO producer/grower certification
International Sustainability and Carbon Certification (ISCC)
Other, please specify
Indonesian Sustainable Palm Oil (ISPO); Palm Oil Innovation Group Charter

Conversion of natural ecosystems during the reporting year
No

Area converted during the reporting year (hectares)

% covered by natural forests

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 (HSCA) 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-a-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

Area (Hectares)
6,450

% Area certified
54

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 during the reporting year
No

Area converted during the reporting year (hectares)

% covered by natural forests

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 (HSCA) 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-a-report/ and http://highcarbonstock.org/registered-hcsa-and-hcv-hcsa-assessments/.

F1.4

(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.

<table>
<thead>
<tr>
<th>Forest risk commodity</th>
<th>Palm oil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country/Area</td>
<td>Indonesia</td>
</tr>
<tr>
<td>Type of control</td>
<td>Concession/lease</td>
</tr>
<tr>
<td>Land type</td>
<td>Set-aside land</td>
</tr>
<tr>
<td>Area (hectares)</td>
<td>27,500</td>
</tr>
<tr>
<td>% covered by natural forests</td>
<td></td>
</tr>
</tbody>
</table>
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 (HSCA) 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-a-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)?

<table>
<thead>
<tr>
<th>Data availability/Disclosure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palm oil</td>
</tr>
<tr>
<td>Production data available, disclosing</td>
</tr>
</tbody>
</table>

F1.5a

(F1.5a) Disclose your production and/or consumption data.

<table>
<thead>
<tr>
<th>Forest risk commodity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palm oil</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Data type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production data</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,717,961</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metric tons</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Data coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full commodity production/consumption</td>
</tr>
</tbody>
</table>

Please explain
F1.5b

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

<table>
<thead>
<tr>
<th>Forest risk commodity</th>
<th>Palm oil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country/Area of origin</td>
<td>Indonesia</td>
</tr>
<tr>
<td>State or equivalent jurisdiction</td>
<td>Specify state/equivalent jurisdiction</td>
</tr>
<tr>
<td></td>
<td>Pelalawan Regency</td>
</tr>
<tr>
<td>% of total production/consumption volume</td>
<td>18.88</td>
</tr>
</tbody>
</table>

Please explain
Percentage of Fresh Fruit Bunch (FFB) produced in Pelalawan Regency compared to total Musim Mas production.

<table>
<thead>
<tr>
<th>Forest risk commodity</th>
<th>Palm oil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country/Area of origin</td>
<td>Indonesia</td>
</tr>
<tr>
<td>State or equivalent jurisdiction</td>
<td>Specify state/equivalent jurisdiction</td>
</tr>
<tr>
<td></td>
<td>Pasaman Barat Regency</td>
</tr>
<tr>
<td>% of total production/consumption volume</td>
<td>6.57</td>
</tr>
</tbody>
</table>

Please explain
Percentage of Fresh Fruit Bunch (FFB) produced in Pasaman Barat Regency compared to total Musim Mas production.
### Labuhan Batu Regency

**State or equivalent jurisdiction**
Labuhan Batu Regency

**% of total production/consumption volume**
0.45

**Please explain**
Percentage of Fresh Fruit Bunch (FFB) produced in Labuhan Batu Regency compared to total Musim Mas production.

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### Musi Banyuasin Regency

**State or equivalent jurisdiction**
Musi Banyuasin Regency

**% of total production/consumption volume**
9.77

**Please explain**
Percentage of Fresh Fruit Bunch (FFB) produced in Musi Banyuasin Regency compared to total Musim Mas production.

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### Sambas Regency

**State or equivalent jurisdiction**
Sambas Regency

**% of total production/consumption volume**
3.79

**Please explain**
Percentage of Fresh Fruit Bunch (FFB) produced in Sambas Regency compared to total Musim Mas production.
Palm oil

**Country/Area of origin**
Indonesia

**State or equivalent jurisdiction**
Specify state/equivalent jurisdiction
Ketapang Regency

**% of total production/consumption volume**
2.62

**Please explain**
Percentage of Fresh Fruit Bunch (FFB) produced in Ketapang Regency compared to total Musim Mas production.

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**Forest risk commodity**
Palm oil

**Country/Area of origin**
Indonesia

**State or equivalent jurisdiction**
Specify state/equivalent jurisdiction
Indragiri Hilir Regency

**% of total production/consumption volume**
8.93

**Please explain**
Percentage of Fresh Fruit Bunch (FFB) produced in Indragiri Hilir Regency compared to total Musim Mas production.

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**Forest risk commodity**
Palm oil

**Country/Area of origin**
Indonesia

**State or equivalent jurisdiction**
Specify state/equivalent jurisdiction
Barito Utara and Murung raya Regency

**% of total production/consumption volume**
3.52

**Please explain**
Percentage of Fresh Fruit Bunch (FFB) produced in Barito Utara dan Murung Raya Regency compared to total Musim Mas production.

Forest risk commodity
Palm oil

Country/Area of origin
Indonesia

State or equivalent jurisdiction
Specify state/equivalent jurisdiction
Kotawaringin Timur Regency

% of total production/consumption volume
45.47

Please explain
Percentage of Fresh Fruit Bunch (FFB) produced in Kotawaringin Timur Regency compared to total Musim Mas production.

F1.5e

(F1.5e) 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
1,025,533

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?

No

Comment
In 2020, our mills have used biofuel as our fuel option.

F1.6

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

No

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
Global Forest Watch Pro
Sustainability Policy Transparency Toolkit (SPOTT)
Global Risk Assessment Services (GRAS)
National specific tools and databases
Other, please specify
Please explain

Palm oil and its derivatives are the primary commodities of Musim Mas which accounts for almost 100% of its revenue. Therefore, forest-related risk assessment is of great importance to Musim Mas. For this, Musim Mas has put a comprehensive system in place, including:

• In case of complaints concerning breaches to our NDPE guidelines, Grievance Channels and Controlled Purchase Protocol (CPP) are available to resolve issues, to secure remedy and remediation, and to exclude errant suppliers as the last resort. If there is an allegation of NDPE violation across our supply chain, we will extensively study the allegation through internal tools as well as publicly available tools such as satellite monitoring, GRAS, GFW Pro, and etcetera. If a breach of the NDPE policy is confirmed, we will engage with the relevant suppliers in question. In 2020, we have excluded one supplier due to NDPE commitment breaches. More information on our grievance mechanisms can be found on https://www.musimmas.com/sustainability/grievances/

• 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 in which allows Musim Mas to identify potential risk areas at the mill level. As of December 2020, 60% of our suppliers have completed their assessments. Moreover, we also conduct workshops to engage with suppliers, and thus, able to track their progress towards making and achieving NDPE commitments

• We have dedicated teams to ensure continual adherence to regulations and certification schemes such as RSPO, ISCC, ISPO, and POIG principles and guidelines. These independent certification audits allow us to track and improve our sustainability policy and practices such as no deforestation and peat development in our concessions. Additionally, to rate our sustainability commitments and progress, Musim Mas participates in several well-known public assessments and benchmarking programmes including CDP, SPOTT, Ecovadis, etc. Through improvement in our sustainability practices, we ranked 6th out of 98 palm oil companies in the overall score of SPOTT (jumped from 11th in the previous year) in 2020.

F2.1b

(F2.1b) Which of the following issues are considered in your organization’s forests-related risk assessment(s)?

Availability of forest risk commodities

Relevance & inclusion

Relevant, always included
Please explain

As we derive almost 100% of our revenue from oil palm and its derivative, the availability of oil palm is paramount to our operations and is always reviewed extensively in our risk assessment. One way to mitigate the risk is through R&D, by maximising the yield of CPO and improving our best practices. Additionally, we also actively collect and analyse data concerning upstream production fluctuation, rainfall, hotspots, and deforestation using various methods and tools including but not limited to satellite, ground-truthing, GFW Pro, and RADD partnership. The compiled information is also part of the quarterly meeting discussion among the Board, Directors, and Head of Departments to prepare us and adjust accordingly. Adjustments include but are not limited to plans of action, risk management policies, annual budgets, business plans and so on.

Quality of forest risk commodities

Relevance & inclusion
Relevant, always included

Please explain
Recognising the growing global demand, delivering a high-quality oil palm is a crucial aspect of our operations. Musim Mas invests heavily in technologies and measures to continuously increase its productivity, yield, and quality. Through our R&D experts, we construct Standard Operating Procedures (SOPs) and adopt best agricultural practices at our upstream operations such as replanting old palms, using high-yielding plant seedlings, and optimising land use.

Besides partnering with Radar Alerts for Detecting Deforestation (RADD), Musim Mas Self-Assessment Tool (SAT) is also in place for suppliers to self-declare information about their operations and allows Musim Mas to identify potential risk areas at the mill level. As of December 2020, 60% of our suppliers have completed their assessments and are expected to be 100% by 2025.

Impact of activity on the status of ecosystems and habitats

Relevance & inclusion
Relevant, always included

Please explain
Following our sustainability policy, Musim Mas’s commitment to conserve and preserve both biodiversity and the environment has been long-standing and will only continue to become our utmost priorities. As a member of the Palm Oil Innovation Group (POIG), the Roundtable on Sustainable Palm Oil (RSPO), Indonesian Sustainability Palm Oil (ISPO), and International Sustainability and Carbon Certification (ISCC), Musim Mas pledge to No Deforestation of High Carbon Stock (HCS) forests, No Conversion of High Conservation Value (HCV) areas, No Developments on Peatlands regardless of depth, and Zero Burning policy.

We use dedicated conservation management and monitoring plans to safeguard our
conservation areas. Conservation and protection measures include restoring areas that are degraded and managing riparian buffer zones, regularly conducting biodiversity surveys, patrolling grounds and monitoring for encroachment through satellite surveillance to prevent illegal development. We strictly prohibit the hunting of rare, threatened and endangered species and 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.

Through combination methods such as Earthqualizer’s satellite monitoring platform, as of 2020, we monitor more than 6 million hectares across Indonesia and Malaysia covering 100% of suppliers’ mill with concession are actively monitored for deforestation and peat development. If our supplier is found to be noncompliant 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 83% traceability to plantation as of December 2020. We are now gearing toward 100% full traceability to plantation by December 2025.

Furthermore, we monitor hotspots and extreme weather on daily basis using data obtained from NOAA, MODIS and VIIRS to mitigate fire risk and floods in our concession and surroundings. As a member of the Fire Free Alliance, we also launched our Fire Free Village Programme (FFVP) to engage and educate local communities. As of December 2020, our FFVP covered 75 villages spanning 468,569 hectares and have conducted 144 trainings in the communities.

**Regulation**

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**Relevance & inclusion**

Relevant, always included

**Please explain**

Following our sustainability policy, we commit to fully comply with local, national, and international regulations and guidelines. For this, the change of regulation risk is assigned with a high priority in our risk assessment process where dedicated team is established to actively monitor and update the latest requirements of guidelines and regulations. For example, the upcoming adoption of RED II include changes in GHG emission factor and GHG savings guideline. Recognising these changes, our dedicated team has extensively studied the required adjustments and socialise them effectively throughout the supply chain operations. Additionally, we also work closely with certification bodies to ensure that we are on the right track at all times.

**Climate change**

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**Relevance & inclusion**

Relevant, always included

**Please explain**

Climate changes cause changes in precipitation pattern which may lead to extreme weather conditions such as drought and flood. Consequently, this may cause a
substantive impact on our operations. For example, high levels of drought can trigger fire outbreaks in the plantation units or that excessive rainfall may lower FFB production due to disruption of fertilizers application program. To mitigate these, some measures taken include satellite monitoring such as the WRI Global Forest Watch Fires map to identify and monitor hotspots at and around our concessions and initiates fire-free village programme along with the local communities to educate and encourage best agriculture practices and risks associated with the use of fire for land preparation. The awareness of climate change and its impact may also bring about a change in customers preference. For this, we actively disclose our sustainability progresses in annual sustainable report and known platform such as CDP and SPOTT. We are also working with the Consortium of Resource Experts (CORE) – Proforest and Daemeter – on implementing NDPE commitments, the Extension Services Programme and landscape collaborations. As of 2020, 97% of suppliers have either an NDPE policy or adopted the Musim Mas Sustainability Policy. Climate change risk is always included in our risk assessment.

Impact on water security

Relevance & inclusion
Relevant, always included

Please explain
Since we operate our own plantations and mills, the availability of sufficient water resources is important for us and is always included in risk assessment. To monitor and assess the water availability of our upstream operations, we produce water accountability report annually. This report covers range of topics starting from water balances to water management plan. We started our first water footprint in 2018 using our 2016 and 2017 data. Ever since, we have conducted annual water footprint calculation to ensure that a positive water balance is always maintained in each of our plantations.

Tariffs or price increases

Relevance & inclusion
Relevant, always included

Please explain
Tariffs or other non-tariffs barriers due to various factors such as government climate regulations can impact the financial performance of the company. Company must always comply with the government regulations and thus tariff/price is always included in our risk assessment. To mitigate the risk, dedicated teams are established to actively monitor and socialize the latest update on regulations.

Loss of markets

Relevance & inclusion
Relevant, always included

Please explain
With the growing international agreements concerning climate change and GHG emission reduction commitment, the implementation of stricter International and/or national regulations become inevitable. The recent decision of the International market to pose stricter regulations on the import of palm oil has impacted the market. To mitigate this risk, Musim Mas through its relevant department constantly monitors the media and effectively communicates to stakeholders, customers, and the public on demonstrating our sustainability progress, innovation, and measures taken by Musim Mas to ensure its compliance to local, national, and international regulations and guidelines. The engagement platforms including but are not limited to CDP disclosure, sustainability report, and meetings. More information on Musim Mas sustainability updates can be found on https://www.musimmas.com/newsroom/.

Leakage markets

Relevance & inclusion
Relevant, always included

Please explain
Musim Mas conducts due diligence on all new suppliers before the mill is accepted as our supplier to understand where and how oil palm fruits or fresh fruit bunches (FFB) are produced, and 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. Recognising the importance of traceability in our operations, since 2015, we have achieved 100% traceability to mill with 83% of the total supply to plantation is traceable in 2020. We are now gearing toward 100% traceability to plantation by 2025. 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 2020, 60% 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. All traceability progress can be found on https://www.musimmas.com/sustainability/traceability/.

Brand damage related to forest risk commodities

Relevance & inclusion
Relevant, always included

Please explain
With the increasing awareness on forest-related risk, sustainability management plays an integral role in our business operations and reputation. Our sustainability practices are managed in our sustainability and NDPE policies. To mitigate this risk, Musim Mas, through its relevant departments, constantly monitors the media and effectively communicates to our stakeholders, customers, and public demonstrating the sustainability progress, innovation, and measures taken by Musim Mas to ensure its
compliance to local, national, and international regulations and guidelines. The engagement platforms include but are not limited to CDP disclosure, sustainability report, and meetings. Furthermore, we are also working closely with local communities and the relevant parties (i.e. priority landscape collaboration in Siak and collective participatory mapping activities) to ensure that our actions are done in accordance with the FPIC principles, where all activities are well documented. The latest Musim Mas sustainability updates can be found on https://www.musimmas.com/newsroom/.

Corruption

Relevance & inclusion
Relevant, always included

Please explain
We are committed to conduct business fairly, ethically, and prohibit all forms of corruption and bribery. These commitments are guided by our Code of Business Conduct and the internal Anti-corruption Policy shared with relevant Musim Mas employees. Our Supplier Code of Business Conduct imposes similar obligations upon all external parties who supply to Musim Mas. We are pleased to say that there were no cases of bribery or corruption reported in 2020.

Social impacts

Relevance & inclusion
Relevant, always included

Please explain
One key pillar in Musim Mas’ Sustainability Policy is to bring benefit to the communities, for this, we always strive to ensure that social impact assessment is well conducted before undertaking any new development. Presently, Musim Mas supports 3,497 smallholders. Furthermore, our practices and policies are aligned with the Free and Fair Labor in Palm Oil Production Principles and have implemented strict measures to prevent child, slave and forced labour, and unlawful, unethical or abusive treatment of any kind.

Musim Mas uses every means at our disposal to support rural communities including, but not limited to, providing jobs, basic amenities, medical services, and education. For example, we carry out participatory mapping with local communities, creating land-use plans in surrounding areas to ensure sufficient land is set aside for food security. We also integrate our conservation and land use plans (ICLUP) into our existing community programmes, such as our Fire Free Village Programme, Village Development Programme, and our HCV management and monitoring protocol. Additionally, Musim Mas also allocates CSR budget to support the community according to their needs, including but are not limited to providing cattle, fish seed, agricultural seedlings and etcetera. Through long-term partnerships with communities and civil society organisations, we work to address issues that are important to the communities in the areas where we operate. Social impact is always included in our risk assessment. We have recently launched our inaugural Social Impact Report this year, which can be referred here - https://www.musimmas.com/wp-content/uploads/2021/05/Musim-Mas-CSR-Social-Impact-Report_Final.pdf.
Other, please specify

Relevance & inclusion
Not considered

Please explain
N/A

F2.1c

(F2.1c) Which of the following stakeholders are considered in your organization's forests-related risk assessments?

Customers

Relevance & inclusion
Relevant, always included

Please explain
Customers’ request and due-diligence are part of our forest-related risk assessment. For example, more often than not, our customers also have their own NDPE, sustainability standards, or requirements including CDP disclosure that they adhere to. Failure in meeting their standards can lead to customers’ dissatisfaction. This in turn might affect the company reputationally. To this end, Musim Mas is working with customers to address their concern including forest related aspect. Methods of engagement include but are not limited to joint partnerships and collaborations on key issues such as monitoring deforestation in supply chain and smallholder projects, one-on-one communications, field visits, website, and sustainability reports.

Employees

Relevance & inclusion
Relevant, always included

Please explain
Musim Mas is established upon a group of talented staffs and workers who work and collaborate as a team to address the challenges in the palm oil industry, making the products more economically viable, socially responsible, and environmentally appropriate. Therefore, Musim Mas takes extensive measures to ensure the wellbeing and health of its workers and staffs. For example, in the event of COVID-19, we have installed handwashing stations at entrance areas of all offices, plantations and mills, tightening supervision at entrances to our offices, plantations and mills, including temperature checks, donning of masks, and hand washing before entry. Moreover, we also divide different work zones to maintain safe distances. We also actively socialise our Sustainability Policy to all employees ensuring that they are aware and understand the commitments outlined in the policy including which includes forest conservation, fair workplace practices, gender equity, grievance procedure, etc. Methods of engagement include but are not limited to participating in external initiatives to address systemic industry issues (i.e. labour rights), Musim Mas’s training programmes, collaborating with...
experts to assess and improve workplace conditions, one-on-one meetings, community meetings, and trade union meetings.

**Investors**

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**Relevance & inclusion**

Relevant, always included

**Please explain**

With the stricter policies on environment and wildlife protection, investors and banks are starting to require sustainability assessment. In 2014, Musim Mas has developed our own NDPE and sustainability policy. We also ensure continual adherence to regulations and certification schemes such as RSPO, ISCC, and POIG principles and guidelines. These independent certification audits allow us to track and improve our sustainability policy and practices such as no deforestation and peat development in our concessions. Additionally, to rate our sustainability commitments and progress, Musim Mas participates in several well-known public assessments and benchmarking programmes including CDP, SPOTT, Ecovadis, etc. Through improvement in our sustainability practices, we ranked 6th out of 98 palm oil companies in overall score of SPOTT (jumped from 11th in the previous year) in 2020.

We manage environmental and social risks through sustainable financing by communicating policies and actions and responding to queries. Our methods of engagement include but are not limited to one-to-one communications, field visits, website and social media, sustainability reports. For more information on our latest report go to: https://www.musimmas.com/newsroom/.

**Local communities**

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**Relevance & inclusion**

Relevant, always included

**Please explain**

Plantation operations always involve local communities, thus, local communities become a significant aspect of our forest-related risk assessment. Musim Mas uses every means at our disposal to support rural communities including, but not limited to, providing jobs, basic amenities, medical services, and education. Our methods of engagement include but are not limited to participatory mapping and integration into management and monitoring land-use plans, grievance procedure, dialogue and consultation with community groups and representatives.

Additionally, we also integrate our conservation and land use plans into our existing community programmes, such as our Fire Free Village Programme, Village Development Programme, and our HCV management and monitoring protocol. Through stakeholder consultation, we also provide training and socialization to local community regarding our approaches such as our NDPE, HCV, and HCS. Recognising the difficulty of accessing education in estates, we have established childcare centres at each of our estates to meet the needs of workers with pre-school children and ensure access to education for all school-age children living on our plantations. Through long-term
partnerships with communities and civil society organisations, we work to address issues that are important to the communities in the areas where we operate. More information in our inaugural Social Impact Report can be found here - https://www.musimmas.com/wp-content/uploads/2021/05/Musim-Mas-CSR-Social-Impact-Report_Final.pdf.

NGOs

Relevance & inclusion
Relevant, always included

Please explain
As the front runner in the sustainable oil palm industry, we understand that NGOs play an important role to advance our sustainability progress. Methods of engagement include but are not limited to working with NGOs in landscape initiatives (i.e. Sedagho Siak NGO in Siak District conservation project) and sustainability platforms (i.e. HCSA). With the collaboration of NGOs and continuous improvement in our sustainability standards, optimistically, these approaches can then bring benefits to local communities and ecosystems.

Other forest risk commodity users/producers at a local level

Relevance & inclusion
Relevant, always included

Please explain
Align with our NDPE policy, we engage with other forest risk commodity producers to develop a monitoring and management program, which goals are to ensure the conservation of both operating and surrounding areas and full traceability. Engagement methods include but are not limited to grievance procedure, Musim Mas Self-Assessment Tool (SAT), training and workshops, and launching programmes or other initiatives for our scheme smallholders and independent smallholders, including those supplying to Musim Mas and those outside our supply base in priority landscapes.

Regulators

Relevance & inclusion
Relevant, always included

Please explain
Following our sustainability policy, we fully comply with local, national and international laws. We are supporting government, regulatory bodies, and agencies to facilitate projects focused on building smallholder capacity to improve smallholders’ livelihoods. Engagement platforms include but are not limited to landscape and smallholder programme meetings and one-on-one meetings. Dedicated teams are established to constantly monitor and keep abreast of any new laws and regulations that could affect the business.

Suppliers
Relevance & inclusion
Relevant, always included

Please explain
Since Musim Mas Group is a fully integrated palm oil corporation, disruption to our suppliers may affect our downstream operations. To mitigate the risk, we have set up a traceability system to map our suppliers, analyse their risk level, and engage with them if necessary. Presently, we have achieved 100% traceability to mill since 2015 and 83% traceability to plantation as of December 2020. We are now gearing toward 100% full traceability to plantation by December 2025. Engagement platforms include but are not limited to one-to-one communication, workshops and training on NDPE commitments, Musim Mas Self-Assessment tool, customised roadmaps, and grievance channel.

Other stakeholders, please specify

Relevance & inclusion
Not considered

Please explain
N/A

F3. Risks and opportunities

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?

<table>
<thead>
<tr>
<th></th>
<th>Risk identified?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palm oil</td>
<td>Yes</td>
</tr>
</tbody>
</table>

F3.1a

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

Musim Mas defines substantive financial impact as impacts that significantly affect and disrupt our supply chains which in turns affect the financial performance of the company. Its definition is further detailed as follows:

- Any impact that could potentially inflict financial loss around 10 percent or higher of current EBITDA estimates.
- Any climatic event that will drastically affect the yield and productivity of oil palm crop as well as palm oil supply.
- Any drastic drop in supply (of raw materials) of 20 percent or more, which affect our production cost as well as production volume.
To address these risks, Musim Mas implements a robust corporate governance and risk management framework to continuously monitor, identify, and manage the arising risks. This framework is aligned and managed in our NDPE and sustainability policies which include no deforestation, no peatland development regardless of its depth, 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.

<table>
<thead>
<tr>
<th>Forest risk commodity</th>
<th>Palm oil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of risk</td>
<td>Physical</td>
</tr>
<tr>
<td>Geographical scale</td>
<td>Plantation</td>
</tr>
<tr>
<td>Where in your value chain does the risk driver occur?</td>
<td>Direct operation, Supply chain</td>
</tr>
<tr>
<td>Primary risk driver</td>
<td>Increased severity of extreme weather events</td>
</tr>
<tr>
<td>Primary potential impact</td>
<td>Increased capital costs</td>
</tr>
<tr>
<td>Company-specific description</td>
<td>The change in precipitation patterns may increase the occurrence of extremes weather such as drought and flood. Consequently, these can drop the productivity of our operations and disrupt our supply chains, which in turns, affects the performance of the company. Thus, this poses a risk to Musim Mas.</td>
</tr>
<tr>
<td>Timeframe</td>
<td>1-3 years</td>
</tr>
<tr>
<td>Magnitude of potential impact</td>
<td>Medium</td>
</tr>
<tr>
<td>Likelihood</td>
<td>About as likely as not</td>
</tr>
<tr>
<td>Are you able to provide a potential financial impact figure?</td>
<td>Yes, a single figure estimate</td>
</tr>
</tbody>
</table>
Potential financial impact (currency)
2,000

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

Explanation of financial
Since drought may lead to fire risk, besides RADD partnership and satellite monitoring, Musim Mas also installs fire breaks in our operation areas to slow the spread of fire. The financial impact figure corresponds to the installation of fire break per kilometre. Since firebreak implementation varies depending on the field, thus, the figure is estimated using per kilometre unit.

Primary response to risk
Implementation of environmental best practices in direct operations

Description of response
Best management practices and operating procedures are carried out by Musim Mas to alleviate the impacts of extreme weather scenarios, such as drought and flood. These practices include:

- Improvement of soil management from recycling back the cut fronds and organic waste from palm mill such as but are not limited to EFB. This is to improve the soil moisture retention capability and in attempt to ameliorate the drought effects

- Installation and maintenance of proper drainage systems are done in preparation for floods

- Since drought can lead to fire risk, thus, satellite monitoring such as the WRI Global Forest Watch Fires map is used to watch for hotspots at and around our concessions. Moreover, we also provide training and equipping firefighting teams at all of our plantations to take action at the first sign of an outbreak. Additionally, zero-burn policy and fire management practices have been implemented in Musim Mas group. For example, we installed fire breaks to slow the spread, should fire occur.

Cost of response
2,000

Explanation of cost of response
The cost corresponded to the installation of firebreaks per kilometre. Since the firebreak implementation varies depending on the field, thus, this figure is estimated using per kilometre unit.

Forest risk commodity
Palm oil
**Type of risk**
Regulatory

**Geographical scale**
Global

**Where in your value chain does the risk driver occur?**
Direct operation
Supply chain

**Primary risk driver**
Other regulatory driver, please specify
Changes of local or international regulations, guidelines, or laws

**Primary potential impact**
Increased capital costs

**Company-specific description**
With the growing international agreements concerning forest conservation, biodiversity protection, and emission reduction commitment, thus, the implementation of stricter International and/or national regulations must be ensured. Additionally, other international guidelines such as the latest RED II may also impact our financial performance with the updated emission factor and threshold in its GHG emissions.

**Timeframe**
>6 years

**Magnitude of potential impact**
Medium

**Likelihood**
About as likely as not

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

**Potential financial impact (currency)**
4,000,000

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

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

**Explanation of financial**
To ensure continual adherence of both regulations and certifications, new projects and action plans are sometimes required. Implementing these projects and plans can lead to an increase of expenses. For example, the investment of methane capture facilities to fulfill the emission reduction requirement. As of 2020, Musim Mas has installed 15
methane capture plants to reduce our GHG emissions. The financial impact figure corresponds to the estimated capital cost of each methane capture facility.

Primary response to risk
Implementation of environmental best practices in direct operations

Description of response
To ensure compliance and reduction in our GHG emissions, we have built 15 methane capture plants in our mills as per December 2020 with a total of 544,219.64 MT CO2e of emissions were avoided. Following our sustainability and NDPE policies, Musim Mas implements best Agri-practices and pledges to no deforestation, no peatland development regardless of its depth, emission reduction, waste management, traceability to plantations, etc. Full information can be found on https://www.musimmas.com/sustainability/ndpe-policy/ and https://www.musimmas.com/sustainability/. To monitor and rate our sustainability progresses, our operations are recognised and certified by third-party certification schemes such as RSPO and ISCC. Dedicated teams are also formed to actively monitor and consult the change of regulations and policies with stakeholders, customers, and certification bodies.

Cost of response
4,000,000

Explanation of cost of response
The cost of response corresponds to the capital cost of one methane capture plant ranges from 3 mil USD to 4 mil USD.

Forest risk commodity
Palm oil

Type of risk
Regulatory

Geographical scale
Plantation

Where in your value chain does the risk driver occur?
Direct operation
Supply chain

Primary risk driver
Changes to product standards

Primary potential impact
Increased compliance costs

Company-specific description
With the growing international agreements concerning climate change and GHG emission reduction commitment, the implementation of stricter International and/or
national regulations become inevitable. For example, the decision of the International market (i.e. ISCC) to pose stricter guidelines on the import of palm oil has impacted the market. Consequently, more customers now prefer sustainably certified palm oil products and derivatives. With the variability of international regulations and decisions imposed on the palm oil sector, it is important for the company to keep abreast of the newest market regulation. Hence, this poses a risk to Musim Mas operations.

**Timeframe**

>6 years

**Magnitude of potential impact**

Medium

**Likelihood**

More likely than not

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact (currency)**

5,000

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

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

**Explanation of financial**

Financial impact due to changes in customer’s behaviour and preferences could range widely from mild to severe. For example, if the European market shifts their preferences solely to demand more sustainable and certified palm oil products. The impact on stricter sustainable demand is limited to the cost needed in fulfilling the third-party certifications (including the operational cost to comply with the certification scheme standards) and supplier engagement costs. The financial impact corresponds to the certification cost per unit to be able to enter the European Market i.e. ISCC. In 2020, all our 18 processing units are ISCC certified.

**Primary response to risk**

Increased use of sustainably sourced materials

**Description of response**

To mitigate the associated risk, Musim Mas initiates some measures such as:

- Engagement in sustainability initiatives. For example, landscape initiatives surrounding Siak and Pelalawan involving local NGOs, communities, companies, and government agencies
- Achieve and maintain 100% sustainability certifications schemes such as RSPO, ISCC, ISPO throughout our supply chain. These will also serve as a benchmark in our operation to keep track of our sustainability progress. All our 18 processing units are
ISCC certified.
- Promote traceability tools such as Musim Mas Self-Assessment (SAT) Tool to engage with suppliers
- Participates in several well-known public assessments and benchmarking programmes including CDP, SPOTT, Ecovadis, etc. Through improvement in our sustainability practices, we ranked 6th out of 98 palm oil companies globally in SPOTT 2020 (jumped from 11th in the previous year)

Cost of response
5,000

Explanation of cost of response
The change in customer’s preferences and behaviour may impact our financial performance. The cost of response corresponds to the certification cost per unit to be able to enter the European Market i.e. ISCC. In 2020, all our 18 processing units have been ISCC certified.

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?

<table>
<thead>
<tr>
<th>Forest risk commodity</th>
<th>Have you identified opportunities?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palm oil</td>
<td>Yes</td>
</tr>
</tbody>
</table>

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
Resilience

Where in your value chain does the opportunity occur?
- Direct operation
- Supply chain

Primary forests-related opportunity
Improved supply chain engagement

Company-specific description & strategy to realize opportunity
Musim Mas conducts due diligence on all new suppliers before the mill is accepted as our supplier to understand where and how oil palm fruits or fresh fruit bunches (FFB) are produced, and 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. Recognising the importance of traceability in our operations, since 2015, we have achieved 100% traceability to mill with 83% of the total supply to plantation is traceable in 2020. We are now gearing toward 100% traceability to plantation by 2025. 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 2020, 60% 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. All traceability progress can be found on https://www.musimmas.com/sustainability/traceability/.

**Estimated timeframe for realization**
- 4-6 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)**

**Potential financial impact figure – minimum (currency)**

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

**Explanation of financial impact figure**
- The financial impact is yet to be publicly disclosed.

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**Forest risk commodity**
- Palm oil

**Type of opportunity**
- Products & services

**Where in your value chain does the opportunity occur?**
- Direct operation
- Supply chain
Primary forests-related opportunity
 Increased brand value

Company-specific description & strategy to realize opportunity
 Musim Mas participates in many public assessments and benchmarking programmes including CDP, Ecovadis, SPOTT, and PROPER to rate our sustainability commitments and progresses at the highest level. Through improvement in our sustainability practices, we ranked 6th out of 98 palm oil companies in overall score of SPOTT (jumped from 11th in the previous year) in 2020. One of the important aspects of the benchmark is certification. Third-party certifications such as RSPO, ISCC, POIG, etc verify that audits have been conducted independently, thus, ensuring proper implementation and compliance to the principles and criteria of the respective sustainability certification schemes. For this, our operations are benchmarked annually against these certifications. As of 2020, 13 out of our 15 mills have been RSPO certified. All our mills are fully in compliance with the ISCC certification scheme; proving our commitment to implement our NDPE and sustainability practices into our operations. Moreover, since regulations and guidelines of the relevant certifications are constantly changing, thereby, dedicated teams are also established to ensure continual adherence to the respective regulations.

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)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure
 The financial figure 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.

<table>
<thead>
<tr>
<th>Position of individual</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chief Executive Officer (CEO)</td>
<td>The Musim Mas Board of Directors (‘Board’) considers sustainability a core component of our corporate integrity, ensuring that material environmental, social and governance (ESG) factors are embedded into business strategies and decisions. The Board is led by our Executive Chairman and Chief Executive Officer. Our sustainability teams, senior management, and the Board meet quarterly to review key ESG issues and are involved in decision-making pertaining to our forest-related risks and opportunities. Monthly reports are also provided to the Board. Examples of decisions made include taking initiatives in joining Palm Oil Innovation Group (POIG) to become the first South-East Asia countries to join. Other includes participating in landscape initiatives such as Siak, Pelalawan, etc.</td>
</tr>
</tbody>
</table>

F4.1b

(F4.1b) Provide further details on the board’s oversight of forests-related issues.

<table>
<thead>
<tr>
<th>Frequency that forests-related issues are a scheduled agenda item</th>
<th>Governance mechanisms into which forests-related issues are integrated</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scheduled - all meetings</td>
<td>Monitoring implementation and performance</td>
<td>During the meeting, the sustainability committee will brief the board on the state of sustainability of the industry and the progress of Musim Mas sustainability initiatives such as RSPO, ISPO, ISCC certification, POIG verification and supply chain traceability. The committee will also bring up any complaints or grievances that the company has received regarding sustainability to discuss the potential paths to resolution. The committee also discussed potential new sustainability initiative that</td>
</tr>
</tbody>
</table>
Reviewing and guiding annual budgets  
Reviewing and guiding business plans  
Reviewing and guiding corporate responsibility strategy  
Reviewing and guiding major plans of action  
Reviewing and guiding risk management policies  
Reviewing and guiding strategy  
Reviewing innovation / R&D priorities  
Setting performance objectives

<p>| F4.2 |<br />
| (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). |</p>
<table>
<thead>
<tr>
<th>Name of the position(s) and/or committee(s)</th>
<th>Responsibility</th>
<th>Frequency of reporting to the board on forests-related issues</th>
<th>Please explain</th>
</tr>
</thead>
</table>
| Other, please specify  
  Director of Sustainability | Both assessing and managing forests-related risks and opportunities | More frequently than quarterly | In the sustainability governance structure, Director of Sustainability is reporting to Executive Chairman and the Board of Directors. Our Director of Sustainability oversees the implementation and execution of our sustainability policy commitments, and an external senior strategic advisor supports their work. The forest-related issues reported including but are not limited to standards and certifications, impact and monitoring, and assurance and compliance. |
F4.3

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

<table>
<thead>
<tr>
<th>Provide incentives for management of forests-related issues</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes, we do provide incentives for the board members.</td>
</tr>
</tbody>
</table>

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)?

<table>
<thead>
<tr>
<th>Role(s) entitled to incentive?</th>
<th>Performance indicator</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monetary reward</td>
<td>Director on board</td>
<td>Achievement of commitments and targets Supply chain engagement</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Our Director on board oversees and resolves any sustainability matter including forest-related issues such as conservation of biodiversity, High Conservation Value (HCV), High Carbon Stock (HCS), The Remediation and Compensation Procedure (RaCP) as well as supply chain engagement. Additionally, Director on board also develops management programs and action plans related to conservation initiatives at the group level. Our Director on Board works and is evaluated annually based on the Key Performance Indicator (KPI) where compensation and benefits are awarded accordingly. Examples of performance indicators include but are not limited to full compliance to HCV and HCS guidelines as well as RSPO NPP.</td>
</tr>
<tr>
<td>Non-monetary reward</td>
<td>Director on board</td>
<td>Achievement of commitments and targets Supply chain engagement</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Our Director on board oversees and resolves any sustainability matter including forest-related issues such as conservation of biodiversity, High Conservation Value (HCV), High Carbon Stock (HCS), The Remediation and Compensation Procedure (RaCP) as well as supply chain engagement. Additionally, Director on board also develops management programs and action plans related to conservation initiatives at the group level. Our Director on Board works and is evaluated annually based on the Key Performance Indicator (KPI). Examples of performance indicators include but are not limited to full compliance to HCV and HCS guidelines as well as RSPO NPP. In complement to the monetary reward, non-monetary</td>
</tr>
</tbody>
</table>
reward such as special assignment is also given to those who perform. They are given the authority to form, develop, and budget projects/teams/action plans to improve on the performance indicators.

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 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 2018, forest-related discussion can be found in page 27-30.

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.

<table>
<thead>
<tr>
<th>Scope</th>
<th>Content</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Row 1</td>
<td>Company-wide Commitment to eliminate deforestation Commitment to protect rights and livelihoods of local communities Commitments beyond regulatory compliance Commitment to transparency Commitment to stakeholder awareness and engagement</td>
<td>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 continual compliance in local, national, and international laws, dedicated teams are established to regularly review and update the current sustainability policy. In September 2020, Musim Mas updated 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:</td>
</tr>
</tbody>
</table>
| 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  
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 | 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 relationship with suppliers, customers, and stakeholders  
4. Driving innovation in sustainable practices  

On our daily operations, Musim Mas strives to operate in accordance with these key pillars. For more information, our sustainability policy can be found in http://www.musimmas.com/sustainability/sustainability-policy. |

**F4.5b**

(F4.5b) Do you have commodity specific sustainability policy(ies)? If yes, select the options that best describe their scope and content.
<table>
<thead>
<tr>
<th>Do you have a commodity specific sustainability policy?</th>
<th>Scope</th>
<th>Content</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palm oil</td>
<td>Yes</td>
<td>Company-wide</td>
<td>Commitment to eliminate conversion of natural ecosystems Commitment to eliminate deforestation Commitment to no deforestation, to no planting on peatlands and to no exploitation (NDPE) Commitment to protect rights and livelihoods of local communities Commitment beyond regulatory compliance Commitment to transparency Commitment to stakeholder awareness and engagement Commitment to align with the SDGs</td>
</tr>
<tr>
<td>Recognition of the overall importance of forests and other natural ecosystems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Description of business dependency on forests</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recognition of potential business impact on forests and other natural ecosystems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Description of forest risk commodities, parts of the business, and stages of value-chain covered by the policy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>List of timebound commitments and targets</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Description of forests-related performance standards for direct operations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Description of forests-related standards for procurement</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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?
   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 2020
   - 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

(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
   - Zero net deforestation
   - No new development on peat regardless of depth
   - Best management practices for existing cultivation on peat
   - 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
   - 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
No sourcing of illegally produced and/or traded forest risk commodities
No sourcing of forest risk commodities from unknown/controversial 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

Commitment target date
2021-25

Please explain
Following our sustainability policy, Musim Mas’s commitment to conserve and preserve both biodiversity and the environment has been long-standing and will only continue to become our utmost priorities. As a member of the Palm Oil Innovation Group (POIG), the Roundtable on Sustainable Palm Oil (RSPO), Indonesian Sustainability Palm Oil (ISPO), and International Sustainability and Carbon Certification (ISCC), Musim Mas pledge to No Deforestation of High Carbon Stock (HCS) forests, No Conversion of High Conservation Value (HCV) areas, No Developments on Peatlands regardless of depth, and Zero Burning policy.

We respect of the formal and customary rights of indigenous peoples (outlined in the UN Declaration on the Rights of Indigenous Peoples) and local communities. Respecting the rights of smallholders’ prerogative to grant or withhold Free, Prior and Informed Consent (FPIC) for all new developments or conservation areas which may affect indigenous peoples’ and local communities’ rights, land, resources, territories, livelihoods, and food security, and providing remedy in cases where existing operations have caused harm.

Additionally, we use dedicated conservation management and monitoring plans to safeguard our conservation areas. Conservation and protection measures include restoring areas that are degraded and managing riparian buffer zones, regularly conducting biodiversity surveys, patrolling grounds and monitoring for encroachment through satellite surveillance to prevent illegal development. We strictly prohibit the hunting of rare, threatened and endangered species and 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.

Prior to any new development, we carry out rigorous assessments and follow the
process outlined in the RSPO New Planting Procedure (NPP), including identifying and conserving areas with High Conservation Value (HCV) and High Carbon Stock (HCS). This included observing Free, Prior and Informed Consent (FPIC) through consultation and negotiation with all affected communities. In 2019, we submitted an RSPO NPP implementation plan for 1,182 hectares at PT. Lestari Abadi Perkasa that were designated for future planting.

In 2020, our HCV-HCS conservation area are now amounting to approximately 27,500 hectares. In 2020, we began collaborating with the South East Asia Rainforest Research Partnership (SEARRP), a Borneo-based scientific research facility that has expertise in habitat restoration and sustainable plantation management. Through this partnership, we aim to quantify our conservation efforts and review our management and monitoring plans.

Musim Mas will also continue to improve our sustainability practices and will remain an industry leader in innovation by participating in the continuous improvement of standards, monitoring systems, and applied research. The sustainability policy can be found on https://www.musimmas.com/sustainability/ndpe-policy/.

## F5. Business strategy

### F5.1

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

<table>
<thead>
<tr>
<th>Are forests-related issues integrated?</th>
<th>Long-term time horizon (years)</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, forests-related issues are integrated</td>
<td>5-10</td>
<td>Recognising the impact of forests-related issues, Musim Mas announced its sustainability policy in December 2014. As a member of the Palm Oil Innovation Group (POIG), the Roundtable on Sustainable Palm Oil (RSPO), Indonesian Sustainability Palm Oil (ISPO), and International Sustainability and Carbon Certification (ISCC), Musim Mas pledges to No Deforestation of High Carbon Stock (HCS) forests, No Conversion of High Conservation Value (HCV) areas, No Developments on Peatlands regardless of depth, and Zero Burning policy. As of 2020, approximately 27,500 hectares have been set aside for HCV-HCS conservation. To ensure NDPE commitments, our operations are certified by well recognised third-party sustainability certification schemes such as RSPO and ISCC. These</td>
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<tr>
<td>Long-term business objectives</td>
<td></td>
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</tbody>
</table>
certification schemes ensure that audits have been conducted independently, thus, ensuring proper implementation and compliance to the principles and criteria of the sustainability certification schemes including no peatland development and GHG emission reduction.

Additionally, we use dedicated conservation management and monitoring plans to safeguard our conservation areas. Conservation and protection measures include restoring areas that are degraded and managing riparian buffer zones, regularly conducting biodiversity surveys, patrolling grounds and monitoring for encroachment through satellite surveillance to prevent illegal development. We strictly prohibit the hunting of rare, threatened and endangered species and 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.

Musim Mas will continue to improve its sustainability practices and will remain as the industry leader in innovation by participating in the continuous improvement of standards, monitoring systems, and applied research.

<table>
<thead>
<tr>
<th>Strategy for long-term objectives</th>
<th>Yes, forests-related issues are integrated</th>
<th>5-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forests-related issues have induced Musim Mas to alter its approach in growing our business. With sustainability policy becomes our core value in our operations, as of 2020, Musim Mas has implemented the following practices:</td>
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<tr>
<td>- Completed group-level supplier profiles for all supplier groups</td>
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<tr>
<td>- Ensured that all primary supplier groups are covered by roadmaps leading to the implementation of milestones towards No Deforestation, No Peat, No Exploitation (NDPE) commitments</td>
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<tr>
<td>- Engage with suppliers to complete Musim Mas Self-Assessment Tool (SAT). In 2020, 60% have complete the form.</td>
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<tr>
<td>- Ensure that 100% of supply base/suppliers’ mill with concession (more than 6 million ha) is monitored via satellite imagery for deforestation and peatland development</td>
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</tbody>
</table>
- Impose traceability to plantation commitment. As of 2020, we have achieved 83% traceability to total supply base (plantation).
- Engaged and trained 32,101 independent smallholders under the Indonesian Palm Oil Development for Smallholders programme in 2020. As of 2020, 2092 smallholders have become RSPO certified
- Working closely with other relevant stakeholders. For example, joined landscape programme in Siak with a coalition of companies and the Siak District Government.

By prioritising the sustainability aspects and practices across our supply chain, Musim Mas will continue to become the front runner in sustainable palm oil industry for many years to come.

<table>
<thead>
<tr>
<th>Financial planning</th>
<th>Yes, forests-related issues are integrated</th>
<th>5-10</th>
</tr>
</thead>
<tbody>
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<td></td>
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</tbody>
</table>

The change in our long-term business objectives and strategy has altered the way we budget and finance our operations. For example, investors and some banks are starting to require sustainability disclosure. In light of this, we plan our finances accordingly. For example, we invest in new technology such as methane capture plants to further reduce our GHG emissions. 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. As of 2020, 13 out of 15 mills have been RSPO-certified and we are on track to achieve 100% RSPO certified mills in 2021.

**F6. Implementation**

**F6.1**

(F6.1) Did you have any timebound and quantifiable targets for increasing sustainable production and/or consumption of your disclosed commodity(ies) that were active during the reporting year?

Yes

**F6.1a**

(F6.1a) Provide details of your timebound and quantifiable target(s) for increasing sustainable production and/or consumption of the disclosed commodity(ies), and progress made.
Target reference number
Target 1

Forest risk commodity
Palm oil

Type of target
Third-party certification

Description of target
Known third-party certifications such as RSPO, POIG, and ISCC play an important role in our sustainability journey. Undergoing these well recognised certifications demonstrate that Musim Mas has continuously fulfilled the highest sustainability standards across the supply chain.

Linked commitment
Zero net/gross deforestation

Traceability point

Third-party certification scheme
RSPO (any type)
International Sustainability and Carbon Certification (ISCC)

Start year
2009

Target year
2021

Quantitative metric

Target (number)

Target (%)
100

% of target achieved
87

Please explain
One important sustainability benchmark is through the recognition of third-party sustainability certifications and verifications. These independent certifications ensure that Musim Mas's supply chain is in full compliance with the highest sustainability standards including no peat development, no deforestation, no burning policy, etc. With dedicated teams, we are targeting 100% of RSPO certification for all our mill operations by 2021.
Musim Mas is certified under the widely known Roundtable on Sustainable Palm Oil (RSPO) standard to enhance both accountability and traceability at every step. As of 2020, 13 out of 15 of our mills (87%) have been RSPO-certified with the remaining mill is still pending for on-site audit which delayed due to the COVID-19 pandemic. Moreover, as of December 2020, all 45 of our downstream operations were certified against the RSPO Supply Chain Certification Standard (SCCS).

<table>
<thead>
<tr>
<th>Target reference number</th>
<th>Target 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forest risk commodity</td>
<td>Palm oil</td>
</tr>
<tr>
<td>Type of target</td>
<td>Assess and/or verify compliance</td>
</tr>
<tr>
<td>Description of target</td>
<td>Since 2015, Musim Mas has been a member of the Palm Oil Innovation Group (POIG). We are 100% POIG verified by 2019 at group level. Being verified by POIG means that we are verified against the strictest sustainability guidelines.</td>
</tr>
<tr>
<td>Linked commitment</td>
<td>Zero net/gross deforestation</td>
</tr>
<tr>
<td>Traceability point</td>
<td></td>
</tr>
<tr>
<td>Third-party certification scheme</td>
<td></td>
</tr>
<tr>
<td>Start year</td>
<td>2017</td>
</tr>
<tr>
<td>Target year</td>
<td>2019</td>
</tr>
<tr>
<td>Quantitative metric</td>
<td></td>
</tr>
<tr>
<td>Target (number)</td>
<td></td>
</tr>
<tr>
<td>Target (%)</td>
<td>100</td>
</tr>
<tr>
<td>% of target achieved</td>
<td>100</td>
</tr>
<tr>
<td>Please explain</td>
<td></td>
</tr>
</tbody>
</table>
Being POIG-verified means that products are independently verified against stringent standards and best-in-class. No Deforestation, No Peat, No Exploitation (NDPE) policies, some of which already meet the standards resulting from the adoption of the 2018 RSPO P&C. We are the first Southeast Asia company to be 100% POIG verified by 2019 at group level.

---

**Target reference number**

Target 3

**Forest risk commodity**

Palm oil

**Type of target**

Traceability

**Description of target**

Both full traceability and transparency across our supply chain are managed in our sustainability policy. Traceability across the supply chain is crucial to ensure that suppliers are compliance with our NDPE commitment. By 2025, we are on-track to be 100% of the total supply traceable to plantation. The latest development can be viewed in our website: https://www.musimmas.com/sustainability/ndpe/.

**Linked commitment**

Other environmental commitments

**Traceability point**

Plantation

**Third-party certification scheme**

**Start year**

2015

**Target year**

2025

**Quantitative metric**

**Target (number)**

100

**Target (%)**

83

**% of target achieved**

83
Please explain
Since 2015, we have achieved 100% traceability to mills and to the Group’s plantations. As of December 2020, 83% have been traced to plantation. We are committed and on-track to achieve 100% traceability of total supply to plantation by 2025. To enhance our traceability and NDPE compliance, we also initiate Musim Mas Self-Assessment Tools (SAT), an exhaustive set of questions against our NDPE requirements, to self-declare information about their operations, thus, allowing us to identify potential risk areas at the mill level. For more information, please refer to:

F6.2

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

<table>
<thead>
<tr>
<th>Do you have system(s) in place?</th>
<th>Description of traceability system</th>
<th>Exclusions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palm oil</td>
<td>Yes</td>
<td>Our traceability systems include traceability to the Group’s plantations, Group’s direct supply base of independent smallholders, third-party supply to plantations, and suppliers independent smallholders supply base using risk-based traceability. We use various methods and tools to achieve full traceability across our supply chain including satellite monitoring, ground-truthing, RADD partnership, NDPE Implementation Reporting Framework (IRF), Musim Mas SAT, and other publicly available tools such as GFW. With almost 6 million hectares monitored on daily basis, we prioritise concessions that are nearby highly sensitive areas (i.e. ecosystem with high conservation values and endangered biodiversity) and those of which are reported for alleged non-compliances (i.e. grievance channels). Through these various approaches, we can then track the progress of suppliers on NDPE commitments and detect (or verify) any non-compliance suppliers. Since 2015, we have achieved 100% traceability to mill with 83% of the total supply to plantation is traceable in 2020. We are on track in achieving 100% traceability to plantation by 2025.</td>
</tr>
</tbody>
</table>

F6.2a

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

<table>
<thead>
<tr>
<th>Forest risk commodity</th>
<th>Point to which commodity is traceable</th>
<th>% of total production/consumption volume traceable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palm oil</td>
<td>Plantation</td>
<td>83</td>
</tr>
<tr>
<td>Palm oil</td>
<td>Mill</td>
<td>100</td>
</tr>
</tbody>
</table>
F6.3

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

<table>
<thead>
<tr>
<th></th>
<th>Third-party certification scheme adopted?</th>
<th>% of total production and/or consumption volume certified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palm oil</td>
<td>Yes</td>
<td>87</td>
</tr>
</tbody>
</table>

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

% of total production/consumption volume certified
- 87

Form of commodity
- Crude palm oil (CPO)
- Other, please specify
  - Palm Kernel (PK)

Volume of production/consumption certified
- 872,956

Metric for volume
- Metric tons

Is this certified by more than one scheme?
- Yes

Please explain
- We maintain our FFB and CPO production from both our own plantations and associated scheme smallholders to be RSPO certified, whereas all new plantation or mill will be certified within 3 years of acquisition. The company has established a dedicated certification team to obtain and maintain RSPO certification.
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?

<table>
<thead>
<tr>
<th>A system to control, monitor or verify compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palm oil</td>
</tr>
<tr>
<td>Yes, we have a system in place for our no conversion and/or deforestation commitments</td>
</tr>
</tbody>
</table>

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 oil

Operational coverage
- Direct operations
- Supply chain

Description of control systems
- Musim Mas has its own NDPE to ensure there are No Deforestation, No Peat and No Exploitation in our business. Standard Operational Procedures (SOPs) are in place to monitor our compliance and practices. We are a member and committed to the RSPO, ISCC, ISPO, POIG as well as HCSA. HCV and HCSA are conducted in our operational units. Furthermore, we have dedicated department and teams to ensure compliance to these commitments. Internally, we conduct our own risk assessment as well as monitoring using remote sensing method and ground truthing checking. External and internal audits are also conducted regularly to maintain our compliance. Additionally, we are aware that the conversion and/or deforestation may come from the local community, therefore we regularly conduct the stakeholder consultation to educate the local community on our NDPE. Together with the community, we also have Fire Free Program called "Masyarakat Bebas Api" to promote a fire-free and deforestation land conversion.

Monitoring and verification approach
- Geospatial monitoring tool
- Ground-based monitoring system
- Community-based monitoring
- First-party verification
- Second-party verification
- Third-party verification

% of total volume in compliance
- 100%
% of total suppliers in compliance
100%

Response to supplier non-compliance
Other, please specify
We will immediately engage supplier follow put CPP (Controlled Purchase Protocol) with companies to take immediate action such as Stop Work Order, corrective action plan including developing HCV area, HCS forest or peatland and burning.

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
Re-integrating suppliers back into supply chain based on the successful and verifiable completion of activities

Please explain
We will review our business dealings with suppliers who are found to breach our sustainability policy. We recognize that suppliers may need time to implement the guidelines laid down by the policy. We believe that close cooperation and constructive dialogues with suppliers are necessary to integrate sustainable development principles with current business practices. We will work with suppliers through training, capacity building programmes and continuous positive support.

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.

<table>
<thead>
<tr>
<th>Assess legal compliance with forest regulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palm oil</td>
</tr>
</tbody>
</table>

F6.6a

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

Palm oil

Procedure to ensure legal compliance
Corporate affair team constantly monitor our compliance to the relevant local and national regulations. Sustainability team constantly monitors and updates our compliances to our NDPE policy as well as several recognised third-party certifications scheme including RSPO, ISCC, and ISPO. Since regular audits are conducted to achieve these certification schemes, they are used to track and monitor legal adherence toward our sustainability practices and standards of the highest level.

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?

<table>
<thead>
<tr>
<th>Are you working with smallholders?</th>
<th>Type of smallholder engagement approach</th>
<th>Smallholder engagement approach</th>
<th>Number of smallholders engaged</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palm oil</td>
<td>Yes, working with smallholders</td>
<td>Supply chain mapping</td>
<td>Supplier questionnaires on</td>
<td>Musim Mas is working close with smallholders in various programs, for example:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Capacity building</td>
<td>environmental and social</td>
<td>1. Scheme smallholder program</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Financial and commercial</td>
<td>indicators</td>
<td>2. Capacity building in terms of Best Management Practices and certified products</td>
</tr>
<tr>
<td></td>
<td></td>
<td>incentives</td>
<td>Developing or distributing</td>
<td>3. Initiate Fire Free Village program called Masyarakat Bebas Api. As of December 2020, our FFVP covered 75 villages spanning 468,569 hectares and have conducted 144 trainings in the communities</td>
</tr>
<tr>
<td></td>
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<td>supply chain mapping tool</td>
<td>4. Joint monitoring of conservation area</td>
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<td>Offering on-site technical</td>
<td>5. CSR program to smallholders</td>
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<td></td>
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<td>assistance and extension</td>
<td>6. Piloting a smallholder certification scheme with IFC (International Finance Corporation). As 2020, 2092 smallholders have been RSPO certified</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>services</td>
<td>7. Musim Mas is working</td>
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<td></td>
<td>Organizing capacity building</td>
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<td>events</td>
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<td>Prioritizing support for</td>
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<td>smallholders in high-risk</td>
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<td></td>
<td>deforestation regions</td>
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</tbody>
</table>
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 respective landscape

### F6.8

(F6.8) Are you working with your direct suppliers to support and improve their capacity to comply with your forests-related policies, commitments, and other requirements?

<table>
<thead>
<tr>
<th>Are you working with direct suppliers?</th>
<th>Type of direct supplier engagement approach</th>
<th>Direct supplier engagement approach</th>
<th>% of suppliers engaged</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, working with direct suppliers</td>
<td>Supply chain mapping</td>
<td>Supplier questionnaires on environmental and social indicators</td>
<td>91-99%</td>
<td>We are working with our direct suppliers in various aspects including engagement to our NDPE policy. Since 2019, we began trialling NDPE Implementation Reporting Framework (IRF) to track progress on deforestation/peat commitments of suppliers. Moreover, we also conduct workshops on NDPE commitments along with Musim Mas Self-Assessment Tool (SAT). We are also working with the Consortium of Resource Experts (CORE) – Proforest and Daemeter – on implementing NDPE commitments, the Extension Services Programme and landscape collaborations. As of 2020, 97% of suppliers have either an NDPE policy or adopted the Musim Mas Sustainability Policy. More on NDPE engagement can be found at <a href="https://www.musimmas.com/sustainability/ndpe-roadmap/">https://www.musimmas.com/sustainability/ndpe-roadmap/</a></td>
</tr>
<tr>
<td>Palm oil</td>
<td>Capacity building</td>
<td>Developing or distributing supply chain mapping tool</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Financial and commercial incentives</td>
<td>Offering on-site training and technical assistance</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Financial incentives for certified products</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
F6.9

(F6.9) Are you working beyond your first-tier supplier(s) to manage and mitigate deforestation risks?

<table>
<thead>
<tr>
<th>Are you working beyond first tier?</th>
<th>Type of engagement approach with indirect suppliers</th>
<th>Indirect supplier engagement approach</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palm oil (Yes, working beyond first tier)</td>
<td>Supply chain mapping</td>
<td>Developing or distributing supply chain mapping tools</td>
<td>We have mapped our indirect suppliers and held socialization to promote sustainability through our Sustainability and NDPE policies. For example, in 2020, we have engaged our 30 suppliers in Aceh to conduct socialization on Musim Mas NDPE to their respective FFB suppliers.</td>
</tr>
<tr>
<td></td>
<td>Capacity building</td>
<td>On-site meetings with indirect suppliers</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Offering on-site training and technical assistance</td>
<td></td>
</tr>
</tbody>
</table>

F6.10

(F6.10) Do you participate in 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 jurisdictional approaches

Initiatives

Jurisdictional approaches
Other, please specify
Earhqualizer

Please explain
Sambas landscape covers an area of around 671,700 hectares which consists of production forest, protected forest, conservation forest, peatland and village areas. Through multi-stakeholder collaboration (i.e. Sambas District Government and
Earthqualizer), Musim Mas aims to improve villages’ and communities’ economic livelihood. This includes supporting local communities on social forestry knowledge and capacity by providing access to local forest areas and land legalisation, establishing sustainable use and forest management practices, and establishing small business models to improve land use. These activities and initiatives are done in accordance with our sustainability and NDPE policies.

Since its initiation in 2018, the social forestry programme at Sambas landscape has engaged 80 households in four villages: Sebubus, Kaliau, Sanatab, and Santaban. We assist villages in developing land use plans via a participatory planning approach as well as helping with the planning and drafting of village policy in Sambas, West Kalimantan. Additionally, Musim Mas also assist independent smallholders in the area with land legalisation and registration. In August 2019, a multi-stakeholder forum was held at the Sambas district regional development planning agency office resulting in a set of recommendations such as the need for developing multi-stakeholder collaboration and synergy for area development and forest area management, as well as for village areas, particularly the ones located in Sambas Landscape.

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**Forest risk commodity**

Palm oil

**Do you participate in activities/initiatives?**

Yes

**Activities**

Involved in multi-partnership or stakeholder initiatives

**Initiatives**

Other, please specify
- IDH (the Sustainable Trade Initiative), Government of Aceh, Unilever, PepsiCo, General Mills, Local civil society organisations, Earthqualizer

**Jurisdictional approaches**

**Please explain**

Aceh Tamiang is home to five million Indonesians from over ten ethnic groups, and the Leuser Ecosystem, an ecological hotspot known for its biological diversity. Musim Mas collaborates with IDH (the Sustainable Trade Initiative), Government of Aceh, Forum Konservasi Leuser (FKL), Pusat Unggulan Perkebunan Lestari (PUPL), downstream actors (Unilever, PepsiCo ) local civil society organisations, Earthqualizer, and suppliers, including those outside our supply chain to have Aceh Tamiang verified as a deforestation free and traceable commodities producer.

Align with our sustainability policy, Musim Mas engages closely with third-party suppliers, independent smallholders, and stakeholders in three priority areas – Tamiang, Timur, and Singkil – to address risks of encroachment into the Leuser Ecosystem, specifically in Aceh Tamiang and the South Aceh region. Additionally, we establish a
Smallholder Hub where we can build the capacity of local agricultural officers to enable them to train independent smallholders in their area. Moreover, we assist villages in developing land use plans via a participatory planning approach and assist the planning and drafting of village policy in Aceh Singkil and the South Aceh district. Last but not least, we also help independent smallholders in the area with land legalisation and registration. These activities and initiatives are done in accordance with our sustainability and NDPE policies.

F6.11

(F6.11) Is your organization supporting or implementing project(s) focused on ecosystem restoration and protection?
Yes

F6.11a

(F6.11a) 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
Forest ecosystem restoration

Primary motivation
Voluntary

Description of project
Siak district is home to vulnerable communities and ecosystems that have been adversely affected by agricultural expansion in the past. 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 more than one-third of the land area owned by smallholders who need counselling and assistance with various agricultural challenges. 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. Plan of actions include conserving plots of land and preventing deforestation by training independent smallholders and supporting suppliers on traceability and NDPE commitments.

Start year
2019

Target year
2024

Project area to date (Hectares)
Project area in the target year (Hectares)
5,000

Country/Area
Indonesia

Latitude
0

Longitude
0

Monitoring frequency
Six-monthly or more frequently

Measured outcomes to date
Biodiversity
Carbon sequestration
Soil

Please explain
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: Sinar Mas Agribusiness and Food (GAR)) and Local NGOs (Sedagho Siak).

The Coalition have an overlapping third-party supply base, including both smallholders and mills in Siak and Pelalawan, and shared objectives that include advancing all palm oil producers in Siak and Pelalawan towards deforestation and exploitation 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. Respect labour and community rights within the palm oil sector
4. Pursue sustainable palm oil production goals through improved district policies and plans

For more information on the project, refer to https://www.musimmas.com/social-forestry-made-priority-program-for-collaborative-and-sustainable-management-of-sambas-landscape/

Project reference
Project 2

Project type
Other, please specify
Deforestation Free Sourcing Area- VSA (Verified Sourcing Area) jurisdiction

Primary motivation
Voluntary

Description of project
Aceh Tamiang is home to five million Indonesians from over ten ethnic groups, and the Leuser Ecosystem, an ecological hotspot known for its biological diversity. Musim Mas collaborates with IDH (the Sustainable Trade Initiative), Government of Aceh, Forum Konservasi Leuser (FKL), Pusat Unggulan Perkebunan Lestari (PUPL), downstream actors (Unilever, PepsiCo) local civil society organisations, Earthqualizer, and suppliers, including those outside our supply chain to have Aceh Tamiang verified as a deforestation free and traceable commodities producer. Musim Mas engages closely with our third-party suppliers, independent smallholders, and stakeholders in three priority areas – Tamiang, Timur, and Singkil – to address risks of encroachment into the Leuser Ecosystem, specifically in Aceh Tamiang and the South Aceh region. Additionally, we establish a Smallholder Hub where we can build the capacity of local agricultural officers to enable them to train independent smallholders in their area. Moreover, we assist villages in developing land use plans via a participatory planning approach and assist the planning and drafting of village policy in Aceh Singkil and the South Aceh district. Last but not least, we also help independent smallholders in the area with land legalisation and registration.

Start year
2019

Target year
2025

Project area to date (Hectares)
25,000

Project area in the target year (Hectares)
25,000

Country/Area
Indonesia

Latitude
0

Longitude
0

Monitoring frequency
Six-monthly or more frequently

Measured outcomes to date
Biodiversity
Carbon sequestration
Soil

Please explain
Key expected outcomes include Good governance and transparency platform, 25 000 ha forest protection in place with 435 000 tons of sustainable palm produced by estates and smallholders per year from the VSA, double the number of smallholders with legal land title, positive progress of sustainable standard compliance for workers and labor in the palm oil and rubber safety and health. A model of measure, verification and monitoring system for VSA implementation has been tested and accepted by the stakeholders.

F7. Verification

F7.1

(F7.1) Do you verify any forests information reported in your CDP disclosure?
No, but we are actively considering verifying in the next two years

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
Supply chain complexity

Comment
Third party suppliers such as outgrowers, small-growers, independent smallholders have little knowledge on the HCV and/or HCS area. Thus, we are conducting socialization, training and knowledge sharing to educate them on conservation area such as HCV, HCS and the importance to maintain the conservation area.
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.

<table>
<thead>
<tr>
<th>Forest risk commodity</th>
<th>Palm oil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coverage</td>
<td>Supply chain</td>
</tr>
<tr>
<td>Main measure</td>
<td>Investment in monitoring tools and traceability systems</td>
</tr>
<tr>
<td>Comment</td>
<td>In accordance with our sustainability policy, we are committed to ensure a fully traceable supply chain and implementation of NDPE practices. For this, we actively engage with suppliers through workshops and annual Musim Mas Self-Assessment Tool.</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Job Title</th>
<th>Corresponding job category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director of Sustainable Supply Chain</td>
<td>Other, please specify</td>
</tr>
<tr>
<td></td>
<td>Director of Sustainable Supply Chain</td>
</tr>
</tbody>
</table>

SF. Supply chain module

SF0.1

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

<table>
<thead>
<tr>
<th>Annual revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
</tr>
</tbody>
</table>
SF0.2

(SF0.2) Do you have an ISIN for your organization that you are willing to share with CDP?
   No

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

<table>
<thead>
<tr>
<th>I am submitting to</th>
<th>Public or Non-Public Submission</th>
<th>Are you ready to submit the additional Supply Chain questions?</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am submitting my response</td>
<td>Investors, Customers</td>
<td>Public</td>
</tr>
</tbody>
</table>

Please confirm below

I have read and accept the applicable Terms