Welcome to your CDP Forests Questionnaire 2020

F0. Introduction

F0.1

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

GAR is one of the leading palm oil plantation companies located in Indonesia with Integrated operations focused on the production of palm-based edible oils, fats, and fuels. GAR is focused on sustainable palm oil production and its primary activities range from cultivating and harvesting oil palm trees, processing fresh fruit bunches (FFB) into crude palm oil (CPO) and palm kernel (PK), to refining CPO into industrial and consumer products such as cooking oil, margarine, shortening, and specialty fats, as well as merchandising palm products throughout the world.

GAR aims to be the leader in sustainable palm oil production by adopting the best industry practices and standards, managing the environment responsibly and empowering the communities where we operate while delivering shareholder value. Our sustainability strategy is based on implementing best practices holistically in all dimensions of sustainability (the environment, community, work environment, supply chain and marketplace); benchmarking our practices against the Roundtable on Sustainable Palm Oil (RSPO) Principles and Criteria and the core principles of the United Nations Global Compact (UNGC); and engaging stakeholders.

F0.2

(F0.2) State the start and end date of the year for which you are reporting data.

<table>
<thead>
<tr>
<th>Reporting year</th>
<th>Start Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 1, 2019</td>
<td>December 31, 2019</td>
<td></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. For each forest risk commodity selected, identify the stages of the supply chain which best represents your organization’s area of operation.

<table>
<thead>
<tr>
<th>Commodity disclosure</th>
<th>Stage of the value chain</th>
</tr>
</thead>
</table>


<table>
<thead>
<tr>
<th>Commodity</th>
<th>Activity</th>
<th>Form of commodity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timber products</td>
<td>This commodity is not produced, sourced or used by our organization</td>
<td></td>
</tr>
<tr>
<td>Palm oil</td>
<td>Disclosing</td>
<td></td>
</tr>
<tr>
<td>Cattle products</td>
<td>This commodity is not produced, sourced or used by our organization</td>
<td></td>
</tr>
<tr>
<td>Soy</td>
<td>This commodity is not produced, sourced or used by our organization</td>
<td></td>
</tr>
<tr>
<td>Other - Rubber</td>
<td>This commodity is not produced, sourced or used by our organization</td>
<td></td>
</tr>
<tr>
<td>Other - Cocoa</td>
<td>This commodity is not produced, sourced or used by our organization</td>
<td></td>
</tr>
<tr>
<td>Other - Coffee</td>
<td>This commodity is not produced, sourced or used by our organization</td>
<td></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

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Activity  
Growing/production of raw materials
Harvesting
Milling
Refining & processing
Exporting/trading
Using as input into product manufacturing
Retailing/onward sale of commodity or product containing commodity

Form of commodity
GAR is a vertically-integrated palm oil plantation company with a commitment to responsible palm oil with plantations and production facilities based in Indonesia. Our primary activities include cultivating and harvesting oil palm trees; extracting fresh fruit bunches (FFB) into crude palm oil (CPO) and palm kernel; to processing it into value-added products such as cooking oil, margarine, shortening, biodiesel and oleochemicals; as well as merchandising palm products throughout the world.

We are a major grower with around 500,000 hectares of plantation area producing palm oil Fresh Fruit Bunches (FFB). 77% of FFB is produced on our nucleus estates, with another 23% FFB coming from plasma smallholders, and third party estates. FFB, the feedstock for the mills, are in turn supplied by our own nucleus estates, third-party estates, thousands of individual farmers (plasma and independent), as well as brokers and agents who buy from farmers.

The bulk of our palm oil is distributed through our customers, which include traders, distributors, wholesalers, retailers as well as other businesses in the food and manufacturing industries that use our oil as a raw material in the production of secondary goods. Palm oil is an extremely versatile raw material used to make many daily products ranging from cooking oil to household cleaners.
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>Forest risk commodity</th>
<th>% of revenue dependent on commodity</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palm oil</td>
<td>91-99%</td>
<td>We are a vertically integrated company in production of palm oil and its derivatives. The majority of our revenue is dependent on palm oil.</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>
<th>% Area certified</th>
<th>Certification scheme</th>
<th>Conversion of natural ecosystems during the reporting year</th>
<th>Area converted during the reporting year (hectares)</th>
<th>% covered by natural forests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palm oil</td>
<td>Concession/lease</td>
<td>Indonesia</td>
<td>392,836</td>
<td>59.6</td>
<td>RSPO producer/grower certification, International Sustainability and Carbon Certification (ISCC)</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please explain
**Forest risk commodity**  
Palm oil

**Type of control**  
Scheme/Plasma smallholders

**Country/Area**  
Indonesia

**Area (Hectares)**  
103,480

**% Area certified**  
52

**Certification scheme**  
- RSPO producer/grower certification  
- International Sustainability and Carbon Certification (ISCC)

**Conversion of natural ecosystems during the reporting year**  
No

**Area converted during the reporting year (hectares)**

**% covered by natural forests**

Please explain

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**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.

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**Forest risk commodity**  
Palm oil

**Country/Area**  
Indonesia

**Type of control**  
Concession/lease

**Land type**  
Set-aside land
Area (hectares)  
53,248

% covered by natural forests  
75

Please explain  
The set aside land is High Conservation Value area. The area is not only covered by natural forests, but also includes grass and bushland (especially on peat), riparian zones and palm in areas which are being remediated.

Forest risk commodity  
Palm oil

Country/Area  
Indonesia

Type of control  
Concession/lease

Land type  
Set-aside land

Area (hectares)  
19,082

% covered by natural forests  
75

Please explain  
The set aside land is High Carbon Stock area. The area is not only covered by natural forests, but also includes grass and bushland (especially on peat) and palm in areas which are being remediated.

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.
**Forest risk commodity**
Palm oil

**Data type**
Production data

**Volume**
2,306,000

**Metric**
Metric tons

**Data coverage**
Full commodity production/consumption

**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.

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**Forest risk commodity**
Palm oil

**Country/Area of origin**
Indonesia

**State or equivalent jurisdiction**
Specify state/equivalent jurisdiction
Sumatra

**% of total production/consumption volume**
45

**Please explain**
This location accounts for 45% of our own palm production which is 100% traceable to the plantation (GAR-owned mills achieved full TTP in 2017).

We are a major grower with around 500,000 hectares of plantation area producing palm oil Fresh Fruit Bunches (FFB). 77% of FFB is produced on our nucleus estates, with another 23% FFB coming from plasma smallholders, and third party estates. FFB, the feedstock for the mills, are in turn supplied by our own nucleus estates, third-party estates, thousands of individual farmers (plasma and independent), as well as brokers and agents who buy from farmers.
We maintain full traceability through a documented traceability system. Our traceability information is updated quarterly on the GAR Sustainability Dashboard (https://goldenagri.com.sg/sustainability-dashboard/)

GAR reports the proportion of FFB processed in GAR's own mills that are traceable to the plantation on a quarterly basis. For FFB received to be considered traceable to plantation the following information needs to be provided and verified:

Information of the plantations supplying FFB to the mill:
- Company/owner of the plantation
- Address of the plantation
- Maps/geospatial information of boundaries of the plantation
- Area of the plantation

Percentage of FFB received by each mill from this plantation. This is derived from volumes received from the estate as a proportion of total volume received by the mill in a quarter.

We are working to expand full TTP to our entire palm supply chain involving third-party mills which supply our downstream facilities (refineries) by end 2020.

<table>
<thead>
<tr>
<th>Forest risk commodity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palm oil</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>State or equivalent jurisdiction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specify state/equivalent jurisdiction</td>
</tr>
<tr>
<td>Kalimantan</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>% of total production/consumption volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>53</td>
</tr>
</tbody>
</table>

Please explain

This location accounts for 53% of our own palm production which is 100% traceable to the plantation (GAR-owned mills achieved full Traceability to the Plantation in 2017).

We are a major grower with around 500,000 hectares of plantation area producing palm oil Fresh Fruit Bunches (FFB). 77% of FFB is produced on our nucleus estates, with another 23% FFB coming from plasma smallholders, and third party estates. FFB, the feedstock for the mills, are in turn supplied by our own nucleus estates, third-party estates, thousands of individual farmers (plasma and independent), as well as brokers and agents who buy from farmers.
We maintain full traceability through a documented traceability system. Our traceability information is updated quarterly on the GAR Sustainability Dashboard (https://goldenagri.com.sg/sustainability-dashboard/)

GAR reports the proportion of FFB processed in GAR’s own mills that are traceable to the plantation on a quarterly basis. For FFB received to be considered traceable to plantation the following information needs to be provided and verified:

Information of the plantations supplying FFB to the mill:
- Company/owner of the plantation
- Address of the plantation
- Maps/geospatial information of boundaries of the plantation
- Area of the plantation

Percentage of FFB received by each mill from this plantation. This is derived from volumes received from the estate as a proportion of total volume received by the mill in a quarter.

We are working to expand full TTP to our entire palm supply chain involving third-party mills which supply our downstream facilities (refineries) by end 2020.

Only one plantation in Semitau, West Kalimantan is located in the RAMSCAR Sentarum Lake biome.

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**Forest risk commodity**
- Palm oil

**Country/Area of origin**
- Indonesia

**State or equivalent jurisdiction**
- Specify state/equivalent jurisdiction
  - Papua

**% of total production/consumption volume**
- 2

**Please explain**
This location accounts for 2% of our own palm production which is 100% traceable to the plantation (GAR-owned mills achieved full Traceability to the Plantation in 2017).

We are a major grower with around 500,000 hectares of plantation area producing palm oil Fresh Fruit Bunches (FFB). 77% of FFB is produced on our nucleus estates, with another 23% FFB coming from plasma smallholders, and third party estates. FFB, the feedstock for the mills, are in turn supplied by our own nucleus estates, third-party estates, thousands of individual farmers (plasma and independent), as well as brokers.
and agents who buy from farmers.

We maintain full traceability through a documented traceability system. Our traceability information is updated quarterly on the GAR Sustainability Dashboard (https://goldenagri.com.sg/sustainability-dashboard/)

GAR reports the proportion of FFB processed in GAR’s own mills that are traceable to the plantation on a quarterly basis. For FFB received to be considered traceable to plantation the following information needs to be provided and verified:

- Information of the plantations supplying FFB to the mill:
  - Company/owner of the plantation
  - Address of the plantation
  - Maps/geospatial information of boundaries of the plantation
  - Area of the plantation

Percentage of FFB received by each mill from this plantation. This is derived from volumes received from the estate as a proportion of total volume received by the mill in a quarter.

We are working to expand full TTP to our entire palm supply chain involving third-party mills which supply our downstream facilities (refineries) by end 2020.

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

F1.6a
(F1.6a) Describe the forests-related detrimental impacts experienced by your organization, your response, and the total financial impact.

<table>
<thead>
<tr>
<th>Forest risk commodity</th>
<th>Palm oil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact driver type</td>
<td>Physical</td>
</tr>
<tr>
<td>Primary impact driver</td>
<td>Increased severity of extreme weather events</td>
</tr>
<tr>
<td>Primary impact</td>
<td>Reduction or disruption in production capacity</td>
</tr>
</tbody>
</table>
Description of impact
This primarily impacts our upstream (plantation) operations. It also has the potential to disrupt our logistics and our supply chain. Palm trees require a constant amount of rainfall for healthy growth. Prolonged drought will impact fruit production as it stresses the trees. Meanwhile, excessive rain and flooding will also negatively impact fruit production. The same negative impacts would also affect our suppliers. Transportation delay also occurs especially during the rainy season where roads may be damaged. Our palm third-party suppliers may also see their production impacted. Weather events include El Nino events. The last severe weather phenomenon El Nino of 2015 saw its peak impact in the second half of 2015, leading to a 10-15% drop in palm oil production.

Primary response
New product/technology development

Total financial impact
0

Description of response
Financial impact is variable depending on severity of extreme weather events. We have noted the increasing occurrence of extreme weather phenomena like El Niño which can lead to severe draught. Our in-house research facility, SMARTRI, conducts research and development to produce new improved seed stock that is drought resilient. SMARTRI also continuously looks for ways to improve agricultural practices that take into account changing weather patterns.
- SMARTRI continued R&D efforts to produce more drought and disease resistant seeds. New high-yielding and more resilient seeds have already been developed and are scheduled for rollout in the plantations in the next 5 years.
- SMARTRI continued R&D efforts in looking at strains which can better adapt to high CO2 content in the atmosphere.
- SMARTRI continued R&D on adaptive agronomic practices to for climate change. We are now exploring ways to optimise water use in our plantations through the use of advanced technology including AI and fertigation (fertiliser and irrigation) system in our nursery.
- Our biotech division is also looking into developing genetic molecular markers for selecting seeds and clones that are drought-resistant.

Forest risk commodity
Palm oil

Impact driver type
Physical

Primary impact driver
Forest fires
Primary impact
Reduction or disruption in production capacity

Description of impact
Haze from forest fires can affect the well-being of our workers, reduce fruit production, and delay/disrupt our upstream and downstream operations. Fires can also damage plantation and conservation areas. During the last severe haze season which lasted throughout H2 2015, palm oil production was impacted with a drop of between 10-15%. Financial impact is therefore variable depending on the severity of the dry season, the fires and exacerbation by haze pollution.

Primary response
Promotion of best practice and awareness

Total financial impact
0

Description of response
Financial impact is variable depending on severity of fire/haze season. Management of fire and haze is part of our operational costs. GAR takes a holistic and long-term approach to fire and haze management. GAR has had a Zero Burning Policy since 1997 which is incorporated into the GSEP which also contains a commitment not to develop peat lands.
We invest in new fire response and fire-fighting equipment for our own operations, including drones and increased satellite surveillance. We have also trained 10,000 of our personnel to remain on standby to rapidly suppress fires.
We have set up a Fire Command Post at HQ in Jakarta to coordinate fire management and suppression with the teams on the ground. This enables the quick management and suppression of fires.
Due to strengthened fire mitigation procedures we were able to keep the fire-affected areas relatively contained, and 99.5 percent of our production area was unaffected in 2019.
We have also engaged with 32 communities since 2017 in our concessions in long-term fire prevention programmes (Desa Makmur Peduli Api) and aim to raise their awareness and train them on best practices re fire management. (Since implementation the programme has been successful in reducing hotspots by 80-90%)
- For more details see : https://goldenagri.com.sg/sustainability/forest-conservation/fire-management/

Forest risk commodity
Palm oil

Impact driver type
Physical
Primary impact driver
Forest fires

Primary impact
Reduction or disruption in production capacity

Description of impact
Haze from forest fires can affect the well-being of our workers, reduce fruit production, and delay/disrupt our upstream and downstream operations. Fires can also damage plantation and conservation areas. During the last severe haze season which lasted throughout H2 2015, palm oil production was impacted with a drop of between 10-15%. Financial impact is therefore variable depending on the severity of the dry season, fires and exacerbation by haze pollution.

Primary response
Engagement with local community

Total financial impact
0

Description of response
Financial impact is variable depending on severity of fire/haze season. Our fire prevention programme, Desa Siaga Api was piloted in 2017 in 17 villages in West Kalimantan and Jambi. We work with schools to spread knowledge and awareness about the dangers of forest fires and the importance of forest conservation to school students.
As monitoring by the non-profit Global Forest Watch showed that the vast majority of the fires in 2019 occurred in areas other than palm oil plantations, we continue to invest in community fire prevention programmes (Desa Makmur Peduli Api) and have expanded this to reach 32 villages. Villages that manage to prevent/reduce hotspots receive assistance of IDR 50-100 mil from GAR in the form of facilities and infrastructure.
- In 2019, we focused on strengthening our fire prevention and mitigation procedures amongst the villages. This involved a four-pronged approach: Prevention, Preparedness, Early warning systems, and Quick response. This exercise helped us tackle the 2019 fire season.
- Since its implementation the programme has been successful in reducing hotspots and firespots by about 80 -90 percent.

For more details on our approach to fire management, see our website: https://goldenagri.com.sg/sustainability/forest-conservation/fire-management/

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 an established enterprise risk management framework

- **Frequency of assessment**
  - More than once a year

- **How far into the future are risks considered?**
  - > 6 years

- **Tools and methods used**
  - Internal company methods
  - External consultants
  - Global Forest Watch Pro
  - Sustainability Policy Transparency Toolkit (SPOTT)
  - National specific tools and databases
  - Other, please specify
    - DJSI, FTSE4Good, materiality assessment

- **Please explain**
  - We use a combination of highly effective internal/external methods for holistic risk assessment for our ops and supply chain: Internally:
    - Ops meetings (frequently); Sustainability Committee (quarterly); risk enterprise management committee
    - Continuous engagement with external stakeholders (customers, NGOs, etc)
    - Scheduled Participatory Mapping to map out boundaries together with HCS and HCV assessments in our concessions and improving our peatland inventory. This helps keep track of and maintain conservation areas as well as mitigate risks of encroachment into forests through joint conservation.
    - Continuous external input via grievance channels
    - Annual certification audits with RSPO, ISCC, ISPO
    - Continuous monitoring of our conservation area with satellite, radar, drones
    - Continuous assessment of supply chain risks through traceability and engagement.
  - Mapping and assessments with external consultants, to identify suppliers that are
located near/in regions highly vulnerable to deforestation. We engage with suppliers and request they conduct HCV assessments and encourage them to adopt the HCS Approach.

We design appropriate interventions such as special workshops on no deforestation for suppliers operating near sensitive biomes/ecosystems like the Leuser Ecosystem in Aceh.

- Continuous media monitoring

External consultants for independent advice:
- Commission external parties to assess issues and risks. For eg Rainforest Alliance assessment of the implementation of the GSEP, our NDPE policy leading to our action plan to close gaps: https://goldenagri.com.sg/wp-content/uploads/2017/12/Rainforest-Alliance-releases-evaluation-of-GAR-221217-FINAL.pdf
- Working with consultants on materiality assessments every 2-3 years to identify and monitor emerging issues/risks – see reporting in annual Sustainability Reports on deforestation issues.

SPOTT:
We participate in SPOTT assessments annually and are currently ranked 6th (77% score) for transparency. Aside from SPOTT we also take part in Robecosam/DJISI, FTSE4Good, Sustainalytics and other disclosures on our ESG performance including no-deforestation commitments. This help us stay abreast of emerging concerns/issues.

National tools and databases:
- forest data to assess supply chain risk (spatial analysis)
- work with Peat Restoration Agency on best practices for peatland conservation.

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

The majority of our concessions are located far from forests and we do not have plantations on deforested areas. Nevertheless, we still conduct forests-related risk assessments, and consider this issue in the assessment. Availability of raw materials i.e. fresh fruit bunch for milling and CPO for refining is a critical matter to our operations. We work internally and with suppliers to ensure optimum productivity and output of our milling, refining, and processing operations. Risks of availability of products are assessed and managed through review of plantation operations and purchasing orders and engagement with our suppliers. This is a current issue.
Quality of forest risk commodities

Relevance & inclusion
Relevant, sometimes included

Please explain
The majority of our concessions are located far from forests and we do not have plantations on deforested areas. Nevertheless, we still conduct forests-related risk assessment, and consider this issue in the assessment. The quality of our raw materials i.e. fresh fruit bunches and CPO is critical to our operations. Our mills, for example, set a certain free fatty acid percentages in the FFB to ensure that the fruits can be processed for a good quality CPO. This risk is assessed, managed and minimised through regular tests and checks of FFB and the end products. This is a current issue.

Impact of activity on the status of ecosystems and habitats

Relevance & inclusion
Relevant, always included

Please explain
As a leading agribusiness we are aware that we must be careful stewards of our natural resources and minimise impacts on ecosystems and habitats if we are to remain in the business over the long term.

We are committed under the GSEP to:
- No development of and the conservation of High Carbon Stock forests
- No development of and the conservation of High Conservation Value areas
- No development of and the conservation of peatlands of any depth
- No burning for new plantings, replantings or other development - Report and reduce GHG emissions
- Improve waste management

Regular internal checks and audits are conducted to ensure proper implementation of these environmental management commitments. External checks/audits for annual certification process for sustainable palm oil. Continuous physical monitoring of conservation areas using satellite, drones and radar is carried out. Monitoring and assessments of deforestation in our supply chain is also carried out continuously through desk research, grievance verification, spatial analysis.

Failure to properly implement these commitments may lead to negative perceptions and reputational/brand damage, which may in turn lead to potential loss of markets.

This is a current issue.

Regulation

Relevance & inclusion
Relevant, always included
Please explain
Our business is subject to a variety of laws and regulations that promote environmentally and socially sound operating practices. These regulations could become more stringent in the future. The government environmental agencies have the power to take action against us for failure to comply with applicable environmental regulations, including imposing fines and revoking licenses.
We are aware of the importance of environmental measures and regulations and we have a separate compliance department that closely monitors and update current requirements of relevant regulations. We ensure our compliance with relevant regulations to avoid any liabilities that may occur in the future.

This is a current issue.

Climate change

Relevance & inclusion
Relevant, always included

Please explain
The majority of our concessions are located far from forests and we do not have plantations on deforested areas. Nevertheless, we still conduct forests-related risk assessment, and consider this issue in the assessment. Our fresh fruit bunch yield is very dependent on weather conditions in Indonesia. Excessive rainfall or extensive period of dry weather will lead to a decrease in the overall yield. Excessive rainfall generally leads to poor pollination of palms and reduces the effectiveness of fertilisers, while drought results in less fruit bunches and lower oil extraction rate. High levels of drought might also trigger fire outbreaks in the plantations. We have implemented various measures at our plantations to reduce the impact of weather conditions on our plantations, including the construction of drainage and irrigation systems and roads and the establishment of certain planting patterns. Historically, CPO prices typically increase when supply is adversely affected by weather conditions, thereby reducing the impact of the decrease in supply. We also focus on efforts for long term fire prevention. This is a current issue.

Impact on water security

Relevance & inclusion
Relevant, always included

Please explain
We are currently focused on managing and mitigating risks related to our most material (environmentally-related) issues which include: no deforestation, forest conservation, no development on peat and conservation of biodiversity. We also focus on riparian zone conservation and rehabilitation and the conservation of water catchment areas. These are also priorities for our key stakeholders such as customers and third-party suppliers. Palm oil trees require a constant, abundant supply of water. Hence, palm oil plantations are only viable in and around tropical regions where there is fairly constant and
abundant rainfall throughout the year. Plantations are therefore not opened/developed in any water scarce or stressed areas, and plantations are rainfed and not irrigated. Nevertheless we recognise the growing importance of water-related issues. We have begun a pilot project to assess our water footprint based on Life Cycle Assessment (LCA) Methodology, in accordance to the ISO 14046 to understand the impact of water consumed in our operational activities. The assessment is done within the cradle-to-gate system boundary to calculate the water consumption of seed production, nursery, estate, palm oil mill, kernel crushing plant, bulking, and refinery. As we are at the initial stages of assessing our water footprint, we have not yet done a full water-related risk assessment.

Tariffs or price increases

Relevance & inclusion
Relevant, always included

Please explain
Regulations relating to palm oil in Indonesia such as export tax and levy as well as import tariffs, taxes and other restrictions imposed by importing countries might impact the company. From time to time, in line with social and economic policies, the Indonesian government may impose new policies on the palm oil industry. Foreign governments may also seek to impose levies/tariffs/bans on palm oil based on deforestation concerns. Import tariffs and taxes and other import restrictions imposed by importing countries will affect the demand for CPO and its derivative products, and can encourage substitution by other vegetable oils. If importing countries ban imports of CPO from Indonesia, tax competing substitute products, such as soybean oil, at a lesser tax rate, the competitiveness of imported CPO and derivative products can be adversely affected, which can affect the demand for and the price of our products.

We are actively involved in oil palm-related organisations and collaborate with industry stakeholders in providing positive inputs to the Indonesian government in order to create conducive regulations for the palm oil industry, and to other stakeholders both domestic and international.

This is a current issue.

Loss of markets

Relevance & inclusion
Relevant, always included

Please explain
Negative perceptions and public campaigns against palm oil based on concerns surrounding palm oil and deforestation can result in the potential loss of markets especially in the developed world.

We assess this risk through various ways including monitoring of media reports, social campaigns and market intelligence gathering. We also engage continuously with key
external stakeholders including customers and governments.

This is an emerging issue.

**Brand damage related to forest risk commodities**

**Relevance & inclusion**
Relevant, always included

**Please explain**
Negative perceptions and public campaigns against palm oil based on concerns surrounding deforestation can result reputational damage and lead to potential boycotts/loss of markets.

We assess this risk through various ways including monitoring of media reports, social campaigns and market intelligence gathering.

This is a current issue.

**Corruption**

**Relevance & inclusion**
Not relevant, included

**Please explain**
We have a Company Code of Conduct, which serves as a guide for conducting business ethically and in compliance with the law. Our suppliers must also comply with our Supplier Code of Conduct.

We further minimise the risk of corruption through good governance and having a company structure that allows for strong accountability.

**Social impacts**

**Relevance & inclusion**
Relevant, always included

**Please explain**
We assess social impacts by conducting social impact assessments for all of our plantation areas and have them monitored yearly. In certain cases conflicts arising from competing stakeholder interests may happen. For example, the use of land under our concession for community gardens that may otherwise be conserved. As much as possible we balance our assessments and decisions to preserve the rights of communities and to conserve the environment. We are implementing Participatory Mapping and Participatory Conservation Planning with the communities to involve them in joint conservation and improve land use mapping.

We conduct mapping of latent conflict and have several measures such as free, prior, informed, consent process, conflict handling, and grievance mechanisms to reduce this
risk.

This is a current issue.

**Other, please specify**

**Relevance & inclusion**

**Please explain**

**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 expect our business to comply with their sustainability standards/policies including no-deforestation. Customers could potentially stop sourcing from us should we fail to comply.

We work closely with our customers to comply with their expectations of sustainability standards. Different customers have different supply chain policies that we need to adhere to. We are also in partnership with customers who are keen to work deeper in the areas where our plantations are through co-funding of projects that reduce deforestation risks.

We engage with our customers through:

- Multi-stakeholder forums and industry groups
- Presentations and meetings
- Field visits
- Consumer Focus Group Discussion
- Monthly e-update
- GAR website
- GAR Sustainability Dashboard
- Annual Report
- Sustainability Report
- Social media
- Materiality Assessment

The frequency of engagement varies depending on the methods of engagement. For example, we engage with our customers through monthly e-updates, materiality
assessments and interviews every 2-3 years, and conduct visits to the plantation and operations frequently.

Outcomes from engagement include:
• Improved reputation
• Better understanding of GAR’s sustainability progress
• Partnerships in community and forest conservation projects

Employees

Relevance & inclusion
Relevant, always included

Please explain
Employees need to be aware of the company’s policy on responsible palm oil including our commitments on forest and biodiversity conservation and protection and they need to be trained in order to properly implement the company's sustainability commitments on the ground and to be in full compliance with the policy.
We engage our employees through:
• Townhall meetings on sustainability report
• Internal campaigns e.g. World Environment Day
• Trade union meetings
• GAR website
• GAR Sustainability Dashboard
• Social media
• Celebration of major festivals
• HR training and training on GSEP
• Materiality Assessment

The frequency of engagement varies depending on the method of engagement and can be biannually in terms of townhall meetings, annually through training programmes and every 2-3 years through the materiality assessment.

Outcomes of engagement include:
• Better understanding of company policies
• Improved awareness of company’s actions towards responsible palm oil

Investors

Relevance & inclusion
Relevant, always included

Please explain
Investors expect the company to manage its ESG risks including forest-related risks, and financial institutions want the company to be compliant with their internal policies on responsible financing. Failure to manage ESG risks including deforestation, could lead to the risk of poor credit profiling.

We engage our investors through:

• Quarterly analyst briefings
• One-on-one communications
• Field visits
• Monthly e-update
• GAR website
• GAR Sustainability Dashboard
• Annual Report
• Sustainability Report
• Social media
• Materiality Assessment

The frequency and timing of the engagement varies and includes scheduled engagement such as analyst briefings, monthly e-updates as well as ad hoc such as through field visits and every 2-3 years through a materiality assessment.

Outcomes include:

• Improved reputation and awareness of our no-deforestation initiatives
• Better credit profiling by banks
• Foundation for good long-term relationship and engagement

Local communities

Relevance & inclusion
Relevant, always included

Please explain
We need the support and buy-in of local communities to enable us to carry out forest conservation projects successfully while ensuring that their economic and social development continues. We also need to engage the community in long-term forest fire prevention efforts.

We engage local communities through:

• Participatory mapping and participatory conservation approach and community development programmes
• Complaint handling, grievance procedures, and conflict resolution mechanisms
• Dialogue and consultation with community groups and representatives
• Community programmes
• Outreach programmes to combat fire and haze
The timing and frequency of engagement varies and includes scheduled consultations for conservation planning, ad hoc engagement to deal with grievances and conflict resolution and annual community programmes such as fire-free programmes.

Outcomes include:
• New community conservation partnerships to protect forests
• Developed and improved guidelines and capacity in areas such as mediation, conflict management and Participatory Mapping to facilitate the successful implementation of the GSEP
• Continued investment in comprehensive range of community programmes
• Successful Desa Makmur Peduli Api (long-term fire prevention) programme

NGOs

Relevance & inclusion
Relevant, always included

Please explain
NGOs subject the industry’s practices to scrutiny and can publicise negative impacts such as deforestation leading to reputational damage. Conversely, we also collaborate and work with NGOs to develop new standards in forest conservation. We engage through:
• Multi-stakeholder forums and events
• One-on-one communications
• Monthly e-update
• GAR website
• GAR Sustainability Dashboard
• Annual Report
• Sustainability Report
• Social media
• Materiality Assessment

The timing and frequency varies according to the method of engagement with regular engagement through one-on-one communications, ad hoc when responding to a grievance or issue, as well as monthly communication through e-updates and every 2-3 years through the materiality assessment.

Outcomes include:
• Feedback and input for the development of GSEP
• Joint development of HCS Approach
• Awareness of company’s actions towards responsible palm oil

In several instances, we have worked with CSO stakeholders like Greenpeace to develop new guidelines and standards such as the High Carbon Stock Approach.
(HCSA) to address deforestation concerns. This approach is increasingly being adopted not only in our industry but also in other sectors such as forestry. The GSEP was developed with feedback and input from key stakeholders including CSOs such as Greenpeace, Rainforest Action Network (RAN), Forest Peoples Programme (FPP) and our implementation partner, Earthworm Foundation (formerly The Forest Trust). We also continue to improve our Standard Operating Procedures for carrying out FPIC, handling grievances, conflict resolution and participatory mapping, often with input from external stakeholders such as CSOs.

Other forest risk commodity users/producers at a local level

Relevance & inclusion
Relevant, always included

Please explain
Producers at a local level located near our plantation are likely to want to supply products to our mills. Therefore we treat them as our suppliers / potential suppliers. Please refer to the “Supplier” box for explanation of engagement and method of engagement.

Regulators

Relevance & inclusion
Relevant, always included

Please explain
It is important for us to monitor and keep abreast of possible/new environmental/forest-related regulations that could impact our business/operations.

We engage with them through:
• One-on-one meetings
• Field visits
• Multi-stakeholder forums and events
• GAR website
• GAR Sustainability Dashboard
• Annual Report
• Sustainability Report
• Materiality assessment

Our engagement varies in timing and frequency including scheduled meetings with government agencies, ad hoc briefings and field visits and every 2-3 years through surveys and interviews for our materiality assessment.

Outcomes include:
• Better understanding of the palm oil industry and GAR’s sustainability commitments and initiatives
• Collaboration in smallholder development projects for e.g. Independent Farmers Replanting Programme
• Community outreach programme on fire prevention focus on tackling fire and haze
• Collaboration with Indonesia Estate-Crop Fund for Palm Oil (BPDP Sawit) and other government institutions on palm oil supply chain development

Suppliers

Relevance & inclusion
Relevant, always included

Please explain
Our palm suppliers are our critical suppliers and we need to minimize and avoid any forest-related risks from our supply chain as this could impact our business and cause reputational damage.
Our sustainability policy - GSEP - also applies to our supply chain and we are focused on sharing responsible practices and transforming our supply chain. This helps us minimise supply chain risks.

We engage suppliers to:
• Ensure they understand GSEP compliance
• Help them adopt responsible practices including environmental management, social/community engagement, fire and haze prevention, labour practices
• Help them build capacity
• Achieve 100% Traceability to the Mill and Plantation
• Collaborate on carrying out Traceability to the Plantation by 2020
• Increase smallholder inclusion
• Share best practices in responsible palm oil
• Help smallholders towards certification

We engage them through:
• Supplier Support Team and dedicated e-helpline
• One-on-one communications
• Workshops and training sessions
• Site visits
• Questionnaires and self-assessments

Engagement includes scheduled site visits and assessments, ad hoc site visits and engagement during grievance handling and annual training programmes and workshops.

Outcomes include:
• Improved engagement and trust-building
• 100% Traceability to the Mill
• Collaboration on carrying out Traceability to the Plantation by 2020
• Supporting the conservation commitments of 65,000 hectares of forests by our suppliers with 10 having carried out HCV/HCS assessments since 2016
• Smallholder inclusion
• Best practices sharing in responsible palm oil
• Helping smallholders towards certification

As part of our continuous support to our suppliers, a dedicated GAR Supplier Support Team is available to respond to queries from suppliers.

Other stakeholders, please specify

Relevance & inclusion

Please explain

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?

Our organisation defines substantive impact as an impact that has a meaningful or important effect to our business, which affects a large proportion of our business units, creates further impacts on those business units, and potentially becomes a material concern for our stakeholders. These impacts occur due to the forest-related risks such as extreme weather events, forest fires, declining ecosystem services, changes to national legislation, changes to international law and bilateral agreements, changes in land tenure regulations, conflicts of land ownership and occupancy rights, negative media coverage, local community opposition, as well as uncertainty about product origin and legality.

Those risks create substantive impacts on our business which are:
a. Reduction or disruption in production capacity (in tonnes): production capacity is calculated as the sum of fresh fruit bunch output and palm product output.
b. Increased operational cost (in US Dollar): operational cost consists of selling expenses, general and administrative expenses. Selling expenses comprise of export tax and levy, transportation and delivery, export administration, salaries, wages, and employees' benefits, as well as advertising and promotions. General and administrative expenses comprise of salaries, wages and employees' benefits, rent, taxes and licenses, depreciation and amortisation, repairs and maintenance, travelling, and professional fees.
c. Disruption in product supply (in million MT)
d. Reduced demand for products and services (in million MT)
e. Disruption to sales (in USD): Our sales mostly comprise Crude Palm Oil (CPO) and Palm Kernel (PK) including their derivative products, such as cooking oil, margarine, shortening and biodiesel.
f. Brand damage

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>State or equivalent</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>Changes in precipitation patterns</td>
</tr>
<tr>
<td>Primary potential impact</td>
<td>Reduction or disruption in production capacity</td>
</tr>
<tr>
<td>Company-specific description</td>
<td>Changes in precipitation pattern occur due to climate change. The rainfall can increase heavily during the rainy season and decrease heavily during the dry season in some areas in Indonesia, while in other areas the pattern can be reversed. Excessive rainfall or insufficient rainfall can impact fresh fruit bunch production. This will reduce the palm product output, and potentially disrupt our supply chain and logistics. The latter can lead to a rise in operational costs.</td>
</tr>
<tr>
<td>Timeframe</td>
<td></td>
</tr>
</tbody>
</table>
>6 years

**Magnitude of potential impact**
- Medium-high

**Likelihood**
- Likely

**Are you able to provide a potential financial impact figure?**
- No, we do not have this figure

**Potential financial impact (currency)**

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

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

**Explanation of financial**

The financial impact is within a range and dependent on the severity of the climate event and is therefore highly variable. Excessive rainfall or extensive period of dry weather will lead to a decrease in the overall yield. Excessive rainfall generally leads to poor pollination of palms and reduces the effectiveness of fertilizers, while drought results in less fruit bunches and oil extraction rate. This will lead to the reduction of our revenue from palm oil production while increasing our operational costs for handling the disruption in our business operations.

The financial impact is variable (for eg. prices of CPO tend to rise if supply is tight thus potentially offsetting a fall in revenue due to fall in production). Ultimately the impact depends on the severity of the change in precipitation - based on the last severe drought, it can range from between 10-15% of decline in production.

**Primary response to risk**
- Voluntary engagement in conservation projects (including reforestation, afforestation and ecosystem restoration)

**Description of response**

GAR has implemented measures to mitigate climate change which can lead to changes in precipitation patterns. We mitigate climate change by conserving High Carbon Stock (HCS) and High Conservation Value (HCV) forests. Successful conservation of HCS and HCV forests helps retain large stores of carbon and help avoid GHG emissions which contributes to climate change.

Currently we have set aside 72,000 ha as conservation area. We are also working in partnership with local communities on conservation – to date, some 13 villages have agreed to set aside another 7,700 hectares of forests for conservation. We are engaged in jurisdictional approaches to forest conservation in Siak, Aceh Tamiang, Kapuas Hulu;
and supporting conservation commitments of 65,000 ha by our suppliers.

We are also committed to no development on peat and Best Management Practices for peatlands, and rehabilitation of degraded peatland. This is crucial for reducing GHG emissions and maintaining hydrological function to prevent floods. We are carrying out peatland restoration in West Kalimantan. We also conserve riparian buffer zones and water catchment areas to maintain hydrological functions and ecosystem services.

We are also reducing GHG emissions through methane capture facilities which can reduce emissions by up to 50% onsite at a number of mills in Central Kalimantan, Jambi, and Riau. The captured methane gas is used as an alternative energy source.

Implementation is ongoing and long-term.

**Cost of response**
0

**Explanation of cost of response**
Our efforts in this area are considered part of our overall operational costs and we therefore do not have a separate cost of response. These initiatives are part of our overall operations and expected to continue indefinitely.

---

**Forest risk commodity**
Palm oil

**Type of risk**
Physical

**Geographical scale**
State or equivalent

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

**Primary risk driver**
Forest fires

**Primary potential impact**
Reduction or disruption in production capacity

**Company-specific description**
Fires and resultant haze in different regions of Indonesia can damage our plantation, conservation areas, and wildlife habitats. Fires and resultant haze stresses the palm trees leading impacting fruit production. It will significantly reduce our production and
delay operations which leads to disrupt our supply chain and logistics. Haze from forest fire will affect health and well-being of our workers and local communities. Forest fires will release huge amount of GHG which exacerbates climate change and extreme weather phenomenon. The issue of fires and haze can also potentially damage our reputation.

**Timeframe**

>6 years

**Magnitude of potential impact**

High

**Likelihood**

Likely

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

No, we do not have this figure

**Potential financial impact (currency)**

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

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

**Explanation of financial**

Forest fires will decrease the overall yield which leads to the reduction of our revenue from palm oil production. It will also increase our operational costs for handling the damage of our plantation or conservation areas, as well as handling the disruption in our supply chain and logistics. Negative impact on the health and well-being of our workers will also generate additional cost. The financial impact is variable across the different regions where we operate and depends on the severity of the conditions which includes fire, haze and severe drought (which is generally also present in these conditions). Based on the last severe fire and haze season, output can decline between 10-15%.

**Primary response to risk**

Promotion of best practice and awareness

**Description of response**

We have implemented a Zero Burning Policy since 1997 and we consistently engage farmers and local community to advocate no burning as well. This preventative approach also involves ensuring all illegal fires are reported to the authorities to enable them to take appropriate actions. We are continuing our long-term community collaboration on fire prevention with 32 villages in the Desa Makmur Peduli Api (DMPA) programme in Ketapang, Kalimantan, Jambi, Sumatra, Central Kalimantan and Riau. We train the villagers in these 32 villages to rapidly suppress fires and educate them on the dangers of fire and to stop using fire to clear land. Since its implementation the
programme has been successful in reducing hotspots and firespots by about 80-90 percent.

We have committed to no development of peatlands since 2010. Keeping the peat areas moist by re-wetting the areas with water from rivers and ponds, which were constructed for that purpose, is one of our measures to reduce the risk of forest fires. We are currently rehabilitating and reforesting peatland in West Kalimantan.

We also implement fire management in our concession areas with monitoring, provision of fire-fighting equipment and training 10,000 Emergency Response personnel to suppress fires. We also engage with and educate our suppliers on Zero Burning.

All initiatives are ongoing.

**Cost of response**
320,000

**Explanation of cost of response**
The above figure of USD320,000 refers to the amount that we spend on the community collaboration fire-free programmes per year. Our other costs such as maintaining preparedness in fighting and suppressing fires are considered part of our overall operational costs. Our fire prevention efforts are part of our overall operations and expected to continue indefinitely.

**Forest risk commodity**
Palm oil

**Type of risk**
Regulatory

**Geographical scale**
Country

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

**Primary risk driver**
Changes to national legislation

**Primary potential impact**
Increased compliance costs

**Company-specific description**
National legislation evolves and can become more stringent over time. For example, the Ministry of Agriculture in Indonesia issued the Indonesia Sustainable Palm Oil (ISPO)
policy in 2015 which aims to increase the competitiveness of Indonesian palm oil in the
global market and reduce GHG emissions as well as focus on environmental issues.

ISPO mandates palm oil producers to conduct both GHG inventory and mitigation of
emission sources, including mandatory planning of methane capture. These measures
are already being carried out by GAR and to date, over 217,878 hectares of GAR
plantations and 34 mills have received ISPO certification.

Timeframe
>6 years

Magnitude of potential impact
Medium-low

Likelihood
Likely

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact (currency)

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

Explanation of financial
Changes in national legislation (most likely changes in environmental regulations), can
create a financial impact on our business since in order to adhere to the new legislation,
we would need to change several aspects of our business. Implementing these changes
increase our operational cost. These costs cannot be predicted in advance. In order to
comply with ISPO for example, we need to have methane capture facilities. Based on
the assumption that the cost of a methane capture facility to capture and utilise the
biogas
from POME is around USD 2 – 3.5 million (we currently have 8 plants). There are also
operational costs for maintenance and plant upkeep till end of the facility's lifetime.

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

Description of response
Under the GAR Social and Environmental Policy (GSEP), we are committed to comply
with all relevant national laws and international certifications and criteria. We
continuously engage with national government stakeholders and we monitor all relevant
news and developments which may impact our business and industry.

With regards to complying with ISPO, we have total 8 methane capture facilities in place to utilise biogas for energy to generate electricity for the operations in our mills, and we plan to expand on these activities through working on new and improved facilities. The facilities capture methane gas which is then used as an alternative energy source, generating electricity for our palm oil mills. These facilities can reduce between 40 – 55 % of operational emissions on site. We are also currently working on implementing GHG reduction measures, such as CO-composting, Energy Management System, etc.

**Cost of response**
2,000,000

**Explanation of cost of response**
Based on assumption that the cost of a methane capture facility to capture and utilise the biogas from POME is around USD 2 – 3.5 million (there are currently 8 plants). Operational and maintenance costs are high with no financial incentives provided to industry to offset costs (these are counted as part of operational costs of the mill). These initiatives are ongoing and expected to continue indefinitely.

---

**Forest risk commodity**
Palm oil

**Type of risk**
Regulatory

**Geographical scale**
Country

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

**Primary risk driver**
Changes in land tenure regulations

**Primary potential impact**
Reduction or disruption in production capacity

**Company-specific description**
Changes in land tenure regulation can create confusion and uncertainty resulting in delays or disruptions in operations.

**Timeframe**
>6 years

**Magnitude of potential impact**
Medium
Likelihood
   About as likely as not

Are you able to provide a potential financial impact figure?
   No, we do not have this figure

Potential financial impact (currency)

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

Explanation of financial
   Changes in land tenure regulation can delay our operations as we need to ensure that our operations remain compliant with the regulations. Therefore, there is a potential to disrupt or possibly reduce our production capacity. The financial impact will depend on the magnitude of the change and whether/how it will impact our operations. We consider response to this impact as part of our overall operational costs.

Primary response to risk
   Engagement in multi-stakeholder initiatives

Description of response
   Through our continuous engagement with national stakeholders including local and national government, we stay updated on potential changes in regulations. Engagement with the government is through:
   - One-on-one meetings
   - Field visits
   - Multi-stakeholder forums and events
   - GAR website
   - GAR Sustainability Dashboard
   - Annual Report
   - Sustainability Report
   - Materiality assessment

Cost of response
   0

Explanation of cost of response
   Engagement with government stakeholders is considered as part of our overall operating costs and we do not have a separate cost of response. These initiatives are ongoing and expected to continue indefinitely.
Forest risk commodity
   Palm oil

Type of risk
   Regulatory

Geographical scale
   Country

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

Primary risk driver
   Changes to international law and bilateral agreements

Primary potential impact
   Reduced demand for products and services

Company-specific description
   International laws and bilateral agreements evolve and can become more stringent over time. These changes can affect our business and industry. For example, changes to the EU Renewable Energy Directive II can impact the use of palm oil for biofuel and could potentially (negatively) impact palm oil demand. Other legislation which can impact business includes legislation on labour such as laws against modern slavery.

Timeframe
   >6 years

Magnitude of potential impact
   Medium

Likelihood
   About as likely as not

Are you able to provide a potential financial impact figure?
   No, we do not have this figure

Potential financial impact (currency)

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

Explanation of financial
   International laws and bilateral agreements evolve and can become more stringent over time. These changes can affect our business and industry but the costs cannot be predicted in advance. For example, changes to the EU Renewable Energy Directive II
can impact the use of palm oil for biofuel and could potentially (negatively) impact palm oil demand. Other legislation which can impact business includes legislation on labour and human rights such as laws against modern slavery.

**Primary response to risk**  
Greater compliance with regulatory requirements

**Description of response**  
We assess changing rules/regulations and ensure that we are in compliance with regulatory requirements in our target markets. For eg. we ensure that we meet requirements on no deforestation and international labour regulations.

**Cost of response**  
0

**Explanation of cost of response**  
This is considered part of our overall operational costs and we do not have a separate cost of response. Our initiatives/response in this area are ongoing and expected to continue indefinitely.

---

**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**  
Uncertainty and/or conflicts involving land ownership and occupancy rights

**Primary potential impact**  
Increased operating costs

**Company-specific description**  
Conflicts regarding land ownership and occupancy rights can result in delays or disruptions in operations, as well as damage our reputation.

**Timeframe**  
>6 years

**Magnitude of potential impact**  
Medium
Likelihood
About as likely as not

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact (currency)

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

Explanation of financial
Operations can be impacted/delayed due to land ownership conflicts and can impact our operational costs, but the costs cannot be predicted in advance.

Primary response to risk
Engagement with local community

Description of response
Under GAR Social and Environmental Policy (GSEP), we implement FPIC in all our plantations. By implementing FPIC, we ensure that decision-making by indigenous peoples and local communities regarding the presence of our operations is done without pressure and intimidation (free), performed before an activity that has impact on the surrounding communities is carried out (prior), and with sufficient knowledge about the activity and its impact on the surrounding communities (informed), so they may express agreement or disagreement to such activity (consent).

For land acquisition, the implementation of this policy includes:
- Participatory Mapping and Land Tenure Study of all indigenous peoples and local community lands prior to negotiation
- Social Impact Assessments carried out using participatory methods, the results of which will be publicly available and actively shared with relevant stakeholders
- Engaged and open negotiation processes
- Documented agreements signed by and shared with all relevant parties

Participatory mapping in particular will help to avoid future land tenure conflicts as map of local community areas/properties is formalised in consultation with local stakeholders and government agencies.

This initiative is currently ongoing and as of 2019 over 90 villages have participated in Participatory Mapping.

Cost of response
2,500,000
### Explanation of cost of response
The USD2.5 million cost above refers to the cost of carrying out Participatory Mapping in 2019. Our initiatives with the community are ongoing; Participatory Mapping is expected to continue for the next year.

<table>
<thead>
<tr>
<th>Forest risk commodity</th>
<th>Palm oil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of risk</td>
<td>Reputational and markets</td>
</tr>
<tr>
<td>Geographical scale</td>
<td>Global</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>Negative media coverage</td>
</tr>
<tr>
<td>Primary potential impact</td>
<td>Brand damage</td>
</tr>
<tr>
<td>Company-specific description</td>
<td>Negative media coverage about palm oil and deforestation impacts the public's perception of the palm oil industry in general and our brands in particular. Negative media coverage of our suppliers also impacts our reputation. This can potentially impact demand for palm oil products in various markets.</td>
</tr>
<tr>
<td>Timeframe</td>
<td>&gt;6 years</td>
</tr>
<tr>
<td>Magnitude of potential impact</td>
<td>Medium</td>
</tr>
<tr>
<td>Likelihood</td>
<td>More likely than not</td>
</tr>
<tr>
<td>Are you able to provide a potential financial impact figure?</td>
<td>No, we do not have this figure</td>
</tr>
<tr>
<td>Potential financial impact figure (currency)</td>
<td></td>
</tr>
<tr>
<td>Potential financial impact figure - minimum (currency)</td>
<td></td>
</tr>
<tr>
<td>Potential financial impact figure - maximum (currency)</td>
<td></td>
</tr>
</tbody>
</table>
Explaination of financial
Negative media coverage of palm oil and links to deforestation can damage our brand image and potentially lead to boycott of products, leading to a loss in revenue. Investors and banks can also become hesitant to invest in or lend to the company making it more difficult for the company to secure credit. The financial impact depends on how severely the brand is impacted by negative coverage and in which markets.

Primary response to risk
Engagement with suppliers

Description of response
We have strong commitments under the GSEP to no deforestation, no development on peat, no burning etc and we report on these through our sustainability report, dashboard and website. We also participate in sustainable palm oil certification schemes including RSPO, ISCC and ISPO. We submit Annual Communications of Progress to RSPO. We are now therefore prioritizing the transformation of our supply chain and ensuring that suppliers are in compliance with the GSEP. We do this through the maintenance of full Traceability to the Mill as well as the achievement of full (100%) Traceability to the Plantation for our own and third party mills (as of 2019 we have achieved 78% TTP for our palm supply chain). We are on track to report third-party supplier full TTP by 2020. This enables us to know the origin of our raw materials and at the same time expand our outreach and support to our suppliers to improve and strengthen their responsible palm practices. We conduct annual assessments of our suppliers through site visits and questionnaires. We hold targeted training and special workshops for our suppliers on a range of important topics including achieving sustainable palm oil certification and the importance of forest conservation. We are currently supporting the conservation commitments of 65,000 hectares of forests by our suppliers. We have a public grievance mechanism to handle complaints about potential non-compliance by our suppliers. These initiatives are ongoing.

Cost of response
0

Explanation of cost of response
This is considered part of operational costs and we do not have a separate cost of response. Our TTP exercise for third-party suppliers is scheduled to be completed at end-2020. Other initiatives with suppliers are ongoing and expected to continue indefinitely.

Forest risk commodity
Palm oil

Type of risk
Physical
Geographical scale
State or equivalent

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

Primary risk driver
Increased severity of extreme weather events

Primary potential impact
Reduction or disruption in production capacity

Company-specific description
Extreme weather events such as El Nino weather phenomenon in the different regions where we operate can periodically bring prolonged drought. Other events include flooding. The weather events generally affect several regions where we have operations. Extreme weather events create unfavorable conditions for fresh fruit bunch production as the palm trees become stressed. This will reduce the palm product output. Flooding or forest fires and haze caused by extreme dry weather can also disrupt our supply chain and logistics. As extreme weather events disrupt our operation, this increases our operational cost. Lastly, extreme weather events can also create many negative impacts for our employees and their families in local communities including impacts on health and worker productivity.

Timeframe
>6 years

Magnitude of potential impact
Medium-high

Likelihood
Likely

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact (currency)

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

Explanation of financial
The financial impact is within a range and dependent on the severity of the climate event across the various regions and is therefore highly variable. Excessive rainfall or extensive period of dry weather will lead to a decrease in the overall yield. Excessive rainfall generally leads to poor pollination of palms and reduces the effectiveness of fertilizers, while drought results in less fruit bunches and oil extraction rate. This will lead to the reduction of our revenue from palm oil production while increasing our operational costs for handling the disruption in our business operations. The financial impact is variable (for eg. prices of CPO tend to rise if supply is tight thus potentially offsetting a fall in revenue due to fall in production). Ultimately the impact depends on the severity of the change in precipitation - based on the last severe drought, it can range from between 10-15% of decline in production.

Primary response to risk
New product/technology development

Description of response
Our flagship in-house research facility, SMART Research Institute focuses on developing better seed stock to take into account changing and extreme weather events, such as increasing drought and flood resilience.

New super high-yielding clonal seeds Eka 1 and Eka 2, launched in 2017 will be ready for replanting in GAR plantations by 2022. To date some 2.5 million clones have been produced for replanting.

SMARTRI is also focusing on constantly innovating and improving agronomic practices to help mitigate the worst impacts of flooding and/or drought. These practices are constantly being rolled out at the plantation level.

SMARTRI has also started testing different strains of palm oil seed to see how they cope with high CO2 levels in the environment which will enable them to develop new seeds which can thrive in high CO2 levels.

We are also exploring ways to optimise water use in our plantations through the use of advanced technology including AI.

The implementation of these initiatives is ongoing and will continue in the foreseeable future.

Cost of response
12,000,000

Explanation of cost of response
Our annual R & D budget is currently around USD 12 million - a portion of which is used for R & D on adapting to extreme weather phenomenon and climate change. This R&D will is ongoing and expected to continue for the foreseeable future and certainly in the next 10-15 years.

F3.2

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

| Palm oil | Yes |

**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.

<table>
<thead>
<tr>
<th>Forest risk commodity</th>
<th>Palm oil</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of opportunity</strong></td>
<td>Markets</td>
</tr>
<tr>
<td>Where in your value chain does the opportunity occur?</td>
<td>Direct operation</td>
</tr>
<tr>
<td><strong>Primary forests-related opportunity</strong></td>
<td>Increased demand for certified materials</td>
</tr>
<tr>
<td><strong>Company-specific description &amp; strategy to realize opportunity</strong></td>
<td>We are committed to producing sustainable palm oil and take part in the RSPO, ISCC and ISPO certification schemes. Our strategy to help drive demand for sustainable palm oil is centred primarily on continuous engagement with stakeholders such as customers, international market forums, the media and end consumers. We also focus on campaigns presenting accurate and factual representations of sustainably-produced palm oil for example our Extraordinary Everyday Campaign which seeks to reframe the debate around palm oil into a more positive frame to counter the negative perceptions of palm oil. See <a href="https://goldenagri.com.sg/extraordinaryeveryday/#the-journey">https://goldenagri.com.sg/extraordinaryeveryday/#the-journey</a></td>
</tr>
<tr>
<td><strong>Estimated timeframe for realization</strong></td>
<td>&gt;6 years</td>
</tr>
<tr>
<td><strong>Magnitude of potential impact</strong></td>
<td>Medium-low</td>
</tr>
<tr>
<td><strong>Likelihood</strong></td>
<td>More likely than not</td>
</tr>
</tbody>
</table>

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
Demand for more sustainable palm oil would help boost revenues as there is generally a premium attached to sustainable palm oil. The premium could range up to 5% and above compared to non-certified palm oil. (As commodity prices fluctuate widely it is not possible to give a single figure or range of figures.)

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**Forest risk commodity**
Palm oil

**Type of opportunity**
Resilience

**Where in your value chain does the opportunity occur?**
Supply chain

**Primary forests-related opportunity**
Improved supply chain engagement

**Company-specific description & strategy to realize opportunity**
To ensure that we manage supply chain risks including forest-related risks and help transform our palm supply chain into a more responsible and resilient supply chain, we have embarked on a traceability to the plantation project (after achieving full traceability to the mill).

A fully traceable supply chain can reduce supply chain risks and helps to differentiate our products as customers demand increased transparency about the source of raw materials and products and assurance that these are not linked to deforestation and other ESG risks.

By end 2017, GAR achieved 100% Traceability to the Plantation for its owned mills and is now working with its third-party suppliers to achieve Traceability to the Plantation by end 2020. As of end 2019, we have achieved 78% TTP for our entire palm supply chain (GAR-owned mills and third-party supplier mills).

The TTP projects are enabling us to better engage our supply chain, assess their situations and identify the best ways to support them to become more responsible producers and mitigate forest-related risks, amongst others. We are now also supporting the conservation commitments of 65,000 hectares of forests by our suppliers.

**Estimated timeframe for realization**
1-3 years

**Magnitude of potential impact**
High
Likelihood
Very 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
Achieving full TTP will help us assure our customers that we have full visibility over our supply chain and are working with our suppliers to mitigate forest-related risks amongst others. This can act as an important differentiator for GAR products in the market. The financial impact has not yet been quantified as we are still in the process of helping our suppliers achieve full TTP as well as helping them improve their practices.

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 Board and Senior Management are fully involved in and supports GAR’s sustainability efforts and commitments under the GSEP and have stated this in the Board of Directors’ Statement. A Sustainability Committee (SC) which is chaired by the Corporate Strategy and Business Development Director, oversees all matters related to responsible palm oil. The SC comprises the senior leadership team from the upstream, downstream, and corporate business units, as well as the Head of the Sustainability and Strategic</td>
</tr>
</tbody>
</table>
Stakeholder Engagement Department and other staff members from the department. It reports directly to the Chairman and CEO of GAR, and the Board, and meets regularly (quarterly) to oversee the development and implementation of the GSEP and the monitoring of performance and risk assessment across all our business operations.

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>Row 1 Scheduled - some meetings</td>
<td>Monitoring implementation and performance</td>
<td>The Board and Senior Management are fully involved in and supports GAR’s sustainability efforts and commitments under the GSEP and have stated this in the Chairman’s Statement in the Annual Report.</td>
</tr>
</tbody>
</table>

F4.2

(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).
Sustainability committee | Both assessing and managing forests-related risks and opportunities | Quarterly | A Sustainability Committee (SC) which ischaired by the Corporate Strategy and Business Development Director, oversees all matters related to responsible palm oil. The SC comprises the senior leadership team from the upstream, downstream, and corporate business units, as well as the Head of the Sustainability and Strategic Stakeholder Engagement Department and other staff members from the department. It reports directly to the Chairman and CEO of GAR, and the Board, and meets regularly to oversee the development and implementation of the GSEP and the monitoring of performance across all our business operations. Aside from these meetings, urgent and developing issues are escalated to relevant SC members for their input and decisions.

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>Certain C-Suite employees have a Key Performance Indicator (KPI) that is related to implementation of sustainability commitments including conservation. Work performance is evaluated every year and the result will be related to the monetary bonus that they received for that year.</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>Corporate executive team</td>
<td>Achievement of</td>
<td>Certain C-Suite employees have a Key Performance Indicator (KPI) that is related to sustainability matters including conservation. Work performance is evaluated every year and the</td>
</tr>
<tr>
<td>Chief Sustainability Officer (CSO)</td>
<td>commitments and targets</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Supply chain engagement</td>
<td></td>
</tr>
</tbody>
</table>
result will be related to the monetary bonus that they received for that year.

| Non-monetary reward | No one is entitled to these incentives |

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)

GAR-AR-2019 (3).pdf

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</td>
<td>Please refer to our GAR Social and Environmental Policy (GSEP) for more info</td>
</tr>
<tr>
<td></td>
<td>Commitment to no deforestation, to no planting on peatlands and to no</td>
<td></td>
</tr>
<tr>
<td></td>
<td>exploitation (NDPE)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Commitment to protect rights and livelihoods of local communities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Commitments beyond regulatory compliance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Commitment to transparency</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Commitment to stakeholder awareness and engagement</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Recognition of the overall importance of forests and other natural</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ecosystems</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Recognition of potential business impact on forests and other natural</td>
<td></td>
</tr>
<tr>
<td></td>
<td>habitats</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Description of forest risk commodities, parts of the</td>
<td></td>
</tr>
</tbody>
</table>
**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>Company-wide</td>
<td>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 Commitments beyond regulatory compliance Commitment to transparency Commitment to stakeholder awareness and engagement Commitment to align with the SDGs</td>
<td>Please refer to our GAR Social and Environmental Policy (GSEP) for more info <a href="https://goldenagri.com.sg/wp-content/uploads/2016/01/GSEP-English.pdf">https://goldenagri.com.sg/wp-content/uploads/2016/01/GSEP-English.pdf</a></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
- [GAR_Social_and_Environmental_Policy-2.pdf](#)

### 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
- Global Agribusiness Alliance
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
- 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
- Promotion of gender equality and women’s empowerment
- 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
- Restricting the sourcing and/or trade of forest risk commodities to credible certified sources
- Recognition of legal and customary land tenure rights

Operational coverage
Direct operations and supply chain

% of total production/ consumption covered by commitment
100%

Cutoff date
2011

Commitment target date
2020

Please explain
We adopted the Forest Conservation Policy applicable to our primary operations in 2011. Subsequently this was included in our updated sustainability policy, the GSEP.
(GAR Social and Environmental Policy) in 2015. The cutoff date for our palm suppliers is therefore 2015.

The GSEP applies to all upstream and downstream palm oil operations that we own, manage or invest in, regardless of the stake. We also require our third-party suppliers from whom we purchase or with whom we have a trading relationship to comply with the policy.

We want to ensure that GAR upstream and downstream palm oil operations are deforestation free, traceable and bring benefits to the people and communities where we operate. Core to this are:

1. Environmental Management; no development of and the conservation of High Carbon Stock (HCS) forests, High Conservation Value (HCV) areas, peatlands of any depth, and no burning for new plantings, re-plantings or other development
2. Social and Community Engagement
   Respect the Universal Declaration of Human Rights, national laws and ratifies international treaties on human rights and indigenous peoples.
3. Work Environment and Industrial Relations; Recognizing, respecting and strengthening the rights of all our workers
4. Marketplace and Supply Chain; Traceable and transparent supply chain, support to suppliers, due diligence and grievance procedures, compliance with all relevant national laws and international certifications principles and criteria

Under our commitments to forest conservation, we have currently set aside some 72,000 hectares of conservation area. We are also working with local communities on joint conservation partnerships to protect HCS forests. We are also physically rehabilitating a peat conservation area in West Kalimantan which was affected by fires in 2015. We are working with local communities on long-term forest fire prevention through training and long-term education to change the community mindset about using fire to clear land.

The policy covers all protected biomes/ecoregions in Indonesia such as the Leuser Ecosystem in Aceh and other important biomes/ecoregions wherever we operate or source from.

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>
</table>


<table>
<thead>
<tr>
<th>Long-term business objectives</th>
<th>Yes, forests-related issues are integrated</th>
<th>&gt;30</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Forests-related issues have consistently been a top material issue for GAR and the palm industry, and as such we have been focused on delinking deforestation from our production for many years. We believe that the trend towards responsibly produced commodities will continue to grow and we aim to capture current and emerging market opportunities based on our commitment and ability to supply sustainably produced palm products. We have invested heavily in NDPE efforts since 1997 starting with a Zero Burning Policy, a no development on peat policy and the industry’s first Forest Conservation Policy. NDPE principles are contained in our sustainability policy, the GSEP and embedded in our everyday operations. This will continue to be our focus for the foreseeable future (&gt;30 years) as we continue to adhere to our NDPE commitments. We believe that environmental responsibility can go hand-in-hand with economic growth and this underpins our long-term business objectives to provide sustainably produced palm oil to the market. We currently maintain around 72,000 ha of conservation areas; have invested in achieving full Traceability to the Plantation for our entire palm supply chain (78% as of end 2019); and are on track to achieving our sustainable certification goals.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Strategy for long-term objectives</th>
<th>Yes, forests-related issues are integrated</th>
<th>&gt;30</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Forests-related issues have consistently been a top material issue for GAR and the palm industry, and will continue to remain so for the foreseeable future. Our strategy to achieve long-term objectives of being a sustainable and responsible producer will continue to include forest-related issues for the long term (&gt;30 years). Having invested heavily in sustainable production based on NDPE principles, we will continue to work on and maintain the delinkage between deforestation and production. We are constantly exploring different ways of achieving more impact in this area to mitigate risks and seize opportunities. This includes new partnerships on landscape/jurisdictional approaches (see section on jurisdictional approach); joint conservation approaches with local communities (13 villages/7,700 hectares to date); transformation of our supply chain and supporting suppliers on forest conservation (65,000 hectares of conservation commitments by suppliers to date.)</td>
<td></td>
</tr>
</tbody>
</table>
Financial planning: Yes, forests-related issues are integrated >30
Activities/initiatives and projects related to the fulfillment of our NDPE commitments are always included under annual operational budgets and will continue to be so for the long-term (>30 years).

## 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.

<table>
<thead>
<tr>
<th>Target reference number</th>
<th>Forest risk commodity</th>
<th>Type of target</th>
<th>Description of target</th>
<th>Linked commitment</th>
<th>Traceability point</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target 1</td>
<td>Palm oil</td>
<td>Third-party certification</td>
<td>Obtaining third-party certification for our palm products - certifications include RSPO, ISCC and ISPO. Undergoing the certification process ensures GAR products meet the highest sustainability standards especially with regards to No Deforestation, No Peat and No Exploitation.</td>
<td>Zero net/gross deforestation</td>
<td>RSPO producer/grower certification, RSPO Identity Preserved</td>
</tr>
</tbody>
</table>
RSPO Segregated
RSPO Mass Balance
RSPO Next
International Sustainability and Carbon Certification (ISCC)
Other, please specify
   Indonesian Sustainable Palm Oil (ISPO)

Start year
2005

Target year
2020

Quantitative metric

Target (number)

Target (%)
100

% of target achieved
85

Please explain
GAR is working towards the achievement of a number of nationally and internationally recognised sustainability standards and certifications. GAR sees certification as one aspect of our sustainability journey. As a business, certification also provides useful information about our performance and where we can continue to improve – increasing efficiency and productivity, sustainably.

GAR works closely with a number of standard systems and certification bodies to better understand and implement the requirements of these standards. This involves reducing deforestation, greenhouse gas emissions and biodiversity loss, and demonstrating respect for indigenous and local communities.

To date, 257,621 hectares of plantations including smallholders plantation 51,128 hectares, 29 mills, 9 kernel crushing plants, 6 refineries, 7 bulking stations and 1 oleochemical plant have received RSPO certification.

In order to comply with ongoing changes in Indonesian Government regulations regarding the land ownership certification, we are extending the timeframe for completion of RSPO certification for the remaining 10 mills (as at 30 June 2010). Under the current regulatory conditions, we expect to complete the RSPO certification process by 2020.

Total units to be certified by 2020 consist of 39 mills and 385,004 hectares of plantations
which include 55,021 hectares of plasma plantations (as at 30 June 2010). Palm oil operations established after 30 June 2010 will be part of separate time-bound plan.

To date, 288,514 ha of plantations including smallholder plantations of 54,221 ha, 30 mills, 5 refineries and 15 bulking stations have received ISCC certification. The objectives of the ISCC are the establishment of an internationally oriented, practical and transparent system for the certification of biomass and bioenergy. ISCC is oriented towards the reduction of greenhouse gas emissions, the sustainable use of land, the protection of natural biospheres and social sustainability. GAR participates in ISCC certification for all biomass exported to Europe for biofuels.

GAR is supportive of the Indonesian Sustainable Palm Oil (ISPO) Scheme developed by the Indonesian Ministry of Agriculture to meet Indonesia’s commitment to reduce greenhouse gases and focus on environmental issues. To date, 205,721 ha of plantations and 32 mills have received ISPO certification.

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**Target reference number**
Target 2

**Forest risk commodity**
Palm oil

**Type of target**
Traceability

**Description of target**
Maintaining full traceability to all mills in supply chain including GAR-owned mills and third-party mills. In 2019, GAR sourced CPO and Palm Kernel from 424 third-party mills and 46 GAR-owned mills for its downstream business. We are also on track to hitting our target of full Traceability to the Plantation for GAR's entire palm supply chain by end 2020. (Timetable may be affected by Covid-19 pandemic). This gives us full visibility over our supply chain and enables us to assure provenance for our customers. Traceability is also a critical step in supporting the transformation of our supply chain to become more responsible. The supply chain is checked for compliance with our NDPE commitments and we are able to better monitor and take action if any of our suppliers are non-compliant in areas such as deforestation.

**Linked commitment**
Zero net/gross deforestation

**Traceability point**
Mill

**Third-party certification scheme**
Start year
2015

Target year
2020

Quantitative metric

Target (number)

Target (%)
100

% of target achieved
78

Please explain
We have achieved 100% Traceability to the Mill (TTM) since 2015 and continue to maintain this annually. At end 2017, we achieved full (100%) Traceability to the Plantation for all GAR owned mills. We are on track to achieving our target of full Traceability to the Plantation (TTP) by end 2020 for over 400 third-party supplier mills (timetable may be affected by the Covid-19 pandemic) and as of end 2019 had achieved 78% TTP, and as of H1 2020, 84% TTP.

Our traceability system includes physical mapping, verification of GPS coordinates, verification of legal name, verification of certification status. We are partnering with technical experts and traceability software providers to achieve this. We also conduct site visits to our third party supplying mills. These site visits allow us to understand our suppliers better and to identify critical areas where they need help and support as they seek to adopt and apply sustainable practices. We also share best practices and conduct workshops for our suppliers. We have also launched special support programmes such as Ksatria Sawit to accelerate TTP amongst smallholders, agents and brokers.

Traceability is a key step towards building relationships with our critical suppliers in order to ensure that they become responsible producers in line with our own sustainability commitments. It also provides assurance to our customers that our supply chain is responsible and not in violation of their sustainability commitments. Knowing our suppliers allows us to better monitor and take quick action where needed in case of non-compliance.

Target reference number
   Target 3

Forest risk commodity
   Palm oil

Type of target
   Assess and/or verify compliance

Description of target
   We assess our entire supply chain annually for compliance with our sustainability/NDPE policy through desk research and spatial analysis. This allows us to monitor implementation of our sustainability commitments such as no deforestation. We are also able to use the data to identify the high-risk suppliers and target them for further intervention and support towards responsible production including site visits, targeted training and sharing of best practices in areas like no-deforestation.

Linked commitment
   Zero net/gross deforestation

Traceability point

Third-party certification scheme

Start year
   2018

Target year
   2019

Quantitative metric

Target (number)

Target (%)
   100

% of target achieved
   100

Please explain
   To support our continuous work on transforming our supply chain to become more responsible, we carry out supplier assessment annually. This allows us to assess and verify their compliance in areas such as no-deforestation as well as other sustainability commitments.
Aside from commercial considerations, all new suppliers are screened using environmental and social criteria, in line with our commitments in the GAR Social and Environmental Policy (GSEP). For our existing suppliers, all GAR-owned and third-party mills are assessed for GSEP compliance on an annual basis through desk research and spatial analysis. Based on our findings, we can determine a risk ranking for each supplier. High-risk suppliers are prioritised for site visits and deep engagement. Every year, we aim to visit at least 20 critical, high-risk suppliers.

GAR details the findings from the site visits, including recommendations and actions for improvement, in reports that are shared with the suppliers. We then work with the mills to develop and implement time-bound action plans for us to monitor progress against. To date, we have completed site visits and assessed both Tier 1 and Tier 2 suppliers at all our downstream processing locations. Reports can be viewed on our website.

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**Target reference number**

Target 4

**Forest risk commodity**

Palm oil

**Type of target**

Ecosystem restoration

**Description of target**

Restoration and rehabilitation of a conservation peat ecosystem in West Kaliamantan, Indonesia. This involves the revegetation/replanting of native species of 979 hectares by 2020.

**Linked commitment**

No conversion of natural ecosystems

**Traceability point**

**Third-party certification scheme**

**Start year**

2016

**Target year**

2020

**Quantitative metric**

Absolute number
Target (number)
979

Target (%)

% of target achieved
95

Please explain
The project involves revegetation/replanting/restoration of 979 ha in the conservation Peat Ecosystem in PT AMNL, West Kalimantan, Indonesia. As of end of 2019, 95% of the target had been achieved - continued revegetation is scheduled for 2020 but may be subject to delays due to Covid19 pandemic.

The project is in line with GAR’s commitments to protect and not develop any peatlands in its concessions and is also in line with the Indonesian Government’s efforts to tackle fire and haze by restoring up to 2 million ha of peatlands. The project was launched following fire damage in the severe El Nino fire season of 2015. Peatlands are a large carbon store and maintaining them in their natural state contributes to huge avoidance of GHG emissions and is also key to managing fires and haze pollution in Indonesia and the region.

The project also involves working in partnership with the local communities so that they also support the conservation of the area. This is to lessen the possibility of encroachment by third parties. We do this through launching Alternative Livelihood programmes with the local communities so that the need to open conservation areas is avoided/reduced.

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>We aim to understand the practices of our suppliers who supply raw materials to our downstream facilities. To achieve this we began by mapping our supply chain to the mill and we achieved 100% Traceability to the Mill in 2015. This means that we know the locations and relevant details of over 400 palm oil mills (third-party and GAR-owned) that supply CPO and PK to our downstream locations. We continue to maintain and update this traceability data quarterly on our publicly accessible Sustainability Dashboard. Our traceability system includes physical mapping, verification of GPS coordinates, verification of legal name, verification of certification status. We are partnering with technical experts and traceability software</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>
providers to achieve this. Through mapping the location of our suppliers, we are able to obtain the geospatial location of our third-party mills, which gives us an indicative area of the origin of its FFB. We then examine their location against maps of relevant areas of concern such as legally protected areas, peat areas, forest areas, and High Conservation Value (HCV) areas. Combined with other publicly available information, this enables us to prioritise suppliers requiring support in complying with our sustainability policy. For example, we have targeted suppliers near sensitive ecosystems like the Leuser Ecosystem in Aceh for site visits and engagement to ensure that they are not sourcing from the Leuser Ecosystem and are aware of how important conservation of the Ecosystem is. We help them strengthen their own procurement and traceability systems to avoid unknowingly sourcing from these areas as it would be in violation of our sustainability policy.

Now we are focused on extending our knowledge and sustainability outreach efforts to the plantations, smallholders, and dealers supplying Fresh Fruit Bunches to our supplier mills. Launched in 2016 our Traceability to the Plantation (TTP) exercise provides us with crucial information about the origin of our raw materials. We require all our supplier mills to participate in this exercise and map their supply chain back to the origin. We aim to complete full TTP for our entire palm supply chain by end 2020.

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>84</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)? Indicate the volume and percentage of your certified production and/or consumption.
Forest risk commodity
Palm oil

Third-party certification scheme
RSPO producer/grower certification

Certification coverage
Production volume

% of total production/consumption volume certified
52.3

Form of commodity
Crude palm oil (CPO)

Volume of production/consumption certified
327,249.47

Metric
Metric tons

Please explain
The total volume of production/consumption is based on volume of RSPO-Certified oil palm products as described in the GAR RSPO Annual Communications on Progress 2019. To date, over 268,000 hectares of plantations including smallholder plantations of over 51,000 hectares, 31 mills, nine kernel crushing plants, six refineries, seven bulking stations and one oleo-chemicals plant have received RSPO certification.

The percentage of total production/consumption volume certified shows the amount of certified Crude Sustainable Palm Oil (CSPO) under RSPO certification, in comparison with total CSPO RSPO certified, CSPO sold under other certification schemes (ISCC), and CSPO sold as conventional.

Forest risk commodity
Palm oil

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

Certification coverage
Production volume

% of total production/consumption volume certified
59.5

Form of commodity
Crude palm oil (CPO)

Volume of production/consumption certified
Please explain
GAR maintains ISCC certification, a global certification which aims to ensure sustainable production and use of all kinds of biomass in global supply chains. ISCC is based on the implementation of the highest sustainability requirements in ecological sustainability, social sustainability, compliance with laws and international treaties, monitoring of GHG emissions and good management practices. To date, over 288,000 hectares of plantations including smallholder plantations of over 54,000 hectares, 30 mills, five refineries, 14 bulking stations and two biodiesel plants have received ISCC certification.

All biomass intended for biofuels in destinations like Europe are ISCC certified, ensuring that our products meet the highest responsible palm oil standards in the international market. The percentage of total production/consumption volume certified shows the amount of certified Crude Sustainable Palm Oil (CSPO) under RSPO certification, in comparison with total CSPO ISCC certified, CSPO sold under other certification schemes (RSPO), and CSPO sold as conventional.

Forest risk commodity
Palm oil

Third-party certification scheme
Other, please specify
RSPO and ISCC

Certification coverage
Production volume

% of total production/consumption volume certified
60.41

Form of commodity
Crude palm kernel oil (CPKO)

Volume of production/consumption certified
366,678.89

Metric
Metric tons

Please explain
In 2019, total volume of Crude palm kernel oil, including derivatives refined from CPKO is 627,027 tonnes.
The total certified production comes from RSPO and ISCC certification schemes. The CPKO sold under RSPO certification is 291,952.9 tonnes and ISCC certification is 33,34 tonnes, while the remaining CPKO is sold as conventional. The total volume of production/consumption is also reported in the GAR RSPO Annual Communications on Progress 2019.

**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**

1. Direct operations (100%):
   a) annual internal audits
   b) annual external audits for eg. RSPO certification
   c) continuous physical monitoring:
      • Hi-res satellite radar monitoring. Change alerts are updated every 24 days for all conservation areas
      • Drone baseline mapping every semester
      • Ground verification and reporting by staff for areas where we receive change alerts from the radar monitoring
   d) annual training on NDPE policy for GAR staff
2. Supply chain:
   a) continuous internal monitoring, desk research and spatial analysis
   b) annual site visits to assess compliance and/or verify grievances such as allegations of deforestation
   c) communication of GAR's NDPE policy to 100% of critical suppliers.
3. Grievance mechanism to log and monitor complaints of non-compliance
4. Funding the development of new radar-based forest monitoring system - Radar Alerts
for Detecting Deforestation (RADD).

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

% of total volume in compliance
81-90%

% of total suppliers in compliance
71-80%

Response to supplier non-compliance
- Retain & engage
- Suspend & engage
- Exclude

Procedures to address and resolve non-compliance with suppliers
- Developing time-bound targets and milestones to bring suppliers back into compliance
- Providing information on appropriate actions that can be taken to address non-compliance
- Assessing the efficacy and efforts of non-compliant supplier actions through consistent and quantified metrics
- Re-integrating suppliers back into supply chain based on the successful and verifiable completion of activities
- Other, please specify
  - We require our suppliers to comply with the GAR Social and Environmental Policy which is communicated to all critical suppliers

Please explain
All new suppliers are screened in line with our NDPE criteria. All supplier mills are assessed for compliance annually through desk research and spatial analysis. High-risk suppliers are prioritised for site visits and deep engagement. Every year, we aim to visit at least 20 high-risk suppliers.

GAR details the findings from the site visits, recommendations and time-bound actions in reports that are shared with the suppliers. To date, we have completed site visits and assessed both Tier 1 and Tier 2 suppliers at all our downstream processing locations. Our Grievance Procedure sets out actions to be taken with suppliers cited in deforestation grievances - this is tracked on our public Grievance List and we monitor cases until resolution.

Non-compliance is judged on severity of case and willingness of supplier to engage/change. Suppliers who do not change/engage after several outreach attempts by GAR for eg continued incidents of deforestation; no response to contact attempts are deemed non-compliant.

For suppliers engage, we help them achieve and maintain compliance with time-bound
action plans including targeted training; strengthening processes and procedures; implementing traceability; and formalization of NDPE policies. Since deep engagement efforts began in 2015, about 10 suppliers have also undertaken HCS/HCV assessments. Former suppliers who can demonstrate substantive change can reengage with GAR - timeframe depends on complexity of case.

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>
<th>Yes, from both suppliers and owned/managed land</th>
</tr>
</thead>
</table>

F6.6a

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

Palm oil

Procedure to ensure legal compliance
We constantly monitor and assess regulatory changes and work towards compliance. For our own operations, our Sustainability Department has a Compliance Division backed up by Sustainability Officers on the ground to ensure compliance with legal, mandatory and voluntary standards and requirements that GAR is either legally bound to comply with such as ISPO or have made a voluntary commitment to for eg. HCSA, RSPO, ISCC. The Compliance unit carries out regular annual internal audits and is also responsible for ensuring we meet the requirements for continued certification by third parties such as RSPO, ISCC or ISPO.

These include:
1) Reviewing, monitoring & assessing all legal requirements such as ISPO or other requirements from the government (for eg moratoriums)
2) Defining the scope of internal assessment/audit based on the legal requirements
3) Preparing the internal audit reports/reports for third party certification (including submission of reports)

The mechanisms in place are appropriately addressing our maintenance of our certification by ISPO in Indonesia as well as our RSPO and ISCC.

For our suppliers, we require proof of certification for eg ISPO. We are also carrying out spatial analysis and desktop research to monitor our supplier's compliance with relevant laws and regulations for eg. not operating in protected biomes like the Leuser Ecosystem. During supplier site visits to check compliance we also ask for and check relevant legal documents as needed such as licences and permits.

Country/Area of origin
Indonesia

**Law and/or mandatory standard(s)**

ISPO

**Comment**

Aside from supporting and participating in the mandatory ISPO certification scheme for palm oil in Indonesia, we are also participating in other certifications such as RSPO and ISCC to ensure we continue meeting the highest standards for sustainability certification on the international market. We have also pioneered and take part in various no-deforestation initiatives including the HCS Approach. In all this we continue to work with a wide range of stakeholders including government, community, industry peers and NGOs to continuously improve beyond compliance. We will also be improving our monitoring of deforestation incidents in our supply chain through the RADD forest radar monitoring initiative.

### F6.7

**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 (Yes, working with smallholders)</td>
<td>Supply chain mapping Capacity building Financial and commercial incentives</td>
<td>Supplier questionnaires on environmental and social indicators Developing or distributing supply chain mapping tool Supplier audits Offering on-site technical assistance and extension services</td>
<td>73,000</td>
<td>At GAR, we have a policy of supporting all (100%) (73,000) of our plasma smallholders. The plasma smallholders adhere to all our NDPE commitments. While GAR does not own the plasma plantations, they are very closely integrated into our management system, and we take the lead in promoting their success and productivity. Through their partnership with us, we provide our plasma smallholders with high-yielding seeds and good quality fertilisers. We also</td>
</tr>
<tr>
<td>Providing agricultural inputs</td>
<td>ensure knowledge transfer and capacity building through regular training on Good Agricultural Practices. GAR also extends support to around 3,800 independent smallholders through the Independent Farmers Replanting Programme and other technical and financial schemes. The Independent Farmers Replanting Programme was set up to encourage independent smallholders to replant with better quality, higher-yielding seeds which will help boost productivity and incomes, while potentially reducing the demand for new agricultural land. It gives farmers access to financing, helping them sustain their livelihoods during the four years it takes for the new seedlings to mature. Since 2014, GAR has also helped independent farmers secure loans of nearly IDR 400 billion from state-owned banks. Through the Smallholders Development Programme, GAR has provided technical assistance and long tenure interest-free credit</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Disseminating technical materials</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizing capacity building events</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Investing in pilot projects</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Supporting smallholders to clarify and secure land tenure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prioritizing support for smallholders in high-risk deforestation regions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchase guarantee linked to best agricultural practices</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long term contracts linked to forest related commitments</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
to independent farmers in East Kalimantan since 2013. To date, we have disbursed more than IDR30 billion in interest-free loans and other aid. Our R&D division, SMARTRI runs regular training programmes for smallholders. Each year, they train several hundred farmers in agronomic practices focusing especially on integrated pest management and fertiliser management. SMARTRI staff also visit smallholder farms when requested, to help solve pest outbreak issues or nutrient deficiency cases. We also support smallholders through our Participatory Mapping exercises which amongst other things increases the clarity of land tenure. We also run 40 Alternative Livelihood projects ranging from cash/food crop farming to animal husbandry to build rural farming communities resilience. We are also running several projects with customers to improve smallholder livelihoods.
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>100%</td>
<td>We aim to transform our supply chain to become more responsible and compliant with our NDPE policies. Our work with smallholders is described in 6.7. In tandem with supply chain mapping, we also help and support our suppliers. Based on assessments of our suppliers' most pressing needs, we continued to help them with training through SMART SPOT and SMART SEED workshops in traceability; responsible labour practices; and implementation of FPIC and human rights. As of 2019, we have shared and emphasised the importance of the GSEP with all (100 percent) of our suppliers. We are proactively helping suppliers review their policies, including providing recommendations on how to strengthen SOPs in various areas such as environmental management and formalization of NDPE.</td>
</tr>
<tr>
<td>to forest related commitments</td>
<td>policies. Since we began our engagement with suppliers on forest-related commitments in 2015, 10 of them have invested in carrying out HCS/HCV assessments and we are now supporting the conservation commitments of 65,000 hectares of forests by our suppliers. To help accelerate the Traceability to the Plantation process amongst our suppliers, we launched the Ksatria Sawit programme. The programme reaches out to areas where many of our supplier mills are buying from smallholders, and traces their agents and farmers. Since its launch in April 2019, we have covered provinces such as Aceh, North/South Sumatra, Riau, Jambi, Lampung, and Bangka Belitung. We estimate that the programme will help us trace almost 60,000 smallholders. Through this programme we also hope to develop new mechanisms to help smallholders and agents adopt sustainable NDPE practices.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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>
</table>
| Yes, working beyond first tier    | Supply chain mapping Capacity building             | Developinng or distributinng supply chain mapping tools Supplier questionnaires on environmental and social indicators On-site meetings with indirect suppliers Offering on-site training and technical assistance Disseminating | Our targeted site visits which are carried out with our implementation partner, Earthworm Foundation, to assess suppliers also includes assessments of their suppliers (Tier 2). These assessments help us to determine the best intervention strategies and support for our suppliers to help manage and mitigate forests-related risks. The assessment is based on a series of indicators developed in accordance with the forests-related commitments under the GAR’s NDPE policy such as:
- No development of and the conservation of High Carbon Stock forests
- No development of and the conservation of High Conservation Value areas - No development of and the conservation of peatlands of any depth
- No burning for new plantings, replantings or other development.
The assessments contain time-bound action plans for Tier 1 and Tier 2 suppliers.
We are also supporting our Tier 1 suppliers to report full traceability to the origin (plantation) by end 2020, which will enable us to reach out and share responsible practices with them and their suppliers. Assessment reports of our Tier 1 and Tier 2 Suppliers can be seen on the GAR Sustainability Dashboard: https://goldenagri.com.sg/sustainability-dashboard/files/file_docs/PB3AKbelawan_refinery_report.pdf https://goldenagri.com.sg/sustainability-dashboard/files/file_docs/OLezQtarahan_report.pdf https://goldenagri.com.sg/sustainability-dashboard/files/file_docs/d14nStubuk_gaung_and_dumai_sustainability_overview_report.pdf
We have rolled out new programmes targeting Tier 2 smallholders and agents such as Ksatria Sawti to accelerate Traceability to the |
F6.10

(F6.10) Do you participate in external activities and/or initiatives to promote the implementation of your forests-related policies and commitments?

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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
UN Global Compact
Tropical Forest Alliance 2020 (TFA)
Global Agri-business Alliance (GAA)
High Conservation Value (HCV) Resource Network
Roundtable on Sustainable Palm Oil (RSPO)
High Carbon Stock Approach Steering Group
International Sustainability & Carbon Certification (ISCC)
Other, please specify
Indonesia Sustainable Palm Oil (ISPO)

Jurisdictional approaches

Please explain
UNGC: GAR has subscribed to the UN Global Compact principles since 2006 and is a Gold Member of the GCNS (UN Global Compact SG)
Tropical Forest Alliance: TFA 2020 is a global public-private partnership in which partners take voluntary actions, individually and in combination, to reduce the tropical deforestation associated with the sourcing of commodities such as palm oil, soy, beef, and paper and pulp. GAR is active member of TFA working group.
GAA: GAR is member of the Steering Committee leading on Workstream 2 on
Smallholder livelihoods looking at how to improve farmer incomes through yield improvement, access to finance and diversification.

RSPO: GAR’s subsidiary, SMART became a member of the RSPO in 2005 shortly after RSPO was founded. GAR became a member in 2011. GAR’s MD of Sustainability is on the RSPO Board of Governors. We also participate in the RSPO working groups on deforestation; peatland; biodiversity; human rights; jurisdictional working group; and outreach and engagement. We are also involved in the RSPO task forces on HCV; FPIC; independent smallholders; Compensation and Supply Chain Certification (SCC) trademark.

HCV Resource Network: GAR is a committee member.

High Carbon Stock Approach Steering Group:
The HCS Approach pioneered by GAR in partnership with The Forest Trust (TFT) and Greenpeace, as part of our original Forest Conservation Policy in 2011, was developed to provide land managers with a practical land use planning tool. The policy is now embedded in our enhanced GAR Social and Environmental Policy (GSEP). The HCS Approach provides a methodology and toolkit to help land managers define forest types and make decisions about what land can be developed and what should be conserved.

GAR has rolled out the HCS approach in all its concessions and is encouraging its suppliers to do so.

ISCC: GAR maintains ISCC certification, a global leading certification which aims to ensure environmentally, socially and economically sustainable production and use of all kinds of biomass in global supply chains.

ISPO: GAR supports the ISPO Scheme developed by the Indonesian Ministry of Agriculture to improve the competitiveness of Indonesian palm oil in world markets and to meet Indonesia’s commitment to reduce greenhouse gases and focus on environmental issues.

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**Forest risk commodity**

Palm oil

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

Yes

**Activities**

Engaging with non-governmental organizations

**Initiatives**

**Jurisdictional approaches**

**Please explain**
The High Carbon Stock (HCS) Approach pioneered by Golden Agri-Resources (GAR) in partnership with The Forest Trust (TFT) and Greenpeace, as part of our original Forest Conservation Policy in 2011, was developed to provide land managers with a practical land use planning tool. The policy is now embedded in our enhanced GAR Social and Environmental Policy (GSEP).

The HCS Approach provides a methodology and toolkit to help land managers define forest types and make decisions about what land can be developed and what should be conserved. It aims to balance ecological and environmental values with the customary rights of indigenous peoples and benefits to local communities.

GAR has rolled out the HCS approach across all its concessions and is encouraging its suppliers to adopt the approach. We are also currently supporting the conservation of 65,000 hectares of forests (HCS/HCV) by our suppliers.

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**Forest risk commodity**

Palm oil

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

Yes

**Activities**

Engaging with communities

**Initiatives**

**Jurisdictional approaches**

**Please explain**

We take a landscape approach to conservation, beyond the boundaries of our concessions. One approach is through our community conservation partnerships. These began in 2015, when we started to formally map their villages through Participatory Mapping (PM) – a process for helping villages map out critical areas such as customary boundaries and land necessary for food security. This map is then lodged with and formally recognised by the authorities, serving amongst other things to clarify land tenure rights and enabling villages to gain access to government development funds for the first time.

The mapping lays the foundation for further dialogue on conservation through our Participatory Conservation Planning process. Our intensive consultative approach takes into account local community concerns, needs and aspirations. These include food security requirements, the ability to earn a decent living and maintain a stable quality of life. Part of this process involves designing suitable alternative livelihood projects for the local community. By 2019, GAR had rolled out PM in 93 villages across our concessions to date. As part of our landscape approach to forest conservation,
we will continue to roll out our conservation planning programmes with local communities. To date, 22 villages have agreed to set aside over 43,000 hectares of HCS forests for conservation. We have started Alternative Livelihood programmes to support these conservation partnerships. We plan to roll out these community conservation partnership models throughout all our concessions.

We are also expanding our long-term fire prevention collaboration community programmes. As of 2019, the programme to help prevent forest fires through training, education and active assessment and monitoring has been rolled out to 32 villages in Indonesia.

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**Forest risk commodity**
- Palm oil

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

**Activities**
- Funding research organizations

**Initiatives**

**Jurisdictional approaches**

**Please explain**
In 2019, GAR joined a pioneering industry initiative to improve surveillance of deforestation in Indonesia. Together with nine other major palm oil producers and buyers, GAR is supporting and funding the development of a new radar-based forest monitoring system known as Radar Alerts for Detecting Deforestation (RADD). This partnership between ourselves, Bunge, Cargill, Mondelez International, Musim Mas, Nestlé, Pepsico, Sime Darby Plantation, Unilever and Wilmar will make it much easier for companies and other stakeholders to see deforestation happening in near-real-time and with greater accuracy.

With this information, GAR and other companies can speed up follow-up actions on the ground and work to improve the sustainability of supply chains. RADD is unique in that it is the first radar-based monitoring system of this scale that will make deforestation alerts publicly available. Developed by Wageningen University and Satelligence, and facilitated by World Resources Institute, the RADD system will augment existing publicly available monitoring tools that rely on optical-based satellite imagery, which can be delayed when clouds obstruct the view of forests. Once the system is complete, the

Forest risk commodity

Palm oil

Do you participate in activities/initiatives?

Yes

Activities

Involved in jurisdictional approaches

Initiatives

Jurisdictional approaches

- Produce, Conserve and Include (PCI)
- Production, Protection and Inclusion (PPI)
- Sustainable Districts Association (Lingkar Temu Kabupaten Lestari)

Please explain

The Siak District Government – in collaboration with the NGO coalition Sedagho Siak – has adopted the concept of a ‘Siak Green District’. This commits them to pursuing a balance between environmental conservation and improving the economy for the benefit of local people. Siak District is championing the Green District Initiative as one of the founders and partners of the Sustainable District Platform or Lingkar Temu Kabupaten Lestari (LTKL). LTKL is a collaborative partnership to promote formation of sustainable jurisdictions.

Building on these landscape ideas, a coalition of seven companies comprising Cargill, Danone, Musim Mas, Neste, Sinar Mas Agribusiness and Food/GAR and Unilever, (and most recently, L’Oreal) and facilitated by Daemeter and Proforest, came together to support and strengthen implementation of the Siak Green District Initiative. The companies, in partnership with LTKL, Sedagho Siak, and Climate and Land Use Alliance (CLUA), are working together to build a road map to support the transformation towards sustainable palm oil in the Siak District.

GAR is also involved in landscape approaches in Kapuas Hulu and Aceh Tamiang.

Forest risk commodity

Palm oil
Do you participate in activities/initiatives?
Yes

Activities
Engaging with policymakers or governments

Initiatives

Jurisdictional approaches

Please explain
We engage with the Indonesian government in various initiatives including:
1. boosting smallholder productivity through supporting national replanting schemes
2. collaborating with the Peat Restoration Agency to implement best practices in Riau and Jambi
3. working with authorities on long-term management of fire and haze

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
Peat Ecosystem Rehabilitation in West Kalimantan. Peat fires are a primary cause of the haze pollution. Peatlands are also a huge carbon store and degradation and fire results in huge GHG emissions. Recognising the urgent need to tackle this issue, GAR is revegetating/replanting 979 hectares of peat conservation area in one its concessions in West Kalimantan. This is also in line with Indonesian government efforts to tackle fire and haze and bring down GHG emissions. The project was launched in the aftermath of
fire damage during the severe El Nino fire season of 2015.

Start year
2015

Target year
2020

Project area to date (Hectares)
934

Project area in the target year (Hectares)
979

Country/Area
Indonesia

Latitude
-1.52122

Longitude
110.45892

Monitoring frequency
Six-monthly or more frequently

Measured outcomes to date
Biodiversity
Carbon sequestration
Soil
Water

Please explain
Together with our partner South Pole Group, we have designed a monitoring system to measure and report the carbon gains or losses. We prevent carbon losses in peatlands through:

1. Maintaining a high water level. This results in reduced (in an ideal case no) decomposition through oxidation and fire
2. Avoiding new land clearing through engagement with local communities and the provision of alternative livelihood options
3. Rehabilitation of forest cover

But because peatlands are constantly exposed to air when degraded, it is difficult to maintain net neutral simply by preventing carbon losses. We also need to boost carbon gains by:

4. Increasing absorption through revegetation
Through these four steps, the goal is to achieve carbon positive peatlands.

As of end 2019, we have revegetated/reforested 934 hectares of the area as a buffer zone and we continue to monitor and maintain optimum water levels to keep the peat wet. Piezometers are used to measure the water levels within the peatland weekly. Water level is not only an indicator on how fire prone the peat is at a given time, it can also be used as a very rough proxy to estimate how much peat is exposed to oxygen and is decomposing and releasing carbon and other greenhouse gases (measured in carbon dioxide equivalent (CO2e)).

We have permanent sampling plots to measure the annual increment of biomass above ground. This includes the trees we have been replanting in the peatlands but also the natural revegetation. The data from these sampling plots provide the annual absorption of CO2e from the atmosphere.

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**Project reference**
- Project 2

**Project type**
- Other ecosystem restoration

**Primary motivation**
- Required by regulation

**Description of project**
- Riparian zone restoration

**Start year**
- 2015

**Target year**
- <2019

**Project area to date (Hectares)**
- 2,700

**Project area in the target year (Hectares)**
- 2,700

**Country/Area**
- Indonesia

**Latitude**
- 0

**Longitude**
Monitoring frequency
Six-monthly or more frequently

Measured outcomes to date
Biodiversity
Soil
Water

Please explain
Our management of HCV areas involves the rehabilitation of riparian zones that have previously been cleared or planted. These riparian buffer zones play a crucial role in providing wildlife habitats and maintaining water systems. Since 2015 GAR has been carrying out a riparian rehabilitation programme in our 18 concessions. By 2018, we completed the rehabilitation of over 2700 hectares of riparian buffer zone.

To date, we have revegetated 96 percent of these riparian zones with native trees and vegetation and will continue to revegetate the zones as well as maintain the riparian zones as buffer zones.

To further improve our understanding of riparian zone rehabilitation, we are participating in the Riparian Ecosystem Restoration in Tropical Agriculture (RERTA) Project with Cambridge University. For more information, see the RERTA Project:
http://oilpalmbiodiversity.com/research/rerta-project/

Project reference
Project 3

Project type
Biodiversity offsetting

Primary motivation
Voluntary

Description of project
Preserving Orangutan population

Start year
2011

Target year
2021

Project area to date (Hectares)
124

Project area in the target year (Hectares)
Country/Area
   Indonesia

Latitude
   2

Longitude
   112

Monitoring frequency
   Six-monthly or more frequently

Measured outcomes to date
   Biodiversity

Please explain
   Operating in Indonesia places us in or near areas of rich biodiversity. Through HCV assessments carried out by licensed HCV assessors, we have identified the rare and endangered species within our concessions and surrounding areas. For our full list of threatened species under Indonesia’s National Law of Protected Species (Indonesian Government Regulation No. 7 of 1999) or on the IUCN Red list, please see our website: https://goldenagri.com.sg/sustainability-dashboard/threatened-species-list

   We continue to work to preserve and protect HCV areas and operate a strict Zero Tolerance Policy towards hunting, injuring, possessing and killing of rare and endangered wildlife. We continuously educate our employees, local communities and related stakeholders on the importance of protecting rare and endangered species.

   GAR also continues to work on orangutan conservation as a special focus area. Under a continued partnership with Orangutan Foundation International (OFI), we supported the release of another eight orangutans back to the wild in 2019. We aim to release a total of 160 orangutans by 2021 back to the Seruyan Forest in Central Kalimantan. Since 2011, we have released 124 primates. Our OFI partnership agreement also focuses on local community and school education programmes on orangutan conservation. Read more about our orangutan rehabilitation efforts on our website: https://goldenagri.com.sg/preserving-orangutan-populations-ofi/

F7. Verification

F7.1

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

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

Disclosure module
F1. Current State

Data points verified
Conservation area in our plantation

Verification standard
High Carbon Stock Approach and High Conservation Value

Please explain
We pioneered the HCS Approach with stakeholders like Greenpeace to develop new guidelines and standards to address deforestation concerns. We have rolled out the HCS approach in all our concessions. This includes HCS assessments by third parties to identify conservation areas. We also conduct HCV assessments. These are carried out by third-party assessors and HCV reports after 2015 are submitted for HCV Resource Network approval. We monitor our HCS/HCV areas continuously through satellite/radar and drone technology. We also conduct annual internal and external audits and reporting on this area.

Outside of our concessions, we are supporting and funding the development of a new radar forest surveillance system with other industry players and research organisations. This will allow the industry to monitor deforestation incidents easier and take quicker action if it involves their supply chain.

We encourage our suppliers to undertake HCV/HCS assessments. Since we began deep engagement with them in 2015, at least 10 have undertaken these assessments. We are also currently supporting the conservation commitments of 65000 ha by our suppliers.

Disclosure module
F5. Strategy

Data points verified
Verification of implementation of GSEP

Verification standard
Verified by RA (Rainforest Alliance) see report at https://www.rainforest-alliance.org/business/assurance-projects-assessments/gar/

Please explain
In 2016, GAR approached the Rainforest Alliance to conduct an objective evaluation of the implementation of the GSEP which was launched in 2015, and built on previous sustainability policies. Three concessions in West Kalimantan were picked as evaluation sites – PT. Kartika Prima Cipta (KPC), PT. Paramitra Internusa Pratama (PIP) and PT. Persada Graha Mandiri (PGM). The concessions were chosen because they are the areas where GAR has trialled and delivered the most work related to its GSEP since the policy was implemented.

The evaluation was conducted using established, independent auditing procedures, including evidence submissions by GAR and other stakeholders, field visits and stakeholder consultations with affected communities, individuals and organisations.

Overall Summary of Findings:
In general, the companies are all fully committed to implement the GSEP in their operations. It was observed during this verification that all sections of the policy are being addressed. All SOPs for all activities are in line with the policy. In terms of GSEP implementation, some are still at early stages in their implementation of the policy. All three companies, especially KPC, have become leaders in adopting internationally recognized approaches such as HCS assessment. For example, in KPC more than half of KPC areas are now classified as conserved and excluded from palm oil development using existing HCS methodology. A participatory approach forms the basis for conservation and community development programs. This verification has concluded that out of 73 indicators derived from the GSEP, 60 findings are categorized as “fully comply”, 12 findings are categorized as “not fully comply”, and one finding is categorized as “not comply”.

Disclosure module
F6. Implementation

Data points verified
GHG (Greenhouse Gas) Emission

Verification standard
Verification by EY and PT Lloyd’s Register

Please explain
Successful conservation of HCS forests is one of the ways in which we retain large stores of carbon and help avoid GHG emissions.

In addition, we have also carried out a baseline study of our Scope 1 GHG emissions including measurements of carbon dioxide, methane and nitrous oxide in our mills and plantations, and are in the midst of designing an emission reduction strategy. The main
sources of GHG emissions at the mill comes from Palm Oil Mill Effluent (POME), and the usage of diesel as fuel and for power production. GHG emissions from the plantation come from the usage of fertilisers, diesel and land use change. We have commissioned EY and PT Lloyd's Register to review and verify how we calculate our carbon footprint, identify viable opportunities to reduce emissions and set short, medium and long-term reduction targets for the business.

Disclosure module
F6. Implementation

Data points verified
Certification

Verification standard
RSPO, ISPO, ISCC

Please explain
We maintain sustainable palm oil certifications with annual audits:
RSPO:
Our Indonesian operations were early adopters of certification of sustainably produced palm oil – SMART became a member of the RSPO in 2005 shortly after RSPO was founded. To date, over 268,000 hectares of plantations including smallholder plantations of over 51,000 hectares, 31 mills, nine kernel crushing plants, six refineries, seven bulking stations and one oleo-chemicals plant have received RSPO certification.
ISPO:
GAR also supports the ISPO Scheme developed by the Indonesian Ministry of Agriculture to improve the competitiveness of Indonesian palm oil in world markets and to meet Indonesia's commitment to reduce greenhouse gases and focus on environmental issues. To date, over 217,000 hectares of plantations and 34 mills have received ISPO certification.
ISCC:
GAR maintains ISCC certification, a global leading certification which aims to ensure environmentally, socially and economically sustainable production and use of all kinds of biomass in global supply chains. ISCC is based on the implementation of the highest sustainability requirements in ecological sustainability, social sustainability, compliance with laws and international treaties, monitoring of GHG emissions and good management practices. To date, over 288,000 hectares of plantations including smallholder plantations of over 54,000 hectares, 30 mills, five refineries, 14 bulking stations and two biodiesel plants have received ISCC certification. The audit was conducted by GUTcert, the German partner of AFNOR Group DQS-UL CFS GmbH, Intertek Certification GmbH, SGS Germany GmbH and Mutu Certification International.
F6. Implementation

Data points verified
Reporting

Verification standard
GRI Standards and SASB

Please explain
We report in accordance with the Global Reporting Initiative's (GRI) Standards Sustainability Reporting Guidelines at the Core level. The GRI Standards framework sets out the principles and standard disclosures that organisations can use to report their economic, environmental, and social performance and impacts. Our GRI Index has been checked by our external consultants, Corporate Citizenship. As of 2019 our Sustainability Report also contains disclosures recommended in the Agricultural Products Sustainability Accounting Standard (Industry Standard, Version 2018-10) that was developed by the Sustainability Accounting Standards Board (SASB).

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
Direct operations
Supply chain

Primary barrier/challenge type
Other, please specify
Competing stakeholder interests

Comment
There may be competing interests, for example, when a community has customary rights to a forest area which has been identified for conservation. We take a multistakeholder approach in finding sustainable solutions such as through Participatory Conservation Planning, which can be time-consuming and challenging since different
stakeholders have different interests and concerns. In the case where opposing views exist, we work hard to find balance in a solution that would be acceptable to all stakeholders.

**Forest risk commodity**
- Palm oil

**Coverage**
- Supply chain

**Primary barrier/challenge type**
- Supply chain complexity

**Comment**
The Indonesian palm oil industry is highly fragmented, with over 2.6 million smallholders managing 44% of all palm oil estates. That means we have to engage with hundreds of suppliers and thousands of smallholders. Complete and continuous engagement with the provision of support to all of them requires time and effort. Smallholders also face challenges in complying with the GSEP as they have limited resources and skills and would need more intensive engagement and support.

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**Forest risk commodity**
- Palm oil

**Coverage**
- Supply chain

**Primary barrier/challenge type**
- Cost of sustainably produced/certified products

**Comment**
Undergoing certification for sustainably produced palm oil requires a lot of resources which may be beyond the reach of smaller companies and small farmers.

---

**Forest risk commodity**
- Palm oil

**Coverage**
- Supply chain

**Primary barrier/challenge type**
- Limited public awareness and/or market demand

**Comment**
There is difficulty convincing the entire supply chain to undergo costly certification processes and audits as consumers have not shown a willingness to pay more for sustainable palm oil.

**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><strong>Coverage</strong></td>
<td></td>
</tr>
<tr>
<td>Direct operations</td>
<td></td>
</tr>
<tr>
<td>Supply chain</td>
<td></td>
</tr>
<tr>
<td><strong>Main measure</strong></td>
<td>Increased demand for certified products</td>
</tr>
<tr>
<td><strong>Comment</strong></td>
<td>Despite availability of certified sustainable palm oil, demand is still lower than supply and producers are often unable to sell RSPO-certified oil at a premium. Sustained demand which involves paying a premium would be a very strong incentive for further industry investment in sustainability measures including no-deforestation. This is especially critical for smaller, medium sized companies in the supply chain as well as smallholders. We continue to actively work on the Board of the RSPO as well as many of its working groups and task forces to encourage this development. We also engage actively with stakeholders like customers and governments in markets such as the EU on this issue.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Forest risk commodity</th>
<th>Palm oil</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Coverage</strong></td>
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<tr>
<td>Direct operations</td>
<td></td>
</tr>
<tr>
<td>Supply chain</td>
<td></td>
</tr>
<tr>
<td><strong>Main measure</strong></td>
<td>Greater customer awareness</td>
</tr>
<tr>
<td><strong>Comment</strong></td>
<td>Palm oil remains a controversial commodity and end consumer awareness regarding the many initiatives in no-deforestation, no-peat, no-exploitation and availability of sustainable certified palm oil remains low. Perceptions of palm oil being responsible for</td>
</tr>
</tbody>
</table>
widespread deforestation remains high despite the fact that palm oil is only responsible for 3% of global deforestation.

GAR is working to change these perceptions of the end consumer through a wide-ranging communications campaigns using a wide variety of channels including social media, internet, mainstream media, speaking opportunities on international forums etc.

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.

GAR’s continuous efforts and contributions on forest conservation are reported in GAR Sustainability Report 2019, which is available to be downloaded at: [https://goldenagri.com.sg/sustainability/sustainability-report/](https://goldenagri.com.sg/sustainability/sustainability-report/)


**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>Row 1 Managing Director, Sustainability and Strategic Stakeholder Engagement</td>
<td>Chief Sustainability Officer (CSO)</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>Row 1</td>
</tr>
<tr>
<td>6,431,799</td>
</tr>
</tbody>
</table>