

Welcome to your CDP Forests Questionnaire 2021

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.

	Start Date	End Date
Reporting year	January 1, 2020	December 31, 2020

F0.3

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

USD

F0.4

(F0.4) Select the forest risk commodity(ies) that you are, or are not, disclosing on (including any that are sources for your processed ingredients or manufactured

goods); and for each select the stages of the supply chain that best represents your organization's area of operation.

	Commodity disclosure	Stage of the value chain
Timber products	This commodity is not produced, sourced or used by our organization	
Palm oil	Disclosing	Production Processing Trading Manufacturing Retailing
Cattle products	This commodity is not produced, sourced or used by our organization	
Soy	This commodity is not produced, sourced or used by our organization	
Other - Rubber	This commodity is not produced, sourced or used by our organization	
Other - Cocoa	This commodity is not produced, sourced or used by our organization	
Other - Coffee	This commodity is not produced, sourced or used by our organization	

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

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

Fresh fruit bunches (FFB)
Crude palm oil (CPO)
Crude palm kernel oil (CPKO)
Palm kernel meal (PKM)
Refined palm oil
Palm oil derivatives
Palm kernel oil derivatives
Palm biodiesel

Source

Owned/managed land
Smallholders
Contracted suppliers (processors)

Country/Area of origin

Indonesia

% of procurement spend

81-90%

Comment

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 an integrated palm oil agribusiness with over 500,000 hectares of plantation area producing palm oil Fresh Fruit Bunches (FFB). We operated 48 mills and 7 downstream processing plants.

The bulk of our procurement comprises crude palm oil (CPO) and palm kernel (PK) for our downstream business in Indonesia. In 2020, these raw materials were sourced from 378 third-party mills and 47 GAR-owned mills in Indonesia (excluding one mill acquired at the end of 2020). Fresh fruit bunches (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. Procurement of CPO and PK, and procurement of FFB, accounts for around 74 and 12 percent respectively of our Indonesian subsidiaries' procurement spend. We source around 60 percent of these materials for our refineries from third-party suppliers.

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.

	% of revenue dependent on commodity	Comment
Palm oil	91-99%	We are a vertically integrated company in production of palm oil and its derivatives. The majority of our revenue is dependent on palm oil.

F1.3

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

Forest risk commodity

Palm oil

Type of control

Concession/lease

Country/Area

Indonesia

Area (Hectares)

396,317

% Area certified

46

Certification scheme

RSPO producer/grower certification

International Sustainability and Carbon Certification (ISCC)

Other, please specify

Indonesian Sustainable Palm Oil certification (ISPO)

Conversion of natural ecosystems during the reporting year

No

Area converted during the reporting year (hectares)

% covered by natural forests

Please explain

We adhere strictly to our No Deforestation, No Peat and No Exploitation policy as outlined in the GAR Social and Environmental Policy (GSEP). We have also stopped opening/developing nucleus (main) plantations since 2014 in favour of focusing on improving yield in existing estates.

Forest risk commodity

Palm oil

Type of control

Scheme/Plasma smallholders

Country/Area

Indonesia

Area (Hectares)

106,195

% Area certified

48

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

Plasma smallholders are subject to our No Deforestation, No Peat and No Exploitation policy as outlined in the GAR Social and Environmental Policy (GSEP).

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.

Forest risk commodity

Palm oil

Country/Area

Indonesia

Type of control

Concession/lease

Land type

Set-aside land

Area (hectares)

59,928

% covered by natural forests

75

Please explain

The set aside land is High Conservation Value (HCV) area. The area is covered by natural forests, and also includes grass, bushland, peatlands, 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)

18,344

% covered by natural forests

75

Please explain

The set aside land is High Carbon Stock (HCS) area. The area is covered by natural forests, and also includes grass, bushland, peatlands, riparian zones 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)?

	Data availability/Disclosure
Palm oil	Production data available, disclosing

F1.5a

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

Forest risk commodity

Palm oil

Data type

Production data

Volume

2,775,000

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.

Forest risk commodity

Palm oil

Country/Area of origin

Indonesia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Sumatra

% of total production/consumption volume

47

Please explain

This location accounts for 47% of our own palm production which is 100% traceable to the plantation (GAR-owned mills achieved full TTP in 2017).

We maintain full traceability through a documented traceability system. Our traceability information is updated quarterly on the GAR website (<https://www.goldenagri.com.sg/sustainability/responsible-sourcing/>)

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.

Forest risk commodity

Palm oil

Country/Area of origin

Indonesia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Kalimantan

% of total production/consumption volume

52

Please explain

This location accounts for 52% of our own palm production which is 100% traceable to the plantation (GAR-owned mills achieved full TTP in 2017).

We maintain full traceability through a documented traceability system. Our traceability information is updated quarterly on the GAR website (<https://www.goldenagri.com.sg/sustainability/responsible-sourcing/>)

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.

Forest risk commodity

Palm oil

Country/Area of origin

Indonesia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Papua

% of total production/consumption volume

1

Please explain

This location accounts for 1% of our own palm production which is 100% traceable to the plantation (GAR-owned mills achieved full TTP in 2017).

We maintain full traceability through a documented traceability system. Our traceability information is updated quarterly on the GAR website (<https://www.goldenagri.com.sg/sustainability/responsible-sourcing/>)

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.

F1.5e

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

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

Yes

Data type

Production

Volume produced/consumed

290,000

Metric

Other, please specify

Metric tons

Country/Area of origin

Indonesia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Java

% of total production/consumption volume

31-40%

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

Yes

Comment

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

Yes

Data type

Production

Volume produced/consumed

335,000

Metric

Other, please specify

Metric Tons

Country/Area of origin

Indonesia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Kalimantan

% of total production/consumption volume

61-70%

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

Yes

Comment

F1.6

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

No

F2. Procedures

F2.1

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

Yes, forests-related risks are assessed

F2.1a

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

Palm oil

Value chain stage

Direct operations

Supply chain

Coverage

Full

Risk assessment procedure

Assessed as part of 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

S&P CSA assessment, FTSE4Good assessment, materiality assessment, NDPE Implementation Reporting Framework (NDPE IRF), SPOTT 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 3-4 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/DJSI, 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

Availability of raw materials i.e. fresh fruit bunch for milling and CPO for refining is critical to our operations. Availability of raw materials can be disrupted by poor weather conditions/extreme weather phenomena such as drought/floods or by potential supply chain disruptions caused by global crisis like a pandemic. We work internally and with suppliers to ensure optimum supply, 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 and whole of business issue.

Quality of forest risk commodities

Relevance & inclusion

Relevant, sometimes included

Please explain

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 and whole of business issue.

Impact of activity on the status of ecosystems and habitats

Relevance & inclusion

Relevant, always included

Please explain

The majority of our concessions are not in close proximity to forests and we do not have plantations on deforested areas. Nevertheless, 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. This is considered a whole of business issue.

We are committed under the our NDPE policy or 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 (RSPO/ISCC etc). We use precision agriculture which involves continuous physical monitoring of conservation areas using satellite, drones and AI. Precision agriculture and Integrated Pest Management are also used to minimise negative impacts on the environment. Our staff are continuously trained in the correct implementation of our NDPE policy.

Monitoring and assessments of deforestation in our supply chain is also carried out continuously through desk research, site visits, grievance verification, spatial analysis and satellite monitoring of potential deforestation. We also expect to have 100% traceability to the plantation for our entire palm supply chain by 2021. (Currently we have over 94% full traceability).

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 considered a whole of business issue.

This is a current issue.

Climate change

Relevance & inclusion

Relevant, always included

Please explain

The majority of our concessions are not in close proximity to forests and we do not have plantations on deforested areas. Nevertheless, climate conditions are extremely important for optimal yield and productivity and this issue has always been a consideration in our risk assessment. This is considered a whole of business issue.

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.

Our internal R&D departments such as the SMART Research Institute are continuously monitoring the situation on the ground in our estates and help assess the risk/impact of extreme weather conditions on our production.

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. We also focus on efforts for long term fire prevention. In addition, our R&D departments are producing new hybrids and new seeds that can adapt to climate change. We also use Precision Agriculture to maximise outputs while reducing inputs and we are using new technology and techniques to improve fertiliser application as well as exploring ways to reduce our water footprint.

This is a current issue.

Impact on water security

Relevance & inclusion

Relevant, sometimes 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. Our forest conservation efforts contribute to the maintenance of freshwater resources. 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 our 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. We are also using Precision Agriculture and progressively deploying new techniques and new technology including AI to optimise agricultural methods including optimizing potential irrigation and water use in the event of extreme weather conditions.

This is an emerging issue and is most relevant to our plantation or upstream division.

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 assess this risk through regular interaction with government stakeholders and media and issues monitoring.

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 whole of business and 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 and mostly impacts our markets in the EU and Western developed countries.

Leakage markets

Relevance & inclusion

Relevant, sometimes included

Please explain

Our NDPE policy applies to all our operations, suppliers and investment and we are not supplying any unsustainably produced palm oil to any markets. However, we recognise that leakage markets can impede the acceptance and uptake of sustainable certified palm oil.

We assess this risk through media monitoring as well as through participation and discussions within palm-related organizations such as the Roundtable on Sustainable Palm Oil (RSPO).

We address this issue by working in industry organizations such as the RSPO to raise awareness about the importance of using sustainably produced palm oil in leakage markets.

This is a current 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 assessment allows us to respond in

a timely and proactive manner and to reach out to key stakeholders on issues of concern.

This is a current issue and mainly impacts our markets in the EU and Western developed countries.

Corruption

Relevance & inclusion

Relevant, sometimes 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.

This risk is assessed through annual internal audits and the monitoring of whistleblower reports as well as media monitoring with regards to our suppliers.

We further minimise the risk of corruption through good governance and having a company structure that allows for strong accountability. Our employees are also required to complete annual e-testing on the Code of Conduct and our executives have signed Integrity Pacts committing them to ethical and lawful behaviour.

Corrupt behaviour can result in punitive legal sanctions and complaints against the company as well as result in loss of reputation amongst key stakeholders such as customers, investors and financiers, leading to a potential loss in business and/or financing.

This is a current issue.

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.

Social conflicts can impact operations on the ground. They can also negatively impact the company's reputation amongst key stakeholders.

This is a current issue and highly relevant to our upstream/plantation division.

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 3-4 years, and conduct site visits for customers to the plantation and operations frequently.

Outcomes from engagement include:

- Improved reputation and trust-building
- Better understanding of GAR's sustainability progress
- Partnerships in community and forest conservation projects. See GAR website: <https://www.goldenagri.com.sg/sustainability/partnerships-and-memberships/>

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 NDPE policy - 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 3-4 years through the materiality assessment.

Outcomes of engagement include:

- Better understanding and implementation 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 3-4 years through a materiality assessment.

Outcomes include:

- Improved reputation and awareness of our no-deforestation initiatives
- Better credit profiling by banks
- Trust-building and 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. Our employees also come from local communities. 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 collaboration programmes.

Outcomes include:

- New community conservation partnerships to protect forests (to date 43,000 hectares)
- 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 as well as work in other areas.

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 3-4 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
- Joint development of re-engagement/re-entry protocol for suspended suppliers.

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. We have also worked with NGOs such as Mighty Earth and Aidenvironment on re-engagement protocol for suspended suppliers.

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 3-4 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 minimise and avoid any forest-related risks from our supply chain as this could impact our business and cause reputational damage.

Our NDPE 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 (TTP)
- 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
- Special programme (Ksatria Sawit) to accelerate TTP and map Tier 2 suppliers such as smallholders

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
- Supporting the conservation commitments of over 100,000 hectares of forests by our suppliers with 17 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?

	Risk identified?
Palm oil	Yes

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.

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

Changes in precipitation patterns

Primary potential impact

Reduction or disruption in production capacity

Company-specific description

Changes in precipitation pattern occur due to climate change. The rainfall can increase heavily during the rainy season and decrease drastically during the dry season in some areas in Indonesia.

Excessive or insufficient rainfall can impact fresh fruit bunch production. This will reduce the palm product output, and can potentially disrupt our supply chain and logistics. The latter can lead to a rise in operational costs.

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 percentage 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 in 2015, 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 helps avoid GHG emissions which contributes to climate change.

Currently we have set aside 78,000 ha as conservation area. We are also working in partnership with local communities on conservation – to date, through Participatory Conservation Planning (PCP), we have engaged with 22 villages, covering a total area of over 237,000 hectares. Through this process, we have convinced several

communities to conserve around 43,000 hectares of forests. We are engaged in jurisdictional approaches to forest conservation in Siak, Aceh Tamiang, Kapuas Hulu; and supporting conservation commitments of 100,000 ha by our suppliers. This brings the total conservation area that we are supporting directly and indirectly to over 220,000 hectares.

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/sequestering 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.

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 (to date revegetated over 1,000 ha).

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. This is being implemented by GAR.

We are 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.

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 7 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 our NDPE policy - 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 7 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 7 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

We aim to stay abreast of any potential regulatory changes through our continuous engagement with national stakeholders including local and national government.

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-low

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 Free, Prior and Informed Consent (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 2020 over 158 villages have participated in Participatory Mapping. As we continue to roll this out this risk will increasingly be avoided/mitigated.

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. Our initiatives with the community are ongoing; Participatory Mapping is expected to continue for the few years. (Timetable has been impacted by ongoing pandemic.)

Forest risk commodity

Palm oil

Type of risk

Reputational and markets

Geographical scale

Global

Where in your value chain does the risk driver occur?

Direct operation

Supply chain

Primary risk driver

Negative media coverage

Primary potential impact

Brand damage

Company-specific description

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.

Timeframe

>6 years

Magnitude of potential impact

Medium

Likelihood

More likely than 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

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 and submit ACOPs to the RSPO.

We are now therefore prioritising the transformation of our supply chain and ensuring that our 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 2020 we have achieved 90% TTP for our palm supply chain). We are on track to report third-party supplier full TTP by 2021. 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 over 100,000 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 by 2021. Maintenance of traceability and 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 3.3 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 using Precision Agriculture to minimise inputs while maximising output and this includes 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

7,800,000

Explanation of cost of response

The R & D budget for 2020 was around USD 7.8 million - a portion of which is used for R & D on adapting to extreme weather phenomenon and climate change as well as implementing precision agriculture. This R&D 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.

Forest risk commodity

Palm oil

Type of opportunity

Markets

Where in your value chain does the opportunity occur?

Direct operation

Primary forests-related opportunity

Increased demand for certified materials

Company-specific description & strategy to realize opportunity

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 <https://goldenagri.com.sg/extraordinaryeveryday/#the-journey>

Estimated timeframe for realization

>6 years

Magnitude of potential impact

Medium-low

Likelihood

More likely than not

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.)

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 (TTP) 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 2020, we have achieved 90% TTP for our entire palm supply chain (GAR-owned mills and third-party supplier mills). (The timetable was impacted by the ongoing pandemic.)

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 over 100,000 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.

Position of individual	Please explain
Chief Executive Officer (CEO)	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 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.
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F4.1b

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

	Frequency that forests-related issues are a scheduled agenda item	Governance mechanisms into which forests-related issues are integrated	Please explain
Row 1	Scheduled - some meetings	<ul style="list-style-type: none"> Monitoring implementation and performance Overseeing acquisitions and divestiture Overseeing major capital expenditures Providing employee incentives Reviewing and guiding annual budgets Reviewing and guiding business plans Reviewing and guiding corporate responsibility strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding strategy Reviewing innovation / R&D priorities Setting performance objectives 	The 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.

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).

Name of the position(s)	Responsibility	Frequency of reporting to the board on	Please explain
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and/or committee(s)		forests-related issues	
Sustainability committee	Both assessing and managing forests-related risks and opportunities	Quarterly	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 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?

	Provide incentives for management of forests-related issues	Comment
Row 1	Yes	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.

F4.3a

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

	Role(s) entitled to incentive?	Performance indicator	Please explain
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Monetary reward	Corporate executive team Chief Sustainability Officer (CSO)	Achievement of commitments and targets Supply chain engagement	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 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 SR2020.pdf

 2020 - GAR Annual Report.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.

 GAR_Social_and_Environmental_Policy.pdf

	Scope	Content	Please explain
Row 1	Company-wide	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	Please refer to our GAR Social and Environmental Policy (GSEP) for more info https://goldenagri.com.sg/wp-content/uploads/2016/01/GSEP-English.pdf

		<p>Recognition of the overall importance of forests and other natural ecosystems</p> <p>Recognition of potential business impact on forests and other natural habitats</p> <p>Description of forest risk commodities, parts of the business, and stages of value-chain covered by the policy</p> <p>List of timebound milestones and targets</p> <p>Description of forests-related performance standards for direct operations</p> <p>Description of forests-related standards for procurement</p>	
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F4.5b

(F4.5b) Do you have commodity specific sustainability policy(ies)? If yes, select the options that best describe their scope and content.

 GAR_Social_and_Environmental_Policy.pdf

	Do you have a commodity specific sustainability policy?	Scope	Content	Please explain
Palm oil	Yes	Company-wide	<p>Commitment to eliminate conversion of natural ecosystems</p> <p>Commitment to eliminate deforestation</p> <p>Commitment to no deforestation, to no planting on peatlands and to no exploitation (NDPE)</p> <p>Commitment to protect rights and</p>	<p>Please refer to our GAR Social and Environmental Policy (GSEP) for more info https://goldenagri.com.sg/wp-content/uploads/2016/01/GSEP-English.pdf</p>


			<p>livelihoods of local communities</p> <p>Commitments beyond regulatory compliance</p> <p>Commitment to transparency</p> <p>Commitment to stakeholder awareness and engagement</p> <p>Commitment to align with the SDGs</p> <p>Recognition of the overall importance of forests and other natural ecosystems</p> <p>Recognition of potential business impact on forests and other natural ecosystems</p> <p>Description of forest risk commodities, parts of the business, and stages of value-chain covered by the policy</p> <p>List of timebound commitments and targets</p> <p>Description of forests-related performance standards for direct operations</p> <p>Description of forests-related standards for procurement</p>	
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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 SR2020.pdf

 GAR-Peat-Ecosystem-Rehabilitation-Project.pdf

 GAR_Social_and_Environmental_Policy.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 NDPE 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?

	Are forests-related issues integrated?	Long-term time horizon (years)	Please explain
Long-term business objectives	Yes, forests-related issues are integrated	>30	<p>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.</p> <p>We have invested heavily in NDPE efforts since 1997 starting with a Zero Burning Policy, a no development on peat policy and the 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 (>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 78,000 ha of conservation areas; have invested in achieving full Traceability to the Plantation for our entire palm supply chain (90% as of end 2020); and are on track to achieve our sustainable certification goals by 2023.</p>
Strategy for long-term objectives	Yes, forests-related issues are integrated	>30	<p>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</p>

			include forest-related issues for the long term (>30 years). We recognize that we need to be careful stewards of our environment in order to remain in business for the long - term. 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 (22 villages/43,000 hectares to date) ; transformation of our supply chain and supporting suppliers on forest conservation (over 100,000 hectares of conservation commitments by suppliers to date.)
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 in 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.

Target reference number

Target 1

Forest risk commodity

Palm oil

Type of target

Third-party certification

Description of target

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.

Linked commitment

Zero net/gross deforestation

Traceability point**Third-party certification scheme**

RSPO producer/grower certification
RSPO Identity Preserved
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

2023

Quantitative metric**Target (number)****Target (%)**

100

% of target achieved

66

Please explain

GAR is working towards the achievement of a number of nationally and internationally recognised sustainability standards and certifications. The above target refers to RSPO certification. 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, 268,553 hectares of plantations including smallholders plantation 51,128 hectares, 31 mills, 9 kernel crushing plants, 6 refineries, 7 bulking stations and 1 oleochemical plant have received RSPO certification.

We are aiming to complete certification for all our remaining mills and their FFB supply areas by 2023.

To date, 282,970 ha of plantations including smallholder plantations of 51,737 ha, 24 mills, 6 refineries and 11 bulking stations and 2 biodiesel plants 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, 233,678 ha of plantations and 35 mills have received ISPO certification.

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 2020, GAR sourced CPO and Palm Kernel from 378 third-party mills and 47 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 2021. (Timetable has been 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 annually 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

Plantation

Third-party certification scheme

Start year

2015

Target year

2021

Quantitative metric

Target (number)

Target (%)

100

% of target achieved

90

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 2021 for some 380 third-party supplier mills (timetable has been affected by the Covid-19 pandemic) and as of end 2020 had achieved 90% TTP, and as of H1 2021, 94% 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 Tier 2 suppliers

such as 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.

Updated traceability information can be found on the GAR Sustainability Dashboard:

<https://goldenagri.com.sg/sustainability-dashboard/> and

<https://goldenagri.com.sg/sustainability-dashboard/traceability>

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

2019

Target year

2020

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.

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 Kalimantan, Indonesia. This involves the revegetation/replanting of native species of around 980 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)

980

Target (%)**% of target achieved**

100

Please explain

The project involves revegetation/replanting/restoration of 980 ha in the conservation Peat Ecosystem in PT AMNL, West Kalimantan, Indonesia. As of end of 2020, 102% of the target had been achieved.

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.

GAR has also partnered with Tanjungpura University on a master water management plan for the area.

Target reference number

Target 5

Forest risk commodity

Palm oil

Type of target

Engagement with smallholders

Description of target

Engagement with Tier 2 suppliers such as smallholders supplying our third-party supplier mills is critical in ensuring the transformation of the supply chain and making it a more responsible and sustainable supply chain. We targeted to reach out to some 60,000 smallholders by 2020.

Linked commitment

Other environmental commitments

Traceability point

Third-party certification scheme

Start year

2019

Target year

2020

Quantitative metric

Target (number)

60,000

Target (%)

% of target achieved

100

Please explain

By end 2020 we had registered some 87,000 smallholders under the Ksatria Sawit programme to help Tier 2 suppliers report traceability to the plantation. This is crucial for our next phase of supplier transformation work with these suppliers as we focus on designing specific programmes for them to become more responsible producers and to comply with our NDPE commitments.

F6.2

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

Do you have system(s) in place?	Description of traceability system	Exclusions
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<p>Palm oil</p>	<p>Yes</p>	<p>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 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,</p>	<p>Not applicable</p>
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		<p>and dealers supplying Fresh Fruit Bunches to our supplier mills.</p> <p>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.</p> <p>We aim to complete full TTP for our entire palm supply chain by 2021. To date, we have achieved over 94%. (Timetable has been affected by pandemic.)</p>	
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F6.2a

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

Forest risk commodity	Point to which commodity is traceable	% of total production/consumption volume traceable
Palm oil	Plantation	90
Palm oil	Mill	100

F6.3

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

	Third-party certification scheme adopted?	% of total production and/or consumption volume certified
Palm oil	Yes	89.41

F6.3a

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

Forest risk commodity

Palm oil

Third-party certification scheme

RSPO producer/grower certification

Chain-of-custody model used

% of total production/consumption volume certified

33.12

Form of commodity

Crude palm oil (CPO)

Volume of production/ consumption certified

374,446

Metric for volume

Metric tons

Is this certified by more than one scheme?

Yes

Please explain

The total volume of production/consumption certified is based on volume of CPO sold as RSPO-Certified oil palm products, as described in the GAR RSPO Annual Communications on Progress 2020. The percentage of certified volume is calculated from RSPO-certified CPO sold / total CPO sold in 2020.

To date, over 260,000 hectares of plantations including smallholder plantations of over 51,000 hectares, 31 mills, nine kernel crushing plants, six refineries, seven bulking stations and one oleochemicals 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.

In addition to RSPO certification, GAR also has ISPO (Indonesia Sustainable Palm Oil) certification which is mandatory.

Forest risk commodity

Palm oil

Third-party certification scheme

International Sustainability and Carbon Certification (ISCC)

Chain-of-custody model used

Not applicable

% of total production/consumption volume certified

56.12

Form of commodity

Crude palm oil (CPO)

Volume of production/ consumption certified

634,528

Metric for volume

Metric tons

Is this certified by more than one scheme?

Yes

Please explain

The total volume of production/consumption certified is based on volume of CPO sold as ISCC-Certified oil palm products in 2020. The percentage of certified volume is calculated from ISCC-certified CPO sold / total CPO sold in 2020.

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 280,000 hectares of plantations including smallholder plantations of over 51,000 hectares, 23 mills, six refineries, 12 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 international markets.

In addition to ISCC certification, GAR also has ISPO (Indonesia Sustainable Palm Oil) certification which is mandatory.

Forest risk commodity

Palm oil

Third-party certification scheme

Other, please specify
RSPO and ISCC

Chain-of-custody model used

Not applicable

% of total production/consumption volume certified

90

Form of commodity

Crude palm kernel oil (CPKO)

Volume of production/ consumption certified

251,485

Metric for volume

Metric tons

Is this certified by more than one scheme?

Yes

Please explain

In 2020, total volume of Crude palm kernel oil, including derivatives refined from CPKO is 251,485 tonnes.

The total volume of production/consumption certified is based on volume of CPKO sold as RSPO and ISCC-Certified oil palm products in 2020. The percentage of certified volume is calculated from certified CPKO sold / total CPKO sold in 2020.

In addition, GAR also has ISPO (Indonesia Sustainable Palm Oil) certification which is mandatory.

F6.4

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

A system to control, monitor or verify compliance	
Palm oil	Yes, we have a system in place for our no conversion and/or deforestation commitments

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

- Drone baseline mapping every semester

- Ground verification and reporting by staff

d) annual training on NDPE policy for staff

2. Supply chain :

- a) 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)
- 5. We have also partnered with agritech company, Satelligence to deliver near real-time deforestation risk monitoring of our concessions and supply chain.

Monitoring and verification approach

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

% of total volume in compliance

91-99%

% of total suppliers in compliance

81-90%

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

GAR has SOPs on Supplier Evaluation and Grievance Handling. All new suppliers are screened in line with our NDPE criteria. All existing supplier mills are assessed for compliance annually through desk research & 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. We have completed site visits and assessed both Tier 1 and Tier 2 suppliers at all our downstream processing locations.

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 who engage, we help them achieve & maintain compliance with time-bound action plans including targeted training; strengthening processes and procedures; implementing traceability; and formalization of NDPE policies.

GAR has also developed suspended supplier re-engagement protocols with NGO partners. Such suppliers must demonstrate substantive progress and meet set criteria before re-engagement.

Forest risk commodity

Palm oil

Operational coverage

Direct operations
Supply chain

Description of control systems

GAR has systems that includes due diligence and annual assessment of suppliers, Traceability to Plantation, grievance handling and monitors deforestation in its areas and its supply chain by satellite (collaboration with third party provider for deforestation alerts, Satelligence.) GAR reports the progress of implementation through the NDPE-IRF (NDPE Implementation Reporting Framework, developed by a working group consisting of producers (including GAR) , brands and NGOs.

Monitoring and verification approach

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

% of total volume in compliance

91-99%

% of total suppliers in compliance

81-90%

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

Please explain

GAR also supports the Landscape Program in Siak Pelalawan District, Riau Province, Indonesia (SPLP) and Aceh Tamiang and Southern Aceh Landscape Program. SPLP is deploying a deforestation monitoring and verification system in Pelalawan district, including monitoring of alerts and training of government civil servants to verify alerts. It is now working on a similar system for Siak.

SPLP now has full overview of all mills in Siak and Pelalawan, based on input of CORE database, GFW's Universal Mill list and government data. A deforestation monitoring and verification system is also being operated jointly by WRI and the Siak Plantation Department.

The project also includes the following stages with the communities: 1) initial engagement on forest and peat conservation , 2) training on good practices and monitoring 3) implementation and capacity building and 4) implementation of village level monitoring and reporting. The monitoring and reporting phase, aims to actively involve communities and farmers in monitoring their compliance and to contribute to joint reporting on progress and commitments.

F6.6

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

Assess legal compliance with forest regulations	
Palm oil	Yes, from both suppliers and owned/managed land

F6.6a

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

Palm oil

Procedure to ensure legal compliance

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 RSPO/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. We have also partnered with agritech company, Satelligence to deliver near real-time deforestation risk monitoring of our concessions and supply chain. In 2020, the SPLP Landscape Programme also provided training to mills and government representatives on the new ISPO standard, targeting 50 participants from mills and government. The programme aims to accelerate certification for target mills.

F6.7

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

	Are you working with smallholders?	Type of smallholder engagement approach	Smallholder engagement approach	Number of smallholders engaged	Please explain
Palm oil	Yes, working with smallholders	Supply chain mapping Capacity building	<p>Supplier questionnaires on environmental and social indicators</p> <p>Developing or distributing supply chain mapping tool</p> <p>Offering on-site technical assistance and extension services</p> <p>Providing agricultural inputs</p> <p>Disseminating technical materials</p> <p>Organizing capacity building events</p> <p>Investing in pilot projects</p> <p>Supporting smallholders to clarify and secure land tenure</p> <p>Prioritizing support for smallholders in high-risk deforestation regions</p>	158,000	<p>At GAR, we have a policy of supporting all (100%) (70,800) of our plasma smallholders. The plasma smallholders adhere to all our NDPE commitments. Through their partnership with us, we provide our plasma smallholders with high-yielding seeds and good quality fertilisers. We also 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.</p> <p>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.</p>

					<p>Through the Smallholders Development Programme, GAR has provided technical assistance and long tenure interest-free credit to independent farmers in East Kalimantan since 2013. 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.</p> <p>SMARTRI staff also visit smallholder farms when requested, to help solve pest outbreak issues or nutrient deficiency cases.</p> <p>Through our Ksatria Sawit Programme to accelerate traceability, we have registered 87,000 Tier 2 suppliers such as smallholders. We are now working on targeted programmes in collaboration with customers to help these smallholders become more sustainable. We also support smallholders through our Participatory Mapping exercises which amongst other things increases the clarity of land tenure. We also run about 60 Alternative Livelihood projects ranging from</p>
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					<p>cash/food crop farming to animal husbandry to build rural farming communities resilience.</p> <p>On 2020 SPLP Landscape Program provided training to mills and government representatives on the new ISPO standard, targeting 50 participants from mills and government. Target mills are those which are not yet engaged and are not yet ISPO certified. SPLP aims to engage with selected number of mills to accelerate ISPO certification.</p>
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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?

	Are you working with direct suppliers?	Type of direct supplier engagement approach	Direct supplier engagement approach	% of suppliers engaged	Please explain
Palm oil	Yes, working with direct suppliers	Supply chain mapping Capacity building Financial and commercial incentives	Supplier questionnaires on environmental and social indicators Developing or distributing supply chain mapping tool Supplier audits Offering on-site training and technical assistance	100%	<p>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.</p> <p>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</p>

			<p>Disseminating technical materials</p> <p>Organizing capacity building events</p> <p>Investing in pilot projects</p> <p>Offering credit lines linked to best agricultural practices</p> <p>Purchase guarantee linked to best agricultural practices</p> <p>Long-term contracts linked to forest related commitments</p>		<p>traceability; responsible labour practices;</p> <p>and implementation of FPIC and human rights.</p> <p>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 policies.</p> <p>Since we began our engagement with suppliers on forest-related commitments in 2015, 17 of them have invested in carrying out HCS/HCV assessments and we are now supporting the conservation commitments of over 100, 000 hectares of forests by our suppliers.</p>
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F6.9

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

Are you working beyond	Type of engagement approach with indirect	Indirect supplier engagement approach	Please explain

	first tier?	suppliers		
Pal m oil	Yes, worki ng beyo nd first tier	Supply chain mapping Capacity building	Developin g or distributin g supply chain mapping tools Supplier questionn aires on environm ental and social indicators On-site meetings with indirect suppliers Offering on-site training and technical assistanc e Dissemin ating technical materials Participati ng in workshop s Investing in pilot projects	<p>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:</p> <ul style="list-style-type: none"> - 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. <p>The assessments contain time-bound action plans for Tier 1 and Tier 2 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/d14nSlubuk_gaung_and_dumai_sustainability_overview_report.pdf</p> <p>We have rolled out new programmes targeting Tier 2 smallholders and agents such as Ksatria Sawti to accelerate Traceability to the Plantation. As of end 2020, 87,000 smallholders have been registered under the programme. We are now working on targeted interventions in collaboration with customers to support smallholder sustainability. Smallholders/agents have also been invited to our supplier workshops.</p>

F6.10

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

Forest risk commodity

Palm oil

Do you participate in activities/initiatives?

Yes

Activities

Involved in 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), NDPE IRF Working Group, Palm Oil Production and Protection Beyond Concession Working Group, Forest Positive Coalition Working Group, New York Declaration on Forests

Jurisdictional approaches

Please explain

UNGC: GAR has subscribed to the UN Global Compact principles since 2006

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.

NYDF: GAR endorsed NYDF in 2014

NDPE IRF: GAR is part of working group developing the IRF and is implementing it.

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). In Aceh Tamiang And southern Aceh (Subullussalam, Aceh Selatan, Aceh Singkil district), this project is in collaboration with local NGO (Forum Komunikasi Leuser, Kempura etc) and local government.

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 over 100,000 hectares of forests (HCS/HCV) by our suppliers .

We have also worked with NGOs like Mighty Earth and Aidenvironment on a supplier re-engagement protocol.

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 2020, GAR had rolled out PM in 158 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 2020, the programme to help prevent forest fires through training, education and active assessment and monitoring has been rolled out to 32 villages in Indonesia.

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 alerts will be available on Global Forest Watch and Global Forest Watch Pro, and the methodology behind the alerts will be published. Read more on RADD on our website: <https://goldenagri.com.sg/wp-content/uploads/2019/11/Palm-Oil-Industry-to-Jointly-Develop-Radar-Monitoring-Technology-to-Detect-Deforestation.pdf>

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)

Verified Sourcing Areas

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 and southern Aceh (Subullussalam, Aceh Selatan, Aceh Singkil district)

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 has revegetated some 1000 hectares of peat conservation area in one its concessions in West Kalimantan. In 2020, GAR also worked with the Univeristy of Tanjung pura on a water management master plan for the area. 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

2023

Project area to date (Hectares)

1,000

Project area in the target year (Hectares)

2,000

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 2020, we have revegetated/reforested 1000 hectares of the area as a buffer zone and we continue to monitor and maintain optimum water levels to keep the peat wet. We are targeting to revegetate another 1,000 hectares in the next 3 years. 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.

In 2020, we also worked with the University of Tanjungpura on a water management masterplan for the peat area.

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

2020

Project area to date (Hectares)

2,700

Project area in the target year (Hectares)

2,700

Country/Area

Indonesia

Latitude

0

Longitude

0

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 2020, we completed the rehabilitation and revegetation of over 2700 hectares of riparian buffer maintain the riparian zone. We will continue to maintain the riparian 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)

160

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 three orangutans back to the wild in 2020, despite the challenges of the ongoing pandemic. . We aim to release a total of 160 orangutans by 2021 back to the Seruyan Forest in Central Kalimantan. Since 2011, we have released 127 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, 17 have undertaken these assessments. We are also currently supporting the conservation commitments of over 100,000 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 233,000 hectares of plantations and 35 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 280,000 hectares of plantations including smallholder plantations of over 51,000 hectares, 24 mills, 6 refineries, 11 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.

Disclosure module

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.

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).

Disclosure module

F6. Implementation

Data points verified

Traceability of palm oil from GAR-owned refineries

Verification standard

NDPE IRF (verified by independent third party, Control Union)

Please explain

Verification of traceability of palm oil from GAR-owned refineries as per requirements of the NDPE IRF was carried out by Control Union for FY 2020

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

Direct operations
Supply chain

Primary barrier/challenge type

Supply chain complexity

Comment

The Indonesian palm oil industry is highly fragmented, with over 2.5 million smallholders managing 40% of all palm oil estates. That means we have to engage with hundreds of supplier mills and thousands of smallholders which takes time and resources. 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.

Forest risk commodity

Palm oil

Coverage

Direct operations
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 especially if they do not see returns on investment due to lack of uptake/support for sustainably certified palm oil by customers.

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.

Forest risk commodity

Palm oil

Coverage

Direct operations

Supply chain

Main measure

Increased demand for certified products

Comment

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.

Forest risk commodity

Palm oil

Coverage

Direct operations

Supply chain

Main measure

Greater customer awareness

Comment

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 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.

Forest risk commodity

Palm oil

Coverage

Direct operations

Supply chain

Main measure

Price premium for certified materials

Comment

Greater willingness by customers and buyers to pay a premium for sustainably-produced palm oil is critical in promoting long-term sustainability in the sector.


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 2020, which is available to be downloaded at:
<https://goldenagri.com.sg/sustainability/sustainability-report/>

 GAR_forest_conservation_policy-fcp.pdf

 2020 - GAR Annual Report.pdf

 GAR-Peat-Ecosystem-Rehabilitation-Project.pdf

 GAR_Social_and_Environmental_Policy.pdf

F17.1

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

	Job Title	Corresponding job category
Row 1	Managing Director, Sustainability and Strategic Stakeholder Engagement	Chief Sustainability Officer (CSO)

SF. Supply chain module

SF0.1

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

	Annual revenue
Row 1	7,077,888

SF0.2

(SF0.2) Do you have an ISIN for your organization that you are willing to share with CDP?

No

SF1.1

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

Partially

SF1.1a

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

Requesting member

KAO Corporation

Forest risk commodity

Palm oil

Form of commodity

Crude palm oil (CPO)
 Crude palm kernel oil (CPKO)
 Refined palm oil
 Other, please specify
 RBDPO & RBDPKO

Third-party certification scheme

RSPO producer/grower certification

Total volume of commodity sold to member

2,107.12

Metric

Metric tons

What % of the volume reported in column 5 is certified?

<10%

Comment

Total volume stated above is for the Non-RSPO certified products that we sell to KAO Corporations (KAO INDUSTRIAL (THAILAND) CP., KAO VIETNAM CO., LTD, PT. KAO INDONESIA, PT. KAO INDONESIA CHEMICALS). In 2020, we have sold Crude palm oil (CPO), Crude palm kernel oil (CPKO), Refined palm oil, RBDPO & RBDPS to KAO Corporation. Our raw materials were sourced from 378 third-party mills and 47 GAR-owned mills in Indonesia. Procurement of CPO and PK, and procurement of FFB, accounts for around 74 and 12% respectively of our Indonesian subsidiaries' procurement spend. We source around 60% of these materials for our refineries from third-party suppliers. From our supply chain mapping, we also know that 53% of our supplying mills or 64% of our procured supply in 2020 is RSPO and/or ISPO certified.

SF1.1b

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

Requesting member

KAO Corporation

Forest risk commodity

Palm oil

Primary reason

Other, please specify

The sales data is considered company confidential.

Please explain

In 2020, we have sold Crude palm oil (CPO), Crude palm kernel oil (CPKO), Refined palm oil, RBDPO & RBDPS to KAO Corporation. Up to 10% of the volume sold is certified RSPO producer/grower certification. However the detail of sales considered company confidential. In 2020, raw materials were sourced from 378 third-party mills and 47 GAR-owned mills in Indonesia. Fresh fruit bunches (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. Procurement of CPO and PK, and procurement of FFB, accounts for around 74 and 12 percent respectively of our Indonesian subsidiaries' procurement spend. We source around 60% of these materials for our refineries from third-party suppliers. From our supply chain mapping, we also know that 53% of our supplying mills or 64% of our procured supply in 2020 is RSPO and/or ISPO certified.

SF2.1

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

Requesting member

KAO Corporation

Commodity related to the project

Palm oil

Category of project

Certification

Type of project

Increase in coverage of commodity certified

Estimated timeframe for realization of benefits to customer

1-3 years

Details of project

Sustainability certification has become the norm in palm oil industry since demand for certified palm oil keeps increasing. We continue to work on extending the coverage of certification for our palm oil production with the aim to certify all our mills by 2023.

Projected outcome

By increasing the coverage of certification for palm oil, it will guarantee the sustainability of our products and generate higher income due to premium prices and enhanced productivity.

Requesting member

KAO Corporation

Commodity related to the project

Palm oil

Category of project

Traceability and transparency

Type of project

New traceability system

Estimated timeframe for realization of benefits to customer

1-3 years

Details of project

We have achieved 100% Traceability to the Mill since 2015 and continue to maintain this. GAR-owned mills achieved 100 percent TTP at end 2017, and we are working closely with our third-party supplier mills to achieve the same result.

Despite COVID-19-related constraints, we achieved 90% full traceability at the end of 2020 for GAR-owned mills and third-party suppliers. In 2020, we sourced from 378 third-

party supplier mills and 47 GAR-owned mills (excluding one mill acquired at end of 2020). We have given an extension to suppliers whose TTP efforts were interrupted by the pandemic. They are expected to complete their mapping in the coming months. However, for the minority of suppliers who have not made any meaningful effort on TTP to date, we will consider them automatically excluded from our supply chain, as traceability is an essential requirement under the GSEP.

To help accelerate TTP amongst Tier 2 suppliers such as smallholders and agents we launched the Ksatria Sawit (Palm Oil Warriors) programme. The initiative links suppliers with our supply chain mapping partner, Koltiva. GAR provides the suppliers' profiles, and Koltiva follows up by conducting field surveys with the mills, agents and smallholder farmers. As of end 2020, we had exceeded our original targets and registered 87,000 smallholders covering 325,000 hectares of estates. Now that the farmers are registered in the Ksatria Sawit programme, we will tailor plans to help them adopt sustainable practices.

Traceability allows us to guarantee provenance for our customers. We are also engaging with our mapped suppliers to help them comply with our NDPE policy.

GAR has procedures/SOPs on Supplier Evaluation and Grievance handling which including protocol for handling non-compliance supplier and updated regularly via <https://www.goldenagri.com.sg/sustainability/responsible-sourcing/grievance-list-and-reports/>

Projected outcome

Traceability enables us to guarantee the provenance of our raw materials to our customers, and gives us visibility over our supply chain. It helps us mitigate, manage and minimize risk in our supply chain and to our customers. Through our supply chain mapping and traceability efforts, we are also able to assure sustainable production practices from the source.

More information on our TTP progress is available through:
<https://www.goldenagri.com.sg/sustainability/responsible-sourcing/palm-supply-chain-traceability-and-transformation/>

SF2.2

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

No

SF3.1

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

Palm oil

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

Yes, willing to share details with requesting CDP SC members

Please explain

We are committed to reducing the Greenhouse Gas (GHG) emissions from our operations. We recognise that emissions resulting from land use change and cultivation is naturally one of the most significant impacts for any agribusiness. Our conservation of HCS forests, which retain large stores of carbon, is one way we are contributing to avoidance of emissions. Another significant source of GHG emissions comes from Palm Oil Mill Effluent (POME), the wastewater from processing fresh fruit bunches (FFB) which emits methane if left untreated.

POME treatment therefore remains one of our main GHG emissions reduction activities. We also carry out methane capture at some of our mills. To treat POME, we mix it with shredded empty fruit bunches to produce compost, which is used as organic fertiliser, in some of our estates. This contributes to a reduction of chemical fertiliser consumption, which is the second largest source of GHG emissions after GHG emissions of POME. In addition, since early 2020 we have implemented the use of coated urea fertiliser, which further contributes to reduction of GHG emissions. We continued to reduce GHG emissions in our operations through our facilities to capture methane gas at seven mills in Central Kalimantan, Jambi and Riau. 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 also reduced GHG emissions through composting.

GAR's emission reduction through 7 methane capture facilities in 2020 is 388,210 tCO₂e.

(Methodology: CDM AMS-III.H. version 19, GHG measured: CH₄)

GAR's emission reduction through 3 composting facilities in 2020 is 155,623 tCO₂e.

(Methodology: CDM AMS-III.F. version 12, GHG measured: CO₂, CH₄, N₂O.)

Total sinking from methane capture and composting facilities in 2020: 543,833 tCO₂e.

SF3.1a

(SF3.1a) For your disclosed commodity(ies), provide details on the actions implemented in your direct operations and/or supply chain that have resulted in a reduction of GHG emissions and/or enhancement in removals.

Forest risk commodity

Palm oil

Description of actions

In 2020, we are measuring the GHG data from our oil palm estates (nucleus only) and mills in Indonesia. We have not measured GHG from our suppliers, but we have measured our GHG reduction from our 7 methane capture and 3 composting facilities.

CO₂e reductions and removals achieved from base year (metric tons CO₂e)

543,833

Base year

2,020

Emissions accounting boundary

Included in the corporate GHG inventory boundary

Scope

Scope 1

Emissions accounting methodology and standards

ISO 14064-1:2018

Please explain calculation

Scope 1 GHG emissions calculated following the ISO 14064-1:2006 standard, using an operational control approach. Direct scope 1 emission sources include emission from stationary combustion, mobile combustion, synthetic fertiliser application, and POME treatment. Calculation includes: CO₂, CH₄, N₂O. Our gross direct emissions in 2020 is 2,182,501 tCO₂e, and our biogenic emissions is 2,411,070 tCO₂e. Direct GHG emission calculation started from 2018 and it will be calculated and audited biannually.

GAR's emission reduction through 7 methane capture facilities in 2020 is 388,210 tCO₂e.

(Methodology: CDM AMS-III.H. version 19, GHG measured: CH₄)

GAR's emission reduction through 3 composting facilities in 2020 is 155,623 tCO₂e.

(Methodology: CDM AMS-III.F. version 12, GHG measured: CO₂, CH₄, N₂O.)

Total sinking from methane capture and composting facilities in 2020: 543,833 tCO₂e.

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP



	I am submitting to	Public or Non-Public Submission	Are you ready to submit the additional Supply Chain questions?
I am submitting my response	Investors Customers	Public	Yes, I will submit the Supply Chain questions now

Please confirm below

I have read and accept the applicable Terms