

Welcome to your CDP Climate Change Questionnaire 2019

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

Golden Agri-Resources (GAR) is one of the largest palm oil plantation companies in the world. Our plantations are located in Indonesia and we manage more than 500,000 hectares of palm oil plantations (including smallholder farmers). It has integrated operations focusing on the production of palm-based edible oils and fats and biodiesel. 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 and shortening and biodiesel as well as trading palm products throughout the world.

GAR is focused on 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, market place and work place); 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 proactively.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Row 1	January 1, 2018	December 31, 2018	Yes	1 year

C0.3

(C0.3) Select the countries/regions for which you will be supplying data.

Indonesia

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

USD

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your consolidation approach to your Scope 1 and Scope 2 greenhouse gas inventory.

Other, please specify
Financail and operational

C-AC0.6/C-FB0.6/C-PF0.6

(C-AC0.6/C-FB0.6/C-PF0.6) Are emissions from agricultural/forestry, processing/manufacturing, distribution activities or emissions from the consumption of your products – whether in your direct operations or in other parts of your value chain – relevant to your current CDP climate change disclosure?

	Relevance
Agriculture/Forestry	Direct operations only [Processing/manufacturing/Distribution only]
Processing/Manufacturing	Direct operations only [Processing/manufacturing/Distribution only]
Distribution	Direct operations only [Processing/manufacturing/Distribution only]
Consumption	Direct operations only [Processing/manufacturing/Distribution only]

C-AC0.7/C-FB0.7/C-PF0.7

(C-AC0.7/C-FB0.7/C-PF0.7) Which agricultural commodity(ies) that your organization produces and/or sources are the most significant to your business by revenue? Select up to five.

Agricultural commodity

Palm Oil

% of revenue dependent on this agricultural commodity

More than 80%

Produced or sourced

Both

Please explain

Our plantations are located in Indonesia and we manage more than 5000,000 hectares of palm oil plantations (including smallholder farmers). We are a leading seed-to-shelf agribusiness—from growing oil palms with farmers to producing food for the present and future.

We are positioning GAR to be the best, fully-integrated, global agribusiness and

consumer product company. To achieve this vision, we are enhancing competitiveness, driving positive change and exploring well research opportunities especially in the areas of innovation, technology and sustainability.

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual(s)	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 to oversee the development and implementation of the GSEP and the monitoring of performance across all our business operations.

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – some meetings	<ul style="list-style-type: none"> Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding annual budgets Reviewing and guiding business plans 	To ensure the appropriate level of oversight and guidance, we have established a Sustainability Committee comprising the senior leadership team across the upstream, downstream and

	<p>Setting performance objectives</p> <p>Monitoring implementation and performance of objectives</p> <p>Overseeing major capital expenditures, acquisitions and divestitures</p> <p>Monitoring and overseeing progress against goals and targets for addressing climate-related issues</p>	<p>corporate centres which meets regularly to oversee the development and implementation of GAR's sustainability strategy. The Committee reports to the Chairman and CEO and the Board, and is a key part of GAR's efforts to embed sustainability in its everyday operations.</p>
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C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

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

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).

The Sustainability Committee (SC) reports to the CEO and Chairman of the Board. The SC comprises the senior leadership team from the upstream, downstream and corporate business units as well as the head of the Sustainability Department and other staff members from the Department.

The SC meets regularly to oversee the development and implementation of the GAR Social and Environmental Policy (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.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

Yes

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Who is entitled to benefit from these incentives?

Other, please specify
Manager

Types of incentives

Monetary reward

Activity incentivized

Emissions reduction project

Comment

GAR is committed to report and reduce GHG emissions and improve energy efficiency, as outlined in our sustainability policy, the GAR Social and Environmental Policy (GSEP). Our monetary reward is embedded in our Key Performance Indicators which will impact salary increment and yearly bonus/incentives.

Who is entitled to benefit from these incentives?

Other, please specify
Employees on GHG reduction programme

Types of incentives

Monetary reward

Activity incentivized

Emissions reduction project

Comment

GAR is committed to report and reduce GHG emissions and improve energy efficiency, as outlined in our sustainability policy, the GAR Social and Environmental Policy (GSEP). Our monetary reward is embedded in our Key Performance Indicators which will impact salary increment and yearly bonus/incentives.

C2. Risks and opportunities

C2.1

(C2.1) Describe what your organization considers to be short-, medium- and long-term horizons.

	From (years)	To (years)	Comment
Short-term	0	3	
Medium-term	3	8	
Long-term	8	20	

C2.2

(C2.2) Select the option that best describes how your organization's processes for identifying, assessing, and managing climate-related issues are integrated into your overall risk management.

Integrated into multi-disciplinary company-wide risk identification, assessment, and management processes

C2.2a

(C2.2a) Select the options that best describe your organization's frequency and time horizon for identifying and assessing climate-related risks.

	Frequency of monitoring	How far into the future are risks considered?	Comment
Row 1	Six-monthly or more frequently	>6 years	The Sustainability Committee meets quarterly. Aside from these meetings, urgent and developing issues are escalated to relevant SC members for their input and decisions. Potential risks are reported to the Board. The Board is also assisted in the governance of climate risk by the Enterprise Risk Management Committee .

C2.2b

(C2.2b) Provide further details on your organization's process(es) for identifying and assessing climate-related risks.

The Enterprise Risk Management Committee comprising of Senior Management helps the Board in risk governance. The ERMC oversees risk management activities across the business segments and directs the efforts of the risk management teams to continually identify, evaluate and mitigate risks together with a focus on operational improvements appropriate for the business and external environment. Our activities are exposed to a baseline of business and strategic, market, credit and operational risk factors. For each of these risk exposures, appropriate risk management strategies and internal controls are put in place to mitigate against such risk.

Risks assessed by the ERMC include environmental (climate change related) risks. The GAR Social and Environmental Policy which contains our commitments on environmental management and GHG emission reduction is a key guiding policy to mitigate these risks.

GAR also identifies environmental and social risks by maintaining regular engagement and interaction with our partners and key stakeholders through the National Sustainability Stakeholders Forum (NSSF). We also conduct direct engagement through bilateral dialogues with communities and individual civil organisations, and collaborate with partners on various third-party assessments such as emission reduction projects and verifications.

GAR has also developed an internal Standard Operating Procedures (SOP) in identifying, managing and monitoring conservation areas prior to developing new plantations as a means to protect company’s physical assets from liabilities. Identification of potential environmental risks and conflicts are also carried out during Social and Environmental Impact Assessment (SEIA) process.

C2.2c

(C2.2c) Which of the following risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	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 for eg to tackle climate change. 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.
Emerging regulation	Relevant, always included	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.
Technology	Relevant, always included	Our business believes in the effectiveness of R&D and technology to improve efficiency, productivity and sustainable production of palm oil including mitigation of climate-related risks. New technology that can help the business achieve these goals will be considered for adoption but will also lead to considerations of additional expenditure such as capital investment , R&D costs to develop new technology etc

Legal	Relevant, always included	Legislation such as acts against pollution eg. Transboundary Haze Pollution Act can be used to penalise companies which cause pollution through burning forests. GAR therefore continues to enforce its Zero Burning Policy and other environmental management commitments under the GAR Social and Environmental Policy to ensure that it is in compliance with national and international regulations.
Market	Relevant, always included	Negative perceptions about palm oil and its links to deforestation and climate change can affect market access/demand. 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.
Reputation	Relevant, always included	Palm oil while one of the most sought after agricultural commodities globally, continues to be embroiled in debates over deforestation, GHG emissions, biodiversity loss and social conflicts. As one of the world's largest palm oil grower, we are affected by campaigns against palm oil. This could have a negative impact on the reputation of the company. These campaigns can also result in changes in consumer attitude and affect the demand for our products.
Acute physical	Relevant, always included	Our fresh fruit bunch yield is very dependent on weather conditions. 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 fires in the plantations.
Chronic physical	Relevant, sometimes included	There is growing evidence that climate change will lead to longer term shifts in weather patterns. This can affect the productivity of our plantations as changes in mean temperatures and/or excessive rainfall will stress the palm trees reducing production of fresh fruit bunches.
Upstream	Relevant, always included	Climate change related extreme weather phenomenon or longer-term shifts in weather patterns can affect upstream (plantation) productivity and profitability.

Downstream	Relevant, always included	Disruptions of supply of raw materials caused by climate change related extreme weather phenomenon or longer term shifts in weather patterns can adversely affect our downstream facilities (refinery and kernel crushing plants) output.
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C2.2d

(C2.2d) Describe your process(es) for managing climate-related risks and opportunities.

The GAR Social and Environmental Policy (GSEP) is the main policy roadmap guiding our mitigation efforts against climate change with commitments on forest conservation; no development on peat and Zero Burning as well as reduction of GHG emissions.

GAR prioritises the identified risks and opportunities in order of urgency (requires immediate short-term, medium-term or long-term decision making), magnitude (numbers of entities affected), economic gain/loss for company including reputational risks.

We also carry out materiality assessments every 2-3 years with a broad range of external and internal stakeholders in line with Global Reporting Initiative's (GRI) guidelines which also helps us monitor and define our most material issues including that of climate change, GHG emissions and forest conservation. This process also enables us to assess risks and opportunities on a regular basis.

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Physical risk

Primary climate-related risk driver

Acute: Increased severity of extreme weather events such as cyclones and floods

Type of financial impact

Reduced revenues from lower sales/output

Company- specific description

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 oil extraction rate.

Extreme weather phenomenon can also potentially disrupt logistics, causing delays and even damage to our products and assets. Examples of such extreme weather phenomenon is seen periodically during severe El Nino years which brings severe draughts and can also lead to more forest fires and pollutant haze. The last severe El Nino in 2015 caused our production across Indonesia to decline by between 10-15%.

Time horizon

Medium-term

Likelihood

Very likely

Magnitude of impact

Medium-high

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

Extreme weather phenomenon like a severe El Nino (causing extreme drought) can lead to a potential reduction/disruption in production capacity of between 10 - 15%. It has the potential to impact our plantation operations, our logistical network as well as our external supply of raw materials to our downstream refineries such as crude palm oil from third-party suppliers who would be experiencing similar problems.

Management method

We have implemented various measures to reduce the impact of weather conditions. Historically, CPO prices typically increase when supply is adversely affected by weather conditions, thereby reducing the impact of the decrease in yield. We also manage risk by educating and preparing our operational staff to deal with

climate related incidents, including droughts. This is achieved through crisis management preparation and having in place protocols and procedures to maintain our capability to handle such emergencies. In parallel, our research arm (SMARTRI) plays an essential role in sustaining high productivity and research into producing more climate change- resilient seed stock.

We have also implemented various measures at our plantations to reduce the impact of weather conditions on our plantations, including the construction of drainage systems and roads and the establishment of certain planting patterns. We are also exploring ways to optimise water use in our plantations through the use of advanced technology including AI.

Cost of management

12,000,000

Comment

We are developing crops resilient to the effects of climate change (e.g. extreme weather events such as drought, flooding) and building community resilience, particularly in areas vulnerable to climate change. These are now a top priority in our business. Our annual R&D budget is around USD 12 million - part of which is used for R&D into more resilient crops and climate change adaptation. Other costs to mitigate and adapt to climate change are considered part of overall costs.

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Transition risk

Primary climate-related risk driver

Reputation: Stigmatization of sector

Type of financial impact

Reduced revenue from decreased demand for goods/services

Company- specific description

Negative perceptions about palm oil and its links to deforestation, GHG emissions and climate change can affect market access/demand and possibly lead to changes in international legislation or regulations. 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. This impact is currently more likely to affect demand from developed markets.

Time horizon

Medium-term

Likelihood

About as likely as not

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The potential financial impact is variable and dependent on how much demand is affected and in which markets.

Management method

We continue to engage with key stakeholders such as customers, consumers, government agencies and NGOs to present factual and accurate representation of sustainable palm oil. We adhere to the GAR Social and Environmental Policy which includes our climate-related commitments on no deforestation, no development of peat, no burning as well as a commitment to reduce GHG emissions. We report on our progress annually through our Sustainability Report, website and GAR Sustainability Dashboard. We also commission external parties to assess our implementation of the GSEP on the ground and to recommend ways to improve.

Cost of management

Comment

Management of this risk is considered part of our overall operational costs.

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Supply chain

Risk type

Transition risk

Primary climate-related risk driver

Reputation: Increased stakeholder concern or negative stakeholder feedback

Type of financial impact

Reduction in capital availability

Company- specific description

Our supply chain especially our critical palm supply chain is required to comply with our sustainability commitments in the GAR Social and Environmental Policy including climate-related commitments on no deforestation, no burning, no development on peat and reduction of GHG emissions. However many of our suppliers (such as mills and their suppliers) in Indonesia are still at the initial stages of adopting sustainable practices due to lack of awareness, capacity and resources. GAR has recently embarked on a programme to help transform our supply chain into one that is more sustainable and responsible. In this initial transition stage there will potentially be suppliers which are found to be in violation of the GSEP. This can then lead to increased stakeholder concern and feedback when such violations are discovered. Amongst key stakeholders that monitor these closely are banks and financial institutions which are increasingly implementing responsible financing. Failure to resolve such issues within our supply chain could lead to a more risky credit profile and which could lead potentially to reduction in capital availability.

Time horizon

Current

Likelihood

About as likely as not

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The impact is variable depending on the nature and magnitude of stakeholder concern or negative feedback.

Management method

We are assessing and engaging intensively with our suppliers to ensure that they are compliant with the GSEP. This includes site visits, special training, sharing of best practices and a dedicated supplier support team to advise our suppliers on sustainability issues. Since 2015, we have dropped some 7% of our suppliers due to non-compliance with our policies. We also have a transparent publicly accessible grievance handling mechanism and a publicly available grievance list which tracks all grievances raised against our suppliers including climate-related grievances and shows all time-bound actions taken to resolve the grievance. This can be accessed on the GAR Sustainability Dashboard: <https://goldenagri.com.sg/sustainability-dashboard/>

We also engage closely and regularly with our key stakeholders including banks and financial institutions and maintain open and transparent communications with them on any matters of concern.

Cost of management

Comment

Management of this risk is considered part of our overall operational cost.

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Opp1

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Products and services

Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

Type of financial impact

Increased revenue through demand for lower emissions products and services

Company-specific description

The European Union's Renewable Energy Directive (RED-2 and Delegated Act) mandates that at least 20% of its total energy used within European Union are from renewable sources. One of the certification schemes that demonstrate compliance with the EU RED requirement is the International Sustainability and Carbon Certification (ISCC) and GAR produces ISCC certified palm oil for use as biodiesel.

The Indonesian government has a biodiesel mandate for its domestic and industrial sectors, as diesel fuel is mixed with a percentage of biodiesel (B20 programme). The government is also expected to continue implementing the biodiesel programme with a larger mix of biodiesel (B30). This could present a further opportunity for the palm oil industry.

Time horizon

Long-term

Likelihood

Likely

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

277,643,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Biodiesel products contributed about 3.8% to GAR's annual revenue in 2018.

Strategy to realize opportunity

GAR has invested in the construction of 2 biodiesel plants in Indonesia to enter the domestic biodiesel market.

GAR is managing the traceability and sustainability of the supply chain to ensure appropriate feedstock in biofuels and ensuring compliance and maintenance of our ISCC certification.

Cost to realize opportunity

240,000,000

Comment

The figure refers to production costs at our biodiesel plants (at 66% utilisation rate , excluding depreciation) is at USD 240 million. Other costs such as maintaining ISCC certification is considered part of operational costs.

Identifier

Opp2

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Resource efficiency

Primary climate-related opportunity driver

Use of recycling

Type of financial impact

Reduced operating costs (e.g., through efficiency gains and cost reductions)

Company-specific description

GAR recycles and reuses 100% of its crude palm oil production waste. Both solid and liquid waste are recycle/reused as fuel or fertiliser in our plantation and mill operations. This helps to reduce energy and fertiliser costs.

Time horizon

Current

Likelihood

Virtually certain

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The impact is cost savings at our plantations and mills.

Strategy to realize opportunity

We continue to maintain 100% recycling of solid and liquid waste including empty fruit bunches, palm oil mill effluent as fuel and fertiliser.

Cost to realize opportunity

0

Comment

This is considered part of our overall operational cost.

Identifier

Opp3

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Energy source

Primary climate-related opportunity driver

Use of lower-emission sources of energy

Type of financial impact

Reduced exposure to GHG emissions and therefore less sensitivity to changes in cost of carbon

Company-specific description

While we work on an overall GHG reduction strategy, we are also working on the implementation of methane capture facilities. These facilities can reduce emissions on-site at our mills in Central Kalimantan, Jambi, and Riau. We have a total of 7 methane capture facilities in our units. These facilities 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. We are also currently working on implementing GHG reduction measures, such as CO-composting, Energy Management System, etc. 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.

Time horizon

Current

Likelihood

Very likely

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The impact is cost savings at our plantations and mills.

Strategy to realize opportunity

GAR plan to expand on these activities through working on new and improved facilities on its units.

Cost to realize opportunity

0

Comment

With an assumption the cost of a methane capture facility to capture and utilize the biogas from POME is around USD 2 – 3.5 million, the total capital cost will be around USD 60 – 105 million. Plus operational costs for maintenance and plant upkeep until the end of system lifetime.

C2.5

(C2.5) Describe where and how the identified risks and opportunities have impacted your business.

	Impact	Description
Products and services	Impacted	Our approach to responsible palm oil production (that we produce ourselves) is underpinned by producing a low emissions product certified through sustainable palm oil certification scheme (i.e. ISCC). This low emissions product is sold at a premium compared with other non-certified products, resulting in increased revenue. We have also built 2 biodiesel plants to take part in the domestic biodiesel market. We anticipate continued investment in maintaining ISCC certification and operational costs of running the 2 biodiesel plants.

Supply chain and/or value chain	Impacted for some suppliers, facilities, or product lines	We seek to transform our palm supply chain to ensure they are compliant with our sustainability commitments in the GSEP. We anticipate continued expenditure on supply chain engagement and training.
Adaptation and mitigation activities	Impacted	We are developing crops resilient to the effects of climate change (e.g. extreme weather events such as drought, flooding) and building community resilience, particularly in areas vulnerable to climate change. These are now a top priority in our business. We anticipate growing R&D budget for continued research into climate-change resilient crops. We also anticipate more operational costs for adaptation activities.
Investment in R&D	Impacted	The main objective of GAR R&D is to increase productivity and resilience. GAR is committed to implement responsible palm oil production through scientific research and development and the use of technological advances. Our flagship research facility SMARTRI, conducts research to improve climate change mitigation through reduction of operational emissions, improvement of Good Agricultural Practices and the development of climate-resilient seed stock. Our annual research and development budget is substantial.
Operations	Impacted	We have established two biodiesel plants in Indonesia and anticipate continuing operational costs from the plants. While we work on an overall GHG reduction strategy, we are also working on the implementation of methane capture facilities. These facilities can reduce emissions on-site at our mills in Central Kalimantan, Jambi, and Riau. We have a total of 7 methane capture facilities in our units. These facilities 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. We are also currently working on implementing GHG reduction measures, such as CO-composting, Energy Management System, etc. 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.
Other, please specify		

C2.6

(C2.6) Describe where and how the identified risks and opportunities have been factored into your financial planning process.

Relevance	Description
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Revenues	Impacted for some suppliers, facilities, or product lines	Our methane capture facilities have reduced GHG emissions up to 40 – 55 % of operational emissions on site. Therefore, it supports our market price, as ISCC-certified palm products command better prices. We also have two operational biodiesel plants contributing about 3.8% of revenue.
Operating costs	Impacted for some suppliers, facilities, or product lines	Our annual budget for research and development into climate change mitigation and adaptation continues to rise. We also employ staff to ensure compliance with ISCC certification criteria.
Capital expenditures / capital allocation	Impacted for some suppliers, facilities, or product lines	The implementation of 2 biodiesel plants and 7 methane capture facilities in our units in Indonesia.
Acquisitions and divestments	We have not identified any risks or opportunities	
Access to capital	Not yet impacted	Our access to capital has not yet been impacted by climate-changed related risks and opportunities.
Assets	Impacted for some suppliers, facilities, or product lines	The implementation of 2 biodiesel plants and 7 methane capture facilities in our units in Indonesia.
Liabilities	We have not identified any risks or opportunities	
Other		

C3. Business Strategy

C3.1

(C3.1) Are climate-related issues integrated into your business strategy?

Yes

C3.1a

(C3.1a) Does your organization use climate-related scenario analysis to inform your business strategy?

No, but we anticipate doing so in the next two years

C-AC3.1b/C-CE3.1b/C-CH3.1b/C-CO3.1b/C-EU3.1b/C-FB3.1b/C-MM3.1b/C-OG3.1b/C-PF3.1b/C-ST3.1b/C-TO3.1b/C-TS3.1b

(C-AC3.1b/C-CE3.1b/C-CH3.1b/C-CO3.1b/C-EU3.1b/C-FB3.1b/C-MM3.1b/C-OG3.1b/C-PF3.1b/C-ST3.1b/C-TO3.1b/C-TS3.1b) Indicate whether your organization has developed a low-carbon transition plan to support the long-term business strategy.

No, we do not have a low-carbon transition plan

C3.1c

(C3.1c) Explain how climate-related issues are integrated into your business objectives and strategy.

The GAR Social and Environmental Policy (GSEP) is the main policy roadmap which integrates climate-related issues into business objectives and strategy. The policy applies to all our operations, suppliers and investments.

The Sustainability Committee comprising senior management across all business units and reporting to the CEO and the Board, maintains general oversight on climate-change related matters and GSEP implementation.

To ensure proper implementation of the policy including commitments on forest conservation, no development on peat, Zero Burning and reduction of GHG emissions, GAR has invested resources in building up its Sustainability Department which oversees, manages, and regulates environmental sustainability issues. There are currently over 300 staff in the department managing various areas of the GSEP commitments.

In addition, we continuously train staff annually on the implementation of the GSEP commitments including those related to environmental management.

C3.1g

(C3.1g) Why does your organization not use climate-related scenario analysis to inform your business strategy?

We are in the process of preparing internally to carry out scenario analysis and we anticipate being able to do in the next 2 years.

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?

No target

C4.1c

(C4.1c) Explain why you do not have emissions target and forecast how your emissions will change over the next five years.

	Primary reason	Five-year forecast	Please explain
Row 1	Other, please specify Our target is based on calculations of certified emissions per tonne of products. We strive to produce palm products much less than 400 kgCO ₂ -eq/dry tonne products.	Explore the reduction of overall GHG emissions and expand methane capture activities which can bring down operation site emissions by about 40-55%.	The European Union's Renewable Energy Directive (RED-2 and Delegated Act) emphasizes the utilization of CPO products phasing out. This directive is contradictive with our product sales to commit to reducing GHG emissions since there will be no incentive from the EU market to increase our investment. Besides, on RSPO Certifications, there is no target for GHG emissions reduction.

C4.2

(C4.2) Provide details of other key climate-related targets not already reported in question C4.1/a/b.

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO₂e savings.

	Number of initiatives	Total estimated annual CO ₂ e savings in metric tonnes CO ₂ e (only for rows marked *)
Under investigation		
To be implemented*		
Implementation commenced*		
Implemented*	2	629,675
Not to be implemented		

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative type

Fugitive emissions reductions

Description of initiative

Agriculture methane capture

Estimated annual CO₂e savings (metric tonnes CO₂e)

458,987

Scope

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

4,683,969

Investment required (unit currency – as specified in C0.4)

3,000,000

Payback period

16-20 years

Estimated lifetime of the initiative

21-30 years

Comment

1. We have 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.
2. We continued to reduce GHG emissions in our operations through our facilities to capture methane gas at a number of mills in Central Kalimantan, Jambi and Riau. The captured methane gas is then used as an alternative energy source, generating electricity for our palm oil mills. The methodology we use for methane capture is CDM AMS III.H ver 18. These facilities can reduce between 40-55% of operational emissions on site. Investment cost is around 2 – 3.5 million USD for each methane capture facility.

Initiative type

Fugitive emissions reductions

Description of initiative

Other, please specify
Composting

Estimated annual CO2e savings (metric tonnes CO2e)

170,688

Scope

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

0

Investment required (unit currency – as specified in C0.4)

0

Payback period

1-3 years

Estimated lifetime of the initiative

>30 years

Comment

We calculate the emission reduction from our estates in Jelatang, Sako, and Kuayan Composting facilities. The methodology we use for composting is CDM AMS III.F ver 12.

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Compliance with regulatory requirements/standards	GAR produces CPO as source for biofuel production in Europe market, which needs to fulfil EU-RED (Renewable Energy Directives) requirements of minimum GHG emission savings.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?

Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products or that enable a third party to avoid GHG emissions.

Level of aggregation

Product

Description of product/Group of products

We produce ISCC certified Crude Palm Oil as source for biofuel production in European market, which needs to fulfil EU-RED (Renewable Energy Directives) requirements of minimum GHG emission savings.

Are these low-carbon product(s) or do they enable avoided emissions?

Low-carbon product

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions

Other, please specify
ISCC 205 GHG Emission

% revenue from low carbon product(s) in the reporting year

12.95

Comment

The total revenue for worldwide CPO sales in 2018 is USD 1,068,298,000, which covers 12.95% of our total revenue.

Level of aggregation

Product

Description of product/Group of products

We have 2 biodiesel plants in Indonesia with a total capacity of 1,000 tonnes per day each.

Are these low-carbon product(s) or do they enable avoided emissions?

Avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions

Other, please specify
Defra / DECC's GHG Conversion Factors

% revenue from low carbon product(s) in the reporting year

3.8

Comment

The total revenue for worldwide biodiesel sales in 2018 covers 3.8% of our total revenue.

C5. Emissions methodology

C5.1

(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).

Scope 1

Base year start

January 1, 2014

Base year end

December 31, 2014

Base year emissions (metric tons CO₂e)

2,065,518

Comment

Total target is for upstream activities only (Plantation and Mill). Baseline emission is calculated from POME emission, fuel consumption and chemical use. Base year of 2014 is based on verified calculation by ISCC auditor.

Scope 2 (location-based)

Base year start

Base year end

Base year emissions (metric tons CO₂e)

Comment

We do not measure Scope 2 emissions

Scope 2 (market-based)

Base year start

Base year end

Base year emissions (metric tons CO₂e)

Comment

We do not measure Scope 2 emissions

C5.2

(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions.

Other, please specify

ISCC 205 Calculation Method

C5.2a

(C5.2a) Provide details of the standard, protocol, or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions.

The calculation method is based on the requirements of the Renewable Energy Directive 2009/28/EC amended through Directive (EU) 2015/1513 (RED) and Fuel Quality Directive 2009/30/EC amended through Directive (EU) 2015/1513 (FQD).

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO₂e?

Reporting year

Gross global Scope 1 emissions (metric tons CO₂e)

675

Start date

January 1, 2018

End date

December 31, 2018

Comment

The number stands for the Average GHG emissions from mills and the supplying estates for the year 2012-2016 that has been verified by third party verifier, which is stated in kg CO₂e/ton CPO. The total emissions data are based on five years of operational data from 45 mills and 129 supplying estate, 26 nurseries and one seed production plant, and excludes land use change calculations.

Past year 1

Gross global Scope 1 emissions (metric tons CO₂e)

445.5

Start date

January 1, 2017

End date

December 31, 2017

Comment

The number stands for the Average GHG emissions from mills and the supplying estates for the year 2010-2014 that has been verified by third party verifier, which is stated in kg CO₂e/ton CPO. The total emissions data are based on ISCC 205 GHG Emissions Calculation Methodology and GHG Audit.

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based

We are not reporting a Scope 2, location-based figure

Scope 2, market-based

We have no operations where we are able to access electricity supplier emission factors or residual emissions factors and are unable to report a Scope 2, market-based figure

Comment

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO₂e?

Reporting year

Start date

End date

Comment

Past year 1

Start date

End date

Comment

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?

Yes

C6.4a

(C6.4a) Provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure.

Source

Downstream business segments i.e. our eight refineries and kernel crushing plants.

Relevance of Scope 1 emissions from this source

Emissions are relevant but not yet calculated

Relevance of location-based Scope 2 emissions from this source

Emissions are not evaluated

Relevance of market-based Scope 2 emissions from this source (if applicable)

Emissions are not evaluated

Explain why this source is excluded

At present, we are only able to disclose our emissions from our sites in Indonesia, from plantations up to mills. We excluded the Downstream end from the calculation because we do not yet have the capacity to gather all relevant information for the period to provide a complete and accurate analysis. We plan to do this in the near future.

Source

Units not certified under ISCC

Relevance of Scope 1 emissions from this source

Emissions are relevant but not yet calculated

Relevance of location-based Scope 2 emissions from this source

Emissions are not evaluated

Relevance of market-based Scope 2 emissions from this source (if applicable)

Emissions are not evaluated

Explain why this source is excluded

We are only able to disclose our ISCC certified mills emissions as these have been verified by third party audits.

C6.5

(C6.5) Account for your organization's Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status

Not evaluated

Explanation

We are currently not evaluating the fuel and energy related activities outside scope 1 category for upstream operations.

Capital goods

Evaluation status

Not evaluated

Explanation

We are currently not evaluating the fuel and energy related activities outside Scope 1 category for upstream operations.

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status

Not evaluated

Explanation

We are currently not evaluating the fuel and energy related activities outside Scope 1 category for upstream operations.

Upstream transportation and distribution

Evaluation status

Not evaluated

Explanation

We are currently not evaluating the fuel and energy related activities outside scope 1 category for upstream operations.

Waste generated in operations

Evaluation status

Not evaluated

Explanation

We are currently not evaluating the fuel and energy related activities outside scope 1 category for upstream operations.

Business travel

Evaluation status

Not evaluated

Explanation

Employee commuting

Evaluation status

Not evaluated

Explanation

We are currently not evaluating the fuel and energy related activities outside scope 1 category for upstream operations.

Upstream leased assets

Evaluation status

Not evaluated

Explanation

We are currently not evaluating the fuel and energy related activities outside scope 1 category for upstream operations.

Downstream transportation and distribution

Evaluation status

Not evaluated

Explanation

We are currently not evaluating the fuel and energy related activities outside scope 1 category for upstream operations.

Processing of sold products

Evaluation status

Not evaluated

Explanation

We are currently not evaluating the fuel and energy related activities outside scope 1 category for upstream operations.

Use of sold products

Evaluation status

Not evaluated

Explanation

We are currently not evaluating the fuel and energy related activities outside scope 1 category for upstream operations.

End of life treatment of sold products

Evaluation status

Not evaluated

Explanation

We are currently not evaluating the fuel and energy related activities outside scope 1 category for upstream operations.

Downstream leased assets

Evaluation status

Not evaluated

Explanation

We are currently not evaluating the fuel and energy related activities outside scope 1 category for upstream operations.

Franchises

Evaluation status

Not evaluated

Explanation

We are currently not evaluating the fuel and energy related activities outside scope 1 category for upstream operations.

Investments

Evaluation status

Not evaluated

Explanation

We are currently not evaluating the fuel and energy related activities outside scope 1 category for upstream operations.

Other (upstream)

Evaluation status

Not evaluated

Explanation

We are currently not evaluating the fuel and energy related activities outside scope 1 category for upstream operations.

Other (downstream)

Evaluation status

Not evaluated

Explanation

We are currently not evaluating the fuel and energy related activities outside scope 1 category for upstream operations.

C6.7

(C6.7) Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?

Yes

C6.7a

(C6.7a) Provide the emissions from biologically sequestered carbon relevant to your organization in metric tons CO2.

Row 1

Emissions from biologically sequestered carbon (metric tons CO2)

426,022.78

Comment

Biogenic CO2 emissions separately from the gross direct Scope 1 GHG emissions (MTCO2eq) is calculated from POME.

C-AC6.8/C-FB6.8/C-PF6.8

(C-AC6.8/C-FB6.8/C-PF6.8) Is biogenic carbon pertaining to your direct operations relevant to your current CDP climate change disclosure?

No

C-AC6.9/C-FB6.9/C-PF6.9

(C-AC6.9/C-FB6.9/C-PF6.9) Do you collect or calculate greenhouse gas emissions for each commodity reported as significant to your business in C-AC0.7/FB0.7/PF0.7?

Agricultural commodities

Palm Oil

Do you collect or calculate GHG emissions for this commodity?

Yes

Please explain

1. GAR is committed to report and reduce GHG emissions. This commitment is stated in our GAR Social and Environmental Policy (GSEP).
2. We are calculating our GHG emissions in order to comply with European Union Renewable Directives (EU RED) requirement for standard of GHG emission reduction/saving through the ISCC Certification Scheme.

Agricultural commodities

Do you collect or calculate GHG emissions for this commodity?

Please explain

C-AC6.9a/C-FB6.9a/C-PF6.9a

(C-AC6.9a/C-FB6.9a/C-PF6.9a) Report your greenhouse gas emissions figure(s) for your disclosing commodity(ies), explain your methodology, and include any exclusions.

Palm Oil

Reporting emissions by

Total

Emissions (metric tons CO₂e)

724,279.91

Change from last reporting year

Lower

Please explain

The GHG Calculation is obtained from the sum of total emissions data taken from 30 mills that have received ISCC Certification.

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO₂e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?

No

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/region.

Country/Region	Scope 1 emissions (metric tons CO2e)
Indonesia	675

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

C-AC7.4/C-FB7.4/C-PF7.4

(C-AC7.4/C-FB7.4/C-PF7.4) Do you include emissions pertaining to your business activity(ies) in your direct operations as part of your global gross Scope 1 figure?

Yes

C-AC7.4b/C-FB7.4b/C-PF7.4b

(C-AC7.4b/C-FB7.4b/C-PF7.4b) Report the Scope 1 emissions pertaining to your business activity(ies) and explain any exclusions. If applicable, disaggregate your agricultural/forestry by GHG emissions category.

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/region.

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)
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C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 0% but less than or equal to 5%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertakes this energy-related activity
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	No
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	No

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total MWh
Consumption of fuel (excluding feedstock)	LHV (lower heating value)	0	211,193.2	211,193.2
Total energy consumption		6,705,717	211,193.2	6,916,910.98

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	No
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Fuels (excluding feedstocks)

Diesel

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

211,193.2

MWh fuel consumed for self-generation of electricity

211,193.2

MWh fuel consumed for self-generation of heat

Comment

C8.2d

(C8.2d) List the average emission factors of the fuels reported in C8.2c.

Diesel

Emission factor

0.00314

Unit

metric tons CO2e per liter

Emission factor source

The data is calculated with ISCC assumption method from 30 Mills.

Comment

In 2018, the GHG emissions from diesel fuel contributed 15% of total GAR emissions.

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	No emissions data provided
Scope 3	No emissions data provided

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 and/or Scope 2 emissions and attach the relevant statements.

Scope

Scope 1

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Underway but not complete for reporting year-previous statement of process attached

Type of verification or assurance

Third party verification/assurance underway

Attach the statement

 EY GHG Verification Statement 2012 - 2016.pdf

Page/ section reference

5-6

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

98

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?

No, we do not verify any other climate-related information reported in our CDP disclosure

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

No, and we do not anticipate being regulated in the next three years

C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?

No

C11.3

(C11.3) Does your organization use an internal price on carbon?

No, and we do not currently anticipate doing so in the next two years

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement

Engagement & incentivization (changing supplier behavior)

Details of engagement

Run an engagement campaign to educate suppliers about climate change

% of suppliers by number

90

% total procurement spend (direct and indirect)

87

% Scope 3 emissions as reported in C6.5

0

Rationale for the coverage of your engagement

Our palm supply chain in Indonesia is considered our critical supply chain as it supplies the raw materials for our 8 downstream refineries and kernel crushing plants. A substantial portion of our procurement spend (over 80 percent) is spent on procurement of palm raw materials. One of our main commitments under the GSEP is to bring our supply chain along on our journey towards responsible palm oil. We believe we can and need to help create a better industry overall as we continue improving our implementation of responsible palm oil practices. Our engagement and supplier support process is time and labour-intensive and includes site visits, specialised training and workshops as well as specifically designed remedial action plans where needed. We conduct supplier assessments for environmental and social impacts. We do this systematically through a process developed by our implementation partner The Forest Trust, to assess compliance with the commitments under the GSEP including reduction of GHG emissions and no development on peat and forest conservation. Subsequently,

we devise appropriate intervention strategies to help our suppliers achieve compliance with our sustainability policy.

Impact of engagement, including measures of success

Our engagement activities help us to minimise supply chain risks because it allows us to deepen knowledge, awareness, trust and engagement with our suppliers while assisting them in improving their responsible practices. The success of our engagement can be measured from the transformation of our stakeholders' sustainability practices within their business management and operations. GAR will roll out thematic surveys geared towards issues in which suppliers are most challenged. Thematic surveys will assist GAR to understand better how its interventions are supporting suppliers to integrate sustainability into their business management and improve their practices in the field. GAR is still in the midst of compiling information about the impact of supplier support programmes as it is a time-consuming process with GAR having to reach out to over 400 mills and further to the suppliers of those mills. Our current analysis and intelligence gathering indicate that many suppliers are not aware of the importance of climate action such as monitoring and reducing GHG emissions and we will have a huge task to educate and support them to achieve competencies in these areas. It is an effort which will require considerable time.

Comment

These engagement and support efforts will ultimately help build a more responsible, resilient supply chain and industry. See more on the GAR Sustainability Dashboard: <https://goldenagri.com.sg/sustainability/sustainability-dashboard/>).

C12.3

(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?

Trade associations

C12.3b

(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?

Yes

C12.3c

(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.

Trade association

Roundtable on Sustainable Palm Oil

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

RSPO encourages its members to move towards low emissions or to avoid emissions through forest conservation.

How have you influenced, or are you attempting to influence their position?

We support the RSPO position and are active in various working groups on conservation. Information regarding GAR's RSPO certification is updated quarterly at GAR Sustainability Dashboard: <https://goldenagri.com.sg/sustainability-dashboard/>

C12.3f

(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?

We adhere to the RSPO Principles and Criteria and we train our employees on the implications and implementation of the GAR Social and Environmental Policy commitments which include commitments to reduce GHG emissions as well as avoidance of emissions through forest and peatland conservation. Similarly we communicate our commitments to our suppliers and require them to comply with our commitments under our Supplier Code of Conduct.

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication

In mainstream reports

Status

Complete

Attach the document

 GAR_SR_2018.pdf

Page/Section reference

32-33

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures

Other metrics

Comment

C14. Signoff

C-FI

(C-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.

C14.1

(C14.1) Provide details for the person that has signed off (approved) your CDP climate change response.

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

SC. Supply chain module

SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.

SC0.1

(SC0.1) What is your company's annual revenue for the stated reporting period?

	Annual Revenue
Row 1	7,167,428,000

SC0.2

(SC0.2) Do you have an ISIN for your company that you would be willing to share with CDP?

No