Sime Darby Plantation Berhad - Climate Change 2023



C0. Introduction

C0.1

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

Formerly under the multinational conglomerate Sime Darby Berhad (SDB), Sime Darby Plantation (SDP) was listed on Bursa Malaysia on 30 November 2017, following a strategic decision by SDB to unlock value for its shareholders by demerging its plantation and property sectors, thereby creating three independent pure play entities. SDP is among the largest company listed in Bursa Malaysia with a market capitalisation of RM 25.52billion and a global operation across 13 countries with a workforce of more than 80,000 employees.

SDP is involved in the full spectrum of the palm oil value chain. Under our Upstream operations, the Group has 744,188hectares (ha) of landbank spread across Malaysia, Indonesia, Papua New Guinea (PNG) and the Solomon Islands (SI). Under this sector, the Group is also involved in rubber, sugar cane plantation as well as cattle rearing. In the Downstream sectors comprises the production as well as the sales and marketing of oils & fats, oleochemicals, biodiesel and other palm oil derivatives.

Committed to operational excellence, innovation and sustainability, SDP has Research & Development (R&D) Centres and Innovation Centres located across the globe with over 190 technocrats and scientists assisting to improve every aspect of our value chain; from developing quality planting materials, genome utilization for no deforestation, correct dosage of fertilizer and environmental-friendly pesticides to enhancing the systems and processes in cultivating, harvesting and milling, to manufacturing not only high quality but also traceable refines palm oil and palm kernel products. In addition to our Upstream and Downstream operations, SDP is also involves in various other businesses that leverage on the potential of related products along the palm oil value chain.

We have a long history of operating sustainably- we have worked hard over the years to ensure that SDP is 100% certified to the Roundtable on Sustainable Palm Oil (RSPO) standard. We were founding members of RSPO and are committed to industry best practices. Our strict No Deforestation, No Peat and No Exploitation (NDPE) commitments are outlined in our Responsible Agriculture Charter, which extends to all suppliers within our supply chain. Crosscheck 2.0 shows our commitment towards a deforestation-free supply chain for SDP and for the sector in general.

With regards to our contribution to the Sustainable Development Goals (SDGs), SDP treat the Goal No 17 - Partnerships for the Goals as our foundational goal where we believe partnerships are the base from which we build up. We recognise that we cannot work in silo, and in order to overcome more complex challenges, we collaborate with with stakeholders and other growers for multiple initiatives. Supported by Goal 12- Responsible Consumption and Production, this is the central pillar of our activity. It is who we are as a company and defines our aspiration to be a leader in best agriculture practices. We also have further goals which we call our 'Primary Goals' which are Goal 2- Zero Hunger, Goal 8 - Decent Work & Economic Growth, Goal 9- Industry, Innovation & Infrastructure, Goal 13 - Climate Action and Goal 15 - Life on Land. The remaining goals of are consider as secondary goals which indirectly related to our operations and in many cases covered by our compliance with RSPO, MSPO and ISPO standards.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data and indicate whether you will be providing emissions data for past reporting years.

Reporting year

Start date January 1 2022

End date December 31 2022

Yes

Indicate if you are providing emissions data for past reporting years

Select the number of past reporting years you will be providing Scope 1 emissions data for 2 years

Select the number of past reporting years you will be providing Scope 2 emissions data for 2 years

Select the number of past reporting years you will be providing Scope 3 emissions data for 2 years

(C0.3) Select the countries/areas in which you operate. China Germany Indonesia Malaysia Netherlands Papua New Guinea Philippines Singapore Solomon Islands South Africa Thailand United Kingdom of Great Britain and Northern Ireland United States of America

C0.4

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

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 chosen approach for consolidating your GHG inventory. Operational control

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	Both own land and elsewhere in the value chain [Agriculture/Forestry only]
Processing/Manufacturing	Both direct operations and elsewhere in the value chain [Processing/manufacturing/Distribution only]
Distribution	Both direct operations and elsewhere in the value chain [Processing/manufacturing/Distribution only]
Consumption	Yes [Consumption 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

The Group's revenue is derived mainly from its upstream and downstream operations. In the upstream operations, revenue is from sales of agricultural produce such as crude palm oil (CPO), fresh fruit bunches (FFB), palm kernel (PK), rubber, beef and sugar. In the downstream operations, revenue is derived from sales of refined oils and fats, sales of CPO, sales of oleochemicals products, refining of coconut oils, production of biodiesel products, sales of derivatives and crushing of palm kernel to crude palm kernel oil and palm kernel expeller.

Palm oil is the main agricultural commodity that is produced and sourced by Sime Darby Plantation, and accounts for a significant portion of our revenue gain. The percentage of revenue dependent on palm oil is an approximation based on the amount of our products and services that are associated to our upstream and downstream operations. Based on this estimation, palm oil accounts for about 80-95% of revenue.

SDP also has production for coconut, rubber, sugar and cattle but it has been excluded due to their collective revenue being less than 2% of the Group's total revenue.

C0.8

(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier	
Yes, an ISIN code	MYL5285OO001	

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	Responsibilities for climate-related issues
individual or	
committee	
Director on board	The Group Managing Director (GMD) is a Director on our Main Board and chairs the Plantation Leadership Committee (PLC), which is SDP's highest management leadership group, comprised of C- Suite executives. Whilst the Board takes accountability on the Group's climate initiatives, the GMD is ultimately responsible for the oversight of our climate agenda and approves these prior to subsequent approval by the Board Sustainability Committee or Main Board, including the management of all risks and opportunities, our commitments on climate action and achieving net zero emissions accountable for sustainability related matters for the entire Group, including climate change. This is then cascaded down to the respective members of the Plantation Leadership Committee (PLC). Moreover, Environmental, Social, and Governance (ESG) related metrics are a key part of the GMD's corporate scorecard. This benchmark assessment includes climate change related KPIs around the Group's climate change commitments and progress in decarbonisation within the operations and throughout the supply chain.
Board-level committee	The Board Sustainability Committee (BSC) was established by SDP's Board of Directors to assist the board in fulfilling its oversight responsibilities in line with the Group's main sustainability objectives, which includes combatting climate change. At every quarterly BSC meeting, the progress of the Group's efforts to decarbonise its operations is monitored and deliberated as a standing agenda item. This includes monitoring and reviewing the progress of renewables projects (biogas & solar initiatives), efforts in implementing nature-based solutions and reforestation projects, and also efforts to eliminate deforestation with the Group's supply chain against SDP's overall climate strategy.
	The BSC roles relating to sustainability including climate change (non-exhaustive): Reviewing the strategy and performance at the Board level for critical sustainability issues including climate change Reviewing issues relating to sustainability arising from independent audits and assurance reports as well as any matters highlighted by the consultants Oversee the monitoring, reporting and verification of the Sustainability Key Performance Indicators of the SDP Group and their implementation through the Group Blueprint and Roadmaps. Consider and recommend to the Board positioning on relevant emerging sustainability issues. Emphasise and facilitate the adoption of a mind-set in favour of sustainability introughout the Group. Oversee the stakeholder dialogue process and its outcomes addressing social and environmental matters with regard to the strategic sustainability goals, in particular, matters that may affect the Group's reputation. This shall include key concerns/allegations that are raised by stakeholders, evolving public sentiments and government regulations.
	Key outcomes of the BSC meetings are then escalated to the Main Board meetings. Specifically in 2022, climate-related decisions that the BSC made or contributed to are: • Approval of SDP's climate ambition, strategy and targets, which were developed in line with the Science Based Targets initiative (SBTi) Criteria and submitted to SBTi for validation in FY2022. • Carbon removals strategy including renewables and Nature-Based Solutions programmes, • TCFD framework and the recommended disclosures
Chief Sustainability Officer	SDP's sustainability team is led by the Chief Sustainability Officer (CSO), who reviews SDP's sustainability strategies, commitments, plans, and oversees their implementation. The CSO is a permanent invitee to all meetings by the Board Sustainability Committee (BSC).
(CSO)	The CSO's key roles are: 1. Focus on efforts in implementing on-the-ground programmes to promote responsible and ethical production throughout Sime Darby Plantation Berhad's (SDP) operations and global supply chain. 2. Engages with a wide range of stakeholders within the sustainable palm oil sphere. 3. Reports on updates, progress, and critical concerns to the BSC every quarter, PLC every month and reports directly to the GMD. 4. Works with the group's sustainability team to actively manage the day-to-day implementation of SDP's No Deforestation, No Peat and No Exploitation (NDPE) commitments and related policies. Its activities include continuously engaging with relevant stakeholders on their respective roles.

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	Governance mechanisms into which climate- related issues are	Scope of board- level oversight	Please explain
item	integrated	lorororgin	
Scheduled – all meetings	Overseeing and guiding employee incentives Reviewing and guiding strategy Overseeing and guiding the development of a transition plan Monitoring the implementation of a transition plan Overseeing the setting of corporate targets Monitoring progress towards corporate targets	<not Applicabl e></not 	The Board Sustainability Committee (BSC) assists the Main Board in fulfilling its oversight responsibilities in line with the Group's main objectives which includes combatting climate change. At every quarterly BSC meeting, the progress of the Group's efforts to decarbonise its operations is monitored and deliberated as a standing agenda tiem. Key outcomes of the Board Sustainability Committee meetings are escalated to the Main Board meetings. The BSC's roles include, but are not limited to; 1. Reviewing and guiding strategy The Board holds responsibility in ensuring the Group operates in line with its sustainability objective. In FY2022, the BSC and Management discussed on exploring how larger climate change ambitions and measures could be taken to accelerate the progress to decarbonise the Group and future-proof the organisation against physical and transitional climate change risks. 2. Overseeing and guiding the development of a transition plan The BSC deliberated the Group's climate ambitions and strategy as well as mitigation measures in the development of SDP's Net-Zero Roadmap. This paper was presented by the Climate Change Steering Committee chaired by the CFO. The Group has since announced our net-zero ambition with a detailed roadmap developed to 2050. Near-term and net-zero targets have been developed in line with the Science Based Targets initiative (SBTi) Criteria and submitted to SBTi for validation in FY2022. Clear strategies and initiatives have been identified where the Group will focus our resources in meeting our climate ambitions. The BSC will place the acceleration of the implementation of the Group's Renewables business, the transformation of the Group's approach to BST if or approval to mitore change. 4. Overseeing the setting of corporate targets The Climate Change Steering Committee about the review of the SBTi-aligned roadmap. The SSC will deliberate and monitor the progress of the Group's approach to Iand use, and engagement with suppliers to mitigate and build resilience against clim

C1.1d

(C1.1d) Does your organization have at least one board member with competence on climate-related issues?

	Board member(s) have competence on climate- related issues	Criteria used to assess competence of board member(s) on climate-related issues	Primary reason for no board- level competence on climate-related issues	Explain why your organization does not have at least one board member with competence on climate-related issues and any plans to address board-level competence in the future
Row 1	Yes	In recommending to the Board any new appointment of a Director on the SDP Board, the Nomination & Remuneration Committee (NRC) takes cognisance of the following selection criteria: (i) Required skills, knowledge, expertise and experience; (ii) Ability to work cohesively with other members of the Board; (iii) Specialist knowledge or technical skills in line with the Group's strategy; Alongside this, the Board Sustainability Committee (BSC) perform a self-assessment annually to assess its effectiveness in carrying out the duties as set out in the terms of reference, which includes understanding and reviewing climate change issues and report the results to the Main Board. The Board shall review the composition, performance and effectiveness of the BSC and each of its members annually to ensure that the Committee has the right composition, and sufficient, recent and relevant skills and expertise to effectively fulfil their roles. That said, our Senior Independent Non-Executive Director has held various senior public administration roles in the Economic Planning Unit (EPU) of the Prime Minister's Department and the Ministry of Finance and was involved in establishing national policies, programmes and projects to tackle environment and sustainability issues. Our board is also advised by an independent sustainability advisor, that is recommended to the Board for appointment based on the recommendation of the Group Managing Director and CSO including the appropriate level of remuneration. The advisor is tasked to; • To provide an independent third-party review and feedback to the BSC on the progress of the Group in implementing its sustainability programme, including climate change, against its commitments and the expectations of its wide range of stakeholders. • To provide insights to the BSC and PLC on how the Group will be able to improve on its sustainability programme, including climate change, in light of emerging megatrends, rising expectations of stakeholders and emerging best practices globally.	<not applicable=""></not>	<not applicable=""></not>

C1.2

Position or committee

Other committee, please specify (Plantation Leadership Committee (PLC))

Climate-related responsibilities of this position

Managing annual budgets for climate mitigation activities Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D) Managing climate-related acquisitions, mergers, and divestitures Providing climate-related employee incentives Developing a climate transition plan Implementing a climate transition plan Integrating climate-related issues into the strategy Conducting climate-related scenario analysis Setting climate-related corporate targets Monitoring progress against climate-related corporate targets Managing public policy engagement that may impact the climate Managing value chain engagement on climate-related issues Assessing climate-related risks and opportunities Managing climate-related risks and opportunities

Coverage of responsibilities

<Not Applicable>

Reporting line

Reports to the board directly

Frequency of reporting to the board on climate-related issues via this reporting line

Quarterly

Please explain

Sustainability related matters are a standing agenda in the monthly meetings of the Plantation Leadership Committee (PLC) which is chaired by the GMD and consists of top C-suites executives. Progress of the Group's climate action, including decarbonisation efforts are reported during these PLC meetings. Key climate change related developments and risk are also highlighted and deliberated during the monthly PLC meetings where required. In FY2022, PLC deliberated in detail the Group's climate ambitions and strategy as well as the mitigation measures in the development of SDP's Net-Zero Roadmap, as presented by the Climate Change Steering Committee chaired by the CFO. Other topics deliberated include future regulatory requirements such as the EU Due Diligence on Deforestation, customer NDPE requirements and expectations and other material climate change related risks and opportunities. The progress of other ESG matters is also deliberated during the PLC meetings. These include fire hotspot monitoring, Responsible Sourcing programme developments, and the status of the Group's certification programme and compliance to its various Charters, Policies and Procedures.

Position or committee

Chief Sustainability Officer (CSO)

Climate-related responsibilities of this position

Providing climate-related employee incentives Developing a climate transition plan Implementing a climate transition plan Integrating climate-related issues into the strategy Conducting climate-related scenario analysis Setting climate-related corporate targets Monitoring progress against climate-related corporate targets Managing public policy engagement that may impact the climate Managing value chain engagement on climate-related issues Assessing climate-related risks and opportunities Managing climate-related risks and opportunities

Coverage of responsibilities

<Not Applicable>

Reporting line

CEO reporting line

Frequency of reporting to the board on climate-related issues via this reporting line Quarterly

Please explain

The Chief Sustainability Officer (CSO) leads the sustainability team under the Group Sustainability department in SDP and reviews SDP's sustainability strategies, commitments, plans, and oversees their implementation. The CSO's key role is to focus on efforts in implementing on-the-ground programmes to promote responsible and ethical production throughout Sime Darby Plantation Berhad's (SDP) operations and global supply chain. He presents quarterly sustainability papers to the Board Sustainability Committee and monthly to the Plantation Leadership Committee.

C1.3

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

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	
		No comment necessary. Details included in C1.3a

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).

Entitled to incentive Chief Executive Officer (CEO)

Type of incentive Monetary reward

Incentive(s)

Bonus - % of salary Salary increase

Performance indicator(s)

Board approval of climate transition plan

Incentive plan(s) this incentive is linked to Short-Term Incentive Plan

Further details of incentive(s)

The General Managing Director (GMD) has a Performance Scorecard which is reviewed by the Nomination and Remuneration Committee and then recommended to the Board, for approval, in salary increment and bonus proposal for the GMD. One of the Key Performance Indicators (KPI) that is measured is the board approval of the climate transition plan and performance of the Group against an external sustainability benchmark.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

The performance of the GMD in his scorecard will have a ripple effect across the group as the annual incentives of employees are contingent on the GMD's Performance Scorecard. The GMD's scorecard is also escalated down to individual direct reports. Thus, this will incentivise the entire group to steer towards the direction of successfully fulfilling the organisation's climate commitments and transition plans.

Entitled to incentive Chief Sustainability Officer (CSO)

Type of incentive Monetary reward

Incentive(s)

Bonus - % of salary

Performance indicator(s) Board approval of climate transition plan

Incentive plan(s) this incentive is linked to Short-Term Incentive Plan

Further details of incentive(s)

This reward packages includes fixed pay, and a performance bonus as a percentage of fixed pay. Senior Management Remuneration and Renewals is recommended to the Board, for approval, the salary increment and bonus proposals as well as contract renewals for the Direct Reports to the GMD. The CSO directly reports to the GMD.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

This monetary reward package incentivises the CSO to steer efforts and resources towards the direction of successfully fulfilling the organisation's climate commitments and transition plans which will be implemented after SBTi validation in FY2023.

Entitled to incentive

Other, please specify (Head Sustainability - Downstream)

Type of incentive Monetary reward

Incentive(s) Bonus - % of salary

Performance indicator(s)

Increased share of revenue from low-carbon products or services in product or service portfolio Increased engagement with customers on climate-related issues

Incentive plan(s) this incentive is linked to

Short-Term Incentive Plan

Further details of incentive(s)

The Head of Downstream Sustainability is given the responsibility to achieve climate related agendas under its KPI to that supports the Group's climate transition plan.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

This monetary reward package incentivises the Head of Downstream Sustainability to steer efforts and resources towards the direction of successfully fulfilling the organisation's climate commitments and transition plans, which will be implemented after SBTi validation in FY2023.

Entitled to incentive Business unit manager

Dusiness and manage

Type of incentive Monetary reward

Incentive(s) Bonus - % of salary

Performance indicator(s)

Incentive plan(s) this incentive is linked to Short-Term Incentive Plan

Further details of incentive(s)

Each business unit head at our downstream division level, are responsible of driving forward the carbon agenda on both the short and mid-term horizons, translating the company commitments into operational targets. Each business unit head is given the responsibility under their KPI to improve energy efficiency through the implementation of emissions reduction initiatives. This then supports the Head of downstream sustainability in his climate related agendas. Monetary rewards are given as a result of successfully achieving their KPIs

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

This monetary reward package incentivises the business unit heads to strive towards achieving their respective KPIs which directly supports the initiatives by the Head of Downstream Sustainability. This ultimately feeds into achieving the Group's climate agenda based on its climate transition plan.

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities? Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From	То	Comment	
	(years)	(years)		
Short- term	0		In considering climate-related issues in our risk assessment process, our climate scenario analysis assesses short term to last up to the year 2029. We have classified short term to be the time horizon to anticipate and manage the varying impacts of climate transition and physical risks. This is longer than the time horizons in our practices (1 year for budgeting and 5 years for organisational strategy) as we consider climate-related risks as having implications over a longer period. This is also in line with SBTI's near-term time frame.	
Medium- term	8		considering climate-related issues in our risk assessment process, our climate scenario analysis assesses medium term to be from the year 2030 to 2049. We have classified m rm to be contingent to transition risks as the period between our short-term and long-term (Net Zero) targets.	
Long- term	27		In considering climate-related issues in our risk assessment process, our climate scenario analysis assesses long term to be from the year 2050 to 2100. We have classified long term to be contingent to physical risks that could pose a threat to our assets.	

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

SDP's Enterprise-wide Principal Risks are risks that would impede the achievement of the Group's long-term and short-term strategies and objectives. The Board is responsible for identifying these principal risks and ensuring implementation of appropriate internal controls and mitigation measures. One of SDP's Principal Risks is climate and sustainability risks.

In assessing the estimated risk impact both quantitative and qualitative impacts are considered. Aside from the reviewing the financial impact, qualitative impact including impact to business operations, nature & environment, social/ cultural/ people, impact to the Group's reputations as well as any regulatory and legal impact are also taken into consideration.

In terms of assessing the financial impact, the Group's uses a Financial Risk Likelihood & Risk Impact Criteria to financially categorise potential significant risks to our Group. Each risk is given a rating from 1 to 5. Rating one is classified as insignificant, followed by minor, moderate, major and catastrophic.

The following materiality thresholds have been used to qualify the magnitude of financial impact:

· Insignificant: up to 1% budgeted recurring PATAMI or a financial loss of less than RM10 million

· Minor: 1% to 5% budgeted recurring PATAMI or a financial loss of between RM10 million to RM50 million

· Moderate: 5% to 15% budgeted recuring PATAMI or a financial loss of between RM50 million to RM200 million

· Major: 15% to 25% budgeted recuring PATAMI or a financial loss of between RM200 million to RM300 million

· Catastrophic: more than 25% of budgeted recurring PATAMI or a financial loss of > RM300 million

A substantial financial impact on our business would be considered from both the likelihood, if rated likely or almost certain (the likelihood rating ranges from 1 to 5 from rate, unlikely, possible, likely and almost certain), as well as from the perspective of the estimated financial impact, if rated either Major or Catastrophic. Risks falling within this matrix is rated high or very high risks.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered Direct operations Upstream Downstream

Risk management process Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment Annually

Time horizon(s) covered Short-term Medium-term

Description of process

Long-term

The approximately set of the set

The process used to determine which risks and opportunities could have a substantive financial or strategic impact on the organization: The primary goal of the Group Risk Management Framework is to identify, evaluate and manage risks that may impede the achievement of the Group's long-term and short-term strategies and objectives. The Group's uses SDP's Financial Risk Likelihood & Risk Impact Criteria to financially categorise potential significant risks to our Group. Each risk is given a rating from 1 to 5. Rating one is classified as insignificant, followed by minor, moderate, major and catastrophic. A substantive financial impact on our business would be if the risk is either Major or Catastrophic. The Group's uses SDP's Financial Risk Likelihood & Risk Impact Criteria to financially categorise potential significant risks to our Group. Each risk is given a rating from 1 to 5. Rating one is classified as insignificant, followed by minor, moderate, major and catastrophic. The Board is responsible for identifying these principal risks and ensuring implementation of appropriate internal controls and mitigation measures.

Case study: In 2022, SDP enhanced the assessment of transition and physical risks to better understand the impact of climate risks to the Group. A Climate Risks and Opportunities workshop was conducted and represented by various business functions to identify and assess our most material transition risks and opportunities in the short-term (2025 or earlier), medium-term (2030) and long-term (2050 or above) horizons, aligned with SDP's Net-Zero Roadmap. The likelihood and impact of identified climate transition and physical risks were discussed and prioritised under the net-zero and Business as Usual (BAU) scenarios and assigned a risk rating.

Decisions to mitigate, transfer, accept or control the identified climate-related risks and to capitalize on opportunities:

Our approach to risk management is aimed at embedding risk awareness in all decision-making and realise our commitment to managing risk proactively and effectively. This includes identifying and evaluating threats and opportunities early, managing and preventing threats before they materialise and responding effectively if they do, and actively pursuing opportunities to capture value within agreed risk tolerances. Our process for identifying, evaluating and managing material business risks is designed to manage rather than eliminate threats where appropriate, and accepting a degree of risk to generate returns. The Board is responsible for identifying principal risks and ensuring the implementation of appropriate internal controls and mitigation measures. The Board recognises that business decisions involve taking appropriate risks and the Board's understanding of risks and how risks are addressed have been fundamental in achieving the right balance of risks and controls in the Group. To achieve this, the Board sets the Group's risk appetite and expects Management to operate and ensure that there is a sound risk management framework to identify, analyse, evaluate, manage and monitor significant financial and non-financial risks, including climate change. The Board has overall accountability for the management of risk and for reviewing the effectiveness of SDP's risk management and internal control systems. The Risk Management Committee assists the Board in providing the framework and guidance to business units to operate, identify, and report on Group-wide risks.

SDP's Group Sustainability is owner of climate risks. To mitigate and control the identified physical climate-related risks, Group Sustainability works with Group R&D and the relevant business units (e.g. Estate, mill and refinery operations) to implement mitigating measures and strategies.

On a quarterly basis, formal risk reports are developed and presented to the Plantation Leadership Council and Risk Management Commitee (RMC). Any potential risks identified are escalated as appropriate, with mitigation actions put in place to manage such risks. Significant risks affecting the business as well as periodic external and emerging risk outlooks are presented to the RMC.

An explanation of the frequency of assessment and time horizons:

We regularly review and assess climate risks. We define climate risks in line with the descriptions of transition and physical risks within the Task Force on Climate Related Financial Disclosure recommendations, and have considered the short-, medium- and long-term risk horizons.

C2.2a

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

		Please explain
	& inclusion	
Current regulation	Relevant, always included	Current regulatory requirements are one of the key risk areas in which the Group monitors. These include climate change and environmental policies within all the operating countries in which we operate. Key examples would be, government regulations to limit emissions from mills, and government policy on biogas implementation at palm oil mills, feed in tariffs etc.
Emerging regulation	Relevant, always included	Future emerging regulatory requirements are also an area in which the Group monitors closely. For example, the climate change related regulatory requirements which have led to the European Union decision to phase out palm oil as a biodiesel feed stock by 2030, and other emerging regulations which may be introduced such as the Carbon Border Adjustment Mechanism (CBAM).
		Bursa Malaysia has put forth a public consultation paper on 23 March 2022 proposing mandatory emissions disclosure from 31 December 2024. The Ministry of Natural Resources, Environment and Climate Change Malaysia has also announced in September 2021 that it is developing a domestic emissions trading scheme (DETS) to execute carbon credit transactions at the domestic level.
		Reporting obligations will increasingly require a more robust data collection, manpower and technology to collect, monitor, and report such data. This will result in increased compliance costs due to the capital expenditure required to re-engineer systems and processes to meet refined emissions reporting requirements as well as potential fines imposed and suspension of sustainability certifications (i.e. Roundtable Sustainable Palm Oil (RSPO), Malaysian Sustainable Palm Oil (MSPO) and Indonesian Sustainable Palm Oil (ISPO)) as a result of non-compliance with reporting requirements.
Technology	Relevant, always included	SDP has recognised the risk on the inability to leverage on technological advancements due to uncertainty if carbon emission reduction technology will achieve the desired emission reduction outcome. For example, not all methane avoidance projects are equally effective in reducing emissions that they initially set out to deliver. Moreover, under the assumption of a Net Zero scenario, there is expected to be major financial impact in the short term as higher upfront cost is required to allow aggressive adoption of new technologies. However, this is likely to reduce to moderate as technologies become more commercially viable overtime.
Legal	Relevant, sometimes included	SDP is operating under the assumption that environmental and climate activism is likely to increase over time as society shifts to an increasingly environmentally conscience mindset. As such we anticipate there to be increased costs of fines and litigation claims due to increased activism from stakeholders (e.g., governments, NGOs, customers) because of breaches in law which impacts SDP's social license to operate (e.g., disclosure of misleading information surrounding organisation's sustainability efforts, etc.). This will drain SDP's time and resources. The overall financial impact trajectory expected to be more rapid under Net Zero scenario. However, with the effective adoption of the net zero roadmap, this impact can be significantly reduced
Market	Relevant, always included	The agricultural sector, particularly the palm oil industry, has continued to be under intense scrutiny by a wide range of stakeholders including customers, governments, investors and civil society organisations who demand the adoption and implementation of sustainable practices. More and more palm oil companies are taking the initiative to comply with recognised certification standards as increased awareness among consumers and manufacturers will impact the demand for sustainably sourced palm oil certified under RSPO, MSPO and ISPO certification standards.
		There is also emerging regulatory risks in the EU as the new policies being introduced which would have an impact on market accessibility due to climate change/deforestation requirements. A key example would be the European Union regulation to phase out the use of palm-based biofuels in Europe by 2030.
Reputation	Relevant, always included	With increasing awareness on global issues such as climate change, deforestation, peat, there is greater expectation and demand by stakeholders and consumers for organisations to operate in an environmentally, socially and economically responsible manner. SDP is aware of the potential loss and/or restriction in capital availability from investors stemming from increasing concerns surrounding exposure to climate-related risks. Exposure to climate risks may worsen investor's confidence and impact company's valuation where investors do not observe mitigating actions by the company. Specifically, sector stigmatization could cause investors to move away from agriculture companies which is viewed as an emissions-intensive sector.
		In addition to this, there is increasing requirements on financial institutions and investors being issued that will further effect capital availability.
		The Central Bank of Malaysia issued an exposure draft on 27 December 2021, detailing proposed requirements and guidance for financial institutions on climate risk management and scenario analysis which is set to come into effect on 31 December 2024. There are increasing signatories of the Principles of Responsible Investing ("UNPRI") and foreign institutional investors are screening their portfolios holistically to align with their
		sustainability agendas • Local institutional investors have announced ESG-compliant investment/Net Zero portfolios by 2030 and 2050 – such as EPF, PNB, etc.
Acute physical	Relevant, always included	SDP is prone to physical risks as our production is dependent on natural resources. A risk we are closely monitoring is the occurrence of forest fires, especially in Indonesia, due to their detrimental effect on forest ecosystems and biodiversity and the health and socio-economic welfare of local communities. Forest fires also significantly contribute to annual occurrences of haze in the ASEAN region and GHG emissions in the atmosphere.
		Fires are more likely to occur at our operations in Indonesia, and PNG and Solomon Islands operations, whilst the risk of fire use remains low in Malaysia. We detected 253 hotspots within and surrounding our estates in 2022. Of these, 184 were confirmed as fires. About 68% of these fires occurred outside our estate boundaries, whilst 59 or 32% occurred within.
Chronic physical	Relevant, always included	The Group's R&D team conducted a literature review of the impact of temperature rise on oil palm yields. Based on the latest literature available, a temperature increase by 1°C to 4°C would have a decrease on the yield between 10% to 41% (Sarkar et al (2020)).
		The Sarkar report conflicts with previous literature which stated that an increase in temperature of 5°C would eliminate any yield increase from the rise of CO2 levels (Corley (2016))
		Any climate scenario or SSP which predicts an increase in temperature of more than 1°C would potentially have an impact to the yield of existing oil palm trees if the Sarkar report is accurate.
		Due to the conflicting nature of the various studies reviewed, the Group's R&D team is currently undertaking its own internal study to simulate and validate the effect of temperature rise on yields and generate additional scientific data.
		In the medium to long-term, the R&D team is also exploring and leveraging on its genomics programme to build crop resilience to climate change impacts.

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?

Risk type & Primary climate-related risk driver

Emerging regulation

Direct operations

Mandates on and regulation of existing products and services

Primary potential financial impact

Decreased revenues due to reduced demand for products and services

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

With the increasing attention to climate change globally, governments are introducing policy and regulatory frameworks at a faster pace in their efforts for climate action. Markets such as the EU are planning to phase out biofuel by 2030. Under the EU's revised Renewable Energy Directive (RED II), oil palm crop-based biofuels cannot be counted towards EU renewable energy targets and this may result in a decline in palm oil demand for biofuel use in the EU.

Such regulations can lead to potential additional compliance costs which may be incurred by the Group to access these markets. Failure to meet these future compliance requirements may also lead to potential limitations to SDP's access to these markets.

Time horizon Short-term

Likelihood Virtually certain

Magnitude of impact

High

Are you able to provide a potential financial impact figure? Yes, an estimated range

Potential financial impact figure (currency) <Not Applicable>

Potential financial impact figure – minimum (currency) 10000000

Potential financial impact figure – maximum (currency) 50000000

Explanation of financial impact figure

Under both Business as Usual Scenario and Net-Zero Scenario, the estimated impact from the palm-based biofuel phase out is insignificant as SDP has shifted away palmbased biodiesel.

Cost of response to risk

Description of response and explanation of cost calculation

SDP has shifted our export strategy to waste-based biodiesel since 2020 with all sales to the EU being made up of waste methyl ester and used cooking oil methyl ester. Continue to explore new markets including lobbying for higher biodiesel mandates in Malaysia and Indonesia to create higher domestic demand for palm oil.

Comment

Likelihood and magnitude of impact are based on a Net Zero 2050 scenario.

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Emerging regulation

Carbon pricing mechanisms

Primary potential financial impact

Increased indirect (operating) costs

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

KASA, The Ministry of Natural Resources, Environment and Climate Change Malaysia has announced in September 2021 that it is developing a domestic emissions trading scheme (DETS) to execute carbon credit transactions at the domestic level.

If SDP does not decarbonise our operations in line with future regulatory expectations, there will be additional costs (e.g. taxes or fees on carbon emissions) which may be incurred as operating costs. Failure to meet these future compliance requirements may also lead to potential limitations to SDP's access to these markets.

Time horizon Short-term

Likelihood

Virtually certain

Magnitude of impact

High

Are you able to provide a potential financial impact figure? Yes, an estimated range

Potential financial impact figure (currency) <Not Applicable>

Potential financial impact figure – minimum (currency) 10000000

Potential financial impact figure – maximum (currency) 30000000

Explanation of financial impact figure

The minimum amount is based on the Business as Usual Scenario. Estimated impact from introduction of carbon tax is based on NGFS1 Nationally Determined Contribution (NDC) scenario carbon pricing trajectory of USD2.52/tCO2-e against the Group's 2030 residual Scope 1 – FLAG and energy and industrial processes GHG emissions following our reduction strategies to achieve the 2030 near-term target reduction as per our Net-Zero Roadmap.

The maximum amount is based on the Net-Zero Scenario. Estimated impact from the introduction of carbon tax is based on NGFS' net-Zero 2030 scenario carbon pricing trajectory of USD106.17/tCO2-e against the Group's 2030 estimated residual Scope 1 – FLAG and energy and industrial processes GHG emissions following our reduction strategies to achieve the 2030 near-term target reduction as per our Net-Zero Roadmap.

Cost of response to risk

Description of response and explanation of cost calculation

Development and on-going implementation of SDP's net-zero by 2050 commitment.

Comment

Likelihood and magnitude of impact are based on a Net Zero 2050 scenario.

Identifier Risk 3

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Technology Transitioning to lower emissions technology

Primary potential financial impact

Increased capital expenditures

Climate risk type mapped to traditional financial services industry risk classification <Not Applicable>

Company-specific description

SDP is increasing its capital expenditure due to investments in green technologies as part of the Group's efforts to decarbonise our operations.

Time horizon Medium-term

Likelihood

Virtually certain

Magnitude of impact Medium-low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency) <Not Applicable>

Potential financial impact figure – minimum (currency) 10000000

Potential financial impact figure - maximum (currency)

5000000

Explanation of financial impact figure

Under Business-as-usual scenario, the estimated impact from investments in green technologies in a scenario where investments are primarily limited to those making most operational and commercial justifications.

Under a Net-Zero Scenario, the estimated impact from investments in green technologies in a more aggressive transition scenario to meet net-zero climate change commitments, although the technologies become more economically viable.

Cost of response to risk

Description of response and explanation of cost calculation

Reduction of SDP's operational emissions through our renewable energy initiatives (methane capture, solar).

Comment

Likelihood and magnitude of impact are based on a Net Zero 2050 scenario.

Identifier

Risk 4

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Chronic physical

Sea level rise

Primary potential financial impact

Increased direct costs

Climate risk type mapped to traditional financial services industry risk classification <Not Applicable>

Company-specific description

In 2021, a study was conducted to assess the potential impact of rising sea levels on SDP's concession areas and infrastructure. Utilising data from IPCC's sea level rise projection tool and overlaying it against the digitised maps of the Group's concession areas and data on elevation above sea level for these areas, the R&D team has identified areas which are considered as "Very High Risk" to flooding due to potential rising sea levels by 2100:

- Malaysia: 2.8% of total landbank (~9,5k ha)
- Indonesia: 7.0% of total landbank (~18,6k ha)
- Papua New Guinea/Solomon Islands: 1.8% of total landbank (~2,6k ha)

In addition to this, in 2022, SDP also carried out additional assessments to understand the long-term risks of physical climate change. The result of this assessment can be used proactively by management for the purpose of replanting and renewal of leases of affected plantations. This pilot assessment was carried out at West Estate and Mill, Carey Island, Malaysia. This location was selected due to its high exposure to physical climate risk and close proximity to the sea. Coastal inundation and riverine flooding were found to represent the dominant hazards under both RCP 8.5 and RCP 2.6 scenarios published by the Intergovernmental Panel on Climate Change (IPCC).

Time horizon

Long-term

Likelihood 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)

<Not Applicable>

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact figure

The financial implication has not been quantified but we plan to publish these numbers in the future.

Cost of response to risk

Description of response and explanation of cost calculation

Estates and mills located in high-risk areas have been equipped with bunds to prevent flooding and coastal inundation. These bunds, made of earth, have been strategically constructed across all coastal estates owned by SDP. Plans are currently being developed to maintain the stability of the bunds to ensure their effectiveness. Plans are currently being developed to maintain the stability of the bunds to ensure their effectiveness.

Comment

Identifier

Risk 5

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Acute physical Flood (coastal, fluvial, groundwater)

Primary potential financial impact

Decreased revenues due to reduced production capacity

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

Potential impact from the risk is drop in production due to no supplying crops from estates affected by flooding.

Time horizon Short-term

Likelihood Likely

Magnitude of impact Please select

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

Potential financial impact figure (currency) <Not Applicable>

Potential financial impact figure – minimum (currency) <Not Applicable>

Potential financial impact figure - maximum (currency)

Explanation of financial impact figure

Potential impact from the risk is drop in production due to no supplying crops from estates affected by flooding.

Cost of response to risk

Description of response and explanation of cost calculation

Based on the study conducted to assess the potential impact of rising sea levels on SDP's concession areas and infrastructure, physical impacts were identified. As a result, estates and mills located in high-risk areas have been equipped with bunds to prevent flooding and coastal inundation. These bunds, made of earth, have been strategically constructed across all coastal estates owned by SDP. Plans are currently being developed to maintain the stability of the bunds to ensure their effectiveness.

Comment

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

Energy source

Primary climate-related opportunity driver

Use of new technologies

Primary potential financial impact

Returns on investment in low-emission technology

Company-specific description

The increase in demand for low emission technology such as biogas plants, solar energy generation or advanced fuels such as biofuels and biomass will contribute to increased revenue.

Time horizon

Medium-term

Likelihood

Virtually certain

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)

<Not Applicable>

Potential financial impact figure – minimum (currency) <Not Applicable>

Potential financial impact figure – maximum (currency) <Not Applicable>

Explanation of financial impact figure

The financial implication has not been quantified but we plan to publish these numbers in the future.

Cost to realize opportunity

Strategy to realize opportunity and explanation of cost calculation

We have increased our budget for capital expenditure and allocation to be channeled towards investments in green technologies and our renewable energy initiatives (methane capture, solar).

The group is expecting an increase in revenue from solar power business by monetising SDP's land assets for large-scale solar (LSS) development, smaller-scale solar projects and potential to expand the biogas development to the supply chain. The development of 12 LSS4 projects with a total capacity of 336 MW is expected to be commissioned by the end of FY2023.

We are also ramping up our capabilities in line with our net zero roadmap to operationalise over 49 biogas plants by 2030 and 66 by 2050 in our operations.

Comment

Identifier Opp2

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

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

Due to heightened awareness amongst consumers and a shift towards environmentally conscious mindsets, SDP is anticipating an increase in demand for low carbon products. As such, SDP is venturing into producing low carbon oils. Seizing this opportunity gives us access to a new market and the benefits of the first mover will increase revenue for SDP.

Time horizon Short-term

Likelihood

Likely

Magnitude of impact Low

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

Potential financial impact figure (currency) <Not Applicable>

Potential financial impact figure – minimum (currency) <Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact figure The financial implication has not been quantified.

Cost to realize opportunity

Strategy to realize opportunity and explanation of cost calculation

The Group is perfectly positioned to provide customers with a reliable supply of low carbon products because we have an integrated supply chain and a longstanding commitment to sustainable agriculture, including no deforestation, no peat and no exploitation (NDPE). Additionally, our ability to meet the elevated level of compliance that is required in specific markets through our integrated segregated sustainable supply of palm oil, gives us a competitive edge.

Comment

C3. Business Strategy

C3.1

(C3.1) Does your organization's strategy include a climate transition plan that aligns with a 1.5°C world?

Row 1

Climate transition plan

Yes, we have a climate transition plan which aligns with a 1.5°C world

Publicly available climate transition plan

Yes

Mechanism by which feedback is collected from shareholders on your climate transition plan

We have a different feedback mechanism in place

Description of feedback mechanism

The Group ensures that there is effective, transparent, and regular communication with its stakeholders. This includes continuous engagements on the topic of climate change with stakeholders such as customers, investors, policymakers, peers, and non-governmental organisations, which allows the Group to align its strategy with their expectations whilst keeping itself ahead of the curve. The Group's annual general meetings also serves as a platform to support meaningful engagement between the board, senior management and shareholders.

Frequency of feedback collection

More frequently than annually

Attach any relevant documents which detail your climate transition plan (optional)

Net Zero Roadmap

SDP-Net-Zero-Roadmap.png

Explain why your organization does not have a climate transition plan that aligns with a 1.5°C world and any plans to develop one in the future <Not Applicable>

Explain why climate-related risks and opportunities have not influenced your strategy

<Not Applicable>

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

			Explain why your organization does not use climate-related scenario analysis to inform its strategy and any plans to use it in the future
R	w Yes, qualitative and quantitative	<not applicable=""></not>	<not applicable=""></not>
1			

C3.2a

(C3.2a) Provide details of your organization's use of climate-related scenario analysis.

Climate- related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Physical climate 2.6 scenarios	Company-wide	<not applicable=""></not>	Assumptions; The risks ratings were generated using Climate Risk Engines. The Climate Risk Engines analyses an asset's vulnerability to hazards using a representative archetype, Simple House, to calculate the probability of damage or failure from each of the hazards analysed. The site analysed is located at West Estate and Oil Mill, Carey Island, Malaysia. The metric used is Hazard Risk Rating
Physical RCP climate 8.5 scenarios	Company-wide	<not applicable=""></not>	Assumptions; The risks ratings were generated using Climate Risk Engines. The Climate Risk Engines analyses an asset's vulnerability to hazards using a representative archetype, Simple House, to calculate the probability of damage or failure from each of the hazards analysed. The site analysed is located at West Estate and Oil Mill, Carey Island, Malaysia. The metric used is Hazard Risk Rating
Transition IEA scenarios NZE 2050	Company-wide	<not applicable=""></not>	This is an orderly transition to Net-Zero (1.5°C) with Immediate action to curb emissions with increasing regulatory requirements The assumptions taken under this transition risk is; 1. Expectations of climate policy ambitions strengthening over time 2. More aggressive mitigation efforts under net-zero compared to BAU 3. Carbon prices are expected to rise over time and assumed to only cover Scope 1 emissions, and will be much higher than in a BAU scenario 4. Net-zero scenario relies more heavily on new technologies compared to BAU scenario with green technologies maturing overtime, bringing the cost of investment lower as adoption rate increases 5. Greater emissions reporting obligations expected under net-zero compared with BAU and expected to become more stringent over time The metrics used are estimated annualised impact against the latest 5-year average budgeted recurring PATAMI for the Group (for estimated increases in cost; and the absolute annualised impact (for increases in CAPEX spending) in line with the Group's Enterprise Risk Management Framework

C3.2b

(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis, and summarize the results with respect to these questions.

Row 1

Focal questions

Focal question 1:

What climate-related risks and opportunities can impact SDP over the short, medium, and long-term?

Rationale for scenarios selected to address the focal questions:

Within the short to medium-term, the Group needs to anticipate and manage the varying impacts of climate transition risks, depending on scenario applied. In the longer term, physical risks could pose a threat to our assets.

Focal question 2:

What are the impacts of climate transition risks (quantitative) and opportunities (qualitative) on the organisation's businesses, strategy and financials?

Rationale for scenarios selected to address the focal questions:

The impacts of climate transition risks and opportunities are assessed based on 2 scenarios 1) Business as Usual (BAU) (+4.0°C): High emissions scenario assuming development without introduction of low-carbon measures and 2) Orderly – Net-zero (1.5°C): Immediate action to curb emissions with increasing regulatory requirements. The two opposing scenarios will provide SDP with sufficient information on the impact of the risks in each scenario.

Focal question 3:

What is the potential impact of rising sea levels on SDP's concession areas and infrastructure?

Rationale for scenarios selected to address the focal questions:

Physical risks are long term risks hence longer-term scenarios similar to a BAU and orderly scenarios in the transition risks were selected. 2 scenarios were selected -Representative Concentration Pathway (RCP) 8.5 (warming of 3.2-5.4°C by 2050 and 2100). RCP 2.6 (warming of 1.5-2.0°C by 2050 and 2100) published by the Intergovernmental Panel on Climate Change (IPCC) to ascertain the impacts in these 2 scenarios.

Results of the climate-related scenario analysis with respect to the focal questions

The physical and transition risks identified were assessed to be well controlled in the short term. Our strategies are assessed to be resilient based on the medium (2030) and long-term (2050) outcomes of the scenario analysis and how they affect SDP's business and operations. Our current risk mitigation measures contribute to our climate resilience.

Focal question 2

The results of the Transition Risks Scenario Analysis with respect to the focal question are;

Financial impacts of key risks identified:

1. Increase in regulatory risks that include carbon pricing - Minor in BAU scenario and Catastrophic in a Net-Zero Scenario

2. Increase risk of stringent policy / regulation such as the European Union (EU) biofuel phase out by 2030 - Minor in both BAU and Net-Zero scenarios. Estimated impact from the palm-based biofuel phase out is insignificant as SDP no longer exports palm-based biodiesel.

3. Risk of transitioning to lower emissions technology - Even in an Orderly scenario, the estimated impact from investments in green technologies in a more aggressive transition scenario to meet net-zero climate change commitments is Minor as the technologies become more economically viable.

Key Opportunities identified:

1. Increased demand for low emission fuels and technology - Expected major increase in revenue from solar power business by monetising SDP's land assets for largescale solar development, smaller-scale solar projects and potential to expand the biogas development to the supply chain.

2. Increased customer demand for low carbon products - Maintaining access to markets and customers on a low carbon trajectory and potential access to a premium market.

Focal question 3

The results of the Climate Scenario Qualitative Analysis for Physical Risks are;

1. Increased risk of rising sea level - A pilot assessment was carried out at selected areas with high exposure to physical climate risk and close proximity to the sea. Coastal inundation and riverine flooding were found to represent the dominant hazards under both RCP 8.5 and RCP 2.6 scenarios.

C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate- related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	Understanding changing consumer behaviour with greater climate awareness, along with the group's efforts to decarbonise our operations, SDP is anticipating an increase in demand for low carbon products. This is informed through our climate-related opportunity assessment. Advancing ESG considerations in the Group's decision-making is also an important priority as globally, there is increasing scrutiny of business practices and their alignment with sustainability principles. In addition, customers are concerned about climate change, carbon emissions and low carbon products, as they develop their net-zero commitments and look to SDP as a partner to help them achieve supply chain carbon emissions reduction. In this regard, the Group is perfectly positioned to provide customers with a reliable supply of low carbon products because we have an integrated supply chain and a longstanding commitment to sustainable agriculture, including no deforestation, no peat and no exploitation (NDPE).
Supply chain and/or value chain	Yes	In addition to producing our own sustainable palm oil, SDP also sources raw materials from third parties for both the upstream and downstream businesses. In this regard, the Group has introduced Responsible Sourcing Guidelines (RSG) which require every actor in the supply chain to commit to the same No Deforestation, No Peat and No Exploitation (NDPE) standards. This means that SDP expects all suppliers of fresh fruit bunches (FFB), crude palm oil (CPO), and its derivatives to abide by our RSG. SDP is currently developing a Climate supplier engagement framework to escalate engagements with suppliers to promote replication of climate change initiatives within the entire value chain.
Investment in R&D	Yes	Our group is susceptible to long-term physical risks, in particular, change in temperature based on our climate scenario qualitative analysis. As a result, the group actively invested in running the Genome project to develop a seed that will be able to withstand harsher weather conditions while still being able to deliver high yield. This will also reduce the amount of deforestation in the industry as a smaller pot of land is needed to achieve the same amount of yield. The GenomeSelect [™] can deliver oil yield improvements of up to 15% above our Calix 600® seeds, with an average of 6.1 MT/ha across all environments, and yield potential above 10 MT/ha in the most fertile environments. This development will enable the Group to increase our yield by the equivalent of 50,000 hectares of new land without increasing our planted hectarage.
Operations	Yes	In conducting the Transition Risks and Opportunities Scenario Analysis, SDP has recognised an opportunity in leveraging and investing in low emissions technology. In 2022, various energy saving projects were implemented across all the Group's refineries. These include projects to improve condensate recovery, heat recovery and insulation, and replacing large motors with high efficiency motors. In addition, our downstream operations are focused on increasing renewable energy consumption through the installation of solar panels on rooftops and the use of biogas. The group is ramping up its capabilities in line with its net zero roadmap to operationalise over 49 biogas plants by 2030 and 66 by 2050 in our operations. SDP has also relooked into transforming its approach to land use, where areas identified as conservation set aside and of high conservation value has been set aside and conserved as part of standard operating procedures now. The Group is also undertaking efforts to reforest unplantable reserves as part of a Nature Based Solution to increase sequestration. To date, a total of more than 1.9million trees have been planted as part of the reofrestation programme. The Group has also worked with partners such as universities to enhance its approach to reforestation. For example SDP recently announced a partnership with the Malaysian Palm Oil Green Conservation Foundation to work with researchers around research on rehabilitation of peat plantations with 50hectares set aside initially.

C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Capital	The group has identified both a potential risk and opportunity in the transition towards renewable energy and green technology as highlighted in C2.3a and C2.4a. Increase in capital expenditure / capital allocation We have increased our budget for capital expenditure and allocation to be channelled towards investments in green technologies as part of the Group's efforts to decarbonise our operational emissions through our renewable energy initiatives (methane capture, solar). This will ensure that these initiatives reduce our Scope 1 & 2 emissions and strengthen our approach towards the Group's net-zero commitment. To date, the group has successfully established 14 operational biogas plants in Malaysia, Indonesia and Papua New Guinea which capture methane from palm oil mill effluent (POME) and convert it into renewable energy. We are ramping up our capabilities in line with our net zero roadmap to operationalise over 49 biogas plants by 2030 and 66 by 2050. In addition to this, in 2022, we completed the construction of rooftop solar at our Research & Development (R&D) Centre in Banting. With its completion, we have installed rooftop solar system at seven sites, of which five are operational. Moving forward, we are planning to install 81 solar rooftop systems across our assets. In addition, SDO also focused on increasing renewable energy consumption through the installation of solar panels on rooftops and the use of biogas.
		Decrease in indirect costs / direct cost With the increase in rooftop solar panels, across our operations, we are anticipating a decrease in our indirect costs. Upon completion of the solar projects currently under development, the tot capacity of SDP's assets will be 359 MW. In 2022, various energy saving projects were implemented across all of the Group's refineries. These include projects to improve condensate recovery, heat recovery and insulation, and replacing large motors with high efficiency motors. At our refinery in the Netherlands, a reverse osmosis plant was built; reducing the amount of water, energy and chemicals needed in the plant's operations.
		Increase in revenue The group is expecting an increase in revenue from solar power business by monetising SDP's land assets for large-scale solar (LSS) development, smaller-scale solar projects and potential t expand the biogas development to the supply chain. In support of Malaysia's national agenda to reduce its carbon emissions, we leased our land to third parties to develop large scale solar plants under the Government's LSS scheme. The first LSS plant with 20 MW capacity was installed in Tali Ayer Estate in Penang and commenced operations in 2018. It has been generating stable income since 2019. The development of 12 LSS projects with a total capacity of 336 MW is expected to be commissioned by the end of FY2023.

C3.5

(C3.5) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's climate transition?

	Identification of spending/revenue that is aligned with your organization's climate transition	Indicate the level at which you identify the alignment of your spending/revenue with a sustainable finance	
		taxonomy	
Row	Yes, we identify alignment with our climate transition plan	<not applicable=""></not>	
1			

C3.5a

(C3.5a) Quantify the percentage share of your spending/revenue that is aligned with your organization's climate transition.

Financial CAPEX	Metric
	lignment being reported for this financial metric with our climate transition plan
Taxonom <not appl<="" th=""><th>y under which information is being reported licable></th></not>	y under which information is being reported licable>
Objective <not appl<="" th=""><th>e under which alignment is being reported licable></th></not>	e under which alignment is being reported licable>
Amount o	of selected financial metric that is aligned in the reporting year (unit currency as selected in C0.4)
Percentag	ge share of selected financial metric aligned in the reporting year (%)
Percentag	ge share of selected financial metric planned to align in 2025 (%)
Percentag	ge share of selected financial metric planned to align in 2030 (%)
Describe	the methodology used to identify spending/revenue that is aligned

C4. Targets and performance

C4.1

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

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number Abs 1

Is this a science-based target?

Yes, we consider this a science-based target, and the target is currently being reviewed by the Science Based Targets initiative

Target ambition 1.5°C aligned

Year target was set 2022

Target coverage Company-wide

Scope(s) Scope 1 Scope 2

Scope 2 accounting method Location-based

Scope 3 category(ies) <Not Applicable>

Base year 2020

Base year Scope 1 emissions covered by target (metric tons CO2e) 2384244

Base year Scope 2 emissions covered by target (metric tons CO2e) 153384

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e) <Not Applicable>

Base year total Scope 3 emissions covered by target (metric tons CO2e) <Not Applicable>

Total base year emissions covered by target in all selected Scopes (metric tons CO2e) 2537628

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1 99.39

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2 100

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e) </br><Not Applicable>

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e) </br>

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e) </br>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e) </br><Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e) <Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e) <Not Applicable>

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories) <Not Applicable>

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes 99.39

Target year 2030

Targeted reduction from base year (%)

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated] <Calculated field>

Scope 1 emissions in reporting year covered by target (metric tons CO2e) 1929803

Scope 2 emissions in reporting year covered by target (metric tons CO2e) 225722

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e) <Not Applicable> Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e) 2155525

Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

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

<Not Applicable>

Target status in reporting year New

Please explain target coverage and identify any exclusions

We have excluded 9,200 tCO2e from fuel-related emissions from our sugarcane operations and 6,255 tCO2e from estate-bound landfill which are 0.36% and 0.25% out of Non-FLAG Scope 1 & 2, respectively, Hence, our emissions from Non-FLAG Scope 1 & 2 covers 99.39%.

Plan for achieving target, and progress made to the end of the reporting year

In accordance to SDP's Net-Zero Roadmap, we plan to reduce our scope 1 and 2 Energy & Industrial emissions through the acceleration and expansion of renewables. Key initiatives for near term target include;

- 1. ongoing methane capture programme to cover 71% of SDP' palm oil mills globally
- 2. 100% adoption of renewable energy in Peninsular Malaysia by 2024 3. ongoing solar panel installations and virtual large scale solar

List the emissions reduction initiatives which contributed most to achieving this target

<Not Applicable>

Target reference number Abs 2

Is this a science-based target?

Yes, we consider this a science-based target, and the target is currently being reviewed by the Science Based Targets initiative

Target ambition 1.5°C aligned

Year target was set 2022

Target coverage Company-wide

Scope(s) Scope 1

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies) <Not Applicable>

Base year 2020

Base year Scope 1 emissions covered by target (metric tons CO2e) 7503483

Base year Scope 2 emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e) <Not Applicable>

Base year total Scope 3 emissions covered by target (metric tons CO2e) <Not Applicable>

Total base year emissions covered by target in all selected Scopes (metric tons CO2e) 7503483

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1 99.44

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2 <Not Applicable>

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e) </br>
<Not Applicable>

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e) </br><Not Applicable>

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e) </br>

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e) </br><Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e) </br>
<Not Applicable>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e) </br>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)

<Not Applicable> Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e) <Not Applicable> Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e) <Not Applicable> Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e) <Not Applicable> Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e) <Not Applicable> Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories) <Not Applicable> Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes 99.44 Target year 2030 Targeted reduction from base year (%) Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated] <Calculated field> Scope 1 emissions in reporting year covered by target (metric tons CO2e) 7503483 Scope 2 emissions in reporting year covered by target (metric tons CO2e) <Not Applicable> Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e) <Not Applicable> Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e) <Not Applicable> Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e) <Not Applicable> Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e) <Not Applicable> Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e) <Not Applicable> Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e) 8448558

Does this target cover any land-related emissions?

Yes, it covers land-related emissions only (e.g. FLAG SBT)

% of target achieved relative to base year [auto-calculated] <Not Applicable>

Target status in reporting year

New

Please explain target coverage and identify any exclusions

We have excluded 41,912 tCO2e from land-related emissions from our sugarcane operations which is 0.56% out of FLAG Scope 1. Hence, our emissions for FLAG Scope 1 covers 99.44%.

Plan for achieving target, and progress made to the end of the reporting year

In accordance to SDP's Net-Zero Roadmap, we plan to reduce our scope 1 FLAG emissions through land use transformation. Key initiatives include;

1. ongoing reforestation of identified areas within concession

- 2. ongoing peat rehabilitation efforts
- 3. agroforestry cultivation
- 4. explore long term solutions for peat plantations
- 5. introduction of stabilised fertiliser

List the emissions reduction initiatives which contributed most to achieving this target

<Not Applicable>

Target reference number Abs 4

A03 4

Is this a science-based target?

Yes, we consider this a science-based target, and the target is currently being reviewed by the Science Based Targets initiative

Target ambition

1.5°C aligned

Year target was set 2022

Target coverage

Company-wide

Scope(s) Scope 3

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies)

- Category 1: Purchased goods and services Category 2: Capital goods Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) Category 4: Upstream transportation and distribution Category 5: Waste generated in operations Category 6: Business travel Category 7: Employee commuting Category 9: Downstream transportation and distribution
- Category 10: Processing of sold products
- Category 11: Use of sold products

Base year 2020

Base year Scope 1 emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 2 emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)

1136650

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e) 210433

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e) 10307

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e) 101834

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e) 8965

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e) 4312

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e) 30842

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e) 319046

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e) 5145

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e) 313828

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e) <Not Applicable>

Base year total Scope 3 emissions covered by target (metric tons CO2e) 2141362

Total base year emissions covered by target in all selected Scopes (metric tons CO2e) 2141362

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1 <Not Applicable>

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2 <Not Applicable>

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e) 95.96

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e) 100

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e) 34.37

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e) 59.87

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e) 100

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e) 100

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e) 100

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e) 100

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e) 100

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e) 100

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e) </br>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e) <Not Applicable> Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e) <Not Applicable> Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e) <Not Applicable> Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e) <Not Applicable> Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories) 94.04 Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes 94.04 Target year 2030 Targeted reduction from base year (%) Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated] <Calculated field> Scope 1 emissions in reporting year covered by target (metric tons CO2e) <Not Applicable> Scope 2 emissions in reporting year covered by target (metric tons CO2e) <Not Applicable> Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e) 1626369 Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e) 272428 Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e) 25821 Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e) 28182 Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e) 9415 Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e) 8636 Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e) 27473 Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e) <Not Applicable> Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e) 103783 Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e) 17897 Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e) 17938 Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e) <Not Applicable> Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e) <Not Applicable> Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e) <Not Applicable> Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e) <Not Applicable> Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e) <Not Applicable> Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e) <Not Applicable> Total Scope 3 emissions in reporting year covered by target (metric tons CO2e) 2137942

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e) 2137942

Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated] <Not Applicable>

Target status in reporting year

New

Please explain target coverage and identify any exclusions

We have excluded 1,112 tCO2e (data centre service, 0.05%) and 46,767 tCO2e (manufacturing of other immaterial purchase goods, 2.18%) from Category 1, 19,679 tCO2e (upstream of purchased electricity, 0.92%) from Category 3 and 68,257 tCO2e (upstream transport of non-fertiliser purchased goods 3.19%) from Category 4 which in total 6.34% out of Non-FLAG Scope 3. Hence, our emissions for Non-FLAG Scope 3 covers 94.04%.

Plan for achieving target, and progress made to the end of the reporting year

To achieve our scope 3 emission reduction in order to achieve our near-term target, the key initiative include;

1. Targeting SDP's most material suppliers to have science-based emission reduction targets in line with SBTi resources by 2027

List the emissions reduction initiatives which contributed most to achieving this target

<Not Applicable>

Target reference number Abs 3

Is this a science-based target?

Yes, we consider this a science-based target, and the target is currently being reviewed by the Science Based Targets initiative

Target ambition 1.5°C aligned

Year target was set 2022

Target coverage Company-wide

Scope(s) Scope 3

Scope 2 accounting method <Not Applicable>

Scope 3 category(ies) Category 1: Purchased goods and services

Base year 2020

Base year Scope 1 emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 2 emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e) 5024845

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e) <Not Applicable>

Base year total Scope 3 emissions covered by target (metric tons CO2e) 5024845

Total base year emissions covered by target in all selected Scopes (metric tons CO2e) 5024845

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1 <Not Applicable>

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2 <Not Applicable>

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e) 100

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e) </br>

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e) </br>

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e) </br>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e) </br>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e) <Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories) 100

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes 100

Target year 2030

Targeted reduction from base year (%)

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated] <Calculated field>

Scope 1 emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 2 emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e) 6237846

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e) 6237846

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e) 6237846

Does this target cover any land-related emissions? Yes, it covers land-related emissions only (e.g. FLAG SBT)

% of target achieved relative to base year [auto-calculated] <Not Applicable>

Target status in reporting year New

Please explain target coverage and identify any exclusions

We have excluded 1,112 tCO2e (data centre service, 0.05%) and 46,767 tCO2e (manufacturing of other immaterial purchase goods, 2.18%) from Category 1, 19,679 tco2e (upstream of purchased electricity, 0.92%) from Category 3 and 68,257 tco2e (upstream transport of non-fertiliser purchased goods 3.19%) from Category 4 which in total 6.34% out of Non-FLAG Scope 3. Hence, our emissions for Non-FLAG Scope 3 covers 94.04%.

Plan for achieving target, and progress made to the end of the reporting year

In accordance to SDP's Net-Zero Roadmap, we plan to reduce our scope 3 FLAG emissions through enhancing supplier engagement. Key initiatives to achieve this long-term target includes:

1. Maintaining 100% NDPE compliant supply chain by 2025

2. Reducing peat drainage emissions in feedstock supply chain by 55% by 2030

List the emissions reduction initiatives which contributed most to achieving this target

<Not Applicable>

Target reference number Abs 5

Is this a science-based target?

No, but we are reporting another target that is science-based

Target ambition <Not Applicable>

Year target was set 2019

Target coverage Company-wide

Scope(s) Scope 1

Scope 2

Scope 2 accounting method Location-based

Scope 3 category(ies)

<Not Applicable>

Base year 2009

Base year Scope 1 emissions covered by target (metric tons CO2e) 2590000

Base year Scope 2 emissions covered by target (metric tons CO2e) 0

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e) <Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e) <Not Applicable> Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e) <Not Applicable>

Base year total Scope 3 emissions covered by target (metric tons CO2e) <Not Applicable>

Total base year emissions covered by target in all selected Scopes (metric tons CO2e) 2590000

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1 100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2 100

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e) </br>

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e) <Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e) </br>

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e) </br><Not Applicable>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e) </br><Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e) <Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e) <Not Applicable>

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories) <Not Applicable>

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes 100

Target year 2030 **Targeted reduction from base year (%)** 50

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated] 1295000

Scope 1 emissions in reporting year covered by target (metric tons CO2e) 10375647

Scope 2 emissions in reporting year covered by target (metric tons CO2e) 225722

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e) <Not Applicable>

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e) 10601369

Does this target cover any land-related emissions? Yes, it covers land-related emissions only (e.g. FLAG SBT)

% of target achieved relative to base year [auto-calculated] -618.638532818533

Target status in reporting year Revised

Please explain target coverage and identify any exclusions

This target was set in 2019 against 2009 baseline which was based on the emission intensity, 1.06 in 2009. This is because the boundary and methodology were revised for FY2020 emissions onwards and the emissions in 2009 remains at 2.59mil. Hence, tehemission reduction target was based on emission intensity per CPO. The 2009 baseline emissions did not included emissions from other commodity, rubber and cattle. Although we accounted oil palm emissions in 2009 baseline, we did not account a few land-related emissions such as land use change, mulching of organic fertiliser,

Plan for achieving target, and progress made to the end of the reporting year

This target will be superseded once SBTi validation is complete and the plan for achieving target will be aligned with our Net-Zero Roadmap.

List the emissions reduction initiatives which contributed most to achieving this target

<Not Applicable>

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year? Net-zero target(s)

C4.2c

(C4.2c) Provide details of your net-zero target(s).

Target reference number

NZ1

Target coverage Company-wide

Absolute/intensity emission target(s) linked to this net-zero target

Target year for achieving net zero 2050

Is this a science-based target?

Yes, we consider this a science-based target, and the target is currently being reviewed by the Science Based Targets initiative

Please explain target coverage and identify any exclusions

This target covers 99.4% of our emission as we excluded fuel-related emission from our sugarcane operations and in-bound landfill (15,455 tco2e, 0.6% out of Non FLAG Scope 1 & 2).

Do you intend to neutralize any unabated emissions with permanent carbon removals at the target year? Yes

Planned milestones and/or near-term investments for neutralization at target year

In accordance to SDP's Net-Zero Roadmap, we plan to reduce our scope 1 and 2 Non-FLAG emissions through the acceleration and expansion of renewables.

Key initiatives in the short-term (by 2030) includes;

- 1. Accelerate ongoing methane capture programmes to cover 71% SDP palm oil mills globally
- 2. Achieve 100% adoption of renewable energy in Peninsular Malaysia by 2024
- 3. Accelerate ongoing solar panel installation and virtual large-scale solar

Key initiatives to achieve this long-term (by 2050) target includes;

- 1. Achieving methane capture at 100% of SDP Palm Oil mills
- 2. Accelerating solar panels installation and virtual large scale solar
- 3. Achieving 100% adoption of renewable energy in Peninsular Malaysia

Planned actions to mitigate emissions beyond your value chain (optional)

Target reference number

NZ2

Target coverage

Company-wide

Absolute/intensity emission target(s) linked to this net-zero target

Abs2

Target year for achieving net zero 2050

Is this a science-based target?

Yes, we consider this a science-based target, and the target is currently being reviewed by the Science Based Targets initiative

Please explain target coverage and identify any exclusions

This target covers 99.4% of our emission as we excluded land-related emission from our sugarcane operations (41,912 tco2e, 0.6% out of FLAG Scope 1).

Do you intend to neutralize any unabated emissions with permanent carbon removals at the target year? Yes

Planned milestones and/or near-term investments for neutralization at target year

In accordance to SDP's Net-Zero Roadmap, we plan to reduce our scope 1 FLAG emissions through land use transformation. Key initiatives include;

- 1. ongoing reforestation of identified areas within concession
- 2. ongoing peat rehabilitation efforts
- 3. agroforestry cultivation
- 4. explore long term solutions for peat plantations
- 5. introduction of stabilised fertiliser

Planned actions to mitigate emissions beyond your value chain (optional)

Target reference number

NZ3

Target coverage Company-wide Absolute/intensity emission target(s) linked to this net-zero target Abs3

Target year for achieving net zero 2050

Is this a science-based target?

Yes, we consider this a science-based target, and the target is currently being reviewed by the Science Based Targets initiative

Please explain target coverage and identify any exclusions

This target covers 100% of our FLAG Scope 3 emissions.

Do you intend to neutralize any unabated emissions with permanent carbon removals at the target year?

Yes

Planned milestones and/or near-term investments for neutralization at target year

In accordance to SDP's Net-Zero Roadmap, we plan to reduce our scope 3 FLAG emissions through enhancing supplier engagement. Key initiatives to achieve this long-

term target includes:

1. Maintaining 100% NDPE compliant supply chain

2. Reducing peat drainage emissions in feedstock supply chain

Planned actions to mitigate emissions beyond your value chain (optional)

Target reference number NZ4

Target coverage

Company-wide

Absolute/intensity emission target(s) linked to this net-zero target Abs4

Target year for achieving net zero

2050

Is this a science-based target?

Yes, we consider this a science-based target, and the target is currently being reviewed by the Science Based Targets initiative

Please explain target coverage and identify any exclusions

This target covers 94.0% of our emission as we excluded emissions from Category 1 data center service, immaterial purchased goods, Category 3 upstream emissions of purchased electricity and Category 4 transportation of non-fertiliser purchased goods and (135,815 tCO2e, 0.6% out of Non FLAG Scope 3).

Do you intend to neutralize any unabated emissions with permanent carbon removals at the target year? Yes

Planned milestones and/or near-term investments for neutralization at target year

SDP plans to achieve our Non Flag Scope 3 emission reduction by striving to enhance our supplier engagement.

Key initiatives in the near-term (by 2030) includes;

1. Target our most material suppliers to adopt science-based emission reduction targets in line with SBTi resources by 2027

Key initiatives to achieve this long-term (by 2050) target includes;

1. Achieving 100% methane capture in palm oil feedstock supply chain

2. Getting 50% of non-feedstock vendors to reduce emissions by half

3. Transitioning upstream and downstream transportation and distribution to low emission / renewable fuels

Planned actions to mitigate emissions beyond your value chain (optional)

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 CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	35	
To be implemented*	2	0
Implementation commenced*	11	9574
Implemented*	12	422978
Not to be implemented	0	

C4.3b

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

Initiative category & Initiative type

Energy efficiency in production processes	Process optimization				
Estimated annual CO2e savings (metric tonnes CO2e)					
1782					
Scope(s) or Scope 3 category(ies) where emissions savings occur					

Scope 1 Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

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

Payback period

4-10 years

Estimated lifetime of the initiative 16-20 years

Comment

Initiative category & Initiative type

Fugitive emissions reductions

Agricultural methane capture

Estimated annual CO2e savings (metric tonnes CO2e)

358785

Scope(s) or Scope 3 category(ies) where emissions savings occur Scope 1

Voluntary/Mandatory

Voluntary

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

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

Payback period

Please select

Estimated lifetime of the initiative 16-20 years

Comment

The biogas comes from methane captured from treatment of Palm Oil Mill Effluent (POME). Sime Darby Plantation's POME is derived from residual waste products from mill processing. The Fresh Fruit Bunch (FFB) we source are RSPO, MSPO and ISPO certified to be sustainable biomass.

Initiative category & Initiative type

Low-carbon energy generation Biogas

Estimated annual CO2e savings (metric tonnes CO2e) 62411

Scope(s) or Scope 3 category(ies) where emissions savings occur Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

Investment required (unit currency - as specified in C0.4) Payback period Please select Estimated lifetime of the initiative Please select Comment The biogas comes from methane captured from treatment of Palm Oil Mill Effluent (POME). Sime Darby Plantation's POME is derived from residual waste products from mill processing. The Fresh Fruit Bunch (FFB) we source are RSPO, MSPO and ISPO certified to be sustainable biomass. Initiative category & Initiative type Solar PV Low-carbon energy generation

Estimated annual CO2e savings (metric tonnes CO2e) 62797

Scope(s) or Scope 3 category(ies) where emissions savings occur Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

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

Payback period Please select

Estimated lifetime of the initiative Please select

Comment

C4.3c

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

Method	Comment
Dedicated budget for other emissions reduction activities	Currently, SDP has 14 biogas plants in operation. In the pipeline are 16 plants - three of which are currently under construction, five are at the pre-construction stage and the rest are still in development stages.
Compliance with regulatory requirements/standards	There is a need for all estates/mills/refinery to comply on RSPO Principals & Criteria/MSPO and ISPO legal requirements -annual carbon emissions.
Dedicated budget for energy efficiency	Internal initiative to boost energy efficiency groupwide.
Dedicated budget for other emissions reduction activities	Biogas - methane captured project is budgeted for all oil mills in SDP to further reduce carbon emissions from effluent treatment plants. Exploring other initiatives such as nature-based solutions.
Employee engagement	We encourage our people to volunteer in projects that increase our carbon stock; Sime Darby Plant A Tree (SDPAT) Programme is actively being done by internal or external organisations.

C-AC4.4/C-FB4.4/C-PF4.4

(C-AC4.4/C-FB4.4/C-PF4.4) Do you implement agriculture or forest management practices on your own land with a climate change mitigation and/or adaptation benefit?

Yes

MP1

C-AC4.4a/C-FB4.4a/C-PF4.4a

(C-AC4.4a/C-FB4.4a/C-PF4.4a) Specify the agricultural or forest management practice(s) implemented on your own land with climate change mitigation and/or adaptation benefits and provide a corresponding emissions figure, if known.

Management practice reference number

Management practice

Land use change

Description of management practice

1. Land Use Management

SDP has a strict no-deforestation policy in place since 2014. For new developments, SDP applies the latest Roundtable on Sustainable Palm Oil (RSPO) criteria to assess the proposed land for high conservation value and high carbon stock using the RSPO's High Conservation Value-High Carbon Stock Approach (HCV-HCSA) Toolkit. In accordance with our policies, SDP has not developed any land in Indonesia and Malaysia for several years, and the Group's only areas of expansion have been in Papua New Guinea which are low carbon developments in line with the RSPO's New Planting Procedure (NPP) and HCV-HCSA requirements. The most recent of these expansions was in an area of 373.51 hectares in Poliamba, Papua New Guinea, where SDP's development plans were formulated in accordance with the RSPO's NPP, with 206 hectares identified for development and 168 hectares set aside for conservation – or 45% of the total area.

In SDP we also adhere to strict land acquisition policies. Once internal feasibility study conducted to check the suitability of land, thorough investigations will be conducted on legal, environmental and social aspects; no development on forests and peat (NDPE), high conservation value forest and high carbon stock assessment (HCV-HCSA) and social and environmental impact assessment (SEIA).

SDP's conservation areas have remained largely unchanged over the years. As at end-2022, a total of 47,308 hectares – two-thirds the size of Singapore – have been identified as high conservation value (HCV) and conservation set-aside (CSA) areas with about 87% of the total conservation area located at SDP's operations in Indonesia, Papua New Guinea and Solomon Islands.

All HCV and CSA areas identified to date have been set aside for conservation and are subject to dedicated management and monitoring plans.

We have also expanded our efforts beyond legal and certification requirements to make positive contributions to forests in key landscapes through many conservation and restoration programmes.

Primary climate change-related benefit

Increase carbon sink (mitigation)

Estimated CO2e savings (metric tons CO2e) 31021

Please explain

Our high conservation areas (HCV), buffer zones and mangroves have sequestered an estimated total of 31,021 metric tons CO2; 3,318 metric tons from our HCV areas, 5,816 metric tons CO2 from our buffer zones and 21,888 metric tons CO2 from our mangrove areas.

The calculations methodology is referenced from GHG Protocol Land Sector and Removals Guidance and the 2019 Refinement to the IPCC Guidelines for National GHG Inventories. The reason we opted for GHG Protocol Land Sector and Removals Guidance draft instead of GHG Protocol Corporate Standards was because we had to be consistent with what we have submitted to SBTi for target validation in 2022 which required us to use GHG Protocol Land Sector and Removals Guidance draft.

Management practice reference number MP2

Management practice

Change in the topography or landscapes

Description of management practice

2. Climatic Consideration:

Highly Suitable Climate Elements in Ensuring Sustainable High Crop Yield. Ideally the following aspects are important in ensuring optimum yield:

- Annual Rainfall = 2000-2500mm/year
- Duration of Dry Season (month) = 0
- Mean Annual Temperature (0C) = 26-29
- Daily Solar Radiation (MJm2) = 16-17
- Wind (Ms-1) = <10

Severe flooding prevents or disrupts harvesting and collection of oil palm fruits, leading to reduced harvest and yield. Flooding may be caused by heavy rains or increased sea levels. Estates and mills located in high-risk areas have been equipped with bunds to prevent flooding and coastal inundation. These bunds, made of earth, have been strategically constructed across all coastal estates owned by SDP. Plans are currently being developed to maintain the stability of the bunds to ensure their effectiveness. We further enhance the protection of these area by rehabilitating mangrove trees at the riverbank and coastal. The earth bunds and mangroves help to prevent erosions at the riverbanks and coastal areas.

Primary climate change-related benefit

Increasing resilience to climate change (adaptation)

Estimated CO2e savings (metric tons CO2e)

Please explain

Management practice reference number MP3

Management practice

Fire control

Description of management practice

Zero Burning Replanting Technique

SDP has long been committed to sustainable practices. We are the forefront of implementing the Zero Burning principles decades ago. Introduced in 1989, the practice has been adopted as National standard in 1997 and ASEAN in 2003. We were awarded the Roll of Honour in the Global 500 at Rio de Jeneiro in 1992 by the UNEP (United Nation Environment Programme) for this initiative.

Zero Burning is a practice in which the old and uneconomical stands of oil palms are felled, shredded and left to decompose during replanting. When replanting, care must be taken to minimize, where possible, disturbance of the soil as this may increase the greenhouse gas (GHG) emissions. Therefore, the oil palm trunks were chipped or applied directly to the plantations as surface mulch to reduce the direct impacts of rainfall and sunlight.

Hotspot - Alert System and Monitoring

- Starting from 2013, SDP launched this system to monitor fire hotspots on a daily basis. An Hotspot Alert Dashboard was introduced in 2015 to proactively monitor fire and haze in our concession areas and also within a 5km radius outside the concession boundaries respectively. Once a hotspot is detected, a system alert is triggered to the respective area/estate.

- Fire prevention teams are then dispatched to verify the accuracy of this satellite reports. Immediate action is taken to extinguish any fire including those that fall within a 5km radius from our estate boundaries. Management completes a Fire Hotspot Internal Report (FHIR) with photos taken on-site, within 24 hours of receiving the Hotspot Email Alert.

- Most of the hotspots detected during the year had been caused by land clearing for paddy planting and slash-and-burn activities by smallholders or the local communities.

- In Indonesia, we monitor hotspots from towers up to 15m which was highly built in strategic locations within our estates.

Primary climate change-related benefit

Emission reductions (mitigation)

Estimated CO2e savings (metric tons CO2e)

Please explain

Emissions are avoided since there is no fire compared to previous practices which involves burning

Management practice reference number MP4

Management practice

Fertilizer management

Description of management practice

Amidst geopolitical uncertainties, and fragile supply chains, it is crucial to secure a reliable source of supplies, particularly fertiliser. As a result, SDP resourcefully recycles its by-products (fronds and empty fruit bunches) from its upstream processes back into operations as organic fertiliser. Palm oil mill effluent (POME) is wastewater produced from the processing of Fresh Fruit Bunches (FFB). It is organic and biologically treated through anaerobic digestion and recycled for use as organic fertiliser in the Group's plantations.

Primary climate change-related benefit

Emission reductions (mitigation)

Estimated CO2e savings (metric tons CO2e)

Please explain

Management practice reference number MP5

Management practice

Restoration of degraded lands and cultivated organic soils

Description of management practice

5. Peat Management

SDP has implemented a strict "no new planting on peat" policy since 2014. There are however, existing 32,798 hectares of plantations located on peat across all operations. Peatlands store twice as much carbon as the rest of the world's forests and are more susceptible to fire. For this reason, the Group conducts drainability assessments at our existing operations on peat in accordance with RSPO requirements and uses the results to plan the phasing out of oil palm cultivation on these lands. Suitable crops will replace oil palms on these lands to generate a higher water table or rehabilitated natural vegetation. It is crucial to maintain an optimal water level for peatland, to maintain its vast stores of carbon, prevent peat fires and minimise peat subsidence.

In the interim, SDP's operating units continuously implement best peat management practices in compliance with the RSPO Principles and Criteria and the Group's internal agriculture reference manual. In addition, the Group maintains existing vegetation in and around our oil palm plantations and engage with surrounding local communities to educate them on sustainable management of peat areas to prevent slash and burn activities.

Primary climate change-related benefit

Emission reductions (mitigation)

Estimated CO2e savings (metric tons CO2e)

Please explain

Estimated CO2e savings for this management practices will be established in future.

Management practice reference number MP6

Management practice

Other, please specify (Water management)

Description of management practice

6. Water Management System

Water usage

The Group monitors the amount of water used and usage intensity in all our upstream operations. In 2022, SDP consumed a total of 28,353,614 cubic metres (m3) of water.

Each region primarily determines its water management and monitoring approaches according to regulatory requirements. Water data is collected at the site level and may vary from operation to operation. SDP is currently reviewing our internal processes to collect this data at the Group level, as doing so will ensure consistency and comparability. Whilst previously, the Group-level water-usage intensity reduction target was reported, SDP will revisit this approach once our collection processes are streamlined.

In 2022, the Group appointed external consultants to conduct a study on our water footprint and water business risks across the upstream and downstream operations. The study will be carried out in 2023 together with SDP's R&D department. The study will be carried out with the Water Footprint Network methodology, and a life cycle assessment in line with the ISO 14046: 2014 Water Footprint standard.

Wastewater/Effluent Discharge

SDP's operations at palm oil mills and refineries produces effluents in the form of wastewater. As SDP operates near waterways, we have a responsibility to protect water sources within and around the boundaries of our operations from contamination by effluents.

Palm oil mill effluent (POME) is wastewater produced from the processing of Fresh Fruit Bunches (FFB). It is organic and biologically treated through anaerobic digestion and recycled for use as fertiliser in the Group's plantations. The remaining wastewater is then treated before being discharged into waterways in accordance with requirements prescribed by applicable laws and regulations.

Palm oil refinery effluent (PORE) is wastewater from refining crude palm oil. PORE is treated with a chemical process to remove oil, grease and inorganic substances before further biological treatment, prior to its discharge. The Group's robust management systems ensure that all our mills and refineries are fitted with Palm Oil Mill Effluent Treatment Systems and Industrial Effluent Treatment Systems that support the management of waste and comply with national environmental standards.

Primary climate change-related benefit

Increasing resilience to climate change (adaptation)

Estimated CO2e savings (metric tons CO2e)

Please explain

There are no estimated CO2 savings as this is an adaptation practice identified at this point in time

Management practice reference number MP7

Management practice

Description of management practice

7. Integrated Pest Management - Beneficial Plants, Barn Owl

SDP is committed to preserving the nutrients in the soil to encourage organic microbial growth for healthier palm fruits by reducing the amount of nitrogen fertiliser and pesticides wherever possible. Our Crop Protection Research Section has developed environmentally friendly and economically viable pest and disease control methods to protect our palms. We use biological controls, creating an ecosystem in our plantations that works to regulate itself. Our Integrated Pest Management (IPM) approach, as we call it, are employed across all our plantations.

Barn owl

We build nesting boxes every 10 hectares in our estates to encourage these barn owls to populate the plantation. These owls help manage the rat population in our estates - our most common pest. Uncontrolled rat damage can result in more than 5% loss in oil palm crop. With Tyto Alba flying around, we are able to significantly reduce the rat infestation – which means fewer rounds of rat baiting and lesser damage to our fruit bunches.

Beneficial plants

We have planted strips of plants (Antigonan leptopus, Tunera subulate & Euphorbia heterophylla) at the fringe of each oil palm row. These plants have been planted to curb the population of the bagworm, a leaf-eating caterpillar that damages palm fronds.

By growing these beneficial plants, we encourage the propagation of the bagworm's natural enemies. Cultivated in the right ratio, these plants protect our oil palms from leaf-eating caterpillar pests within a 120 to 450-metre radius.

Rhinoceros Beetles

These insects infest the newly replanted oil palm fields due to our Zero-burning replanting method, where old trees are cut down and left to decompose. Decaying organic matters such as these are favourable and become a breeding ground for this beetle.

We have explored and discovered the use of the Metarhizium Entomopathogenic fungi that we formulate into a biopesticide to control the Rhinoceros Beetle pest. The biopesticide is applied on the decomposing trunk chips that will infect and kill the Rhinoceros Beetle grub. As a result, we minimise the use of chemical insecticides and protect our palm from damages.

Primary climate change-related benefit

Reduced demand for pesticides (adaptation)

Estimated CO2e savings (metric tons CO2e)

Please explain

There are no estimated CO2 savings as this is an adaptation practice. Annual cost savings has been estimated at between RM87million to RM358 million.

Management practice reference number

MP8

Management practice

Waste management

Description of management practice

8. Utilisation of Empty Fruit Bunch, Palm Oil Mill Effluent (POME) and Compost as Organic Manure Processes use EFB and POME into organic fertilizes in plantations, reducing the use of chemical fertilisers and conversion of EFB and POME into compost. Fertilizer replacement cost savings of RM500/ha.

Primary climate change-related benefit

Emission reductions (mitigation)

Estimated CO2e savings (metric tons CO2e)

71843

Please explain

Annual CDM value of about RM2.4million for 5 oil mills (Lavang, Pekaka, Melalap, Merotai, Kerdau with the estimated 71,843tonne CO2/year.

Management practice reference number MP9

Management practice Governmental or institutional policies and programs

Description of management practice

9. Commitment to sustainable palm oil

As at 2022, Sime Darby Plantation (SDP) is the world's largest producer of Certified Sustainable Palm Oil (CSPO) with a production capacity of 1.887 Million (MT) annually. We are committed to ensuring all our operations follow good agricultural and best management practice by implementing sustainability standards. This includes international standards such as the Roundtable on Sustainable Palm Oil (RSPO) and the Rainforest Alliance (RA), as well as national mandated standards such as the Malaysian Sustainable Palm Oil (MSPO) and Indonesian Sustainable Palm Oil (ISPO).

Primary climate change-related benefit

Emission reductions (mitigation)

Estimated CO2e savings (metric tons CO2e)

Please explain

No estimated emissions savings has been calculated for compliance to RSPO, MSPO and ISPO standards.

Management practice reference number MP10

Management practice Restoration

Restoratio

Description of management practice

SDP is committed to ensure the restoration of degraded forests as well as the reforestation of areas set aside for conservation in our concession areas. Where possible, we have planted Endangered, Rare and Threatened (ERT) trees to create wildlife corridors linking patches of degraded land. Together with our partners, we have collectively planted 1,448,822 trees in an effort to restore the habitats of endangered species. More information on our reforestation efforts can also be seen on our website.

Our tree planting efforts include the following:

- 1) Reforestation and rehabilitation of orang-utan habitat in Northern Ulu Segama, Sabah, Malaysia 295,159 trees
- 2) Sime Darby Plant-A-Tree Programme in Sime Darby Plantation estates, Malaysia 329,225 trees
- 3) Sime Darby Plant-A-Tree Programme in Jentar estate, Malaysia 136,036 trees
- 4) Project RiLeaf with Nestlé Malaysia 588,981 trees
- 5) Peat Swamp Forest Protection and Rehabilitation Project in Raja Musa Forest Reserve, Bukit Talang estate, Malaysia 18,500 trees
- 6) Riparian and coastal reforestation, Papua New Guinea 69,911 trees
- 7) Ramu Tree Nursery, Papua New Guinea 96 trees
- 8) Mangrove restoration Numundo coastline, West New Britain, Papua New Guinea 10,914 trees
- Primary climate change-related benefit

Increase carbon sink (mitigation)

Estimated CO2e savings (metric tons CO2e)

6040340

Please explain

Our restoration efforts have sequestered an estimated total of 6,040,340 metric tons CO2; 5,811,400 metric tons CO2 from our standing oil palm plantations, 226,792 metric tons CO2 from rubber plantations and 2,148 metric tons CO2 from our paulownia plantations.

The calculations methodology is referenced from GHG Protocol Land Sector and Removals Guidance and the 2019 Refinement to the IPCC Guidelines for National GHG Inventories. The reason we opted for GHG Protocol Land Sector and Removals Guidance draft instead of GHG Protocol Corporate Standards was because we had to be consistent with what we have submitted to SBTi for target validation in 2022 which required us to use GHG Protocol Land Sector and Removals Guidance draft.

Management practice reference number

MP11

Management practice

Replacing fossil fuels by renewable energy sources

Description of management practice

Biogas plants have been installed at 14 mills across Malaysia, Indonesia, Papua New Guinea and the Solomon Islands. Biogas plants capture methane to generate electricity, thus reducing a major source of emissions coming from effluent treatment.

For solar energy, in addition to leasing out selected areas within our land bank for use as solar farms. Sime Darby Plantation has also developed rooftop solar projects to reduce the Group's conventional energy and diesel consumption.

Primary climate change-related benefit

Emission reductions (mitigation)

Estimated CO2e savings (metric tons CO2e)

62797

Please explain

We have only accounted for emissions avoided from biogas and solar electricity generation projects in the estimated CO2esavings.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products? No

C5. Emissions methodology

C5.1

(C5.1) Is this your first year of reporting emissions data to CDP? $\ensuremath{\mathsf{No}}$

C5.1a

(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

Row 1

Has there been a structural change?

No

Name of organization(s) acquired, divested from, or merged with <Not Applicable>

Details of structural change(s), including completion dates

<Not Applicable>

C5.1b

(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

	Change(s) in methodology, boundary, and/or reporting year definition?	Details of methodology, boundary, and/or reporting year definition change(s)
1	Yes, a change in methodology Yes, a change in boundary	We have recalculated our baseline emission as per SBTi requirements which required us to revise our base year from 2009 to 2020 (no earlier than 2015). In our baseline emissions recalculation, we have included emissions from land use, land management and the Scope 3 emissions as well as other commodities such as rubber and cattle. We have referred our calculations based on GHG Protocol Land Sector and Removals Guidance, GHG Protocol Corporate Value Chain (Scope 3) Standard, 2006 IPCC Guidelines for National Greenhouse Gas Inventories, 2019 Refinement IPCC Guidelines for National Greenhouse Gas Inventories, 2019 Refinement IPCC Guidelines for National Greenhouse Gas Inventories and RSPO PalmGHG v4 to calculate emissions, which used default emission factors, region-specific emissions factors, plantation specific data and some field measurement data (e.g. kg dry matter of a standing palm, nitrogen content in effluent and empty fruit bunch). We also have updated our GWP and default emission factors according to the latest available guidance. The reason we opted to reference the GHG Protocol Land Sector and Removals Guidance draft instead of GHG Protocol corporate standards was because we had to be consistent with what we have submitted to SBTi for target validation in 2022 which required us to use GHG Protocol Land Sector and Removals Guidance draft.

C5.1c

(C5.1c) Have your organization's base year emissions and past years' emissions been recalculated as a result of any changes or errors reported in C5.1a and/or C5.1b?

	Base year recalculation		Base year emissions recalculation policy, including significance threshold	Past years' recalculation
Row	Yes		For scope 1 and 2 emissions, we have recalculated our emissions according to the updated boundary and methodology. We have included emissions from our	Yes
1		Scope 2,	cattle and rubber operations for the land use, land management and energy used in operations following the guidance suggested by SBTi. As for Scope 3, we	
		location-	have accounted for relevant emission sources such as Category 1, 2, 3, 4, 5, 6, 7, 9, 10 and 11.	
		based		
		Scope 3		

C5.2

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

Scope 1

Base year start

January 1 2020

Base year end

December 31 2020

Base year emissions (metric tons CO2e) 9887727

Comment

The operational emissions comprise of downstream businesses, rubber estates & factory, cattle operation and upstream oil palm estates and mills in Malaysia, Indonesia & Papua New Guinea and Solomon Islands.

Scope 2 (location-based)

Base year start January 1 2009

Base year end December 31 2009

Base year emissions (metric tons CO2e) 153384

Comment

Scope 2 comprises of purchased electricity and steam only that covers downstream businesses, rubber estates & factory, cattle operation and upstream oil palm estates and mills in Malaysia, Indonesia & Papua New Guinea and Solomon Islands.

Scope 2 (market-based)

Base year start

Base year end

Base year emissions (metric tons CO2e)

0

Comment

We do not procure differentiated energy products in the form of contractual instruments (including direct contracts, certificates, or supplier-specific information) are available in the main markets where we operate.

Scope 3 category 1: Purchased goods and services

Base year start January 1 2020

Base year end December 31 2020

Base year emissions (metric tons CO2e)

6161495

Comment

Upstream emissions from feedstock purchased (3rd Party palm supply & non-palm supply) & non-feedstock purchased (Estate tools and equipments, Chemicals (incl. Pesticides), Maintenance services, Machineries spare parts, Packaging, Building & Construction, Safety equipment, Office supplies, PPE, Medical equipment).

Scope 3 category 2: Capital goods

Base year start January 1 2020

Base year end December 31 2020

Base year emissions (metric tons CO2e) 210433

Comment Types of assets procured are property, plant & equipment

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

Base year start

January 1 2020

Base year end December 31 2020

Base year emissions (metric tons CO2e) 10307

Comment

Upstream and transport-related emissions from energy consumption

Scope 3 category 4: Upstream transportation and distribution

Base year start January 1 2020

Base year end December 31 2020

Base year emissions (metric tons CO2e)

101834

Comment

Transportation of externally procured, SDP produced Fresh Fruit Bunches (FFB) from farm (estate) to gate (mill) and fertiliser transportation from suppliers to SDP and outsourced in-bound sea vessels and road transport (heavy duty vehicles)

Scope 3 category 5: Waste generated in operations

Base year start January 1 2020

Base year end December 31 2020

Base year emissions (metric tons CO2e) 8965

Comment

Treatment of municipal waste, scheduled waste and composting

Scope 3 category 6: Business travel

Base year start January 1 2020

Base year end December 31 2020

Base year emissions (metric tons CO2e) 4312

Comment Air and road travel for business purposes

Scope 3 category 7: Employee commuting

Base year start January 1 2020

Base year end December 31 2020

Base year emissions (metric tons CO2e) 30842

Comment Employee commuting from home

Scope 3 category 8: Upstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment Not applicable as we do not have upstream leased assets.

Scope 3 category 9: Downstream transportation and distribution

Base year start January 1 2020

Base year end December 31 2020

Base year emissions (metric tons CO2e) 319046

Comment Outsourced and outbound sea vessels and road transport (heavy duty vehicles)

Scope 3 category 10: Processing of sold products

Base year start January 1 2020

Base year end December 31 2020

Base year emissions (metric tons CO2e) 5145

Comment

Customer processing emissions

Scope 3 category 11: Use of sold products

Base year start January 1 2020

Base year end December 31 2020

Base year emissions (metric tons CO2e) 313828

Comment

CH4 and N2O emissions (non-biogenic) from combustion of biodiesel and biogas sold

Scope 3 category 12: End of life treatment of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Not applicable. SDP products are mainly intermediary products sold to business customers for further processing.

Scope 3 category 13: Downstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Not applicable as we do not have downstream leased assets.

Scope 3 category 14: Franchises

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Not applicable as we do not have franchises.

Scope 3 category 15: Investments

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Emissions from joint ventures will be calculated for FY23.

Scope 3: Other (upstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment Not applicable

Scope 3: Other (downstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment Not applicable

C5.3

(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

IPCC Guidelines for National Greenhouse Gas Inventories, 2006

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

The Greenhouse Gas Protocol Agricultural Guidance: Interpreting the Corporate Accounting and Reporting Standard for the Agricultural Sector

The Greenhouse Gas Protocol: Scope 2 Guidance

The Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Standard

Other, please specify (GHG Protocol Land Sector and Removals Guidance, RSPO PalmGHG calculated emissions being used for peat oxidation emissions and fertiliser emissions in Papua New Guinea and Solomon Islands.)

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) 10375646

Start date

January 1 2022

End date

December 31 2022

Comment

The operational emissions comprise of downstream businesses, rubber estates & factory, cattle operation and upstream oil palm estates and mills in Malaysia, Indonesia & Papua New Guinea and Solomon Islands in FY2022.

Past year 1

Gross global Scope 1 emissions (metric tons CO2e)

10659136

Start date January 1 2021

End date

December 31 2021

Comment

The operational emissions comprise of downstream businesses, rubber estates & factory, cattle operation and upstream oil palm estates and mills in Malaysia, Indonesia & Papua New Guinea and Solomon Islands in FY2021.

Past year 2

Gross global Scope 1 emissions (metric tons CO2e)

9887727

Start date

January 1 2020

End date

December 31 2020

Comment

The operational emissions comprise of downstream businesses, rubber estates & factory, cattle operation and upstream oil palm estates and mills in Malaysia, Indonesia & Papua New Guinea and Solomon Islands in FY2020, our base year.

C6.2

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

Row 1

Scope 2, location-based

We are 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

In the markets we operate, the electricity suppliers are typically the national utility provider e.g. Tenaga Nasional Berhad for Malaysian and PLN in Indonesia. We do not have procure differentiated energy products in the form of contractual instruments.

C6.3

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

Reporting year

Scope 2, location-based 225722

Scope 2, market-based (if applicable) <Not Applicable>

Start date January 1 2022

End date December 31 2022

Comment

Past year 1

Scope 2, location-based 226280

Scope 2, market-based (if applicable) <Not Applicable>

Start date January 1 2021

End date

December 31 2021

Comment

Past year 2

Scope 2, location-based 153384

Scope 2, market-based (if applicable) <Not Applicable>

Start date January 1 2020

End date December 31 2020

Comment

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 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, Scope 2, or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure.

Source of excluded emissions

Sugarcane operations which covers land-related emissions and fuel-related emissions.

Scope(s) or Scope 3 category(ies)

Scope 1

Relevance of Scope 1 emissions from this source Emissions are relevant and calculated, but not disclosed

Relevance of location-based Scope 2 emissions from this source <Not Applicable>

Relevance of market-based Scope 2 emissions from this source <Not Applicable>

Relevance of Scope 3 emissions from this source

<Not Applicable>

Date of completion of acquisition or merger <Not Applicable>

Estimated percentage of total Scope 1+2 emissions this excluded source represents

0.5

Estimated percentage of total Scope 3 emissions this excluded source represents <Not Applicable>

Explain why this source is excluded

Emissions from sugarcane operations managed by RAIL Ltd. have been excluded from the inventory and target boundary coverage as it is deemed insignificant therefore we have excluded this emission from our base year.

Explain how you estimated the percentage of emissions this excluded source represents

We have estimated our emissions based on literature review

Source of excluded emissions

Waste treatment within SDP owned land tCO2e

Scope(s) or Scope 3 category(ies) Scope 1

Relevance of Scope 1 emissions from this source Emissions are relevant and calculated, but not disclosed

Relevance of location-based Scope 2 emissions from this source <Not Applicable>

Relevance of market-based Scope 2 emissions from this source

Relevance of Scope 3 emissions from this source <Not Applicable>

Date of completion of acquisition or merger <Not Applicable>

<Not Applicable>

Estimated percentage of total Scope 1+2 emissions this excluded source represents

0.1

Estimated percentage of total Scope 3 emissions this excluded source represents <Not Applicable>

Explain why this source is excluded

We have excluded this emission as we do not have on-site data and the estimated emissions of groupwide on-site landfill is insignificant in comparison to the groupwide emissions.

Explain how you estimated the percentage of emissions this excluded source represents

We have estimated the emissions based on capacity of on-site dump bin and used the emission factor of landfill mixed solid waste, therefore we have excluded this emission from our base year.

Source of excluded emissions

Data center services (physical facility that stores data remotely)

Scope(s) or Scope 3 category(ies) Scope 3: Purchased goods and services

Relevance of Scope 1 emissions from this source <Not Applicable>

Relevance of location-based Scope 2 emissions from this source <Not Applicable>

Relevance of market-based Scope 2 emissions from this source

<Not Applicable>

Relevance of Scope 3 emissions from this source Emissions are not relevant

Date of completion of acquisition or merger

<Not Applicable>

Estimated percentage of total Scope 1+2 emissions this excluded source represents <Not Applicable>

Estimated percentage of total Scope 3 emissions this excluded source represents

0

Explain why this source is excluded

This emission is 0.02% out of the total Scope 3 emissions which we have excluded as it is not significant to our operations.

Explain how you estimated the percentage of emissions this excluded source represents

We have calculated the emissions based on the electricity consumption of our data center facilities.

Source of excluded emissions

Transport of purchased goods

Scope(s) or Scope 3 category(ies) Scope 3: Upstream transportation and distribution

Relevance of Scope 1 emissions from this source

<Not Applicable>

Relevance of location-based Scope 2 emissions from this source <Not Applicable>

Relevance of market-based Scope 2 emissions from this source

<Not Applicable>

Relevance of Scope 3 emissions from this source

Emissions are relevant and calculated, but not disclosed

Date of completion of acquisition or merger <Not Applicable>

Estimated percentage of total Scope 1+2 emissions this excluded source represents

<Not Applicable>

Estimated percentage of total Scope 3 emissions this excluded source represents

Explain why this source is excluded

This emission is excluded as there is uncertainty in the data that we can obtain.

Explain how you estimated the percentage of emissions this excluded source represents

We have estimated the emissions through spend-based method on the publicly available expenditure data on transportation of goods.

Source of excluded emissions Immaterial purchased goods

Scope(s) or Scope 3 category(ies)

Scope 3: Purchased goods and services

Relevance of Scope 1 emissions from this source <Not Applicable>

Relevance of location-based Scope 2 emissions from this source <Not Applicable>

Relevance of market-based Scope 2 emissions from this source <Not Applicable>

Relevance of Scope 3 emissions from this source Emissions are not relevant

Date of completion of acquisition or merger <Not Applicable>

Estimated percentage of total Scope 1+2 emissions this excluded source represents <Not Applicable>

Estimated percentage of total Scope 3 emissions this excluded source represents 0.7

Explain why this source is excluded

This emission is excluded because the purchased goods are not relevant to our operations for example gifts and souvenirs.

Explain how you estimated the percentage of emissions this excluded source represents

We have estimated the upstream (production/manufacturing) of the immaterial purchase goods through spend-based method.

Source of excluded emissions

Fugitive HFC emissions (from refrigeration & air conditioning systems)

Scope(s) or Scope 3 category(ies) Scope 1

Relevance of Scope 1 emissions from this source

Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source <Not Applicable>

Relevance of market-based Scope 2 emissions from this source <Not Applicable>

Relevance of Scope 3 emissions from this source <Not Applicable>

Date of completion of acquisition or merger

<Not Applicable>

0

Estimated percentage of total Scope 1+2 emissions this excluded source represents

Estimated percentage of total Scope 3 emissions this excluded source represents <Not Applicable>

Explain why this source is excluded

Fugitive HFC emissions (from refrigeration & air conditioning systems) represent 0.01% of SDP total scope 1 and scope 2 emissions. The nature of Sime Darby Plantation's operations does not release PFC, SF6 and NF3 emissions, as we do not use these fluorinated compounds in our operations. Hence, we excluded it.

Explain how you estimated the percentage of emissions this excluded source represents We have calculated the fugitive emissions based on average-data method.

Source of excluded emissions

Upstream emission of electricity from extraction, generation and transmission and losses

Scope(s) or Scope 3 category(ies)

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)

Relevance of Scope 1 emissions from this source <Not Applicable>

Relevance of location-based Scope 2 emissions from this source

<Not Applicable>

Relevance of market-based Scope 2 emissions from this source <Not Applicable>

Relevance of Scope 3 emissions from this source Emissions are relevant and calculated, but not disclosed

Date of completion of acquisition or merger <Not Applicable>

Estimated percentage of total Scope 1+2 emissions this excluded source represents <Not Applicable>

Estimated percentage of total Scope 3 emissions this excluded source represents 0.3

Explain why this source is excluded

This is emission is excluded as there is uncertainty to the data that we can obtain.

Explain how you estimated the percentage of emissions this excluded source represents

C6.5

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

Purchased goods and services

Evaluation status Relevant, calculated

Emissions in reporting year (metric tons CO2e) 7864215

Emissions calculation methodology

Average data method Spend-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Please explain

5

Our Scope 3 Category 1 comprises of upstream (Scope 1 & 2) emissions of purchased feedstock and non-feedstock.

Our purchased feedstock refers to purchased palm fresh fruit bunches (palm FFB) from third-party estates, purchased palm oil supply from third party mills and purchased non-palm oil supply. We have estimated the land use and land management emissions from our palm FFB suppliers based on tonnage of palm FFB purchased and calculated based on GHG Protocol Land Sector and Removals guidance. As for the purchased palm oil supply from third-party mills we have calculated our emissions based on the literature review on life cycle assessment (LCA) of crude palm oil. Meanwhile as for non-palm oil products we have referred to literature review on average carbon footprint of the oil.

Our purchased non-feedstock refers to the extraction, production and manufacturing of our purchased goods and services of the following: Tools and equipment, Chemicals (incl. Pesticides), Maintenance services, Machineries & spare parts, Packaging, Building & Construction, Safety equipment, Office supplies, PPE, Medical equipment, Fertilisers. We estimate these emissions through spend-based method.

Capital goods

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e) 272428

Emissions calculation methodology Spend-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

We have estimated the upstream emissions of assets procured (property, plant & equipment) that are not included in our Scope 1 and 2 emissions.

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

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

25821

Emissions calculation methodology

Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

The upstream emissions (extraction, production and manufacturing) of diesel, biodiesel and petrol used in our operations.

Upstream transportation and distribution

Evaluation status Relevant, calculated

Emissions in reporting year (metric tons CO2e) 28182

Emissions calculation methodology

Average data method Average spend-based method Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Emissions are estimated based on the average transport distance of fresh fruit bunches from external estates to own mills. The average distance travelled was based on data collected from our 121 estates. We also have accounted for inbound transport of purchased crude palm oil from external mills to our own refineries using average distance travelled. As for non-feedstock purchases, we accounted the emissions from fertiliser transportation based on average distance transported.

Waste generated in operations

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e) 9415

Emissions calculation methodology

Spend-based method

Waste-type-specific method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

The emissions cover municipal waste, scheduled waste and composting. For scheduled waste we estimated based on spend-based method. For municipal waste and composting we estimated based on average data method, which we use the emission factor based on the type of waste treatment.

Business travel

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e) 8636

Emissions calculation methodology

Spend-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Emissions are calculated based on spend-based method of air travel and road travel.

Employee commuting

Evaluation status Relevant, calculated

Emissions in reporting year (metric tons CO2e) 27473

Emissions calculation methodology Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Emissions are calculated using average distance travelled by employees to workplace.

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e) </br><Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

We do not account for these emissions as we do not have upstream leased assets.

Downstream transportation and distribution

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e) 103783

Emissions calculation methodology

Average data method Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Emissions are calculated based on average distance -travelled by sea vessels from our refineries to customers.

Processing of sold products

Evaluation status Relevant, calculated

Emissions in reporting year (metric tons CO2e)

17897

Emissions calculation methodology

Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0 Please explain

This emission is estimated by average-data method for processing of sold products.

Use of sold products

Evaluation status Relevant, calculated

Emissions in reporting year (metric tons CO2e)

17938

Emissions calculation methodology

Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Emissions are based on average-data method to calculate the combustion of sold biodiesel.

End of life treatment of sold products

Evaluation status

Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners <Not Applicable>

~1101 Applicable>

Please explain

According to GHG Protocol Scope 3 guidance for Category 12 the calculation of end-of-life emissions is based on total mass of sold products. Our products are intermediary and are mainly sold to business customers. Our products are mostly used in food products that are ingested, hence do not have direct end-of-life emissions.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e) </br><Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

We do not calculate this Category as we do not have downstream leased assets.

Franchises

Evaluation status Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e) <Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners <Not Applicable>

Please explain

We do not calculate this Category as we do not have any franchises.

Investments

Evaluation status Relevant, not yet calculated

Emissions in reporting year (metric tons CO2e) <Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners <Not Applicable>

Please explain

Emissions from joint ventures have yet to be calculated for FY22 but will be calculated for FY23.

Other (upstream)

Evaluation status Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners <Not Applicable>

Please explain

We will continuously monitor our boundary and update our inventory where necessary.

Other (downstream)

Evaluation status Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners <Not Applicable>

Please explain

We will continuously monitor our boundary and update our inventory where necessary.

C6.5a

(C6.5a) Disclose or restate your Scope 3 emissions data for previous years.

Past year 1

Start date

January 1 2021
End date December 31 2021
Scope 3: Purchased goods and services (metric tons CO2e) 7930475
Scope 3: Capital goods (metric tons CO2e) 229655
Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e) 21188
Scope 3: Upstream transportation and distribution (metric tons CO2e) 30561
Scope 3: Waste generated in operations (metric tons CO2e) 4655
Scope 3: Business travel (metric tons CO2e) 3715
Scope 3: Employee commuting (metric tons CO2e) 26260
Scope 3: Upstream leased assets (metric tons CO2e) 0
Scope 3: Downstream transportation and distribution (metric tons CO2e) 130814
Scope 3: Processing of sold products (metric tons CO2e) 16172
Scope 3: Use of sold products (metric tons CO2e) 13279
Scope 3: End of life treatment of sold products (metric tons CO2e) 0
Scope 3: Downstream leased assets (metric tons CO2e) 0
Scope 3: Franchises (metric tons CO2e) 0
Scope 3: Investments (metric tons CO2e) 0
Scope 3: Other (upstream) (metric tons CO2e) 0
Scope 3: Other (downstream) (metric tons CO2e) 0

Comment

Past year 2

Start date January 1 2020

January 1 2020
End date December 31 2020
Scope 3: Purchased goods and services (metric tons CO2e) 6161495
Scope 3: Capital goods (metric tons CO2e) 210433
Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e) 10307
Scope 3: Upstream transportation and distribution (metric tons CO2e) 101834
Scope 3: Waste generated in operations (metric tons CO2e) 8965
Scope 3: Business travel (metric tons CO2e) 4312
Scope 3: Employee commuting (metric tons CO2e) 30842
Scope 3: Upstream leased assets (metric tons CO2e) 0
Scope 3: Downstream transportation and distribution (metric tons CO2e) 319046
Scope 3: Processing of sold products (metric tons CO2e) 5145
Scope 3: Use of sold products (metric tons CO2e) 313828
Scope 3: End of life treatment of sold products (metric tons CO2e) 0
Scope 3: Downstream leased assets (metric tons CO2e) 0
Scope 3: Franchises (metric tons CO2e) 0
Scope 3: Investments (metric tons CO2e) 0
Scope 3: Other (upstream) (metric tons CO2e) 0
Scope 3: Other (downstream) (metric tons CO2e) 0
Comment

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? Yes

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

(C-AC6.8a/C-FB6.8a/C-PF6.8a) Account for biogenic carbon data pertaining to your direct operations and identify any exclusions.

CO2 emissions from land use management

Emissions (metric tons CO2) 5724181

Methodology

Default emissions factors

Please explain

We used the GHG Protocol Land Sector and Removals Guidance, 2006 IPCC Guidelines for National Greenhouse Gas Inventories, 2019 Refinement IPCC Guidelines for National Greenhouse Gas Inventories and RSPO PalmGHG v4 to calculate GHG emissions, using both default and region-specific emissions factors, plantation specific data and some field measurement data (e.g. kg dry matter of a standing palm, nitrogen content in effluent and empty fruit bunch). The reason we opted for GHG Protocol Land Sector and Removals Guidance draft instead of GHG Protocol corporate standards was because we have to be consistent with our submission to SBTi for target validation in 2022 which required us to use GHG Protocol Land Sector and Removals Guidance draft.

CO2 removals from land use management

Emissions (metric tons CO2) 31021

Methodology

Empirical models

Please explain

The CO2 removals amount comes from buffer zones, mangrove areas and high conservation areas. The calculations methodology is referenced from GHG Protocol Land Sector and Removals Guidance and the 2019 Refinement to the IPCC Guidelines for National GHG Inventories. The reason we opted for GHG Protocol Land Sector and Removals Guidance draft instead of GHG Protocol Corporate Standards was because we had to be consistent with what we have submitted to SBTi for target validation in 2022 which required us to use GHG Protocol Land Sector and Removals Guidance draft.

Sequestration during land use change

Emissions (metric tons CO2) 6040340

Methodology

Empirical models

Please explain

The carbon sequestration amount comes from standing oil palm, rubber as well as paulownia plantations. The calculations methodology is referenced from GHG Protocol Land Sector and Removals Guidance and the 2019 Refinement to the IPCC Guidelines for National GHG Inventories. The reason we opted for GHG Protocol Land Sector and Removals Guidance draft instead of GHG Protocol Corporate Standards was because we had to be consistent with what we have submitted to SBTi for target validation in 2022 which required us to use GHG Protocol Land Sector and Removals Guidance draft.

CO2 emissions from biofuel combustion (land machinery)

Emissions (metric tons CO2)

1660

Methodology

Default emissions factors

Please explain

The biogenic emissions due to combustion of biodiesel were calculated by using the biogenic emission factor from UK DEFRA 2022. The biodiesel used were B10 and B30 which are a 10% and 30% blend of biodiesel respectively. Hence the emission factor used is a 10% and 30% fraction of the biodiesel emission factor from DEFRA 2022. The sources of emissions come from combustion of B10 and B30 biodiesel for agricultural machineries, heavy machineries and other stationary machineries.

CO2 emissions from biofuel combustion (processing/manufacturing machinery)

Emissions (metric tons CO2) 3175725

Methodology

Default emissions factors

Please explain

The emissions due to combustion of biomass and biofuels were calculated by using the biogenic emission factor from UK DEFRA 2022 and WRI. The biofuel used were B10 and B30 which are a 10% and 30% blend of biodiesel respectively. Another biofuel combusted is biomass from oil palm Empty Fruit Bunches (EFB). Hence the emission factors used are a 10% and 30% fraction of the biodiesel emission factor from DEFRA 2022. Meanwhile for combustion of EFB, the emission factor used is from WRI. The sources of emissions come from combustion of biodiesel for electricity generation (buildings) and combustion of EFB for electricity generation (process) and boilers in palm oil mills.

CO2 emissions from biofuel combustion (other)

Emissions (metric tons CO2) 227

Methodology Default emissions factors

Please explain

The biogenic emissions due to combustion of biodiesel were calculated using the biogenic emission factors from UK DEFRA 2022. The biodiesel used is B10 is a 10% blend of biodiesel. Hence the emission factor used is a 10% fraction of the biodiesel emission factor from DEFRA 2022. The source of emissions comes from combustion of B10 biodiesel in vehicles used in upstream product transportation.

(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

Reporting emissions by Total

Emissions (metric tons CO2e) 10499051

Denominator: unit of production <Not Applicable>

Change from last reporting year Lower

Please explain

These emissions are for Scope 1 & 2 for palm oil. We have also calculated the Scope 1 & 2 emissions from rubber and cattle commodities, which are 1% of total Scope 1 & 2 emissions and less significant compared to palm oil.

Explain why you do not calculate GHG emission for this commodity and your plans to do so in the future <Not Applicable>

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.

Intensity figure

0.5

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e) 10601369

Metric denominator unit total revenue

Metric denominator: Unit total 21029690

Scope 2 figure used Location-based

% change from previous year

Direction of change Decreased

Reason(s) for change

Change in output

Please explain

Our production rate has decreased from FY2021 to FY2022.

Intensity figure 4.05

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e) 10601369

Metric denominator metric ton of product

Metric denominator: Unit total 2615662

Scope 2 figure used Location-based

% change from previous year 13

Direction of change Decreased

Reason(s) for change Change in output

Please explain Our production rate has decreased from FY2021 to FY2022.

CDP

C7. Emissions breakdowns

C7.1

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

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	8070716	IPCC Sixth Assessment Report (AR6 - 100 year)
CH4	1527317	IPCC Sixth Assessment Report (AR6 - 100 year)
N2O	777614	IPCC Sixth Assessment Report (AR6 - 100 year)

C7.2

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

Country/area/region	Scope 1 emissions (metric tons CO2e)
Malaysia	3925368
Upstream Malaysia - oil palm estates, oil palm mills, rubber estates and rubber factories.	
Indonesia	4478226
Thailand	1901672
Other, please specify (Papua New Guinea & Solomon Islands)	11267
Netherlands	4460
South Africa	53077
United Kingdom of Great Britain and Northern Ireland	1576

C7.3

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

By business division

By activity

C7.3a

(C7.3a) Break down your total gross global Scope 1 emissions by business division.

Business division	Scope 1 emissions (metric ton CO2e)
Upstream businesses - operational emissions for oil palm plantations and processing of palm oil at mills. Include also for 11 rubber estates and two rubber factories in Malaysia and 2 cattle operations in Papua New Guinea.	10241537
Downstream (refinery) businesses.	131395

C7.3c

(C7.3c) Break down your total gross global Scope 1 emissions by business activity.

Activity	Scope 1 emissions (metric tons CO2e)
Oil Palm (land use, land management in estate; effluent treatment, energy and electricity in mill and refinery)	10273328
Rubber (land use in estate and processing in factory)	54700
Cattle (enteric fermentation and manure management in estate land)	47618

(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

163

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

(C-AC7.4a/C-FB7.4a/C-PF7.4a) Select the form(s) in which you are reporting your agricultural/forestry emissions. Total emissions

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.

Activity Agriculture/Forestry

Emissions category <Not Applicable>

Emissions (metric tons CO2e) 8368682

Methodology

Default emissions factor

Please explain

Our main agricultural input is oil palm (98.4% of our total revenue), and we understand that oil palm can be a significant source of carbon dioxide and nitrous oxide emissions due to land use change and land management. Our entire oil palm production, energy and processing (land use, land input/managed soils (fertiliser applied, cattle dung left on soils in estate, crop residue left on soil, fuel usage in transport and machinery, effluent treatment, stationary combustion and transportation) are included in the emissions accounting. We also have accounted Scope 1 of other commodity emissions for rubber and cattle (1.6% of our total revenue).

We used the GHG Protocol Land Sector and Removals Guidance, 2006 IPCC Guidelines for National Greenhouse Gas Inventories, 2019 Refinement IPCC Guidelines for National Greenhouse Gas Inventories and RSPO PalmGHG v4 to calculate GHG emissions, which used default emission factors, region-specific emissions factors, plantation specific data and some field measurement data (e.g. kg dry matter of a standing palm, nitrogen content in effluent and empty fruit bunch). The reason we opted for GHG Protocol Land Sector and Removals Guidance draft instead of GHG Protocol corporate standards was because we had to be consistent with what we have submitted to SBTi for target validation in 2022 which required us to use GHG Protocol Land Sector and Removals Guidance draft.

In future we plan to start external assurance of our reported GHG data.

Activity

Processing/Manufacturing

Emissions category
<Not Applicable>

Emissions (metric tons CO2e) 1998738

Methodology

Default emissions factor

Please explain

Our main agricultural input is oil palm (98.4% of our total revenue), and we understand that oil palm can be a significant source of carbon dioxide and nitrous oxide emissions due to land use change and land management. Our entire oil palm production, energy and processing (land use, land input/managed soils (fertiliser applied, cattle dung left on soils in estate, crop residue left on soil, fuel usage in transport and machinery, effluent treatment, stationary combustion and transportation) are included in the emissions accounting. We also have accounted Scope 1 of other commodity emissions for rubber and cattle (1.6% of our total revenue).

We used the GHG Protocol Land Sector and Removals Guidance, 2006 IPCC Guidelines for National Greenhouse Gas Inventories, 2019 Refinement IPCC Guidelines for National Greenhouse Gas Inventories and RSPO PalmGHG v4 to calculate GHG emissions, which used default emission factors, region-specific emissions factors, plantation specific data and some field measurement data (e.g. kg dry matter of a standing palm, nitrogen content in effluent and empty fruit bunch). The reason we opted for GHG Protocol Land Sector and Removals Guidance draft instead of GHG Protocol corporate standards was because we had to be consistent with what we have submitted to SBTi for target validation in 2022 which required us to use GHG Protocol Land Sector and Removals Guidance draft.

In future we plan to start external assurance of our reported GHG data.

Activity Distribution

Emissions category
<Not Applicable>

Emissions (metric tons CO2e) 8226

Methodology Default emissions factor

Please explain

Our main agricultural input is oil palm (98.4% of our total revenue), and we understand that oil palm can be a significant source of carbon dioxide and nitrous oxide emissions due to land use change and land management. Our entire oil palm production, energy and processing (land use, land input/managed soils (fertiliser applied, cattle dung left on soils in estate, crop residue left on soil, fuel usage in transport and machinery, effluent treatment, stationary combustion and transportation) are included in the emissions accounting. We also have accounted Scope 1 of other commodity emissions for rubber and cattle (1.6% of our total revenue).

We used the GHG Protocol Land Sector and Removals Guidance, 2006 IPCC Guidelines for National Greenhouse Gas Inventories, 2019 Refinement IPCC Guidelines for National Greenhouse Gas Inventories and RSPO PalmGHG v4 to calculate GHG emissions, which used default emission factors, region-specific emissions factors, plantation specific data and some field measurement data (e.g. kg dry matter of a standing palm, nitrogen content in effluent and empty fruit bunch). The reason we opted for GHG Protocol Land Sector and Removals Guidance draft instead of GHG Protocol corporate standards was because we had to be consistent with what we have submitted to SBTi for target validation in 2022 which required us to use GHG Protocol Land Sector and Removals Guidance draft.

In future we plan to start external assurance of our reported GHG data.

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

Country/area/region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Malaysia	100829	
Thailand	10101	
Indonesia	33142	
Other, please specify (Papua New Guinea and Solomon Islands)	60773	
United Kingdom of Great Britain and Northern Ireland	2743	
South Africa	16372	
Netherlands	1763	

C7.6

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

C7.6a

(C7.6a) Break down your total gross global Scope 2 emissions by business division.

Business division	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Upstream - oil palm, mills and refineries	120641	
Downstream	105082	

C7.7

(C7.7) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response? Yes

C7.7a

(C7.7a) Break down your gross Scope 1 and Scope 2 emissions by subsidiary.

Subsidiary name Minamas Plantation

Primary activity Agricultural products wholesale

Select the unique identifier(s) you are able to provide for this subsidiary No unique identifier

ISIN code – bond <Not Applicable>

ISIN code – equity <Not Applicable>

CUSIP number <Not Applicable>

Ticker symbol <Not Applicable>

SEDOL code <Not Applicable>

LEI number <Not Applicable>

Other unique identifier <Not Applicable>

Scope 1 emissions (metric tons CO2e) 4456961

Scope 2, location-based emissions (metric tons CO2e) 14015

Scope 2, market-based emissions (metric tons CO2e)

Comment

Subsidiary name New Britain Palm Oil Limited

Primary activity Agricultural products wholesale

Select the unique identifier(s) you are able to provide for this subsidiary

No unique identifier

ISIN code – bond <Not Applicable>

ISIN code – equity <Not Applicable>

CUSIP number <Not Applicable>

Ticker symbol <Not Applicable>

SEDOL code <Not Applicable>

LEI number <Not Applicable>

Other unique identifier <Not Applicable>

Scope 1 emissions (metric tons CO2e) 1897066

Scope 2, location-based emissions (metric tons CO2e) 60750

Scope 2, market-based emissions (metric tons CO2e)

Comment

Subsidiary name Sime Darby Oils

Primary activity Food & beverage wholesale

Select the unique identifier(s) you are able to provide for this subsidiary No unique identifier

ISIN code – bond <Not Applicable>

ISIN code – equity <Not Applicable>

CUSIP number <Not Applicable>

Ticker symbol <Not Applicable>

SEDOL code <Not Applicable>

LEI number <Not Applicable>

Scope 1 emissions (metric tons CO2e) 131395

Scope 2, location-based emissions (metric tons CO2e) 105082

Scope 2, market-based emissions (metric tons CO2e)

Comment

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? Decreased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change in emissions	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption		<not applicable=""></not>		
Other emissions reduction activities	214273	Decreased	2	We have installed additional 2 biogas plants in 2022 to capture our methane emissions from the effluent treatment
Divestment		<not applicable=""></not>		
Acquisitions		<not applicable=""></not>		
Mergers		<not applicable=""></not>		
Change in output	24261	Decreased	0.2	Our production rate has decreased which reduced the amount of fresh fruit bunches being processed. Therefore, this reduces the emissions of effluent treatment and stationary combustion of biomass from empty fruit bunches (for heat generation).
Change in methodology		<not applicable=""></not>		
Change in boundary	172820	Decreased	2	Our land use emissions has decreased due to the abandoned/sold hectarage or rubber plantation
Change in physical operating conditions		<not applicable=""></not>		
Unidentified	127410	Increased	1	
Other		<not applicable=""></not>		

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Location-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy? More than 5% but less than or equal to 10%

C8.2

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

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

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 (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	LHV (lower heating value)	6689776	878602	7568378
Consumption of purchased or acquired electricity	<not applicable=""></not>	0	286476	286476
Consumption of purchased or acquired heat	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Consumption of purchased or acquired steam	<not applicable=""></not>	8237	1326196	1334433
Consumption of purchased or acquired cooling	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Consumption of self-generated non-fuel renewable energy	<not applicable=""></not>	1014	<not applicable=""></not>	1014
Total energy consumption	<not applicable=""></not>	6699028	2491274	9190302

(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	Yes
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.

Sustainable biomass

Heating value

LHV

Total fuel MWh consumed by the organization 6434366

MWh fuel consumed for self-generation of electricity 6434366

MWh fuel consumed for self-generation of heat 0

MWh fuel consumed for self-generation of steam <Not Applicable>

MWh fuel consumed for self-generation of cooling <Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Comment

SDP classifies use of biomass fuel as sustainable source as 100% of our mills are certified to the Roundtable on Sustainable Palm Oil (RSPO) as of 2021 and 100% of our mills in Malaysia and Indonesia are certified by Malaysian Sustainable Palm Oil and Indonesian Sustainable Palm oil certification. This means that the biomass sourced by these mills meets the certifications requirements.

Other biomass

Heating value

LHV

Total fuel MWh consumed by the organization 3225

MWh fuel consumed for self-generation of electricity 0

MWh fuel consumed for self-generation of heat 3225

MWh fuel consumed for self-generation of steam <Not Applicable>

MWh fuel consumed for self-generation of cooling <Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration <Not Applicable>

Comment

Other renewable fuels (e.g. renewable hydrogen)

Heating value

LHV

Total fuel MWh consumed by the organization 252186

MWh fuel consumed for self-generation of electricity

MWh fuel consumed for self-generation of heat 252186

MWh fuel consumed for self-generation of steam <Not Applicable>

MWh fuel consumed for self-generation of cooling <Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration <Not Applicable>

Comment

Other renewable fuels include biodiesel (B10 and B30).

Coal

Heating value Please select

Total fuel MWh consumed by the organization $\ensuremath{0}$

MWh fuel consumed for self-generation of electricity 0

MWh fuel consumed for self-generation of heat 0

MWh fuel consumed for self-generation of steam <Not Applicable>

MWh fuel consumed for self-generation of cooling <Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration <Not Applicable>

Comment N/A

Oil

Heating value

LHV

Total fuel MWh consumed by the organization 504229

MWh fuel consumed for self-generation of electricity 0

MWh fuel consumed for self-generation of heat 504229

MWh fuel consumed for self-generation of steam <Not Applicable>

MWh fuel consumed for self-generation of cooling <Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration <Not Applicable>

Comment

Oil includes Medium fuel oil (MFO), diesel and petrol.

Gas

Heating value

LHV

Total fuel MWh consumed by the organization 374373

MWh fuel consumed for self-generation of electricity 0

MWh fuel consumed for self-generation of heat 374373

MWh fuel consumed for self-generation of steam <Not Applicable>

MWh fuel consumed for self-generation of cooling <Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration <Not Applicable>

Comment

Gas includes Liquefied petroleum gas (LPG) and natural gas.

Other non-renewable fuels (e.g. non-renewable hydrogen)

Heating value Please select

Total fuel MWh consumed by the organization 0

MWh fuel consumed for self-generation of electricity 0

MWh fuel consumed for self-generation of heat 0

MWh fuel consumed for self-generation of steam <Not Applicable>

MWh fuel consumed for self-generation of cooling <Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration <Not Applicable>

Comment N/A

Total fuel

Heating value I HV

Total fuel MWh consumed by the organization 7568378

MWh fuel consumed for self-generation of electricity 6434366

MWh fuel consumed for self-generation of heat 1134013

MWh fuel consumed for self-generation of steam <Not Applicable>

MWh fuel consumed for self-generation of cooling <Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration <Not Applicable>

Comment

C8.2d

(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

		-	-	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	6434366	6434366	6434366	6434366
Heat	0	0	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

C8.2g

(C8.2g) Provide a breakdown by country/area of your non-fuel energy consumption in the reporting year.

 Country/area

 Malaysia

 Consumption of purchased electricity (MWh)

 0

 Consumption of self-generated electricity (MWh)

 1014

 Is this electricity consumption excluded from your RE100 commitment?

 <Not Applicable>

 Consumption of purchased heat, steam, and cooling (MWh)

 0

 Consumption of self-generated heat, steam, and cooling (MWh)

 0

 Total non-fuel energy consumption (MWh) [Auto-calculated]

1014

C9. Additional metrics

C9.1

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

Description

Other, please specify (Water Consumption Intensity)

Metric value 3.84

Metric numerator

water usage (m3)

Metric denominator (intensity metric only)

Per Metric Tonne of Fresh Fruit Bunch Processed

% change from previous year 7.25

Direction of change Decreased

Please explain

Water data is collected at the site level and may vary from operation to operation. SDP is currently reviewing our internal processes to collect this data at the Group level, as doing so will ensure consistency and comparability.

Description

Waste

Metric value 3030700

Metric numerator Kilogram (KG)

Metric denominator (intensity metric only) N/A

% change from previous year 19.05

Direction of change Increased

Please explain

C10. Verification

C10.1

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

	Verification/assurance status
Scope 1	No third-party verification or assurance
Scope 2 (location-based or market-based)	No third-party verification or assurance
Scope 3	No third-party verification or assurance

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, but we are actively considering verifying within the next two years

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, but we anticipate being regulated in the next three years

C11.1d

(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

Malaysia has made a commitment to become a net zero nation by 2050 and plans to introduce regulatory measures to support that commitment. This includes the introduction of a local carbon market in the future. The Indonesian Government will also be gradually introducing a carbon tax. SDP has already embarked on its decarbonisation journey since 2012. Key efforts taken by the Group to decarbonise its operations and our strategy for complying with the systems that we anticipate being regulated by include:

o Acceleration of renewables programme to address a large part of our direct emissions - Reduction of SDP's operational emissions through its renewables initiatives (methane capture, solar)

o Expanding land use transformation initiatives to increase carbon sinks - Sequestration of emissions through nature-based solutions, conservation and reforestation efforts across the Group

o Escalating engagements with suppliers to promote replication of climate change initiatives within the entire value chain - Efforts to eliminate deforestation within the Group's global supply chain via increased traceability and No Deforestation, No Peat and No Exploitation (NDPE) compliance.

We are building awareness internally in our organisation on internal carbon pricing in FY23. We anticipate the development of an internal carbon price to start in FY24 for us to be ready for any carbon pricing regulations, which we anticipate in the next 2-3 years.

C11.2

(C11.2) Has your organization canceled any project-based carbon credits within the reporting year? No $% \left(\mathcal{A}^{(1)}_{(1)}\right) =0$

C11.3

(C11.3) Does your organization use an internal price on carbon? No, but we 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

50

% total procurement spend (direct and indirect)

% of supplier-related Scope 3 emissions as reported in C6.5 8.5

Rationale for the coverage of your engagement

Sime Darby Oils (SDO) Indonesia invited all feedstock suppliers to a series of sustainability-related engagement sessions. Emissions from feedstock suppliers are the largest, around 74% of our emissions from purchased goods and services. Indonesia has started a series of online webinars on sustainability with our feedstock suppliers in Indonesia and this may be replicated by other countries. Among the series conducted includes, 4 related to climate change - Net Zero, Carbon Sinks and Sequestration in the palm oil industry; increasing awareness among suppliers on the group's commitment to No Deforestation, No Peat and No Exploitation (NDPE), biodiversity management and practices best practices in peat management. This is to engage with our suppliers to ensure they are aware of the group's commitment on climate change, are able to align their practices to support the group's efforts and to lay the foundation for future initiatives and collaboration with suppliers.

Impact of engagement, including measures of success

The average total number of suppliers engaged in the webinars is about 80% out of the total number of suppliers in Sime Darby Oils Indonesia.

Comment

C12.2

(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process? Yes, climate-related requirements are included in our supplier contracts

(C12.2a) Provide details of the climate-related requirements that suppliers have to meet as part of your organization's purchasing process and the compliance mechanisms in place.

Climate-related requirement

Other, please specify (Complying with commitments to No Deforestation, No Peat and No Exploitation (NDPE))

Description of this climate related requirement

SDP expects all suppliers of fresh fruit bunches (FFB), crude palm oil (CPO), and its derivatives to abide by our Responsible Sourcing Guidelines (RSG) and our policy statement on Working With Suppliers To Draw The Line On Deforestation which require every actor in the supply chain to commit to the same NDPE standards.

Under the RSG, suppliers are obliged to commit to respect the natural environment and ensure that their business activities are guided by a no-deforestation objective: - Comply with all relevant applicable laws and regulations relating to the protection of the environment

- Not to clear primary forests, High Conservation Value (HCV) areas, or High Carbon Stock (HCS) forests
- Commit to the conservation of biodiversity and the respect of HCV areas and HCS forests, as well as protected areas
- Commit to no new development of peatland, regardless of depth
- Prohibit the use of fire in land preparation
- Commit to work towards protection of natural resources

In the event of a violation of NDPE standards, we will notify that supplier of our requirement that they commit to:

- Stop work immediately on the affected land.
- Develop a plan for remediating the damaged forest
- Develop a programme to improve their ongoing operational practices to meet NDPE standards.

If the supplier concerned is unwilling to make these commitments, we will suspend them. Once a supplier has been suspended, purchases will not resume until our conditions are met.

% suppliers by procurement spend that have to comply with this climate-related requirement

100

% suppliers by procurement spend in compliance with this climate-related requirement 51

Mechanisms for monitoring compliance with this climate-related requirement

Certification Supplier self-assessment On-site third-party verification

Response to supplier non-compliance with this climate-related requirement

Other, please specify (Engage suppliers to have them comply with our requirements, and suspend if no compliance is given) SDO Responsible Sourcing Guidelines 2022.pdf SDP Policy Working with Suppliers to Draw the Line on Deforestation.pdf

Climate-related requirement

Other, please specify (Reducing emissions)

Description of this climate related requirement

SDP has set out a supplier engagement targets in line with the announcement of our Net-Zero Roadmap. This target is currently being validated by SBTi and has been disclosed in C4.1a under the indicators of Abs 3 and Abs 4. SDP plans to engage and work together with its suppliers to assist them in achieving emission reduction targets out by SDP. The requirements and milestones we have in place to help our suppliers reduces their emissions is as follows;

Key milestones for our suppliers to reduce our scope 3 FLAG emissions by 2030;

1. Achieving 100% NDPE compliant supply chain by 2025 - Non-compliance may result in suspension.

2. Reducing peat drainage emissions in feedstock supply chain by 55% by 2030.

Key milestones for our suppliers to reduce our scope 3 Non-FLAG emissions by 2027; 1. Develop carbon reduction emissions targets in line with SBTi criteria for SDP's most material suppliers.

% suppliers by procurement spend that have to comply with this climate-related requirement 100

% suppliers by procurement spend in compliance with this climate-related requirement

Mechanisms for monitoring compliance with this climate-related requirement Supplier self-assessment

Response to supplier non-compliance with this climate-related requirement

Retain and engage SDP-Net-Zero-Roadmap.png

C-AC12.2/C-FB12.2/C-PF12.2

(C-AC12.2/C-FB12.2/C-PF12.2) Do you encourage your suppliers to undertake any agricultural or forest management practices with climate change mitigation and/or adaptation benefits?

Yes

C-AC12.2a/C-FB12.2a/C-PF12.2a

(C-AC12.2a/C-FB12.2a/C-FF12.2a) Specify which agricultural or forest management practices with climate change mitigation and/or adaptation benefits you encourage your suppliers to undertake and describe your role in the implementation of each practice.

Management practice reference number MP1

Management practice

Biodiversity considerations

Description of management practice

We engage with our direct suppliers in Indonesia on best management practice via the Supplier Support Program - Supplier Self-Assessment Platform. Principle #5 on the platform covers Respect for the Natural Environment: HCV, HCS, protection of Endangered, Rare and Threatened species, biodiversity protection & management, peatland protection, GHG, etc.

Your role in the implementation

Knowledge sharing

Explanation of how you encourage implementation

All completed self-assessments are verified by us to gauge compliance with requirements stipulated in the RSPO P&C, ISPO, SDO RSG, and NDPE policies. We will develop action plans for each supplier according to gaps identified and provide them with technical support and guidance through ongoing engagements to ensure progress.

Climate change related benefit

Emissions reductions (mitigation) Reduced demand for pesticides (adaptation)

Comment

Management practice reference number MP2

Management practice

Enhanced forest regeneration practices

Description of management practice

We engage with our direct suppliers in Indonesia on best management practice via the Supplier Support Program - Supplier Self-Assessment Platform. Principle #5 on the platform covers Respect for the Natural Environment: HCV, HCS, protection of ERT species, biodiversity protection & management, peatland protection, GHG, etc.

Your role in the implementation

Knowledge sharing

Explanation of how you encourage implementation

All completed self-assessments are verified by us to gauge compliance with requirements stipulated in the RSPO P&C, ISPO, SDO RSG, and NDPE policies. We will develop action plans for each supplier according to gaps identified and provide them with technical support and guidance through ongoing engagements to ensure progress.

Climate change related benefit

Increasing resilience to climate change (adaptation) Increase carbon sink (mitigation)

Comment

Management practice reference number

MP3

Management practice Fertilizer management

Description of management practice

We engage with our direct suppliers in Indonesia on best management practice via the Supplier Support Program - Supplier Self-Assessment Platform. Principle #7 on the platform covers Best Management Practices - general plantation management and fertilizer & pesticide management.

Your role in the implementation

Knowledge sharing

Explanation of how you encourage implementation

All completed self-assessments are verified by us to gauge compliance with requirements stipulated in the RSPO P&C, ISPO, SDO RSG, and NDPE policies. We will develop action plans for each supplier according to gaps identified and provide them with technical support and guidance through ongoing engagements to ensure progress.

Climate change related benefit

Emissions reductions (mitigation) Reduced demand for fertilizers (adaptation) Reduced demand for pesticides (adaptation)

Comment

Management practice reference number MP4

Management practice

Fire control

Description of management practice

We engage with our direct suppliers in Indonesia on best management practice via the Supplier Support Program - Supplier Self-Assessment Platform. Principle #7 on the platform covers Best Management Practices on fire management

Your role in the implementation

Knowledge sharing

Explanation of how you encourage implementation

All completed self-assessments are verified by us to gauge compliance with requirements stipulated in the RSPO P&C, ISPO, SDO RSG, and NDPE policies. We will develop action plans for each supplier according to gaps identified and provide them with technical support and guidance through ongoing engagements to ensure progress.

Climate change related benefit

Emissions reductions (mitigation)

Comment

Management practice reference number MP5

Management practice

Integrated pest management

Description of management practice

We engage with our direct suppliers in Indonesia on best management practice via the Supplier Support Program - Supplier Self-Assessment Platform. Principle #7 on the platform covers Best Management Practices - general plantation management, fertilizer & pesticide management, riparian buffer management, integrated pest management, etc.

Your role in the implementation

Knowledge sharing

Explanation of how you encourage implementation

All completed self-assessments are verified by us to gauge compliance with requirements stipulated in the RSPO P&C, ISPO, SDO RSG, and NDPE policies. We will develop action plans for each supplier according to gaps identified and provide them with technical support and guidance through ongoing engagements to ensure progress.

Climate change related benefit

Emissions reductions (mitigation)

Reduced demand for pesticides (adaptation)

Comment

Management practice reference number

MP6

Management practice

Land use change

Description of management practice

We engage with our direct suppliers in Indonesia on best management practice via the Supplier Support Program - Supplier Self-Assessment Platform. Principle #7 on the platform covers Best Management Practices - general plantation management, GHG management, riparian buffer management.

Your role in the implementation

Knowledge sharing

Explanation of how you encourage implementation

All completed self-assessments are verified by us to gauge compliance with requirements stipulated in the RSPO P&C, ISPO, SDO RSG, and NDPE policies. We will develop action plans for each supplier according to gaps identified and provide them with technical support and guidance through ongoing engagements to ensure progress.

Climate change related benefit

Emissions reductions (mitigation) Increase carbon sink (mitigation)

Comment

Management practice reference number MP7

Management practice

Permanent soil cover (including cover crops)

Description of management practice

We engage with our direct suppliers in Indonesia on best management practice via the Supplier Support Program - Supplier Self-Assessment Platform. Principle #7 on the platform covers Best Management Practices - general plantation management.

Your role in the implementation

Knowledge sharing

Explanation of how you encourage implementation

All completed self-assessments are verified by us to gauge compliance with requirements stipulated in the RSPO P&C, ISPO, SDO RSG, and NDPE policies. We will develop action plans for each supplier according to gaps identified and provide them with technical support and guidance through ongoing engagements to ensure progress.

Climate change related benefit

Increasing resilience to climate change (adaptation) Other, please specify (To reduce soil erosion)

Comment

Management practice reference number MP8

Management practice

Pest, disease and weed management practices

Description of management practice

We engage with our direct suppliers in Indonesia on best management practice via the Supplier Support Program - Supplier Self-Assessment Platform. Principle #7 on the platform covers Best Management Practices - general plantation management, fertilizer & pesticide management and integrated pest management.

Your role in the implementation Knowledge sharing

Knowledge sharing

Explanation of how you encourage implementation

All completed self-assessments are verified by us to gauge compliance with requirements stipulated in the RSPO P&C, ISPO, SDO RSG, and NDPE policies. We will develop action plans for each supplier according to gaps identified and provide them with technical support and guidance through ongoing engagements to ensure progress.

Climate change related benefit

Emissions reductions (mitigation) Increasing resilience to climate change (adaptation)

Comment

Management practice reference number

MP9

Management practice

Reducing energy use

Description of management practice

We engage with our direct suppliers in Indonesia on best management practice via the Supplier Support Program - Supplier Self-Assessment Platform. Principle #7 on the platform covers Best Management Practices - general plantation management, mill management, GHG management.

Your role in the implementation

Knowledge sharing

Explanation of how you encourage implementation

All completed self-assessments are verified by us to gauge compliance with requirements stipulated in the RSPO P&C, ISPO, SDO RSG, and NDPE policies. We will develop action plans for each supplier according to gaps identified and provide them with technical support and guidance through ongoing engagements to ensure progress.

Climate change related benefit

Emissions reductions (mitigation) Reduced demand for fossil fuel (adaptation)

Comment

Management practice reference number MP10

Management practice

Reforestation

Description of management practice

Should we detect past deforestation and liabilities in our direct suppliers' operations, we conduct case-specific engagements with them to come up with a Recovery Plan to make up for the past land clearing. Recovery Projects are often in the form of reforestation and rehabilitation of degraded peatland.

Your role in the implementation

Knowledge sharing

Explanation of how you encourage implementation

We engage with identified suppliers by providing technical support on reforestation and introducing them to qualified civil society organizations that could help with the project implementation, if necessary. We publish results of these Recovery Plans by our suppliers in the SDO Grievance Register, which is available on our website.

Climate change related benefit

Increasing resilience to climate change (adaptation) Increase carbon sink (mitigation)

Comment

C-AC12.2b/C-FB12.2b/C-PF12.2b

(C-AC12.2b/C-FB12.2b/C-PF12.2b) Do you collect information from your suppliers about the outcomes of any implemented agricultural/forest management practices you have encouraged?

Yes

C12.3

(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?

Row 1

External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the climate Yes, we engage directly with policy makers

Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement? No, but we plan to have one in the next two years

Attach commitment or position statement(s)

<Not Applicable>

Describe the process(es) your organization has in place to ensure that your external engagement activities are consistent with your climate commitments and/or climate transition plan

The Chief Sustainability Officer is the main approved external engagement liaison person on climate-policy. All presentations and policy discussion with policy makers and trade associations are led by the CSO, ensuring consistency in communication of our climate commitments and transition plans.

Primary reason for not engaging in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate <Not Applicable>

Explain why your organization does not engage in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate <Not Applicable>

C12.3a

(C12.3a) On what policy, law, or regulation that may impact the climate has your organization been engaging directly with policy makers in the reporting year?

Specify the policy, law, or regulation on which your organization is engaging with policy makers Carbon Pricing Policy in Malaysia

Category of policy, law, or regulation that may impact the climate Carbon pricing, taxes, and subsidies

Focus area of policy, law, or regulation that may impact the climate Carbon offsets

Policy, law, or regulation geographic coverage National

Country/area/region the policy, law, or regulation applies to Malaysia

Your organization's position on the policy, law, or regulation Support with no exceptions

Description of engagement with policy makers

Bursa Malaysia Voluntary Carbon Market (VCM) Exchange Industrial Working Group - Our Chief Sustainability Office was part of the working group to provide input on the upcoming VCM exchange.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation <Not Applicable>

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement? Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?

Carbon credits and offsets will play a role in helping corporates achieve a Net Zero future by 2050 to compensate unabated residual emissions. This is also part of SBTi's Beyond Value Chain Mitigations (BVCM), which is a mitigation action or investments falling outside of SDP's value chain, and will become important in our transition plan as we move towards Net Zero. (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

4

SDP sustainability committee Terms of Reference.pdf AR2022-Base-Data_Final.pdf Sime Darby Plantation Annual Report 2022.pdf SDP-Net-Zero-Roadmap.png

Page/Section reference

- 1. Sustainability Committee Terms of Reference (page 3-10)
- 2. Annual Report Base Data Report 2022 (page 2 7)
- 3. Sime Darby Plantation Annual Report
- Renewables (page 56 57)
- Research and Development (page 58 63)
- Sustainability Overview (page 68 69)
- Our Environmental Responsibility (page 70 79)
- Responsible Sourcing (page 86 89)
- Sustainability Committee Report (page 111 113)

4. Sime Darby Plantation Net Zero Roadmap

Content elements

Governance Strategy Risks & opportunities Emissions figures Emission targets Other metrics

Comment

N/A

C12.5

(C12.5) Indicate the collaborative frameworks, initiatives and/or commitments related to environmental issues for which you are a signatory/member.

Certification Taskforce where its main objective is to evaluate the current practices and procedures related to Supply Chain Certification and suggest changes that facilitate its implementation in palm oil supply chains.		Environmental collaborative framework, initiative and/or commitment	Describe your organization's role within each framework, initiative and/or commitment
 Support the RSPO in the application of the HCV framework by screening, reviewing and improving HCV assessment, management, and monitoring processes Support the implementation of the Remediation and Compensation Procedure (RaCP) and improve the procedure accordingly Work to ensure alignment, support, and knowledge sharing with national level HCV initiatives Provide technical advice to the RSPO Secretariat upon request and feed into BHCVWG-related tasks of other working groups and task forces when required. International Sustainability & Carbon Certification (ISCC) SDP is also a member of the ISCC. Under the ISCC, SDP is able to; Participate in the shaping of the strategic direction and further development of the ISCC certification system Be entitled to participate, vote, and have decision-making power in the General Assembly Be entitled to the procesibility to actively participate in the ISCC Stakeholder Meetings and Working Groups 	Row 1	Carbon Certification (ISCC) Other, please specify (Roundtable Sustainable Palm	Sime Darby Plantation is a founding member of the Roundtable on Sustainable Palm Oil (RSPO) and is fully compliant with its sustainability standards. SDP is also an active participant in this certification platform to advance sustainability standards. A key example would be the membership of SDP in RSPO's Supply Chain Certification Taskforce where its main objective is to evaluate the current practices and procedures related to Supply Chain Certification and suggest changes that facilitate its implementation in palm oil supply chains. SDP is also a member of the Biodiversity & HCV Working Group under RSPO that was established in 2010 to provide strategic and technical advice to support the effective implementation of relevant RSPO Principles & Criteria. The role of SDP in this working group is to oversee the efforts to reach the following overarching objectives or strategically important tasks: • Ensure effective implementation of the HCV approach to support the production, processing, procurement and use of sustainable palm oil • Support effective integration of the HCV approach to SNPO P&C, both in the development of new plantations and for existing plantations • Ensure that biodiversity and HCVs are effectively conserved and monitored over time, and work to advise RSPO Secretaria to address challenges with implementation • Support the RSPO in the application of the HCV framework by screening, reviewing and improving HCV assessment, management, and monitoring processes • Support the implementation of the Remediation and Compensation Procedure (RaCP) and improve the procedure accordingly • Work to ensure alignment, support, and knowledge sharing with national level HCV initiatives • Provide technical advice to the RSPO Certification (ISCC) SDP is also a member of the ISCC. Under the ISCC, SDP is able to; • Participate in the shaping of the strategic direction and further development of the ISCC certification system • Be entitled to participate, vote, and have decision-making power in the Genera

C13. Other land management impacts

(C-AC13.1/C-FB13.1/C-PF13.1) Do you know if any of the management practices implemented on your own land disclosed in C-AC4.4a/C-FB4.4a/C-PF4.4a have other impacts besides climate change mitigation/adaptation?

Yes

C-AC13.1a/C-FB13.1a/C-PF13.1a

(C-AC13.1a/C-FB13.1a/C-FF13.1a) Provide details on those management practices that have other impacts besides climate change mitigation/adaptation and on your management response.

Management practice reference number

Overall effect

Positive

MP1

Which of the following has been impacted? Biodiversity

Description of impact

SDP has had a strict no-deforestation policy in place since 2014. For new developments, SDP applies the latest Roundtable on Sustainable Palm Oil (RSPO) criteria to assess the proposed land for high conservation value and high carbon stock using the RSPO's High Conservation Value-High Carbon Stock Approach (HCV-HCSA) Toolkit.

By putting aside and conserving areas with HCV, the conservation of biodiversity increases the identification of flora and fauna. This does not affect our operations as we made the conscious effort to conserve areas with HCV on our own land.

Have you implemented any response(s) to these impacts? Yes

Description of the response(s)

In accordance with our policies, SDP has not developed any land in Indonesia and Malaysia for several years, and the Group's only areas of expansion have been in Papua New Guinea which are low carbon developments in line with the RSPO's New Planting Procedure (NPP) and HCV-HCSA requirements. The most recent of these expansions was in an area of 373.51 hectares in Poliamba, Papua New Guinea, where SDP's development plans were formulated in accordance with the RSPO's NPP, with 206 hectares identified for development and 168 hectares set aside for conservation – or 45% of the total area. The plans have been approved and planting started in late 2022.

All HCV and CSA areas identified to date have been set aside for conservation and are subject to dedicated management and monitoring plans. Measures include regular surveillance and patrolling for encroachment to prevent illegal development, poaching, and hunting.

SDP has identified a total of 17,913 hectares of land classified as "unplantable reserves" in Malaysia. These unplantable reserves are made up of HCV and CSA areas, as well as other areas with characteristics which render them as non-productive or unsuitable for oil palm planting. The total unplantable reserve area makes up about 5.03% of SDP's total upstream landbank in Malaysia, making them suitable candidates for conservation.

Management practice reference number

MP6

Overall effect

Neutral

Which of the following has been impacted? Water

Description of impact

Wastewater/Effluent Discharge

As part of our water management plan, we conduct assessment of Environmental Aspect & Impact Identification and evaluation where we identify and classify water related pollutants and evaluate the impacts. The identification and classifications are based on ISO 14001 Environmental Management System. Specific matrix is used to evaluate the impacts on water pollutants that come from the operational activities. The risk assessment is partly assessed in the environmental impact assessments and environmental management system where the impacts of pollutants to water in our operations. Specific Standard Operating Procedures (SOP) on Palm Oil Mill Effluent treatments, Refinery Effluent Treatments and water sampling procedures are well established in our operations.

We actively manage our water systems due to high Biological Oxygen Demand (BOD) from treated effluent that are discharged to water course. The greater the BOD, the more rapidly oxygen is depleted in the stream. This means less oxygen is available to higher forms of aquatic life. The consequences of high BOD are the same as those for low dissolved oxygen: aquatic organisms become stressed, suffocate, and die. High BOD levels can also indicate the presence of pollutants that may be harmful to human health, such as pathogens or chemicals.

Have you implemented any response(s) to these impacts?

Yes

Description of the response(s)

Wastewater/Effluent Discharge

To ensure our operation does not pollute the natural water ways, we have established a robust waste management plan that ensure all our mills and refineries are fitted with Palm Oil Mill Effluent Treatment Systems and Industrial Effluent Treatment Systems that support the management of waste and comply with national environmental standards. SDP continuously monitors the quality of discharged wastewater and wastewater treatment performance at our upstream operations as well as ensures that biological oxygen demand (BOD) remains below regulatory thresholds. We have set targets for effluent intensity for each of the regions where we operate. These are 0.65 cubic metres m3 POME per MT of FFB processed (m3/MT FFB) for Malaysia, 0.5m3/MT FFB in Indonesia, and 0.7 m3/MT FFB for Papua New Guinea and Solomon Islands.

Our R&D has successfully constructed a system called Membrane Oil Recovery System (MORS) in our Mills where it can significantly reduce pollutants such as suspended solids and oil and grease more than conventional ETP. SDP established a proper Standard Operating Procedures (SOP) for Water Quality Monitoring 2016 (Revision to SPMS Appendix 7 Issue Date 1st November 2008) which stipulates the requirements related to water quality and effluent discharge quality.

Management practice reference number MP10

Overall effect

Positive

Which of the following has been impacted?

Biodiversity

Description of impact

In considering the type of conservation measures best suited for a particular area, we are guided by the SDP Conservation and Biodiversity Area (CBA) initiative, which was launched in 2021. It sets out specific guidance in determining whether a particular site should be protected, restored, or connected with other landscapes. This will then enable the Group to draw up the appropriate action plans.

SDP connects areas that have the potential to be connected with important habitats, landscapes and ecosystems. SDP's focus on these areas will be on creating corridors, connectivity, steppingstones and extensions to such habitats and ecosystems. By creating wildlife corridors, SDP is able to play a part in positively influencing the conservation and preservation of wildlife.

Have you implemented any response(s) to these impacts? Yes

Description of the response(s)

SDP has identified a total of 17,913 hectares of land classified as "unplantable reserves" in Malaysia. These unplantable reserves are made up of HCV and CSA areas, as well as other areas with characteristics which render them as non-productive or unsuitable for oil palm planting. These include terrain with slopes greater than 25 degrees, ponds, ravines, swamps, and the like. The total unplantable reserve area makes up about 5.03% of SDP's total upstream landbank in Malaysia, making them suitable candidates for conservation.

In FY2022, as part of the initiatives to restore CBA, SDP began setting up new satellite nurseries to supply and plant tree saplings of endemic forest species and fruit trees at the identified areas. Where possible, SDP will also introduce Endangered, Rare & Threatened (ERT) species with a planting density of 600 – 1,000 saplings per hectare.

The CBA approach is supported by existing SDP tree-planting initiatives, such as the Group's Plant-A-Tree and Sapong Forest Rehabilitation projects. The Group has also identified new external partnerships, such as Project RELeaf with Nestlé Malaysia, Plan4Tawau with 1StopBorneo and the SDP-BORA Stream restoration project.

C-AC13.2/C-FB13.2/C-PF13.2

(C-AC13.2/C-FB13.2/C-PF13.2) Do you know if any of the management practices mentioned in C-AC12.2a/C-FB12.2a/C-PF12.2a that were implemented by your suppliers have other impacts besides climate change mitigation/adaptation? Yes

C-AC13.2a/C-FB13.2a/C-PF13.2a

(C-AC13.2a/C-FB13.2a/C-FF13.2a) Provide details of those management practices implemented by your suppliers that have other impacts besides climate change mitigation/adaptation.

Management practice reference number MP1

Overall effect Positive

I USILIVE

Which of the following has been impacted?

Biodiversity

Description of impacts

As encouraged by SDP, some of our suppliers truly exemplify our policies and have a robust biodiversity and conservation management. We have identified suppliers that have implemented several initiatives targeted towards preserving the natural habitats of critically endangered species and protecting areas with High Conservation Value ("HCV") and High Carbon Stock ("HCS"). Our suppliers have adopted an integrated HCV-HCSA assessments which will be led by ALS-licensed assessor who will be required to follow the new HCV-HCSA Assessment Manual.

Have any response to these impacts been implemented?

Yes

Description of the response(s)

We have identified suppliers that have worked to established wildlife sanctuaries and corridors. Our larger suppliers are able to monitor conservation areas inclusive of HCV & HCS areas via satellite remote sensing and drone.

We also have suppliers that are committed to conserving endangered wildlife through monitoring potential human-wildlife conflict on their operational land and spearhead initiatives such as habitat restoration. Wildlife animals that are targeted for conservation include, but are not limited to Pygmy Elephants, Orang Utan and Malayan Sunbear.

Management practice reference number

Overall effect

Positive

MP11

Which of the following has been impacted?

Biodiversity

Description of impacts

We have identified suppliers that are committed to reforest a percentage of their owned land landbank and connecting forests through wildlife corridors. This will have a significant impact to the conservation and preservation of several flora and fauna.

Have any response to these impacts been implemented?

Yes

Description of the response(s)

Selected suppliers have planted native tree seedlings in between abandoned palm trees to ensure a gradual return of the area to natural forest. Maintenance of the seedlings has also been conducted regularly, using only manual weeding and grass cutting methods without the use of fertilizers, pesticides, or chemicals.

C15. Biodiversity

C15.1

(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues		Scope of board-level oversight
Row 1	Yes, both board-level oversight and executive management-level responsibility	In 2022, we demonstrated our leadership in corporate governance with several industry firsts. Among the year's highlights are: • Formulating and launching our commitment to net-zero emissions by 2050 together with a clear roadmap; and • Discussing and formulating a Strategy Charter that leverages sustainability, operational excellence and innovation to drive growth over the next five years.	<not applicable=""></not>

C15.2

(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity		Initiatives endorsed
Row 1	Yes, we have made public commitments and publicly endorsed initiatives related to biodiversity	Commitment to not explore or develop in legally designated protected areas Commitment to respect legally designated protected areas Commitment to avoidance of negative impacts on threatened and protected species Commitment to no conversion of High Conservation Value areas Commitment to secure Free, Prior and Informed Consent (FPIC) of Indigenous Peoples Commitment to no trade of CITES listed species	SDG

C15.3

(C15.3) Does your organization assess the impacts and dependencies of its value chain on biodiversity?

Impacts on biodiversity

Indicate whether your organization undertakes this type of assessment

Yes

Value chain stage(s) covered Upstream

Portfolio activity
<Not Applicable>

Tools and methods to assess impacts and/or dependencies on biodiversity

Other, please specify (HCV assessment)

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)

Using the HCV Approach by HCV Network. The HCV Approach is a 20-year methodology that pragmatically identifies and protects High Conservation Values (HCVs) from the impacts of land-use change. It is globally applicable, works across a wide range of scales (large landscapes or jurisdictions, farms, plantations, management units, smallholdings), ecosystems (from forests to grasslands and aquatic systems) and productive systems.

Dependencies on biodiversity

Indicate whether your organization undertakes this type of assessment Yes

Value chain stage(s) covered Upstream

- |- - - - - -

Portfolio activity
 <Not Applicable>

Tools and methods to assess impacts and/or dependencies on biodiversity

Other, please specify (HCV Network)

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)

The methodology works by:

- 1. Using the best available science to identify what HCVs are present, potentially present, or absent in a development scenario.
- 2. Involving stakeholders (such as Indigenous Peoples and Local Communities) in identifying and co-managing HCVs.
- 3. Considering interconnections between the wider ecological landscape and the local social context.
- $\label{eq:constraint} \text{4. Monitoring the effectiveness of management actions to ensure the long-term protection of HCVs.}$

C15.4

(C15.4) Does your organization have activities located in or near to biodiversity- sensitive areas in the reporting year? Yes

(C15.4a) Provide details of your organization's activities in the reporting year located in or near to biodiversity -sensitive areas.

Classification of biodiversity -sensitive area

Key Biodiversity Area (KBAs)

Country/area Malaysia

Name of the biodiversity-sensitive area

Tawau Hills Park, Tawau, Sabah

Proximity Adjacent

Briefly describe your organization's activities in the reporting year located in or near to the selected area One of the SDP's operating units, Table Estate, is located next to Tawau Hills Park. Table Estate is involved in the cultivation and management of oil palm.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity Yes, but mitigation measures have been implemented

Mitigation measures implemented within the selected area

Site selection Operational controls Restoration

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented

Despite being located near the key biodiversity areas, SDP ensures that these areas are protected by establishing a 50-meters buffer zone along the estate's boundary adjacent to the Tawau Hills Park. Oil palm replanting is strictly prohibited within this buffer zone and the strip is left untouched with natural vegetation and old palm trees. In addition to complying with RSPO and MSPO standards, SDP also conducts annual environmental compliance monitoring as required by the local authority (Environmental Protection Department, Sabah) on an annual basis. This monitoring ensures that sensitive areas such as river reserves, forest boundaries, and steep slopes in our operating units are protected and monitored regularly to ensure that our operations do not harm the environment. Estate management has erected signboards in the vicinity and at the borders of the estates, prohibiting hunting of wildlife. Workers and staff have also been provided awareness training on High Conservation Value (HCV) and biodiversity on a yearly basis.

SDP has also partnered with a local NGO to rehabilitate selected areas within its Tawau estates. The project aims to connect the forest reserves of Tawau Hills, Bukit Gemok, and other smaller parks by planting various Ficus tree species. The project is also an educational tourism program that educates locals and visitors on best practices for restoring damaged forests to the original biodiversity of Borneo's native forests.

Classification of biodiversity -sensitive area

Key Biodiversity Area (KBAs)

Country/area Malaysia

Name of the biodiversity-sensitive area

Krau Wildlife Forest Reserves, Pahang

Proximity

Up to 10 km

Briefly describe your organization's activities in the reporting year located in or near to the selected area

Kerdau Estate is involved in the cultivation and management of oil palm. Kerdau Estate and Jentar Estate have merged into a single-unit estate under the name Kerdau Estate effective January 2021. Jentar now serves as a division under Kerdau Estate.

SDP has initiated a "Plant-A-Tree" Project at Kerdau Estate, Jentar Division. Approximately 136,036 trees have been planted in an area of 136 hectares, consisting of 60 ERT species.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity Yes, but mitigation measures have been implemented

Mitigation measures implemented within the selected area

Site selection Operational controls Restoration

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented

SDP's Jentar Plant-A-Tree project contributes more than 136,000 trees, in partnership with Yayasan Sime Darby (YSD), the Pahang forestry department (PFD), and the Forest Research Institute of Malaysia (FRIM). The project was launched with the goal of enhancing natural habitats and increasing biodiversity value in the estate over the long term. The project site is located near the adjacent Krau Wildlife Forest Reserve and now the Jentar program hosted the largest collection of ERT tree species in a single oil palm plantation area in Malaysia. The project concluded with the publication of a guidebook for researchers, students, NGOs, and government agencies that includes references on the tree species planted. Since 2019, we have provided conservation expertise to the (PFD), including knowledge transfer and resource sharing on reforestation efforts.

The project also demonstrates SDP's commitment to improving certain areas that have been set aside for conservation purposes within its operations. Conservation Set-Aside (CSA) areas, such as the SDP Jentar Plant-A-Tree project site, are conservation areas within plantation operations that must be conserved in accordance with the RSPO Principles & Criteria (P&C). Estate management has erected signboards in the vicinity and at the borders of the estates, prohibiting hunting of wildlife. Workers and staff have also been provided awareness training on High Conservation Value (HCV) and biodiversity on a yearly basis.

C15.5

(C15.5) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	Type of action taken to progress biodiversity- related commitments
Row 1	Yes, we are taking actions to progress our biodiversity-related commitments	Land/water protection
		Land/water management
		Species management
		Education & awareness
		Law & policy

C15.6

(C15.6) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	Yes, we use indicators	Response indicators

C15.7

(C15.7) Have you published information about your organization's response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
In mainstream financial reports	Content of biodiversity-related policies or commitments	IOM on Human-Wildlife Conflict SOP_FINAL.pdf
	Governance	SOP for HWC mitigation_FINAL.pdf
	Impacts on biodiversity	Sime Darby Plantation Annual Report 2022.pdf

C16. 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.

N/A.

C16.1

(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Chief Sustainability Officer	Chief Sustainability Officer (CSO)