

# Welcome to your CDP Climate Change Questionnaire 2022

## C0. Introduction

### C<sub>0.1</sub>

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

Established in 1974, Sunway Group is one of Southeast Asia's leading conglomerates with 13 business divisions across more than 50 locations worldwide. Our 16,000-strong team is committed to sustainable development and socio-economic progress through our diverse businesses including core interests in real estate, construction, education, healthcare, retail and hospitality. Sunway is committed to advancing the United Nations Sustainable Development Goals and continues to align them with our Environmental, Social and Governance (ESG) targets as part of our corporate strategy and social responsibility towards driving the group's long-term success and deepening our commitment to nation-building.

In line with our aspiration to build a sustainable future, Sunway aims to achieve net zero carbon emissions by 2050 with an interim target to halve emissions by 2030. Sunway is the first corporation in Malaysia, and among the first in Asia, to introduce a carbon pricing framework into its business, putting it in the company of some 40 other countries around the world. Sunway Berhad has been listed on the ESG-themed FTSE4Good Bursa Malaysia Index since 2014.

Sunway's unique Build-Own-Operate business model also makes us an integral stakeholder of the communities in which we operate namely Sunway City Kuala Lumpur, Sunway City Ipoh in Perak and Sunway City Iskandar Puteri in Johor, and a host of other integrated developments which collectively span more than 5,000 acres across Malaysia. Underscoring Sunway Group's long-standing commitment to sustainable development, founder and chairman Tan Sri Dato' Seri Dr. Jeffrey Cheah AO through his eponymous Jeffrey Cheah Foundation endowed US\$10 million to the United Nations to set up the Jeffrey Sachs Center on Sustainable Development at Sunway University. In 2020, the Foundation committed another US\$10 million to further advance the sustainability agenda in Malaysia and Asia. The Center, chaired by Professor Jeffrey D. Sachs, a world-renowned



economist and special advisor to the UN Secretary-General, aims to create and deliver the world's best academic and executive programmes on sustainable development.

Sunway City Kuala Lumpur is one of only three overarching United Nations Sustainable Development Solutions Network (UN-SDSN) centres alongside New York City and Paris to coordinate continent-wide sustainability initiatives for Asia, the Americas and Europe as well as Africa respectively. This centre serves as the UN-SDSN Asia headquarters and hosts the SDG Academy, which will play a fundamental role in the global initiative Mission 4.7 that aims to accelerate the implementation of education for sustainable development worldwide. To further advance the sustainability agenda in a holistic manner throughout the region, the Sunway Centre for Planetary Health was established in 2021. Based at Sunway University, this Centre will work closely with existing institutions at the University to address pressing planetary challenges at the confluence of human and environmental health. Jeffrey Cheah Foundation, Malaysia's largest education-focused social enterprise, has awarded close to US\$150 million worth of scholarships and grants to thousands of deserving students as of 2021.

## C<sub>0.2</sub>

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

	Start date	End date		Select the number of past reporting years you will be providing emissions data for
Reporting	January 1,	December 31,	Yes	3 years
year	2021	2021		

## C<sub>0.3</sub>

(C0.3) Select the countries/areas in which you operate.

Malaysia

## C<sub>0.4</sub>

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

**MYR** 



## C<sub>0.5</sub>

(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-CN0.7/C-RE0.7

(C-CN0.7/C-RE0.7) Which real estate and/or construction activities does your organization engage in?

New construction or major renovation of buildings Buildings management

#### 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	MYL5211OO007

## C1. Governance

## C1.1

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

Yes



# C1.1a

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

Position of individual(s)	Please explain
Board-level	Sunway Berhad's sustainability governance is led by the Group's Board Sustainability Committee (BSC), which comprises four Directors
committee	from the Group's Board of Directors. The BSC was established in 2020 to review, supervise and recommend Sunway's sustainability
	strategy and issues, key environment, social and governance (ESG) targets and performance, progress and scorecard to advance the
	Group's sustainability leadership. The BSC plans to meet at least twice a year to review Sunway's sustainability plans.

# C1.1b

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

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – all meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding annual budgets Reviewing and guiding business plans	At the highest governance level, The Board of Directors has ultimate oversight on ESG risks including climate change. Meanwhile, BSC review, supervise and recommend to the Board on Sunway's sustainability strategy and issues, key environment, social and governance (ESG) targets and performance, progress and scorecard to advance the Group's sustainability leadership.  Some of the key agendas on climate-related issues discussed in the BSC meetings are:  1. Endorsement of framework / strategies to achieve Sunway Sustainability 2030 Goals and Targets.



Setting performance objectives Monitoring implementation and performance of objectives Overseeing major capital expenditures, acquisitions and divestitures Monitoring and overseeing progress against goals and targets for addressing climate- related issues	<ul> <li>In September 2021, BSC appointed JSC to assess physical risks due to Climate Change for all assets owned by Sunway Property Investment. JSC has presented to BSC in April 2022 on the Climate Value at Risk (VaR) of all assets owned by Sunway Property Investment and the potential financial implications of climate-related physical risks and transition risks to the Sunway Berhad using the Task Force on Climate-Related Financial Disclosures (TCFD) framework.</li> <li>BSC has recommended to the Board for adoption of the Internal Carbon Pricing framework as the key driver and strategic action plan to manage Climate Change Transitional risks and the Group's 2050 net zero carbon target.</li> <li>Establishment of new policies to be implemented / update existing policies.</li> <li>In September 2021, BSC has endorsed proposal and strategy on water management and for all business units to have their respective water crisis SOPs in place.</li> <li>In April 2022, BSC agreed to recommend to the Board on the updated Group Sustainability Policy and establishment of new Biodiversity Policy and Green Building Policy.</li> <li>3. Progress against target and performance to achieve Sunway Sustainability 2030 Goals and Targets.</li> </ul>
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# 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		
Row	Yes	The BSC is responsible to review, supervise and recommend Sunway's sustainability strategy and issues, key		
1		environment, social and governance (ESG) targets and performance, progress and scorecard - which included water-		



	related issues. The BSC is able to address climate-related issues raised and advise practicable strategy and
	implementations during BSC meetings and recommends to Board of Directors.

## C1.2

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

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate- related issues
Sustainability committee	Both assessing and managing climate-related risks and opportunities	Half-yearly
Environment/ Sustainability manager	Both assessing and managing climate-related risks and opportunities	Half-yearly
Other committee, please specify  Management Sustainability  Committee	Both assessing and managing climate-related risks and opportunities	Half-yearly

## C1.2a

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

#### **Board Sustainability Committee**

Established in 2020, the BSC reviews, supervises and makes recommendations to the Board for approval in the areas of sustainability strategy and issues, key environmental, social and governance (ESG) targets and performance, progress and scorecard. The BSC meets at least twice a year to review Sunway's sustainability strategies.

#### **Group Sustainability**

The Group Sustainability (GS) helps the BSC make informed decisions that will drive the integration of sustainability strategies into business operations in order to achieve the Group's sustainability goals. GS also oversees reporting, key sustainability risks and opportunities, stakeholder engagement and



the assessment of our material issues, while monitoring sustainability trends.

#### **Management Sustainability Committee**

The Management Sustainability Committee (MSC) comprises of all business divisions' heads. GS chairs and communicates the Group's sustainability direction to the MSC to be cascaded into their respective operations. This is where MSC will incorporate sustainability initiatives as part of their business plan in order to achieve Group's goals and targets.

Sunway Berhad Sustainability Report 2021, page 20 & 70 (https://www.sunway.com.my/sustainability-report/)

## 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	In 2021, Sunway Berhad integrated sustainability in senior management performance evaluations and Key Performance Indicators (KPIs), which are linked to remuneration. This includes linking the remuneration for senior executives to ESG performance including climate change matters. The KPIs are aligned to the Sunway Sustainability 2030 Goals and Targets:  Goal 1: Transforming Our Portfolios To Low-Carbon Sustainable Cities Goal 2: Advocating A Responsible Value Chain Goal 3: Developing A Safe, Equal And Dignified Workforce Goal 4: Investing In Community Inclusivity Goal 5: Respecting Ethical Principles  The KPIs will also be cascaded to employees within the organisation, tracked and reported annually.



# 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	Type of incentive	Activity incentivized	Comment
President	Monetary reward	Energy reduction target  Efficiency target  Other (please specify)  - Waste diversion target - Occupational Health and Safety targets - Employee learning hours - Corporate governance	In 2021, Sunway Berhad further strengthened sustainability governance by incorporating sustainability into Senior Management's Key Performance Indicators (KPIs) and performance evaluations, which are linked to remuneration. The Environmental KPIs which are linked to climate-related issues includes reduction of energy intensity and increasing waste diverted away from landfills. On top of that, there are Social and Governance KPIs including OHS practices, employee learning & development hours and compulsory annual training on mandatory policies. These KPIs are then further cascaded to the respective business divisions
Other, please specify Business division heads	Monetary reward	Energy reduction target  Efficiency target  Other (please specify)  - Waste diversion target - Occupational Health and Safety targets - Employee learning hours - Corporate governance	In order to manage climate-related risks, the business division heads play an important role to drive the efforts towards achieving the 2030 targets. Hence, the President's ESG KPIs and performance evaluations linked to remuneration are cascaded to the business division heads. Each business divisions have similar but specific KPIs catered to their business to be achieved annually. The business division heads as well as their respective HR are responsible to track progress and performance of their KPIs.
All employees	Monetary reward	Energy reduction target  Efficiency target  Other (please specify)  - Waste diversion target - Occupational Health and Safety targets - Employee learning hours - Corporate governance	The specific KPIs are further cascaded to relevant employees that are involved in the operations such as reduction of energy intensity, increasing waste diverted away from landfills, and OHS practices. Meanwhile, all employees are responsible to contribute towards employee learning & development hours and compulsory annual training on mandatory policies.



# **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 (years)	To (years)	Comment
Short- term	1	5	Sunway has set future value goals and 2030 targets to transform portfolios to low-carbon sustainable cities. The main strategic framework includes decarbonisation, resource management, and pollution management. These goals and targets are cascaded to the relevant Group Functions and business units where the progress and performance are tracked and reported annually. This is to encourage continuous internal analysis and review to ensure the targets are met or to be revised, if necessary. Some of the targets includes reduction of Building Energy Intensity (BEI) and Energy Use Intensity (EUI), renewable energy generation and waste diversion from landfill. From this practice, the business units are able to manage risks and identify opportunities for financial planning on climate-related investments to be incorporated in the annual business plan.
Medium- term	6	10	As part of the roadmap towards Net Zero Carbon Emissions by 2050, Sunway's focus is on reducing residual emissions by improving efficiency and using energy substitution. In 2021, Sunway established an Internal Carbon Pricing framework to start preparing for the potential transition risks from climate-related issues at RM15 per tonne of CO2e emitted above a threshold level. This is a mechanism/decision-making tool that can help business units to understand their exposure to external carbon pricing schemes, guide their decisions and investments and put a value on their greenhouse gas (GHG) emissions in a way that drives positive change in their business. Sunway target for managed and industrial properties to reduce their emissions per tonne of production by 4% and 3.5%, respectively, per year by 2030 using 2022 as a base year.



		The other implementation strategy includes engaging with stakeholders to reduce upstream and downstream Scope 3 emissions such as sustainable procurement and supply chain practices and green lease.
Long- term	11	To get to Net Zero Carbon Emissions by 2050, Sunway plan to focus on carbon offset technology which includes carbon storage and capture and investment in large-scale renewable energy. In 2017, Sunway University formed a partnership with the Massachusetts Institute of Technology (MIT) in Boston to conduct research on carbon capture, utilisation and storage technology at Sunway City Kuala Lumpur. Sunway has invested in renewable energy sourced from solar photovoltaic (PV) panels and generated 8,940 MWh of clean energy in 2021. To ensure the getting to net zero is possible, Sunway is exploring to invest in large-scale solar farm.

## C2.1b

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

As part of risk management of climate-related issues, Sunway appointed the Jeffrey Sachs Center on Sustainable Development (JSC) to conduct a climate Value at Risk (VaR) assessment on all our 74 properties to assess Sunway's risk exposure to climate change. JSC has categorised the levels of VaR as below:

Low: Low vulnerability to physical risks due to sea-level rise or higher rain intensity

**Medium:** Vulnerable to physical risks due to sea-level rise or higher rain intensity AND NOT Vulnerable to large potential damage physical risks (i.e. max. historical annual damages cost ratio < 5% or max. RM annual historical losses < RM5 mil)

**High:** Vulnerable to physical risks due to sea-level rise or higher rain intensity AND Vulnerable to large potential damage physical risks (i.e. max. historical annual damages cost ratio ≥ 5% or max. RM annual historical losses ≥ RM5 mil)

The JSC also discussed the potential financial implications of climate-related physical risks and transition risks for Sunway in the short term (1-5 years), medium term (6-10 years) and long term (≥ 11 years) based on the Taskforce on Climate-Related Financial Disclosures (TCFD) framework.

#### **Transition Risks**

Transition risks are changes that a firm is expected to navigate as society transitions to a low-carbon economy. Under the TCFD framework, there are four types of transition risks, namely policy and legal risk, technology risk, market risk and reputation risk.



#### **Physical Risks**

The risks of climate events physically damaging the properties in Sunway's portfolio. In the Malaysian context, material physical risks consist of:

- · Sea-level rise, which can lead to more coastal and riverine floods.
- · Increased rainfall intensity, which can lead to more flash floods, water seepages into buildings and landslides.

Climate Report: Net Zero by 2050, Sunway Berhad Sustainability Report 2021, page 19-25 (https://www.sunway.com.my/sustainability-report/)

## **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

Long-term

#### **Description of process**

As part of Sunway Berhad's risk management towards climate-related issues, Sunway Berhad has appointed the Jeffrey Sachs Center on Sustainable Development (JSC) to conduct a climate Value at Risk (VaR) assessment on all 74 properties to assess Sunway's risk exposure to



climate change. JSC has categorised the levels of VaR as below:

- · Low: Low vulnerability to physical risks due to sea level rise or higher rain intensity
- Medium: Vulnerable to physical risks due to sea level rise or higher rain intensity AND NOT Vulnerable to large potential damage physical risks (i.e. Max historical annual damages cost ratio < 5% or max RM annual historical losses < RM5 mil)
- High: Vulnerable to physical risks due to sea level rise or higher rain intensity AND Vulnerable to large potential damages physical risks (i.e. Max historical annual damages cost ratio ≥ 5% or max RM annual historical losses ≥ RM5 mil)

Certain properties were leased, hence did not have asset carrying value. For such properties, RM annual historical losses was used to define VaR. The VaR assessment was conducted based on the worst-case scenario as described by the IPCC Assessment Report 6 published in August 2021, which estimated that the sea level rise in Southeast Asia will increase between 0.4m and 1.1m in the long term (2081-2100), and that maximum one-day precipitation is to increase between 6.7% and 46.6% within the same period.

JSC also discussed the potential financial implications of climate related physical risks and transition risks to Sunway in the short term (1-5 years), medium term (6-10 years) and long term (≥ 11 years) based on the Task Force on Climate- Related Financial Disclosures (TCFD) framework. To facilitate clear and insightful discussion, Sunway's nine business divisions were grouped into two categories where the constituents have similar climate risk characteristics.

Sunway Berhad's "Build" business divisions are exposed to similar risk in the property and construction production supply chain.

- Property Development
- Construction
- · Trading and Manufacturing
- Quarry
- Building Materials

Sunway Berhad "Own and Operate" business divisions are exposed to similar risk in owning and operating property assets to serve consumers

- Property Investment and REIT
- Leisure
- Hospitality



#### Healthcare

#### Physical Risks

The risks of climate events physically damaging the properties in Sunway's portfolio. In Malaysia's context, material physical risks consist of:

- Sea level rise, which can lead to more coastal and riverine floods.
- Increased rainfall intensity, which can lead to more flash floods, water seepages into buildings and landslides.

#### Transition Risks

Transition risks are changes which a firm is expected to navigate as society transitions to a low-carbon economy. Under the TCFD framework, there are four types of transition risks namely policy and legal risk, technology risk, market risk and reputation risk.

Based on the climate VaR study, Sunway's property portfolio is assessed to be low VaR because 60 of the 74 properties evaluated were low VaR. The study also noted that 7 properties were medium VaR because of close proximity to the coast or river and another 7 properties were medium VaR because they have had experienced material historical climate related damages. Sunway will continue to monitor all properties closely to ensure that they are safe against material climate-related physical risks (floods, increased rainfall intensity, landslides) and put in place mitigation measures as appropriate. The discussion of potential financial implications of climate-related physical risks and transition risks to Sunway in the short term, medium term and long term under the TCFD framework importantly identified that climate change does not only present Sunway with potential financial risks but also potential financial opportunities. Sunway is committed to deepening our understanding of the climate-related potential risks and opportunities, and investing in strategies and actions that will prudently mitigate material risks and enhance our business position as a provider of high-quality green and sustainable products and services.

## C2.2a

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

Relevance & Please explain inclusion



Current regulation	Relevant, always included	One of the material issues that Sunway prioritises is Pollution (Waste/Effluents). Companies that fail to comply with the local laws and regulations are susceptible to disruption in operations and loss of revenue. One of the commitments in Sunway Berhad's Water Management Policy includes ensuring effluents discharged at buildings and operation sites are within permissible limits by authorities such as the Environmental Quality Act (EQA) 1974. We remain guided by a waste management hierarchy and we comply with the Solid Waste and Public Cleansing Management Act 2007, allowing us to manage waste based on the potential benefits.
Emerging regulation	Relevant, always included	Malaysia committed to be a carbon-neutral country at the earliest in 2050. There is a potential of carbon tax which could increase operating costs of high carbon emission assets. Thus, an internal carbon pricing framework has been approved by the Board of Directors to be adopted in business operations as a way to prepare for a low-carbon economy. Placing a value on GHG emissions will help align with and support a carbon management strategy that will drive the company towards achieving our Net Zero Carbon Emissions by 2050 target. Setting internal carbon pricing can also incentivise the business divisions across the Group to reduce their carbon emissions and enable low-carbon innovation.
Technology	Relevant, always included	<ul> <li>R&amp;D costs to develop green products and services (green buildings, green construction products and services)</li> <li>Costs to adopt low emissions technologies (hydrogen-powered heavy machines, carbon capture and storage)</li> <li>Costs of holding impaired technology assets (fossil fuel-powered heavy machinery)</li> </ul>
Legal	Relevant, always included	<ul> <li>Regulations mandating green products and services (green buildings, green construction products and services) will increase production costs</li> <li>Exposure to litigation</li> </ul>
Market	Relevant, always included	<ul> <li>Increasing consumer preferences for products and services (green buildings, green construction products and services)</li> <li>Increasing cost of raw materials to produce green products and services</li> <li>More volatile fossil fuel prices as energy system transitions away from fossil fuels</li> <li>Increasing consumer preferences for green property assets</li> <li>Increasing cost to own or lease green property assets</li> </ul>
Reputation	Relevant, always included	<ul> <li>Increasing consumer preferences for companies that have green reputations</li> <li>Increasing stakeholder concerns about climate change (difficulty in securing government approvals, difficulty in accessing financing, increasing shareholder activism for climate action)</li> <li>Increasing consumer preferences for companies that have green reputations</li> </ul>



Acute physical	Relevant, always included	Increasing frequency of extreme weather events (floods, heavy rain, landslides) which causes:  • Disruption of the provision of services dependent on the property asset, thus loss of revenue  • Disruption of the production schedule  • Higher cost of repairs  • Higher insurance premiums
Chronic physical	Relevant, always included	Higher mean temperatures: o No risk as existing chiller technology can operate even if Southeast Asia temperature increases by 3.5°C in the worst case o Higher operating cost of running chillers for longer hours
		Higher sea levels: o Higher development cost of coastal properties (higher floor elevation, foundation which is resistant to seawater) o Increasing frequency of flooding damage if building is not designed to cope with sea-level rise (buffer above king tide)

## **C2.3**

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

Yes

## C2.3a

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

Identifier

Risk 1

Where in the value chain does the risk driver occur?



Direct operations

#### Risk type & Primary climate-related risk driver

Emerging regulation
Carbon pricing mechanisms

#### **Primary potential financial impact**

Increased direct costs

#### **Company-specific description**

Potential Financial Risks that may arise are:

- Regulations mandating green products and services (green buildings, green construction products and services) will increase production costs
- · Carbon tax increases operating costs of high carbon emission assets
- Exposure to litigation

#### Time horizon

Medium-term

#### Likelihood

Very likely

#### Magnitude of impact

High

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

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)



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

**Explanation of financial impact figure** 

Cost of response to risk

Description of response and explanation of cost calculation

Comment

#### Identifier

Risk 2

## Where in the value chain does the risk driver occur?

Direct operations

#### Risk type & Primary climate-related risk driver

Chronic physical

Changing precipitation patterns and types (rain, hail, snow/ice)

#### **Primary potential financial impact**

Increased indirect (operating) costs

#### **Company-specific description**

Higher mean temperatures

o No risk as existing chiller technology can operate even if Southeast Asia temperature increases by 3.5°C in the worst case



o Higher operating cost of running chillers for longer hours

Higher sea levels

- o Higher development cost of coastal properties (higher floor elevation, foundation which is resistant to seawater)
- o Increasing frequency of flooding damage if building is not designed to cope with sea-level rise (buffer above king tide)

#### Time horizon

Long-term

#### Likelihood

Likely

#### Magnitude of impact

High

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

Yes, a single figure estimate

## Potential financial impact figure (currency)

1,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

#### **Explanation of financial impact figure**

1. Landslide at Quarry site in Rawang due to heavy rainfall

On 19 December 2021, a landslide occurred at a quarry site in Rawang due to continuous heavy rain for 3 days. The landslide did not occur in area that is directly related to quarry operations. The heavy rain made the soil super saturated (>70% moisture content). When workers began



to move heavy machineries when the rains weakened, the vibration triggered the landslide. The landslide caused damages to company assets such as cabins and company vehicles.

2. Flooding at Trading & Manufacturing site in Kota Kinabalu due to heavy rainfall
In September 2021, heavy rainfall occurred at West Coast of Sabah including Kota Kinabalu area causing water level to rise at the river and monsoon drain. The flooding disrupted internet connection, wiring and phone system. It also caused minor damage to company assets and products.

#### Cost of response to risk

1,000,000

#### Description of response and explanation of cost calculation

Landslide at Quarry site in Rawang due to heavy rainfall

• Financial loss due to damage of cabins and company vehicles

Flooding at Trading & Manufacturing site in Kota Kinabalu due to heavy rainfall

• Financial loss due to damages occurring at site and damage of products

#### Comment

The figure is estimated based on recent climate-related and/or water-related incidents that caused damage and loss to the company

## **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?

No

### C2.4b

(C2.4b) Why do you not consider your organization to have climate-related opportunities?



	Primary reason	Please explain
Row 1	Evaluation in progress	

# C3. Business Strategy

#### C3.1

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

#### Row 1

#### **Transition plan**

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

#### Publicly available transition plan

Yes

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

We have a different feedback mechanism in place

#### **Description of feedback mechanism**

Sunway has published its Net Zero Carbon Emissions by 2050 Roadmap in Sustainability Report and corporate website. Feedback from stakeholders is vital to continuously improve reporting and sustainability practices. Stakeholders are welcomed to give views, comments or feedback, which are directed to the Group Sustainability department.

#### Frequency of feedback collection

Annually

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

Sunway Berhad Sustainability Report 2021, page 24





## C3.2

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

	Use of climate-related scenario analysis to inform strategy
Row 1	Yes, qualitative

## 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 scenarios Customized publicly available physical scenario	Company- wide	Unknown	The risks of climate events physically damaging the properties in Sunway's portfolio. In the Malaysian context, material physical risks consist of: o Sea-level rise, which can lead to more coastal and riverine floods. o Increased rainfall intensity, which can lead to more flash floods, water seepages into buildings and landslides.  In the Business-as-Usual (4°C) scenario, the organisation is highly impacted by physical risks, while in the Aggressive mitigation (2°C or less) scenario, the organisation is highly impacted by transition risks. Physical risks are most material in a 4°C warming scenario when global efforts fail to limit the emissions of carbon. Conversely, transition risks are most material in the 2°C or less warming scenario due to stakeholder demands for businesses to speed up the transition to low-carbon production processes.



	Sunway Berhad Sustainability Report 2021, page 22 & 23.
	(https://www.sunway.com.my/sustainability-report/)

## 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**

Materiality assessments are vital for our value creation journey as we seek to identify the ESG issues that matter most to our business and stakeholders.

Conducting a materiality assessment allows us to identify opportunities and mitigate risks to ensure sustainable business growth. In 2020, we engaged an external consultant to conduct a comprehensive materiality assessment, which allowed us to understand our challenges and priorities. The assessment included a comprehensive online survey, focus group discussions and a desktop validation against industry peers locally, regionally and globally. It resulted in 24 material matters, of which ten were prioritised. In 2021, we conducted desktop research to reassess our material matters and compare them against local, regional and global industry peers. We also realigned them against global trends, risk themes, risks, consequences and opportunities to ensure our material matters were up to date and in line with the latest economic landscape and stakeholder needs.

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

We renamed, added to, and removed some of the 24 material matters from the previous year's assessment to better reflect our management approach. Following this reassessment exercise, we were left with 17 material matters, out of which 13 were prioritised.

#### Environmental

- Ecology & Biodiversity
- Physical Impacts of Climate Change
- Resource Management (Energy)
- Resource Management (Water)



- Pollution (Emission)
- Pollution (Waste/Effluents)
- Resource Management (Supply Chain & Materials)

#### Social

- Labour Standards & Practices
- Diversity & Inclusion
- Human Capital Development
- Employee Health & Safety
- Community Enrichment
- Indirect Economic Impact
- Customer Responsibility

#### Governance

- Corporate Governance
- Business Ethics
- Risk & Crisis Management

## 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	Green Building
		As regulations mandating green products and services is one of the potential financial risks, Sunway is committed to ensuring all new townships and buildings completed from 2025 onwards are green-certified. Sunway defines green townships and green buildings as developments that focus on boosting



resource efficiency, while reducing building impact on human health and the environment during the buildings' life cycle through better design, construction, operation and maintenance. Established in 2021, Sunway's Green Building Policy outlines the key requirements that are essential to the development of green townships and buildings. The guidelines ensure that Sunway will integrate sustainable practices into the development, operations and management of townships and buildings. The policy also underscores Sunway's commitment to designing and producing built environments that facilitate healthy lifestyles and prioritising the well-being of the stakeholders.

#### Sustainable Construction Materials

One of the most significant parts of Sunway's sustainability journey is making sure the use of sustainable construction materials in developments to better manage environmental footprint. This includes:

- Using materials such as Autoclaved Aerated Concrete, which is a lightweight, precast, foam concrete building material that contributes to a reduction of at least 30% in industrial waste, 50% in greenhouse gas emissions and more than 60% in integrated energy on the surface of bricks.
- Using products with low volatile organic compounds to minimise the release of dangerous gases and solids from paints and lacquers, paint strippers, cleaning supplies, pesticides, building materials and furnishing and craft materials, including adhesives and permanent markers.

#### Energy security

Efficient energy management is vital for the Group as we journey towards achieving net zero emissions by 2050. The Group continuously conserves energy usage across all its business divisions by replacing to LED lights, upgrading chiller for optimisation, and many more. Other than that, shifting from fossil fuel to renewable energy continues to play a key role in reducing the Group's GHG emissions. Going forward, we aspire to expand our solar power generation as part of our initiative. These initiatives are to ensure energy security and result in monetary savings.



Supply chain and/or value chain	Yes	Sustainable supply chain In 2020, Sunway Berhad established a Sustainable Procurement Policy to develop a best practice approach to sustainable procurement. Beginning in 2021, all suppliers who have completed the supplier registration form are required to declare their current ESG practices via the Supplier Environmental and Social Risk Assessment forms. The information provided will be recorded and kept by all business divisions.  Sunway introduced sustainable procurement best practices to employees and suppliers. Suppliers are able to refer to the Sustainable Procurement Policy as a guideline to benchmark their ESG practices against industry best practices. All Sunway suppliers must comply with all relevant laws, regulations and standards, and any supplier found to have violated the law will be removed from the supply chain.  Sustainable Purchasing of Goods We purchase products with eco-labels such as PEFC and FSC-certified products. One of our 2030 targets includes to record a measurable reduction in environmental impact from goods and services procured from suppliers.
Investment in R&D	Yes	Ensuring Sustainable Water Supply To ensure sustainable water supply in Sunway City Kuala Lumpur, Sunway invested in an RM18 million water treatment plant in 2019. With a daily water supply capacity of up to 8.5 million litres for 51,500 people, the treatment plant recycles water from the city's lakes to produce potable drinking water, enabling the Group to reduce its water consumption cost. The lake is also a catchment area for surface run-off, and Sunway ensures that the water is pumped out to the river when it reaches a certain level to avoid flooding in the surrounding areas. The lake is the source of water supply during water shortage crises to ensure business continuity.
Operations	Yes	Low-Carbon Sustainable Cities As stated in the Sunway's Net Zero Carbon Emissions by 2050 Roadmap, Sunway has set future value goals and 2030 targets to transform portfolios to low-carbon sustainable cities. Some of the targets include:  • Reducing energy intensity • Increasing use of renewable energy



Increasing waste diverted from landfills	
Reducing water use intensity	

## 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	Revenues Direct costs Indirect costs Capital expenditures Capital allocation	Sunway has included sustainability as part of their business plan. As each business divisions have specific ESG KPIs to achieve, the business division would identify areas for capital investment / expenditures (e.g upgrading of chillers, installation of solar panels, water treatment plant, etc.) in order to achieve the Sunway Sustainability 2030 Goals and Targets. The business divisions would allocate CAPEX and OPEX in their business plan. In order to achieve the Net Zero Carbon Emissions by 2050, Sunway is also looking into investment in large-scale renewable energy.

## C3.5

(C3.5) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's transition to a 1.5°C world?

No, but we plan to in the next two years

# C4. Targets and performance

## C4.1

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

Intensity target



## C4.1b

(C4.1b) Provide details of your emissions intensity target(s) and progress made against those target(s).

#### Target reference number

Int 1

Year target was set

2021

**Target coverage** 

Company-wide

Scope(s)

Scope 1

Scope 2

**Scope 2 accounting method** 

Market-based

Scope 3 category(ies)

**Intensity metric** 

Metric tons CO2e per unit revenue

Base year

2022

Intensity figure in base year for Scope 1 (metric tons CO2e per unit of activity)

14.5



Intensity figure in base year for Scope 2 (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3 (metric tons CO2e per unit of activity)

Intensity figure in base year for all selected Scopes (metric tons CO2e per unit of activity) 25.5

% of total base year emissions in Scope 1 covered by this Scope 1 intensity figure 100

% of total base year emissions in Scope 2 covered by this Scope 2 intensity figure 100

% of total base year emissions in Scope 3 (in all Scope 3 categories) covered by this Scope 3 intensity figure

% of total base year emissions in all selected Scopes covered by this intensity figure 100

#### Target year

2030

Targeted reduction from base year (%)

45

Intensity figure in target year for all selected Scopes (metric tons CO2e per unit of activity) [auto-calculated] 14.025

% change anticipated in absolute Scope 1+2 emissions



#### % change anticipated in absolute Scope 3 emissions

Intensity figure in reporting year for Scope 1 (metric tons CO2e per unit of activity)

14.5

Intensity figure in reporting year for Scope 2 (metric tons CO2e per unit of activity)

11.1

Intensity figure in reporting year for Scope 3 (metric tons CO2e per unit of activity)

Intensity figure in reporting year for all selected Scopes (metric tons CO2e per unit of activity)

25.5

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

0

#### Target status in reporting year

Underway

#### Is this a science-based target?

Yes, we consider this a science-based target, and we have committed to seek validation of this target by the Science Based Targets initiative in the next two years

#### **Target ambition**

1.5°C aligned

#### Please explain target coverage and identify any exclusions

From now until 2030, Sunway's focus is on reducing residual emissions by improving efficiency and using energy substitution. We target for our managed and industrial properties to reduce their emissions per tonne of production by 4% and 3.5%, respectively, per year by 2030 using 2022 as a base year.



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

In 2021, we established an Internal Carbon Pricing framework to start preparing for the potential transition risks from climate-related issues at RM15 per tonne of CO2e emitted above a threshold level. This is a mechanism/decision-making tool that can help our business divisions to understand their exposure to external carbon pricing schemes, guide their decisions and investments and put a value on their greenhouse gas (GHG) emissions in a way that drives positive change in their business.

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

#### 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

Int1

#### Target year for achieving net zero

2050



#### Is this a science-based target?

Yes, we consider this a science-based target, and we have committed to seek validation of this target by the Science Based Targets initiative in the next 2 years

#### Please explain target coverage and identify any exclusions

## 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

Carbon storage and capture

Sunway University has formed a partnership with MIT in 2017 to research carbon capture, utilisation and storage technology (CCUS) to make it commercially viable. Currently, while carbon capture technology is readily available, the storage of carbon as a 'waste product' is still costly. The researchers are working on ways to turn carbon into a useful product with the potential to be sold.

Buying green energy

Sunway is also currently looking at investing directly or indirectly in large-scale solar farms.

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

Sunway engages with stakeholders to reduce Scope 3 emissions.

1) Upstream – Suppliers (Sustainable procurement & supply chain practices)

Sunway is committed to responsible procurement by working with partners who uphold the same high sustainability standards we subscribe to in the areas of ethical conduct, human rights, workplace standards and environmental management. In 2020, Sunway Berhad established a Sustainable Procurement Policy to develop a best practice approach to sustainable procurement. Beginning in 2021, all suppliers who have completed the supplier registration form are required to declare their current ESG practices via the Supplier Environmental and Social Risk Assessment forms. The information provided will be recorded and kept by all business divisions. We introduced sustainable procurement best practices to our employees and suppliers. Our suppliers are able to refer to the Sustainable Procurement Policy as a guideline to benchmark their ESG practices against industry best practices. All Sunway suppliers must comply with all relevant laws, regulations and standards, and any supplier found to have violated the law will be removed from our supply chain



2) Downstream - Tenants

Sunway is looking into launching green lease for tenants in the retail, office and hotel operations.

## 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	0	0
To be implemented*	0	0
Implementation commenced*	0	0
Implemented*	3	6,234
Not to be implemented	0	0

## C4.3b

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

Low-carbon energy generation



Solar PV

Estimated annual CO2e savings (metric tonnes CO2e)

5,230

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

Scope 2 (market-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

Estimated lifetime of the initiative

Comment

#### Initiative category & Initiative type

Waste reduction and material circularity
Other, please specify
Diversion of waste from landfill



#### Estimated annual CO2e savings (metric tonnes CO2e)

378

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

Scope 3 category 5: Waste generated in operations

## **Voluntary/Mandatory**

Voluntary

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

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

Payback period

Estimated lifetime of the initiative

Comment

#### Initiative category & Initiative type

Other, please specify
Other, please specify
Sustainable procurement practices

## Estimated annual CO2e savings (metric tonnes CO2e)

626



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

Scope 3 category 1: Purchased goods & services

#### **Voluntary/Mandatory**

Voluntary

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

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

Payback period

Estimated lifetime of the initiative

Comment

## C4.3c

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

Method	Comment
Internal price	An internal carbon pricing framework has been approved by the Board of Directors to be adopted in our business operations as a way to
on carbon	prepare for a low-carbon economy. Placing a value on our GHG emissions will help us align with and support a carbon management strategy
	that will drive us towards achieving our Net Zero Carbon Emissions by 2050 target. Setting internal carbon pricing can also incentivise the
	business divisions across the Group to reduce their carbon emissions and enable low-carbon innovation. Ultimately, it will make carbon
	considerations more central to our business operations, promote understanding of carbon and carbon risk internally and externally and
	future-proof our business strategy.



#### C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?

# **C5.** Emissions methodology

## C5.1

(C5.1) Is this your first year of reporting emissions data to CDP?
Yes

## C5.2

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

## Scope 1

#### Base year start

January 1, 2015

#### Base year end

December 31, 2015

#### **Base year emissions (metric tons CO2e)**

24,510

Comment

#### Scope 2 (location-based)



Base year start			
Base year end			
Base year emissions (metric to	ons CO2e)		
Comment			
Scope 2 (market-based)			
Base year start			
January 1, 2015			
Base year end			
December 31, 2015			
Base year emissions (metric to	ons CO2e)		
33,758			
Comment			
Scope 3 category 1: Purchased go	ods and services		
Base year start			
Base year end			



	Base year emissions (metric tons CO2e)
	Comment
Sc	ope 3 category 2: Capital goods
	Base year start
	Base year end
	Base year emissions (metric tons CO2e)
	Comment
Sc	ope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)
	Base year start
	Base year end
	Base year emissions (metric tons CO2e)
	Comment



### Scope 3 category 4: Upstream transportation and distribution

Base year start

Base year end

**Base year emissions (metric tons CO2e)** 

Comment

# Scope 3 category 5: Waste generated in operations

Base year start

January 1, 2017

Base year end

December 31, 2017

Base year emissions (metric tons CO2e)

1,329

Comment

# Scope 3 category 6: Business travel

Base year start

January 1, 2015



Base year end December 31, 20	015		
Base year emission 3,192	ons (metric tons CO2e)		
Comment			
Scope 3 category 7: E	mployee commuting		
Base year start			
Base year end			
Base year emission	ons (metric tons CO2e)		
Comment			
Scope 3 category 8: U	pstream leased assets		
Base year start			
Base year end			
Base year emission	ons (metric tons CO2e)		



# Comment

Scope 3 category 9: Downstream transportation and distribution
Base year start
Base year end
Base year emissions (metric tons CO2e)
Comment
Scope 3 category 10: Processing of sold products
Base year start
Base year end
Base year emissions (metric tons CO2e)
Comment
Scope 3 category 11: Use of sold products



	Base year start
	Base year end
	Base year emissions (metric tons CO2e)
	Comment
Sc	ope 3 category 12: End of life treatment of sold products
	Base year start
	Base year end
	Base year emissions (metric tons CO2e)
	Comment
Sc	ope 3 category 13: Downstream leased assets
	Base year start January 1, 2015
	Base year end
	December 31, 2015



Base year e	ar emissions (metric tons CO2e)	
8,708		
Comment	nt	
Scope 3 catego	egory 14: Franchises	
Base year s	ar start	
Base year e	ar end	
Base year e	ar emissions (metric tons CO2e)	
Comment	nt	
Scope 3 catego	egory 15: Investments	
Base year s	ar start	
Base year e	ar end	
Base year e	ar emissions (metric tons CO2e)	
Comment	nt	



Sc	ope 3: Other (upstream)
	Base year start
	Base year end
	Base year emissions (metric tons CO2e)
	Comment
Sc	ope 3: Other (downstream)
	Base year start
	Base year end
	Base year emissions (metric tons CO2e)
	Comment

# C5.3

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

Defra Environmental Reporting Guidelines: Including streamlined energy and carbon reporting guidance, 2019



# **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)** 

53,765

Start date

January 1, 2021

End date

December 31, 2021

Comment

# Past year 1

**Gross global Scope 1 emissions (metric tons CO2e)** 

52,005

Start date

January 1, 2020

**End date** 

December 31, 2020

Comment



# Past year 2

**Gross global Scope 1 emissions (metric tons CO2e)** 

51,726

Start date

January 1, 2019

End date

December 31, 2019

Comment

# Past year 3

Gross global Scope 1 emissions (metric tons CO2e)

26,467

Start date

January 1, 2018

**End date** 

December 31, 2018

Comment

# C6.2

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



#### Row 1

#### Scope 2, location-based

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

#### Scope 2, market-based

We are reporting a Scope 2, market-based figure

#### Comment

Data for emissions generated for electricity was obtained from Malaysian Green Technology and Climate Change Centre.

# **C6.3**

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

#### Reporting year

#### Scope 2, market-based (if applicable)

41,099

#### Start date

January 1, 2021

#### End date

December 31, 2021

#### Comment

# Past year 1

# Scope 2, market-based (if applicable)

43,076



#### Start date

January 1, 2020

#### **End date**

December 31, 2020

#### Comment

# Past year 2

# Scope 2, market-based (if applicable)

48,692

#### Start date

January 1, 2019

#### **End date**

December 31, 2019

#### Comment

# Past year 3

# Scope 2, market-based (if applicable)

40,093

#### Start date

January 1, 2018

#### End date

December 31, 2018



#### Comment

# **C6.4**

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

No

# **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)**

n

#### **Emissions calculation methodology**

Average product method

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

0

# Please explain

We purchase products with eco-labels such as PEFC and FSC-certified products. Hence, we calculated the emission avoidance from this practice. 626 tonnes of CO2e emissions avoided by practising sustainable purchasing of goods in 2021.

# **Capital goods**



#### **Evaluation status**

Not evaluated

Please explain

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

#### **Evaluation status**

Not evaluated

Please explain

#### **Upstream transportation and distribution**

#### **Evaluation status**

Not evaluated

Please explain

# Waste generated in operations

#### **Evaluation status**

Relevant, calculated

# **Emissions in reporting year (metric tons CO2e)**

5,735

# **Emissions calculation methodology**

Waste-type-specific method



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

0

#### Please explain

Efficient waste management continues to be a key area in our environmental management. The emission is calculated based on the types of waste generated at our managed properties and industrial sites and method of disposing / diverting the waste. We strongly believe in waste prevention where possible, as we strive to reduce our waste to landfills from across our operations. We also reported the emission avoidance from diverting waste from landfills.

#### **Business travel**

#### **Evaluation status**

Relevant, calculated

#### **Emissions in reporting year (metric tons CO2e)**

2,071

#### **Emissions calculation methodology**

Fuel-based method

Distance-based method

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

n

# Please explain

We reported the emissions from business travel based on the claims made by employees through internal staff claim system.

#### **Employee commuting**

#### **Evaluation status**

Relevant, not yet calculated

#### Please explain



# **Upstream leased assets**

#### **Evaluation status**

Not relevant, explanation provided

# Please explain

Not relevant to our business operations.

### **Downstream transportation and distribution**

#### **Evaluation status**

Relevant, not yet calculated

Please explain

# **Processing of sold products**

#### **Evaluation status**

Not evaluated

Please explain

# Use of sold products

#### **Evaluation status**

Not evaluated

Please explain



# End of life treatment of sold products

#### **Evaluation status**

Not evaluated

### Please explain

#### **Downstream leased assets**

#### **Evaluation status**

Relevant, calculated

#### **Emissions in reporting year (metric tons CO2e)**

33,594

### **Emissions calculation methodology**

Asset-specific method

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

0

# Please explain

The reported emission is based on the purchased electricity consumption of Sunway's managed properties occupied by tenants.

#### **Franchises**

#### **Evaluation status**

Not relevant, explanation provided

# Please explain

Not relevant to our business operations.



#### **Investments**

#### **Evaluation status**

Not relevant, explanation provided

### Please explain

Not relevant to our business operations.

### Other (upstream)

#### **Evaluation status**

Not relevant, explanation provided

# Please explain

Not relevant to our business operations.

# Other (downstream)

#### **Evaluation status**

Not relevant, explanation provided

#### Please explain

Not relevant to our business operations.

# C6.5a

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

#### Past year 1

#### Start date

January 1, 2020



#### End date

December 31, 2020

Scope 3: Purchased goods and services (metric tons CO2e)

**Scope 3: Capital goods (metric tons CO2e)** 

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

Scope 3: Upstream transportation and distribution (metric tons CO2e)

Scope 3: Waste generated in operations (metric tons CO2e)

5,622

Scope 3: Business travel (metric tons CO2e)

3,121

Scope 3: Employee commuting (metric tons CO2e)

Scope 3: Upstream leased assets (metric tons CO2e)

Scope 3: Downstream transportation and distribution (metric tons CO2e)

Scope 3: Processing of sold products (metric tons CO2e)



Scope 3: Use of sold products (metric tons CO2e)

Scope 3: End of life treatment of sold products (metric tons CO2e)

Scope 3: Downstream leased assets (metric tons CO2e)

36,722

**Scope 3: Franchises (metric tons CO2e)** 

Scope 3: Investments (metric tons CO2e)

Scope 3: Other (upstream) (metric tons CO2e)

Scope 3: Other (downstream) (metric tons CO2e)

Comment

#### Past year 2

#### Start date

January 1, 2019

#### End date

December 31, 2019

Scope 3: Purchased goods and services (metric tons CO2e)



- Scope 3: Capital goods (metric tons CO2e)
- Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)
- Scope 3: Upstream transportation and distribution (metric tons CO2e)
- Scope 3: Waste generated in operations (metric tons CO2e) 8,637
- Scope 3: Business travel (metric tons CO2e) 2,572
- Scope 3: Employee commuting (metric tons CO2e)
- Scope 3: Upstream leased assets (metric tons CO2e)
- Scope 3: Downstream transportation and distribution (metric tons CO2e)
- Scope 3: Processing of sold products (metric tons CO2e)
- Scope 3: Use of sold products (metric tons CO2e)
- Scope 3: End of life treatment of sold products (metric tons CO2e)



Scope 3: Downstream leased assets (metric tons CO2e)

39,218

**Scope 3: Franchises (metric tons CO2e)** 

Scope 3: Investments (metric tons CO2e)

Scope 3: Other (upstream) (metric tons CO2e)

Scope 3: Other (downstream) (metric tons CO2e)

Comment

### Past year 3

#### Start date

January 1, 2018

#### End date

December 31, 2018

Scope 3: Purchased goods and services (metric tons CO2e)

**Scope 3: Capital goods (metric tons CO2e)** 



- Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)
- Scope 3: Upstream transportation and distribution (metric tons CO2e)
- Scope 3: Waste generated in operations (metric tons CO2e) 1,506
- Scope 3: Business travel (metric tons CO2e) 6,701
- Scope 3: Employee commuting (metric tons CO2e)
- Scope 3: Upstream leased assets (metric tons CO2e)
- Scope 3: Downstream transportation and distribution (metric tons CO2e)
- Scope 3: Processing of sold products (metric tons CO2e)
- Scope 3: Use of sold products (metric tons CO2e)
- Scope 3: End of life treatment of sold products (metric tons CO2e)
- Scope 3: Downstream leased assets (metric tons CO2e) 38,550



**Scope 3: Franchises (metric tons CO2e)** 

Scope 3: Investments (metric tons CO2e)

Scope 3: Other (upstream) (metric tons CO2e)

Scope 3: Other (downstream) (metric tons CO2e)

Comment

# C-CN6.6/C-RE6.6

(C-CN6.6/C-RE6.6) Does your organization assess the life cycle emissions of new construction or major renovation projects?

	Assessment of life cycle emissions	Comment
Row 1	No, but we plan to for upcoming projects	

# **C6.7**

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

# C<sub>6</sub>.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**

25.5

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

94,864

#### **Metric denominator**

unit total revenue

Metric denominator: Unit total

3,717,308,000

Scope 2 figure used

Market-based

% change from previous year

2

**Direction of change** 

Increased

Reason for change

# 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	53,501	Other, please specify	
		Defra Environmental Reporting Guidelines: Including streamlined energy and carbon reporting guidance	
CH4	53	Other, please specify	
		Defra Environmental Reporting Guidelines: Including streamlined energy and carbon reporting guidance	
N2O	210	Other, please specify	
		Defra Environmental Reporting Guidelines: Including streamlined energy and carbon reporting guidance	

# C7.2

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

Country/Region	Scope 1 emissions (metric tons CO2e)
Malaysia	53,765

# **C7.3**

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

By activity



# C7.3c

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

Activity	Scope 1 emissions (metric tons CO2e)
Company facilities	51,215
Company vehicles	2,550

# **C7.5**

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

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Malaysia		41,099

# **C7.6**

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

By activity

# C7.6c

### (C7.6c) Break down your total gross global Scope 2 emissions by business activity.

Activity Scope 2, location-based (metric tons CO2e)		Scope 2, market-based (metric tons CO2e)	
Purchased electricity		41,099	

# **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	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	896	Increased	1	Sunway has invested in solar power generation since 2018 and has been expanding our solar power generation.  Change (increase) in renewable energy generation in 2021 = 896 tonnes CO2e.  Total emissions (Scope 1+2) for 2020 = 95,081 tonnes CO2e. % change = 896 / 95,081 = 1.0%
Other emissions reduction activities	31	Decreased	0.03	As part of pollution management, Sunway has been reporting the amount of emission avoided from diversion of waste from landfills.  Change (decrease) in waste diversion in 2021 = -31 tonnes CO2e.  Total emissions (Scope 1+2) for 2020 = 95,081 tonnes CO2e. % change = -31 / 95,081 = -0.03%
Divestment				
Acquisitions				
Mergers				
Change in output				
Change in methodology				
Change in boundary				



Change in physical operating conditions		
Unidentified		
Other		

# 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?

Market-based

# C8. Energy

# **C8.1**

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

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

# C8.2

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

	Indicate whether your organization 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	No



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)	Unable to confirm heating value		209,876	209,876
Consumption of purchased or acquired electricity			258,147	258,147
Consumption of self-generated non-fuel renewable energy		8,940		8,940
Total energy consumption		8,940	468,023	476,963

# C8.2b

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

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	No
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.

Sustaina	able biomass
Heat	ing value
Tota	I fuel MWh consumed by the organization
Com	ment
Other bid	omass
Heat	ing value
Tota	I fuel MWh consumed by the organization
Com	ment
Other re	newable fuels (e.g. renewable hydrogen)
Heat	ing value
Tota	I fuel MWh consumed by the organization



#### Comment

#### Coal

#### **Heating value**

# Total fuel MWh consumed by the organization

#### Comment

#### Oil

### **Heating value**

Unable to confirm heating value

# Total fuel MWh consumed by the organization

95,465

#### Comment

Consumption of Light Fuel Oil (LFO) at Quarry sites and Hydraulic Oil at Building Material sites.

#### Gas

#### **Heating value**

Unable to confirm heating value

# Total fuel MWh consumed by the organization

86,739



#### Comment

Consumption of Liquefied Petroleum Gas (LPG) at Quarry sites

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

#### **Heating value**

Unable to confirm heating value

#### Total fuel MWh consumed by the organization

27,672

#### Comment

Consumption of Diesel at Quarry and Building Material sites.

#### **Total fuel**

#### **Heating value**

Unable to confirm heating value

# Total fuel MWh consumed by the organization

209,876

#### Comment

# C8.2d

(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

Total	Gross	5
aene	ration	(MWh)

Generation from renewable sources that is consumed by the organization (MWh)



Electricity	8,940	8,940	
Heat			
Steam			
Cooling			

# C8.2e

(C8.2e) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero or near-zero emission factor in the market-based Scope 2 figure reported in C6.3.

### Sourcing method

None (no active purchases of low-carbon electricity, heat, steam or cooling)

**Energy carrier** 

Low-carbon technology type

Country/area of low-carbon energy consumption

**Tracking instrument used** 

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

Country/area of origin (generation) of the low-carbon energy or energy attribute



Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

# C8.2g

(C8.2g) Provide a breakdown of your non-fuel energy consumption by country.

# Country/area

Malaysia

**Consumption of electricity (MWh)** 

267,087

Consumption of heat, steam, and cooling (MWh)

n

Total non-fuel energy consumption (MWh) [Auto-calculated]

267,087



# **C9.** Additional metrics

# C9.1

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

#### **Description**

Energy usage

#### **Metric value**

94

#### **Metric numerator**

kWh

# Metric denominator (intensity metric only)

m2/year

# % change from previous year

14.5

# **Direction of change**

Decreased

# Please explain

Building Energy Intensity for Office division.

# **Description**



Energy usage

#### **Metric value**

206

#### **Metric numerator**

kWh

# Metric denominator (intensity metric only)

m2/year

# % change from previous year

11.2

#### **Direction of change**

Decreased

# Please explain

Building Energy Intensity for Retail division.

# **Description**

Energy usage

#### **Metric value**

182

#### **Metric numerator**

kWh

# Metric denominator (intensity metric only)

m2/year



#### % change from previous year

19.1

# **Direction of change**

Decreased

# Please explain

Building Energy Intensity for Hospitality division.

# **Description**

Energy usage

#### **Metric value**

120

#### **Metric numerator**

kWh

# Metric denominator (intensity metric only)

m2/year

# % change from previous year

4

# **Direction of change**

Decreased

#### Please explain

Building Energy Intensity for Education division.



#### Description

Energy usage

#### **Metric value**

282

#### **Metric numerator**

kWh

# Metric denominator (intensity metric only)

m2/year

# % change from previous year

5.2

#### **Direction of change**

Increased

# Please explain

Building Energy Intensity for Healthcare division.

# Description

Energy usage

#### **Metric value**

68

#### **Metric numerator**

kWh

# **Metric denominator (intensity metric only)**



m2/year

# % change from previous year

34.6

# **Direction of change**

Decreased

#### Please explain

Building Energy Intensity for Student Residence division.

# **Description**

Energy usage

#### **Metric value**

15.1

#### **Metric numerator**

kWh

# **Metric denominator (intensity metric only)**

person/year

# % change from previous year

24.1

# **Direction of change**

Decreased

# Please explain

Energy Use Intensity for Leisure division.



# **Description**

Energy usage

#### **Metric value**

0

#### **Metric numerator**

tonnes CO2e

# Metric denominator (intensity metric only)

production tonnes/year

#### % change from previous year

7.7

# **Direction of change**

Decreased

# Please explain

Energy Use Intensity for Quarry division.

#### **Description**

Energy usage

#### **Metric value**

0.54

#### **Metric numerator**

tonnes CO2e



#### **Metric denominator (intensity metric only)**

production tonnes/year

# % change from previous year

28.6

# **Direction of change**

Increased

# Please explain

Energy Use Intensity for Building Materials (Sunway VCP)

# **Description**

Energy usage

#### **Metric value**

0.01

#### **Metric numerator**

tonnes CO2e

#### **Metric denominator (intensity metric only)**

production tonnes/year

# % change from previous year

27.8

#### **Direction of change**

Decreased

# Please explain



#### Energy Use Intensity for Building Materials (Sunway Spun Pile)

#### **Description**

Energy usage

#### Metric value

1.12

#### **Metric numerator**

tonnes CO2e

#### **Metric denominator (intensity metric only)**

production m2 ('000)/year

#### % change from previous year

8.2

#### **Direction of change**

Decreased

# Please explain

Energy Use Intensity for Building Materials (Sunway Paving Solutions)

# C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6

(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

Investment in low-carbon R&D

Comment



Row 1 No
----------

#### **C-RE9.9**

(C-RE9.9) Does your organization manage net zero carbon buildings?

No, but we plan to in the future

# C-CN9.10/C-RE9.10

(C-CN9.10/C-RE9.10) Did your organization complete new construction or major renovations projects designed as net zero carbon in the last three years?

No, but we plan to in the future

# C-CN9.11/C-RE9.11

(C-CN9.11/C-RE9.11) Explain your organization's plan to manage, develop or construct net zero carbon buildings, or explain why you do not plan to do so.

Evaluation in progress

# C10. Verification

# C10.1

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

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place



Scope 3

Third-party verification or assurance process in place

# C10.1a

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

#### Verification or assurance cycle in place

Annual process

#### Status in the current reporting year

Complete

#### Type of verification or assurance

Limited assurance

#### Attach the statement

#### Page/ section reference

Sunway Berhad Sustainability Report 2021, page 98-99

#### Relevant standard

ISAE3000

# Proportion of reported emissions verified (%)

100



# C10.1b

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

#### Scope 2 approach

Scope 2 market-based

#### Verification or assurance cycle in place

Annual process

#### Status in the current reporting year

Complete

#### Type of verification or assurance

Limited assurance

#### Attach the statement

#### Page/ section reference

Sunway Berhad Sustainability Report 2021, page 98-99

#### Relevant standard

ISAE3000

#### Proportion of reported emissions verified (%)

100



# C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

#### Scope 3 category

Scope 3: Purchased goods and services

Scope 3: Waste generated in operations

Scope 3: Business travel

Scope 3: Downstream leased assets

#### Verification or assurance cycle in place

Annual process

#### Status in the current reporting year

Complete

#### Type of verification or assurance

Limited assurance

#### Attach the statement

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# Page/section reference

Sunway Berhad Sustainability Report 2021, page 98-99

#### Relevant standard

ISAE3000



# Proportion of reported emissions verified (%)

100

# 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?

Yes

# C10.2a

# (C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C1. Governance	Other, please specify	ISAE3000	Independent Assurance Statement by third-party
C2. Risks and opportunities	Other, please specify	ISAE3000	Independent Assurance Statement by third-party
C3. Business strategy	Other, please specify	ISAE3000	Independent Assurance Statement by third-party
C4. Targets and performance	Other, please specify	ISAE3000	Independent Assurance Statement by third-party
C5. Emissions performance	Other, please specify	ISAE3000	Independent Assurance Statement by third-party
C6. Emissions data	Other, please specify	ISAE3000	Independent Assurance Statement by third-party



C7. Emissions breakdown	Other, please specify	ISAE3000	Independent Assurance Statement by third-party
C8. Energy	Other, please specify	ISAE3000	Independent Assurance Statement by third-party
C9. Additional metrics	Other, please specify	ISAE3000	Independent Assurance Statement by third-party
C11. Carbon pricing	Other, please specify	ISAE3000	Independent Assurance Statement by third-party
C12. Engagement	Other, please specify	ISAE3000	Independent Assurance Statement by third-party

<sup>&</sup>lt;sup>1</sup> Interactive-Page-Sunway-SR2021.pdf

# 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?

An internal carbon pricing framework has been approved by the Board of Directors to be adopted in our business operations as a way to prepare for a low-carbon economy. Placing a value on our GHG emissions will help us align with and support a carbon management strategy that will drive us towards achieving our Net Zero Carbon Emissions by 2050 target. Setting internal carbon pricing can also incentivise the business divisions across the



Group to reduce their carbon emissions and enable low-carbon innovation. Ultimately, it will make carbon considerations more central to our business operations, promote understanding of carbon and carbon risk internally and externally and future-proof our business strategy. We are also committed to setting Science-Based Targets and will be one of the first few organisations in Malaysia to do so.

# C11.2

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

# C11.3

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

# C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

# Objective for implementing an internal carbon price

Change internal behavior
Drive energy efficiency
Drive low-carbon investment

#### **GHG Scope**

Scope 1 Scope 2

#### **Application**



From now until 2030, Sunway's focus is on reducing residual emissions by improving efficiency and using energy substitution. The Internal Carbon Pricing framework is a mechanism/decision-making tool that can help our business divisions to understand their exposure to external carbon pricing schemes, guide their decisions and investments and put a value on their greenhouse gas (GHG) emissions in a way that drives positive change in their business. We target for our managed and industrial properties to reduce their emissions per tonne of production by 4% and 3.5%, respectively, per year by 2030 using 2022 as a base year.

#### Actual price(s) used (Currency /metric ton)

15

#### Variance of price(s) used

A consistent internal carbon price is used across managed and industrial properties in Malaysia.

#### Type of internal carbon price

Internal fee

#### **Impact & implication**

The Internal Carbon Pricing framework is a mechanism for the business divisions to start preparing for the potential transition risks from climate-related issues at RM15 per tonne of CO2e emitted above a threshold level.

# 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**

Other, please specify
Sustainable Procurement Policy

#### % of suppliers by number

100

#### % total procurement spend (direct and indirect)

100

#### % of supplier-related Scope 3 emissions as reported in C6.5

100

#### Rationale for the coverage of your engagement

Sunway Group has adopted the 17 United Nations Sustainable Development Goals (UNSDGs) and is committed to establish a best practice approach to sustainable procurement. In line with the commitment, we have developed a Sustainable Procurement Policy. This policy shall cover all employees of Sunway Group. This Policy is also applicable to the following external parties; including but not limited to Sunway Group's suppliers.

#### Impact of engagement, including measures of success

The supplier selection process will favor suppliers that adopt sustainability practices in their organisation based on the following categories:

- a) Environmental
- i. Minimizes environmental footprint of the goods and services over the life cycle (e.g. choosing products and services that have lower adverse impacts associated with any stage in their production, use or disposal.)
- ii. Environmental footprint includes but not limited to climate change, energy use, water use and biodiversity.
- iii. Provides goods and services that are certified with eco labels.
- iv. Introduces take-back service at the products' end of life.



- b) Social
- i. Provides non-discriminatory, healthy and safe environment to the employees.
- ii. Supports the right to freedom of association and collective bargaining.
- iii. Provides goods and services that are certified with social labels.
- iv. Prohibits slavery and use of forced or child labor across supply chain.
- v. Zero tolerance on supplier violation of Employment Act 19555.

Suppliers are advised to make a declaration if they are aware that their products consist of hazardous components and/or materials (e.g. chemicals, toxic, require special handling of waste)

Beginning in 2021, all suppliers who have completed the supplier registration form are required to declare their current ESG practices via the Supplier Environmental and Social Risk Assessment forms. The information provided will be recorded and kept by all business divisions. We introduced sustainable procurement best practices to our employees and suppliers. Our suppliers are able to refer to the Sustainable Procurement Policy as a guideline to benchmark their ESG practices against industry best practices. All Sunway suppliers must comply with all relevant laws, regulations and standards, and any supplier found to have violated the law will be removed from our supply chain.

#### Comment

# C12.2

(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process?

Yes, suppliers have to meet climate-related requirements, but they are not included in our supplier contracts

# C12.2a

(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

#### Description of this climate related requirement

We are committed to responsible procurement by working with partners who uphold the same high sustainability standards we subscribe to in the areas of ethical conduct, human rights, workplace standards and environmental management. In 2020, Sunway Berhad established a Sustainable Procurement Policy to develop a best practice approach to sustainable procurement.

The supplier selection process will favor suppliers that adopt sustainability practices in their organisation based on the following categories:

- a) Environmental
- i. Minimizes environmental footprint of the goods and services over the life cycle (e.g. choosing products and services that have lower adverse impacts associated with any stage in their production, use or disposal.)
- ii. Environmental footprint includes but not limited to climate change, energy use, water use and biodiversity.
- iii. Provides goods and services that are certified with eco labels.
- iv. Introduces take-back service at the products' end of life.

#### % 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

100

#### Mechanisms for monitoring compliance with this climate-related requirement

Certification

Supplier self-assessment

Grievance mechanism/Whistleblowing hotline

Supplier scorecard or rating

#### Response to supplier non-compliance with this climate-related requirement

Other, please specify

The supplier selection process will favor suppliers that adopt sustainability practices in their organisation



#### 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

Direct or indirect engagement that could 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?

Yes

#### Attach commitment or position statement(s)

Sunway Berhad Sustainability Report 2021, page 24

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# Describe the process(es) your organization has in place to ensure that your engagement activities are consistent with your overall climate change strategy

1) On Track Towards Achieving 2030 Targets

We have set future value goals and 2030 targets to transform our portfolios to low-carbon sustainable cities. The strategic framework includes:

- Decarbonisation
- Resource management
- Pollution management

# 2) Accelerating Decarbonisation

From now until 2030, Sunway's focus is on reducing residual emissions by improving efficiency and using energy substitution. In 2021, we established an Internal Carbon Pricing framework to start preparing for the potential transition risks from climate-related issues at RM15 per tonne of CO2e emitted above a threshold level. This is a mechanism/decision-making tool that can help our business divisions to understand



their exposure to external carbon pricing schemes, guide their decisions and investments and put a value on their greenhouse gas (GHG) emissions in a way that drives positive change in their business. We target for our managed and industrial properties to reduce their emissions per tonne of production by 4% and 3.5%, respectively, per year by 2030 using 2022 as a base year. The implementation includes:

- Internal Carbon Pricing
- Engaging with stakeholders to reduce Scope 3 emissions
- 3) Getting to Net Zero

To get to net zero carbon emissions by 2050, we plan to focus on carbon offset technology. The implementation includes:

- Carbon storage and capture
- Investment in large-scale renewable energy

# 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?

# Focus of policy, law, or regulation that may impact the climate

Mandatory climate-related reporting

Specify the policy, law, or regulation on which your organization is engaging with policy makers

Sustainability Reporting Framework

Policy, law, or regulation geographic coverage

National

Country/region the policy, law, or regulation applies to

Malaysia

Your organization's position on the policy, law, or regulation

Neutral



#### Description of engagement with policy makers

We publish annual sustainability report to meet the mandatory requirements by Bursa Malaysia Main Market Listing Requirements on sustainability reporting for all public listed companies. We ensure that the criteria on climate-related issues by Bursa is addressed in our sustainability reporting. In addition to that, Sunway is one of the companies that have been invited by Bursa to provide feedback on the proposed amendments to the Main Market Listing Requirements in relation to Sustainability Reporting Framework.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

Have you evaluated whether your organization's engagement is aligned with the goals of the Paris Agreement? Yes, we have evaluated, and it is aligned

# C12.4

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

#### **Publication**

In mainstream reports, incorporating the TCFD recommendations

#### **Status**

Complete

#### Attach the document

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#### Page/Section reference

Sunway Berhad Sustainability Report 2021, page 14-45



#### **Content elements**

Governance

Strategy

Risks & opportunities

**Emissions figures** 

**Emission targets** 

Other metrics

#### Comment

# 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	Description of oversight and objectives relating to biodiversity
Rov 1	Yes, both board-level oversight and executive management-level responsibility	Sunway Berhad's sustainability governance is led by the Group's Board Sustainability Committee (BSC). The BSC oversees the Group's sustainability strategy and issues, including ESG targets and performance, progress and scorecard. The BSC meets at least twice a year and is supported by the Group's Sustainability Department and the Jeffrey Sachs Centre (JSC) on Sustainable Development.

# 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	Biodiversity-related public commitments
Row	Yes, we have made public commitments only	Other, please specify
1		Sunway Berhad Biodiversity Policy

# C15.3

# (C15.3) Does your organization assess the impact of its value chain on biodiversity?

	Does your organization assess the impact of its value chain on biodiversity?
Row 1	No, and we do not plan to assess biodiversity-related impacts within the next two years

# C15.4

# (C15.4) 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
Ro	Yes, we are taking actions to progress our biodiversity-related commitments	Land/water management

# C15.5

# (C15.5) 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	No	



# C15.6

(C15.6) 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
Other, please	Content of biodiversity-related	Sunway Berhad Biodiversity Policy (https://www.sunway.com.my/wp-
specify	policies or commitments	content/uploads/2022/04/Sunway-Berhad-Biodiversity-Policy-4Apr2022.pdf)
Corporate website	Biodiversity strategy	<b>(</b> ) 1

<sup>&</sup>lt;sup>1</sup> Sunway-Berhad-Biodiversity-Policy-4Apr2022.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.

No further additional information.

# 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	Manager - Sustainability	Environment/Sustainability manager



# **Submit your response**

In which language are you submitting your response?

English

# Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

#### Please confirm below

I have read and accept the applicable Terms