



**Sentosa Development Corporation** 

Stakeholder Engagement

## **Sustainability Report 2022/2023**

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Heritage

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## **About this Report**

With the publication of its third Sustainability Report, Sentosa Development Corporation (SDC) reaffirms its commitment to sustainability. Sustainability reporting is an important platform for SDC to communicate its management practices and performance pertaining to material Environmental, Social, and Governance (ESG) matters of significance to SDC and its stakeholders.

The Sustainability Report serves as a valuable tool for stakeholders to gain a comprehensive understanding of SDC's policies, approaches, and strategic roadmap. This, in turn, empowers SDC to pursue opportunities within the tourism sector, prepare for a more resilient future, while upholding its core sustainability values as guardian of the Sentosa island precinct.

#### **Reporting Scope**

This report encompasses SDC's portfolio (SDC Group), which comprises two subsidiaries — Sentosa Golf Club (SGC) and Sentosa Cove Resort Management (SCRM), with Mount Faber Leisure Group (MFLG) excluded to align the scope of the report with SDC's GreenGov.SG reporting submissions. The reporting period spans from 1st April 2022 to 31st March 2023 (FY2022/2023), aligning with the scope of operations covered in its annual financial statements. It is essential to view this Sustainability Report in conjunction with the SDC Annual Report, which incorporates the organisation's financial statements. SDC calculates and scopes its emissions in accordance with the Operational Control approach in accordance with the GHG Protocol Corporate Accounting and Reporting Standard, which is the world's most widely used greenhouse gas accounting standards. There are no restatements or significant changes to the previous reporting period's sustainability disclosures.

#### **Reporting Framework**

This report has been prepared with reference to the Global Reporting Initiative (GRI) Standards, which was chosen due to its inclusive development process involving multiple stakeholders, making them one of the most widely adopted frameworks for measuring an organisation's sustainability impact. SDC has also aligned key factors considered material to the corresponding United Nations Sustainable Development Goals (UN SDGs), and incorporated the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD) as a recognised best practice. Additionally, SDC is cognisant of the evolving landscape of the International Sustainability Standards Board (ISSB) standards and its implications.

While the information in this report has not undergone independent assurance, SDC is committed to ensuring the accuracy and compliance of all disclosed data with relevant laws and regulations. SDC remains committed to enhancing and ensuring transparency and accountability in its sustainability reporting endeavours.

#### **Guiding Principles**

As a Singapore government Statutory Board, SDC's strategic plans and the development of Sentosa are guided by the GreenGov.SG framework<sup>1</sup>, along with other Whole-of-Government policies and frameworks.

#### **Feedback Mechanism**

SDC and its subsidiaries are firmly committed to enhancing sustainability initiatives and greatly appreciate the valuable input from all stakeholders regarding this report. The organisation strongly believes that this feedback will play a pivotal role in enhancing performance and disclosures as it continues to advance on its sustainability journey.

For feedback and enquiries, please contact SDC at <a href="mailto:sustainability@sentosa.gov.sg">sustainability@sentosa.gov.sg</a>.

<sup>1</sup> Originally known as the Public Sector Taking the Lead in Environmental Sustainability (PSTLES) initiative, the GreenGov.SG framework is an integral component of the Singapore Green Plan 2030, a nationwide initiative aimed at advancing sustainable development in Singapore. The GreenGov.SG framework empowers the public sector to take a proactive role in driving sustainable practices across the country.

### Introduction

As a leading tourist destination, SDC actively embraces emerging trends in sustainable travel that reflect a growing demand for environmentally-friendly and community-conscious tourism experiences. Such trends include the rise of eco-conscious travellers, who choose sustainable accommodations and activities that benefit local communities and the environment; slow travellers, who prioritise immersive experiences in fewer destinations; regenerative travellers, who seek to leave a positive impact on destinations and communities; community-based travellers, who emphasise fostering authentic interactions with locals. The widespread adoption of sustainable transportation options, green certifications, and responsible diving practices further highlight the tourism industry's efforts towards ethical and responsible travel globally.

SDC is similarly committed to pioneering sustainable tourism practices on Sentosa Island, Singapore. This Sustainability Report outlines SDC's transformative approach to sustainable tourism, reflecting its progress from vision to action. With a focus on the Global Sustainable Tourism Council (GSTC) criteria, SDC has developed a comprehensive framework and strategic roadmap that are further elaborated through three key chapters of this report: Towards an Environmentally Sustainable Sentosa, Towards a Nature- and Heritage-Rich Sentosa, and Towards a Sustainable and Socially-inclusive Sentosa: as One Sentosa and Beyond.



# Joint Chairman & Chief Executive Officer Message



As a 500-hectare island resort that comprises numerous businesses, as well as various natural and heritage assets, we believe that sustainable tourism is not just our responsibility to champion, but an opportunity to create a lasting positive impact on our guests, environment, and economy.

This is our third sustainability report since we announced our Sustainable Sentosa framework in 2021, and we take great pride in sharing our sustainability journey for the financial year 2022-2023. As we navigate the dynamic landscape of the tourism industry, our strategies are firmly rooted in achieving long-term sustainability and aligning with the prestigious GSTC-Destination Criteria. Sustainability has been at the core of our endeavours, guiding every decision and action we take, and this commitment is embedded throughout our organisation, from board, to management, to employees. In 2022, we were conferred the Global Sustainable Tourism Council -For Destinations (GSTC-D) certificate, recognising our dedication to sustainable tourism. This accolade stands as a testament to our pioneering efforts, reflecting the collective dedication of every team member at SDC. As guests seek meaningful and ecoconscious experiences, SDC has embraced innovative technologies and sustainable practices, transforming the way we operate and creating a more enriching and responsible environment for guests to enjoy.

The theme for this year's report "From Vision to Action: Sentosa's Transformative Journey Towards Sustainable Tourism" accentuates the significant changes we have made embodying our dedication to sustainable tourism. This theme reflects our progression from envisioning a sustainable future for Sentosa Island to implementing tangible and influential measures to realise that vision.

#### **Towards an Environmentally Sustainable Sentosa**

In light of the climate crisis, SDC understands the profound impact that tourism can have on our

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Sustainability has been at the core of our endeavours, guiding every decision and action we take, and this commitment is embedded throughout our organisation, from board, to management, to employees.

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environment and the importance of contributing to a greener future. Aligned with our vision, we embrace a transformative approach to sustainable tourism and are dedicated to reducing our carbon footprint through energy-efficient practices, waste minimisation, and sustainable business operations. Central to our decarbonisation approach is working with our island partners as One Sentosa, through our Sentosa Carbon Neutral Network (SCNN). Started with 17 founding members in 2021, today the SCNN consists of 25 members that in aggregate covers up to 95% of the island carbon footprint, working together to build a Sustainable Sentosa. For instance, we have collaborated with Resorts World Sentosa (RWS) to embark on a large-scale deployment of photovoltaic cells to harness solar energy across Sentosa island's premises, with an aggregated impact of 3.09 MWp of renewable energy generation across Sentosa. This initiative reaffirms the Sentosa's community's commitment to becoming a carbon neutral destination by 2030. Our commitment goes beyond words, as we work with our Island Partners to craft and execute sustainable initiatives that promote decarbonisation and environmental preservation efforts. We are heartened that various hotels, attractions and food and beverage (F&B) operators who are part of the SCNN have pledged their commitment to end single-use plastic bottled water by the end of 2023.

#### **Towards a Nature- and Heritage-Rich Sentosa**

As a statutory board that is responsible for managing Sentosa, we strive to restore historical landmarks. celebrate local traditions, and develop educational programs that honour the island's natural and cultural significance. We believe in creating a truly immersive and meaningful experience for all who step foot on Sentosa Island through our commitment to preserving and showcasing its unique natural and heritage assets. In the past year, we launched our first foray into ecotourism with the Tiny Away Escape at Lazarus and collaborated with many organisations on citizen science and wildlife conservation. Following the gazetting of Fort Siloso as a national monument in 2022, in 2023 we collaborated with National Heritage Board (NHB) to open Fort Connaught Discovery Tours to the public as part of NHB's Battle for Singapore campaign. Through such strategic initiatives aligned with the national and global movement and globally recognised GSTC sustainability criteria for the tourism industry, we aim to safeguard Sentosa's unique natural and heritage assets. Together, we endeavour to shape Sentosa into a world-class destination that cherishes its past while building a legacy for future generations to cherish.

## Towards a Sustainable and Socially-inclusive Sentosa: as One Sentosa and Beyond

At SDC, we firmly believe that our employees and stakeholders are at the heart of our success. We promote a harmonious work culture and ensure "

We believe in creating a truly immersive and meaningful experience for all who step foot on Sentosa Island through our commitment to preserving and showcasing its unique natural and heritage assets.

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a secure working environment for our workforce. Throughout the year, we have dedicated extensive hours to training our employees, empowering them to be well-prepared for the future. During the Reporting Period, the average training hours per employee at SDC amounted to 24.3 hours. Additionally, our commitment to social responsibility drives us to engage with the local community, empowering them with sustainable employment opportunities and supporting social causes that enhance their well-being. By fostering inclusivity and actively involving the community in our decision-making processes, we aim to build a stronger, more resilient Sentosa together. In 2022. SDC celebrated Sentosa's Golden Jubilee with the main theme of remembering Sentosa's origins and giving back to the greater community. SDC organised a two-day Charity Golf event and raised \$3.9 million in support of the President's Challenge and Community Chest Singapore, in collaboration with Community Chest Singapore and Sentosa Golf Club, SDC will also be working together with our Island Partners as One Sentosa to enhance inclusivity, with opportunities for the less privileged and persons with disabilities to enjoy the island, and even become a part of the Sentosa family.



As we venture into the next phase of our transformative journey, we wholeheartedly embrace our Vision of becoming an internationally recognised resort island that offers an inspiring sustainable development model. Our dedication to sustainability not only advances Singapore's national sustainability and climate change objectives but also forms an integral connection to our aspiration of becoming an exemplar of sustainable tourism on a global scale. Looking ahead, we remain resolute in pushing boundaries and incorporating sustainable practices into every aspect of our operations.

Our heartfelt gratitude goes out to all our stakeholders for their unwavering support and shared passion for a sustainable future. Together, we shall forge ahead, from vision to action, to shape a brighter, more sustainable future for Sentosa and beyond.

## FY2022/2023 Sustainability Highlights

## **Goal 1:**Carbon Neutral Urban Precinct by 2030



#### Experiencing first fruits of reducing our Environmental Footprint

- Energy Installed new renewable energy capacity of 1.69 MWp
- Waste Reduced landfill contribution by increasing recycling and composting efforts by 4 times
- On track to electrify all public transport by 2025, and make all SDC carparks EV-charging-enabled by 2030



## Increasing Momentum of Decarbonisation across Island-wide Ecosystem

- Increased Sentosa Carbon Neutral Network (SCNN) by 50%, covering 95% of the island's carbon footprint
- Sentosa Golf Club becomes World's First Carbon-Neutral Golf Course

## **Goal 2:**Globally-Recognised Sustainable Destination



## Recognised Internationally for Sustainable Tourism Efforts

- First Destination in Asia to be certified to GSTC Destination criteria
- Consecutively recognised in Green Destinations Top 100



#### **Evolving Island-wide Sustainable Practice**

- Launched island-wide Sentosa Disposables Policy & Playbook, eliminating 2M single-use plastic bottles annually
- Championed SG Farm-to-Table local foodsourcing label with >50% of inaugural recipients operating in Sentosa

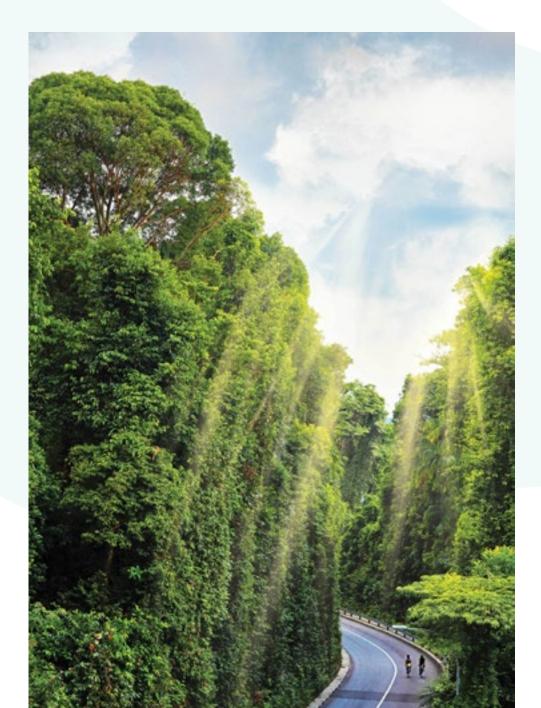


## **Expanded Unique & Sustainable Offerings for Guests**

- Explorers of Sentosa interactive, giant sculptures to celebrate turning trash to treasure
- Low-footprint activations and leisure experiences on Southern Islands to advocate for wellness and sustainability



## **Sustainability Goals**



SDC envisions Sentosa as a beacon of sustainable tourism, where ecological balance, community engagement, and heritage preservation thrive in harmony. The organisation's vision is grounded in its Sustainable Sentosa Framework and Strategic Roadmap, which serve as a comprehensive guide towards a more sustainable future. The framework and roadmap provide a clear path for SDC, outlining nine key sustainability focus areas that shape the organisation's approach to sustainable practices. By adhering to these guidelines, SDC remains steadfast in its commitment to creating a greener, more responsible, and thriving Sentosa Island.

Sentosa has consolidated its sustainability ambitions into two overarching goals. These goals are aligned with strategic milestones and actionable initiatives that will contribute towards achieving SDC's vision of transforming into the world's best loved leisure and lifestyle resort destination. With these goals in mind, SDC strives to operate in a manner that encompasses good governance, environmental sustainability, social responsibility, and the preservation of Sentosa's heritage.



#### **Goal 1: Carbon Neutrality by 2030**

Climate change poses an existential risk to many island destinations, including Sentosa and Singapore. Sentosa mirrors Singapore in many ways and shares mutual concerns in confronting climate change effects, encompassing measures like safeguarding coastlines against increasing sea levels and climate mitigation. Sentosa aims to collaborate with its stakeholders to implement new initiatives and advance sustainability across the island, striving for eventual carbon neutrality in the long run.



## **Goal 2: Become a Globally Recognised, Certified Sustainable Tourism Destination**

Guests are increasingly demanding sustainable and responsible tourism offerings<sup>2</sup>. As such, ensuring that Sentosa is a sustainable destination is essential — from social, cultural, environmental, and business perspectives. The island boasts a range of sustainable offerings ranging from specially designed sustainable zones, to offerings such as green Meetings, Incentives, Conferences, and Exhibitions (MICE) events, farm-to-table offerings, and ecocentric attractions experiences.

 $<sup>^2</sup>$  Google data shows a 70% rise in number of travellers seeking sustainable travel options in 2021, and Booking.com found that 61% of travellers stated that the pandemic has made them want to travel more sustainably in the future.

## Sustainable Sentosa Framework and Strategic Roadmap

The Sustainable Sentosa Framework, which is one of SDC's core strategic thrusts, was designed in line with national sustainability objectives to address climate-related risks, and promote sustainability across SDC and its subsidiaries' operations. SDC strategically and effectively embed its two goals across its operations, by prioritising three areas: (1) Championing Sustainable Travel and Leisure Activities, (2) Decarbonisation and Closing the Waste Loop, and (3) Integrative Planning, Design and Development of Master Plan Zones.

### **Championing Sustainable Travel and Leisure Activities**

As a well-loved and globally recognised destination that has attracted 19 million guests as well as multiple MICE events annually before COVID-19 hit, SDC will champion sustainable outcomes through sustainable guest experiences and touchpoints, such as sustainable MICE or event offerings with very low or net-zero carbon footprints.

#### **Sustainable Tourism**

Delivering the best-in-class guest experience in a sustainable manner and influencing sustainable actions through products, services, and experiences

#### **Culture and Heritage**

Safeguarding, strengthening, and showcasing Sentosa's cultural heritage

#### **Social Inclusivity**

Enabling an inclusive society through Corporate Social Responsibility (CSR) initiatives and corporate volunteerism

#### **Decarbonisation and Closing the Waste Loop**

SDC will accelerate the journey of island businesses towards carbon neutrality, through energy-efficient design and technology as well as carbon abatement, and implementing a roadmap towards carbon neutrality that is in line with, or ahead of, national goals.

#### **Resource Management**

Closing the waste loop through test-bedding innovations, education and partnering with stakeholders to influence climate-friendly behaviours

#### **Carbon Management**

Achieving carbon neutrality through sustainable design, sustainable facilities management and retrofitting for resource efficiency (e.g. energy and water), as well as decarbonisation technologies and solutions

#### **Green Transport**

Ensuring sustainable modes of transportation throughout the island and reducing environmental pollution by tapping on the use of electric vehicles

## Integrative Planning, Design and Development of Master Plan Zones

Through the Sentosa-Brani Master Plan, SDC will design and develop the islands sustainably, deploying precinct-level infrastructure that will reduce their carbon emissions, close the waste loop and protect the coastline against climate change impacts, while being sensitive to the environment and biodiversity. These efforts will also set the stage for the way precincts are further designed and operated in future.

#### **Sustainable Sites**

Enhancing the biophilic design of the built environment and adopting a sustainable approach towards site design and development

#### **Green Buildings**

Greening existing and new buildings by tapping on new innovations, and stewarding the implementation of sustainability goals for new built environment

#### **Ecology and Environment**

Ensuring the long-term sustainability of ecological habitats on Sentosa and preserving Sentosa's rich biodiversity and the natural environment

#### **Delivering Commitments**

- Implement a carbon reduction strategy to achieve neutrality by 2030
- Commit to sustainable development practices in the Sentosa-Brani Master Plan

#### **Engaging Island Sustainability Community**

- Develop an Island Business Community committed to sustainable outcomes
- Foster relationships with larger sustainable community of influencers and stakeholders

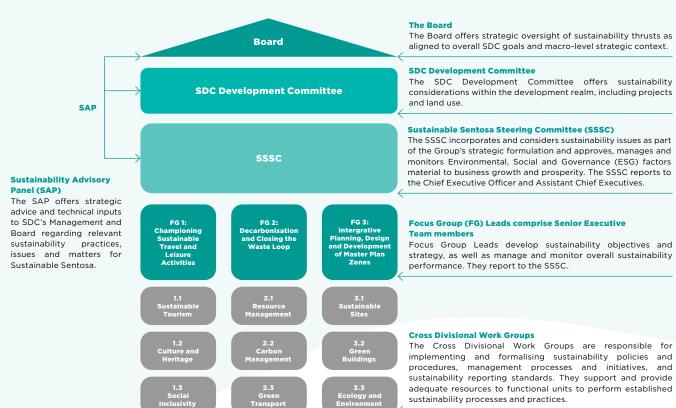
#### **Building Competencies**

- Developing depth in SDC's expertise on sustainability verticals
- Participate in platforms for sustainability collaborations with research institutes, technology companies, and agencies

### **Governance Structure**

An effective and robust governance structure is integral to SDC's sustainability journey, by ensuring the integration of sustainability principles into SDC's management of the island, thereby fostering long-term value for stakeholders.

The SDC Board and Development Committee maintain strategic oversight and advisory of SDC's sustainability matters including environmental risks and opportunities, while the Sustainable Sentosa Steering Committee (SSSC) functions as a strategy development platform, orchestrating sustainability strategies and streamlining interdisciplinary sustainability work, to realise its two long-term ambitions through actions aligned with the Sustainable Sentosa Framework. Chaired by SDC's Chief Executive Officer, the SSSC comprises three Focus Groups (FG) led by SDC's Divisional Directors. With the strategic level guidance and inputs of the FG leads, SSSC members of cross-divisional Work Groups (WG) implement and formalise the sustainability policies and initiatives, while also providing operational guidance to the rest of the organisation.



#### **Sustainability Advisory Panel**

The Sustainability Advisory Panel (SAP) provides strategic advice and technical inputs to SDC's Board and Management. Meeting at least twice a year, the SAP advises SDC Board and Management on the sustainability practices, issues and matters of relevance to the vision, ambitions and focus areas of Sustainable Sentosa.

Role in SAP	Current Member	
Chairman, SDC	Mr Bob Tan	
Chief Executive Officer (CEO), SDC	Ms Thien Kwee Eng CEO, SDC	
	Professor Koh Lian Pin Director, Centre for Nature- based Climate Solutions, National University of Singapore (NUS)	
Independent members	Professor Tai Lee Siang Head of Pillar, Architecture and Sustainable Design, Singapore University of Technology and Design (SUTD)	
	Mr Achal Agarwal Ex-Chairman, WWF-Singapore	
Development Committee (DC) member	Ms Geraldine Low Deputy Secretary (Development), Ministry of National Development	

### **Material Topics**

Annually, SDC conducts a review of the ESG material topics with its key stakeholder groups, to ensure that the organisation's ESG strategy continues to be aligned with stakeholders' priorities, and that SDC and its sustainability efforts remain relevant.

This year, the refreshment of topics was primarily conducted via an online survey which requested stakeholder respondents to rate the importance of ESG topics based on how much emphasis they think SDC should place on them, and invited stakeholders to provide any additional comments regarding the material topics. For the first time, SDC adopted the principle of double materiality as defined by the GRI Standards 2021 and laid out by the Guidelines on Non-Financial Reporting: Supplement on Reporting Climate-related Information<sup>3</sup> formally proposed by the European Commission. The assessment considered two perspectives: the inward impact on SDC's business operation, and the outward impact on the environment and society (as informed by stakeholders).

Highly Important **Environment and Society** Workplace Guest health health and safety and safety Energy and Greenhouse gas Water emissions management Social Talent Waste Environmental o management management Outward Impact Biodiversity Sustainable Local supply chain communities mportant Heritage conservation Important Highly Important

Inward Impact on SDC's Business Operation

SDC adopted a four-step approach in assessing material topics:



#### **Step 1: Research and review**

Desktop research, peer benchmarking, and stakeholder engagement to identify the universe of material issues to inform decisions about best practices.



#### **Step 2: Prioritise**

The list of material ESG topics was ranked and prioritised to produce a materiality matrix that takes into account both financial materiality and impact materiality, based on inputs from stakeholder surveys.



#### Step 3: Validate

SDC Sustainability team carefully reviewed and validated the materiality matrix resulting from Step 2, ensuring that the prioritised material topics remain relevant and pertinent to SDC.



#### **Step 4: Endorse**

SDC Management provides their approval and endorses the material ESG topics.

<sup>&</sup>lt;sup>3</sup> Guidelines on Non-Financial Reporting: Supplement on Reporting Climate-related Information: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52019XC0620(01)

## **Stakeholder Engagement**

SDC recognises the vital role of stakeholders in shaping Sentosa as a sustainable leisure destination. Engaging with stakeholders is essential to understanding their needs and concerns, and in shaping SDC's sustainable practices.

In FY2022/2023, SDC conducted an engagement survey and interviews to better understand our stakeholders, with the following tables providing an overview of our findings.

Key Stakeholder Groups	Key Engagement Methods & Frequency	Key Interest Areas & Material Topics	SDC's Responses
SDC Management	<ul> <li>Meetings with management</li> <li>Quarterly SSSC meetings</li> <li>Directors' meetings twice a month</li> </ul>	Key Interest Areas: Meeting SDC's internal aims and goals, as well as resolving any issues or roadblocks  Material Topics: Energy and Greenhouse Gas Emissions Water Management Waste Management Workplace Health and Safety Talent Management Local Communities Guest Health and Safety Sustainable Supply Chain	<ul> <li>Sustainability is a top priority for SDC's management. SDC integrated sustainability principles into its core business strategy and initiatives across divisions.</li> <li>SDC's goal is to drive long-term environmental, social, and economic value while ensuring the preservation of Sentosa Island's unique natural and cultural heritage.</li> </ul>
SDC Staff	<ul> <li>Electronic Direct Mailer</li> <li>CEO and staff engagement sessions</li> <li>Quarterly townhall</li> </ul>	Key Interest Areas: Working environment and training  Material Topics:  • Talent Management  • Workplace Health and Safety	<ul> <li>SDC is committed to fostering a culture of sustainability among its staff. SDC has actively engaged employees in sustainability initiatives and seek their inputs.</li> <li>SDC has provided training and development opportunities to empower staff to champion eco-friendly practices within and beyond the workplace.</li> </ul>
Guests	<ul> <li>Monthly guest satisfaction survey</li> <li>Online feedback channel</li> </ul>	Key Interest Areas : Service standards  Material Topic: • Guest Health and Safety	<ul> <li>SDC is committed to providing high-quality service and sustainable experiences, while prioritising guest security, health and safety; thus consistently achieving top quartile results in our guest surveys.</li> <li>SDC has implemented eco-friendly practices across our guest journey, and incorporated sustainability-related questions in our surveys. Results show that guests generally have positive perceptions of our sustainability efforts.</li> </ul>

## **Stakeholder Engagement**

Key Stakeholder Groups	Key Engagement Methods & Frequency	Key Interest Areas & Material Topics	SDC's Responses
Island Partners	<ul> <li>Bi-annual SCNN forums and bulletin</li> <li>Meetings</li> <li>Partnerships</li> <li>Dialogues</li> </ul>	Key Interest Areas: Funding for sustainability initiatives, and impact on business operations  Material Topics: • Energy and Greenhouse Gas Emissions • Water Management • Waste Management • Biodiversity • Heritage Conservation	<ul> <li>SDC recognises the importance of collaboration with its island partners. SDC has worked closely with them to develop joint sustainable practices and initiatives. Together, SDC will create a positive impact on the environment, society, and local economy, setting an example for sustainable business practices.</li> </ul>
Government Agencies	<ul> <li>Quarterly Green Economy Working Group (GEWG) forums</li> <li>Meetings</li> <li>Partnerships</li> </ul>	Key Interest Areas: Alignment with the national agenda, including the Singapore Green Plan 2030 and GreenGov.SG; and meeting Whole-of Government targets  Material Topics: Energy and Greenhouse Gas Emissions Water Management Waste Management Biodiversity Heritage Conservation Sustainable Supply Chain	<ul> <li>SDC is fully committed to supporting the Singapore Green Plan 2030 and GreenGov.SG initiatives. SDC's sustainability roadmap aligns with the national agenda, incorporating the key pillars and priorities outlined in these plans. SDC is also committed to actively collaborating with relevant government agencies to achieve national sustainability targets.</li> </ul>
Non-Government Organisations (NGO)	<ul> <li>Meetings and partnerships based on projects with the respective NGOs</li> </ul>	Key Interest Areas: Meeting NGO aims and objectives  Material Topics: Biodiversity Heritage Conservation Local Communities	SDC collaborated with NGOs on projects that contribute to the conservation of Sentosa's natural ecosystems and promote community well-being.

## **Stakeholder Engagement**

Key Stakeholder Groups	Key Engagement Methods & Frequency	Key Interest Areas & Material Topics	SDC's Responses
Nature Group	Meetings and dialogues as and when required	Key Interest Areas: Conservation of nature areas and building public awareness, while ensuring public safety at these nature areas  Material Topic:  • Biodiversity	<ul> <li>Preservation of Sentosa's biodiversity is a shared priority. SDC has engaged with nature groups and experts to collaborate on the protection of the island's unique flora and fauna.</li> <li>Joint initiatives will be pursued to promote habitat restoration and biodiversity conservation for the benefit of present and future generations.</li> </ul>
Suppliers	Meetings as and when required	Key Interest Areas: Impact on business operations  Material Topic: • Sustainable Supply Chain	<ul> <li>SDC specified mandatory sustainability requirements in key tenders and has engaged with suppliers to promote sustainable practices to influence positive change in its value chain.</li> <li>SDC engaged with emerging suppliers to source for innovative sustainability solutions to test-bed on Sentosa.</li> </ul>
Local Communities	Meetings and dialogues as and when required	Key Interest Areas: Conservation of nature areas and sustainability efforts  Material Topics: Energy and Greenhouse Gas Emissions Water Management Waste Management Guest Health and Safety Sustainable Supply Chain	SDC actively communicates with local communities to ensure that its conservation strategies are in harmony and do not conflict with their interests.
Industry Associations	Dialogues and partnerships	Key Interest Areas: Impact on business operations and sustainability efforts  Material Topics:  • Energy and Greenhouse Gas Emissions  • Water Management  • Waste Management  • Sustainable Supply Chain	<ul> <li>SDC actively collaborates with industry associations in a cooperative manner, to strategise and implement environmentally conscious initiatives that align with the industry's concerns about environmental impact reduction and heritage conservation.</li> </ul>



## From Vision to Action: Sentosa's Transformative Journey Towards Sustainable Tourism



Since the 2021 announcement of the vision of a Sustainable Sentosa, SDC and its island partners have collectively made significant progress in their sustainability journey. Upon announcing the ambitious goals to be carbon neutral by 2030 and to become a globally recognised, certified sustainable tourism destination, SDC conducted an island-wide study to baseline its carbon profile, and identified eight decarbonisation levers such as solarisation, energy efficiency, green transport, and waste management.

Internally, SDC set up the Sustainable Sentosa Steering Committee (SSSC) that leads and implement sustainability initiatives across the organisation in all three focus areas outlined in the Sustainable Sentosa framework. The overall governance was further strengthened by setting up a Sustainability Advisory Panel (SAP) consisting of several prominent external experts to provide strategic and technical advice to SDC board and management on all sustainability matters. Like many responsible organisations, SDC published its first sustainability report in 2021 to disclose its progress and was among one of the first government agencies to do so in Singapore.

Externally, SDC and 17 island partners co-founded the Sentosa Carbon Neutral Network (SCNN), which has since grown to 25 member organisations covering 95% of the island's carbon footprint. The SCNN has become the key collaboration platform to galvanise sustainability actions on the island as One Sentosa, such as the implementation of Sentosa Disposables Policy, Farm-to-Table local food sourcing label, Explorers of Sentosa and Sentosa Cares Week.

In the past two years, Sentosa made progress in almost all focus areas outlined in the Sustainable Sentosa framework, including SDC being conferred the prestigious GSTC-D certification — the global sustainable tourism standard that is widely accepted as the most rigorous in the industry. In 2023, the Sentosa Golf Club (SGC) became the world's first carbon-neutral golf club and the first Sentosa business to reach this milestone. SDC has also won many government and industry accolades for its sustainability efforts, including Green Destinations Top 100 Stories for 2021 and 2022.



## From Vision to Action: Sentosa's Transformative Journey Towards Sustainable Tourism



## **Goal 1: Achieve Carbon Neutrality by 2030**

## **Established Sustainable Sentosa Vision and Strategic Roadmap**

- Established an island carbon profile baseline study
- Established partnerships with various stakeholders including Temasek, NUS and NTU
- Sentosa Golf Club was awarded the World's Best Eco-friendly Golf Facility at the World Golf Awards 2020

## Embarked on journey towards Decarbonization and Certification

- Sentosa Carbon Neutral Network formed
- · Electric bus trials commenced
- SDC and Resorts World Sentosa (RWS) announced solar project of 3.09 megawatt-peak (MWp) across 18 sites

## **Progressive Delivery of Sustainability Initiatives**

- SCNN grew to 25 members
- SGC became world's first carbon neutral golf club
- EV chargers installed across Sentosa
- Intra-island bus service 'A' electrified

#### Goal 2: Become a Globally Recognised, Certified Sustainable Tourism Destination

- Green Destination's 2021 Top 100 Destination Sustainability Stories
- Launched SentoSights signature nature and heritage themed guided tours
- Sentosa certified in accordance with the Global Sustainable Tourism Council (GSTC) Destination Criteria
- Launched Sentosa Disposables Policy & Playbook
- Piloted two Green MICE events
- Explorers of Sentosa giant sculptures made of upcycled materials
- Light-touch activations and experiences on Southern Islands
- Offerings with SG Farm-to-Table local food-sourcing label

## **Sentosa's Transformative Journey Towards Sustainable Tourism**

## **Sustainability Vision**

To position Sentosa as an internationally recognised resort island that offers an inspiring sustainable development model that enables and furthers Singapore's national sustainability and climate change outcomes.

Goal 1: Achieve Carbon Neutrality by 2030

**Goal 2:** Become a Globally Recognised, Certified Sustainable Tourism Destination

## **Sustainability Actions**

**Chapter 1:** Towards an Environmentally Sustainable Sentosa

Leverage on innovations to accelerate towards carbon neutrality and sustain resources

## Report Topics (With reference to GRI standards)

- Climate Risk Assessment
- Greenhouse Gas Emissions and Energy
- Water Management
- Waste Management
- Sustainable Supply Chain

**Chapter 2:** Towards a Natureand Heritage-Rich Sentosa

Protect and preserve Sentosa's rich natural environment, heritage and historical significance through conservation and education

- Nature and Biodiversity
- Heritage

**Chapter 3:** Towards a Sustainable and Socially-Inclusive Sentosa:
As One Sentosa and Beyond

Create meaningful relationships with stakeholders to drive sustainability across the value chain

- Cultivating a Culture of Sustainability
- Strengthening Partnerships
- Championing Transformation
- Sentosa's Commitment to Responsible Social Practices
  - Guest Health and Safety
  - Workplace Health and Safety
  - Talent Management
- Giving Back to Local Communities

Alignment with UN SDGs













D(b) Resource management D(c) Management of waste and emissions









- C(a) Protecting cultural heritage
- C(b) Visiting cultural sites
- D(a) Conservation of natural heritage







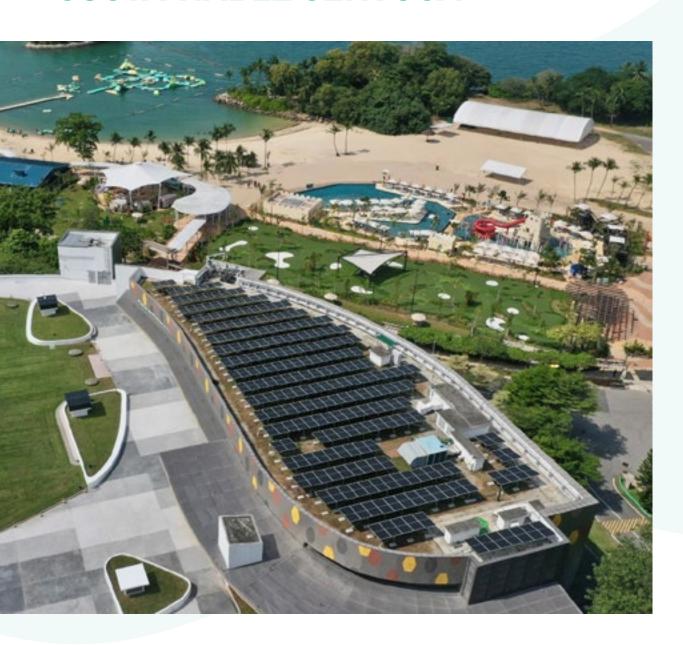






A(c) Managing pressure and change B(a)Delivering local economic benefits B(b) Social wellbeing and impacts

## TOWARDS AN ENVIRONMENTALLY SUSTAINABLE SENTOSA



This chapter encapsulates Sentosa's steadfast journey towards an environmentally sustainable future, anchored in the overarching theme of "Towards an Environmentally Sustainable Sentosa".

SDC's efforts span a spectrum of dimensions, from the establishment of coastal protection measures to implementing sustainable supply chain initiatives. SDC recognises that embracing sustainable practices is not merely the right thing to do; it is a strategic imperative for the long-term prosperity of the society and the environment. By working hand in hand with its stakeholders. SDC can drive meaningful change and create a shared vision of a greener, more resilient Sentosa for generations to come. The journey of decarbonisation is an arduous one with high stakes but SDC has persisted in pushing the limits. Some market segments, for instance, require more time to mature as an ecosystem and navigate supply-demand imbalances — such as commercial electric vehicles and local renewable energy certificates. Sometimes a smaller step has to be taken, to avoid not taking any steps at all, but in doing so, risk greenwashing. While these issues did not deter SDC from pursuing our sustainability goals, SDC is increasingly cognisant of the various trade-offs that needs to be made for key sustainability decisions.

In this chapter, SDC focuses on five essential areas that play a pivotal role in its sustainability efforts.

- Sentosa's Climate Risk Assessment
- Greenhouse Gas Emissions and Energy
- Water Management
- Waste Management
- Sustainable Supply Chain

### Sentosa's Climate Risk Assessment

SDC updates its climate risk assessments annually, incorporating climate-related risk appraisal and following the best practices outlined in the TCFD framework. This process involves comprehensive background research, ongoing risk monitoring, and active engagement with stakeholders to identify and address climate risks effectively. To carry out the assessment, SDC employs publicly available technologies, research-based greenhouse gas (GHG) concentration trajectories, and internal analysis.

Based on projections from the Centre for Climate Research Singapore, it is anticipated that Singapore could face a rise in daily mean temperatures of 1.4°C to 4.6°C by the end of this century, along with more intense and frequent heavy rainfall events and a mean sea level rise of up to one meter by 2100.

Due to the significant potential impact of climate change on Sentosa, safeguarding businesses, livelihoods, and biodiversity on the island is of paramount importance. Urgent action is imperative to enable Sentosa to adapt to the challenges presented by the changing climate and to implement effective mitigation strategies, ensuring the preservation of its identity as an island of discovery for all. As a result, Sentosa has taken the following proactive measures to address the risks posed by climate change:

#### **Potential Impacts of Climate Change**

#### Sea-level rise

The possibility of sea-level rise poses a heightened risk of flooding and seawater intrusion in Sentosa's low-lying beach areas, which could lead to inundation of vegetation, housing, and tourist facilities. As a result, this disruption could adversely affect businesses and residents on the island.

#### **Measures to Address Climate-related Risks**



#### **Coastal Protection Measures**

As part of Sentosa's future planning and in alignment with the Public Utilities Board's (PUB) nationwide coastal protection initiative, SDC has been collaborating with PUB to devise effective coastal protection measures, which are also being integrated into the broader development plan for the Greater Southern Waterfront.

Sentosa has partnered with the National University of Singapore (NUS) to explore nature-based hybrid solutions, including soft approaches to coastline protection, reducing reliance on built-up structures, and preserving the island's natural beauty. The collaboration includes research on ecological habitat restoration, augmentation measures, and targeted species recovery, such as research on seagrass. The collaboration also encompasses educational and outreach initiatives to raise public awareness about nature-based climate solutions. Workshops and educational materials will be developed for shared use, including NUS courses, eco-tourism, and school programs.

In addition to its ecological importance, Sentosa's biodiversity has provided valuable insights into sea-level rise in Southeast Asia. Through a collaboration with the Earth Observatory of Singapore at Nanyang Technological University (NTU), researchers have studied coral microatolls off the coast of Sentosa. The growth patterns of these microatolls at varying sea levels have enabled researchers to estimate sea-level variations in Singapore over the past 7,000 years. This data serves as a valuable resource for further research on sea-level rise and its implications.

## Sentosa's Climate Risk Assessment

#### **Potential Impacts of Climate Change**

#### **Severe weather events**

The increase in both the frequency and intensity of severe weather events, such as thunderstorms and dry spells, poses challenges to outdoor activities and can result in alterations to the natural ecosystems on the island.

#### **Measures to Address Climate-related Risks**



#### **Slope Stabilisation**

The occurrence of rainfall-induced landslides is becoming more prevalent in Singapore, primarily due to the noticeable increase in rainfall frequency, duration, and intensity attributed to climate change. In response to this challenge, SDC is actively undertaking slope stabilisation efforts to address the slope erosions. Furthermore, SDC is commissioning an engineering study to identify and recommend effective measures for safeguarding the slopes at Tanjong Rimau.



#### **Coastal-Inland Flood Model (CIFM)**

SDC is collaborating with PUB's Coastal Protection department to integrate Sentosa's catchment into the national Coastal-Inland Flood Model (CIFM). This sophisticated model allows for a comprehensive assessment of flood risks, considering various factors such as flood duration and depth under different climate change scenarios over an extended period.



#### **Water Management**

Rainwater harvesting serves as a vital strategy to optimise the utilisation of natural resources and promote water conservation. Presently, Sentosa implements rainwater collection at ponds, where a substantial volume of about 65 megalitres was gathered in FY2022/2023, primarily dedicated to landscape irrigation purposes. In line with future developments, like the, rainwater harvesting will be an integral consideration from the outset of the project. Moreover, as part of the precinct redevelopment within the comprehensive Sentosa-Brani Master Plan, further opportunities for rainwater harvesting will be explored and incorporated.



The rising temperatures associated with climate change could exacerbate the urban heat island effect, leading to heightened thermal discomfort among guests and potentially discouraging outdoor activities.



#### **Integrated Infrastructure Planning and Development**

In pursuit of long-term sustainability and resilience, Sentosa's infrastructure planning will take into careful consideration future climate conditions, including the use of greenery to improve thermal comfort. This process will be approached systematically, addressing both the individual precinct level and the broader whole-of-Sentosa level. To achieve this, a precinct planning feasibility study will be conducted to formulate comprehensive and sustainable development plans. These plans will focus on creating sites that integrate blue-green infrastructure, including Sustainable Urban Drainage Systems (SUDS), and incorporate sustainable mobility solutions to support the island's environmental objectives.

To achieve carbon neutrality by 2030, SDC is engaged in a wide range of efforts throughout Sentosa Island to reduce its energy intensity and greenhouse gas emissions, and develop Sentosa into a sustainable and environmentally conscious leisure destination.

SDC also monitors and tracks Sentosa's carbon emissions, enabling the organisation to make informed decisions. SDC will continue to pilot and adopt innovative solutions to improve the sustainability of Sentosa Island's operations.



#### **Achievements in FY2022/2023**

- SCNN members collectively account for about 95% of the island's carbon profile a 2% reduction from last year's 97% of island-wide emissions.
- GreenGov.SG: Energy Utilisation Index (EUI)<sup>4</sup> is 193.82.



#### Targets up to 2030

- Carbon Neutrality by 2030
- Peak carbon emissions around 2025
- GreenGov.SG: Improve Energy Utilisation Index (EUI)<sup>4</sup> by 10% by 2030 from the FY2018/2019 to FY2020/2021 baseline average levels.

#### Carbon Profile<sup>5,6</sup>

Sentosa's island-wide greenhouse gas emissions, inclusive of Island Partners', is at 162,276 tonnes of CO<sub>2</sub>e for FY2022/2023. This is an increase of about 15.9% from the 140,000 tonnes CO<sub>2</sub>e in FY2021/2022, and can be attributed to the recovery of the tourism industry and ongoing development. This is expected to increase as tourism recovery progresses and projects to reduce Sentosa's carbon footprint (e.g. solarisation) are still amid completion. A predominant portion of these emissions falls within Scope 2, encompassing purchased electricity utilised for powering buildings such as offices, hotels, transportation, attractions, F&B outlets, and common areas. It is however, encouraging to note SCNN members becoming more carbon efficient, contributing to a smaller percentage of the island's carbon profile.

Out of the island's total emissions, SDC Group's greenhouse gas emission was estimated to be 11,696 tonnes of  $\rm CO_2e-about~7\%$  of the island's carbon profile. To ultimately achieve carbon neutrality by 2030, SDC remains committed to monitoring its emissions, and expanding its efforts and initiatives to gain a clearer picture of its emissions and reduce energy consumption and greenhouse gas emissions throughout its operations.

- <sup>5</sup> The estimated data for carbon profile has been collated from SDC, SGC, SCRM. MFLG and Island Partners.
- $^{\rm 6}\,$  Carbon profiling was conducted with reference to GHG Protocol. Other references for emission factors include:
- National Environment Agency (NEA). Greenhouse Gas (GHG)
  Emissions Measurement and Reporting Guidelines 2018
- National Environment Agency (NEA). Singapore's Fourth National Communication and Third Biennial Update Report, December 2018.
- Energy Market Authority (EMA). Electricity Grid Emission Factor and Upstream Fugitive Methane Emission Factor (data published as of September 2022).
- Temasek, Deloitte, Agency for Science, Technology and Research (A\*STAR). Environmental impact of food in Singapore, October 2019.

## Carbon profile (SDC and its subsidiaries) (tonnes CO<sub>2</sub>e)

Total emissions: **11,696** tonnes (CO<sub>2</sub>e)



Scope 1: **1,671** 

Direct emissions (including fuels from stationary and mobile combustion)



Scope 2: 7,168

Indirect emissions (purchased energy)



Scope 3: 2,857

Indirect emissions that occur in the value chain including purchased goods and services, waste generated in operations, and business travel

- Agency for Science, Technology and Research (A\*STAR) Jonathan S.C. Low, PhD. Measuring Sustainability with Life Cycle Assessment (LCA) and Life Cycle Costing (LCC), 25 May 2021.
- Deloitte. Environmental impact of food in Singapore, 2019.
- International Energy Agency (IEA) Energy Statistics Manual, 2005.
- 2023 IPCC Sixth Assessment Report.
- 2006 IPCC Guidelines for National Greenhouse Gas Inventories.
- Global Compact Network Singapore. Carbon & Emissions Recording
- American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) blend composition.
- World Resources Institute. Sustainability Dashboard Methodology, 2022.

<sup>&</sup>lt;sup>4</sup> Energy Utilisation Index (EUI) is the total electricity consumed by a facility in one year (Reporting Period) divided by its total Gross Floor Area (GFA), and serves as a proxy for energy efficiency. This index includes only standard infrastructures, which refers to publicly accessible buildings with a computable gross floor area, such as SDC's office and SDC-operated facilities. To calculate EUI, the electricity consumption of all premises is summed up and divided by the total GFA. The unit for EUI is kWh/m².

#### **Sentosa's Decarbonisation Pathway**

Leveraging its role in developing and managing Sentosa Island, SDC is developing a decarbonisation pathway in collaboration with the Island Partners and other stakeholders on the island, and implemented various large-scale initiatives in the past year to decarbonise the island. These include expanding the SCNN, Singapore's first carbon neutrality-focused business alliance consisting of 25 entities covering 95% of the Island's carbon emissions; increasing onsite decarbonisation efforts with the installation of solar panels across various building rooftops accounting for estimated at 1.69MWp of solar capacity; and Sentosa Golf Club's achievement as the world's first carbon neutral golf club.

#### **CASE STUDY 1**



#### **Terrestrial Solar for Sentosa**

As part of the effort for onsite decarbonisation, SDC launched a tender for solar panel installation on building rooftops across the island in June 2022.

With competing uses for limited space on the island, SDC faced the challenge of tapping on previously unused rooftop spaces of buildings with varying tenures to generate as much renewable energy as possible. The boundaries of limitations were pushed, with SDC signing a Power Purchase Agreement (PPA) with tenures ranging from 4 to 15 years, to maximise SDC's building and land tenure.

The installation of terrestrial solar is targeted to complete by the end of 2023, with total installed capacity of 1.69 MWp. This effort is projected to decarbonise Sentosa's operations by 820.8  $tCO_2e$ , or approximately a quarter of SDC's onsite decarbonisation target, bringing SDC one step closer to achieving its goal of carbon neutrality.



### Sentosa Golf Club Became the World's First Carbon Neutral Golf Club

In March 2023, Sentosa Golf Club became the world's first carbon neutral golf club, delivering on a commitment made at the 2021 HSBC Women's World Championship. Since April 2021, the Club has, with the support of its members, set aside \$1 from every round of golf to procure high quality carbon credits from the Katingan Mentaya Project (Indonesia) and Cordillera Azul National Park (Peru). As part of its sustainability commitment, and to complement ongoing carbon abatement efforts identified during its carbon profiling, Sentosa Golf Club has offset 5,000 tonnes of CO<sub>2</sub>. The Club was also the first in Asia to introduce carbon products in the form of biochar into their agronomy programme to help remove more carbon from the atmosphere.

Other initiatives, pioneered over a decade to help reduce Scope 1-3 carbon, include:

- State-of-the-art irrigation and agronomy equipment that minimises wastage;
- Waste digesters, converting food and horticultural waste to fertilisers for use on the golf course; and
- All-electric golf cart fleet powered with lithium batteries, and car charging stations.

#### **Energy Performance**

This year, SDC Group started disclosing its non-renewable fuel consumption for improved clarity and monitoring. Estimated levels of non-renewable fuel consumption in previous years are also provided for comparison.

SDC Group's total energy consumption<sup>7</sup> in FY2022/2023 was 83,070 gigajoules (GJ)<sup>8</sup>, representing a 7.1% increase from FY2021/2022, primarily due to the increased consumption of non-renewable fuel from increased operations of intra-island transport to support increased island visitorship. Majority of SDC Group's total energy consumption in FY2022/2023, is derived from electricity consumption, which accounted for 77%. During the Reporting Period, SDC Group consumed 63,649 GJ of electricity, which is 3% lower than FY2021/2022. The reduction of electricity consumption is a result of continuous efforts by SDC to improve its facilities, operations, and user-behaviour, including initiatives such as the replacement of non-essential light fittings with solar light fittings in the common areas of Sentosa Cove.

In addition to SDC's role in managing Sentosa Island and its energy consumption, SDC as a statutory board, is required to monitor its energy efficiency within its premises.

SDC Group's Total Energy Consumption (GJ)

Purchased electricity

Non-renewable fuel





#### **Energy Utilisation Index (EUI)**

SDC's Energy Utilisation Index (EUI) was 193.82 in FY2022/2023, derived as the total electricity consumed by the standard infrastructures in one year (Reporting Period) divided by its total Gross Floor Area (GFA).

This index includes only standard infrastructures, which refers to publicly accessible buildings with a computable gross floor area, such as SDC's office and SDC-operated facilities. This index serves as a proxy for energy efficiency.

25

<sup>&</sup>lt;sup>7</sup> Energy consumption comprises purchased electricity and non-renewable fuel consumption (e.g. diesel, Liquefied Petroleum Gas (LPG), natural gas, and petrol), used to power buildings such as office premises and hotels, transportation, attractions, food and beverage outlets, and common areas.

<sup>&</sup>lt;sup>8</sup> Source of reference for conversion factors of all energy sources into the unit of Gigajoules (GJ): DEFRA. UK Government GHG Conversion Factors for Company Reporting 2023.

#### **CASE STUDY 1**

#### **Green Transportation**

As part of greening Sentosa's transportation fleet, SDC is currently progressing towards electrifying 100% of its intra-island public transportation by 2025.

Following the successful electric bus trials with ComfortDelgro in 2022, the zero-tailpipe emission bus Service A commenced operations in December 2022.

Notably, Sentosa's cable car, Sentosa Express (monorail), and beach shuttles are already fully electrified. Installation of ten charging stations at Beach Station were also completed in April 2023.

At Sentosa Golf Club, about 250 electrified golf buggies provide zero-tailpipe transportation for golfers, reducing the club's operational carbon footprint and creating a better overall guest experience.



### **Water Management**



SDC adopts a comprehensive approach to enhance water conservation and efficiency, striving for sustainable water usage<sup>9</sup> while diligently reporting in alignment with GreenGov.SG. Water for SDC's operations is sourced from PUB, Singapore's national water agency, drawing from four different sources: local catchment water, imported water, NEWater (reclaimed water), and desalinated water. Despite the availability of diverse and sustainable water sources, Singapore's water scarcity remains a significant concern due to limited natural water resources and constrained land space. To mitigate these challenges, SDC relies on rainwater harvesting from existing ponds as the primary irrigation source, with NEWater serving as a backup during dry spells or when pond water is unavailable.



#### **Achievements in FY2022/2023**

- GreenGov.SG: Water Efficiency Index (WEI)<sup>10</sup> is 320.84.
- Total water consumption<sup>9</sup> for SDC Group covering both standard infrastructures<sup>10</sup> and non-standard infrastructures (e.g. beaches, common areas) was 252.4 megalitres, indicating a 16.3% reduction from FY2021/2022. NEWater contributed to about 1.6% of total water consumption.



#### Targets up to 2030

- GreenGov.SG: Improve Water Efficiency Index (WEI)<sup>10</sup> by 10% by 2030 from the FY2018/2019 to FY2020/2021 baseline average levels.
- New development areas and projects should collect as much rainfall as feasible to irrigate landscape regions, taking into account the project's water requirement.
- Existing developments are required to assess rainwater harvesting options.

<sup>&</sup>lt;sup>9</sup> "Water usage" refers to water withdrawn from both national water supply and rainwater harvesting; "Water consumption" refers to water withdrawn from national water supply only.

<sup>&</sup>lt;sup>10</sup> Water Efficiency Index (WEI) is the water consumption per day of a building divided by the total number of public officer headcount including visitors to the premises. The unit for WEI is litres per person per day. It is calculated only for standard infrastructures, which refers to publicly accessible buildings with a computable gross floor area, such as SDC's office and SDC-operated facilities.

## **Water Management**

#### **Water Performance**

In FY2022/2023, the total water consumption<sup>11</sup> by SDC Group was 252.4 megalitres, of which 98.4% is made up of potable water. The 16.3% decrease in total water consumption of 301.70 megalitres in FY2021/2022, can be attributed primarily to the 95% reduction of NEWater consumption. The consumption of NEWater in daily operations has been restricted for emergency purposes, with SDC relying on harvested rainwater instead. Practices have also been improved to introduce new procedures for identifying and resolving any water leakage. Sustainable landscape practices have also been adopted, including a smart irrigation system which optimises irrigation timing and frequency, and the planting of heat-resistant plants that are capable of tolerating less water.

In addition to SDC's role in managing Sentosa Island and its water consumption, SDC as a statutory board, is required to monitor its water consumption within its premises.

#### Water Efficiency Index (WEI)

SDC's Water Efficiency Index (WEI) was 320.84, derived as water consumption per day of a building divided by the total number of public officer headcount and visitors to the premises. The unit for WEI is litres per person per day.



This index includes only standard infrastructures, which refers to publicly accessible buildings with a computable gross floor area, such as SDC's office and SDC-operated facilities. This index serves as a proxy for water efficiency.

#### Breakdown of Total Water Consumption (megaliters - ML)



<sup>&</sup>quot; "Water consumption" refers to water withdrawn from national water supply only.

### **Water Management**

#### **Water Management Initiatives**

Water assumes a pivotal role in advancing SDC's sustainable development efforts across the island's diverse activities. Accordingly, SDC has adopted a strategic approach to water management, implementing a range of initiatives aimed at managing water usage. Notable measures encompass the introduction of drought-resistant plants throughout the island and the incorporation of wetting agents during periods of drought. For instance, the utilisation of polymer gel in the soil mixture enhances the resilience of plants such as climbers, enabling them to better endure dry conditions. Mulching is also applied to planting beds and trees to retain moisture effectively. Other water management initiatives include piping in natural water sources to the main driveways, as well as incorporating water harvesting tanks. As part of its contingency water management plan, SDC has also installed the piping of NEWater for the landscape and greenery around Sentosa Gateway.

Moving forward, under the Sentosa-Brani Master Plan study, consideration will be given to the watering requirements of forthcoming developments, ensuring that long-term sustainability is incorporated into the design and planning processes. By taking a proactive stance in water management, SDC remains dedicated to advancing its commitment to sustainable practices, further solidifying its position as an environmentally conscious organisation.



#### **Smart Irrigation System**

The irrigation systems on Sentosa are operated by a centralized smart system, which allows for irrigation frequency and timings to be controlled remotely, leading to more flexible and targeted control of the amount of water provided to the various landscaped areas on Sentosa.

The irrigation systems consist of two main components; (1) an evapotranspiration (ET) sensor, to measure key climatic conditions and determine the amount of water lost from the soil through evaporation and transpiration by plants; and (2) a rain sensor to measure the amount of rainfall throughout the day, pausing the irrigation cycle to prevent overwatering. These sensors allow for better control over the watering requirements, conservation of water used in irrigation, and better sustain the plants' condition.

### **Waste Management**

Given the scarcity of land for waste disposal in Singapore, SDC actively encourage recycling and make dedicated efforts to limit the volume of waste produced. This encompasses the reduction of disposable plastics, and the recycling of food waste and horticultural waste into compost.



#### **Achievements in FY2022/2023**

• GreenGov.SG: Waste Disposal Index (WDI)<sup>12</sup> was 8.16 and will form the baseline level for future reporting.



#### Targets up to 2030

• GreenGov.SG: Improve Waste Disposal Index (WDI)<sup>12</sup> by 30% by 2030 from FY2022/2023 baseline level.

#### **Waste Performance**

SDC monitors the quantity of waste produced at waste collection sites across the island. In FY2022/2023, a total of 2,941 tonnes of general waste<sup>13</sup> was generated, including 1,739 tonnes that were directed to disposal, and 1,202 tonnes that were diverted from disposal. Through SDC's sustained waste management efforts, it has achieved a 27% decrease in total waste directed to disposal, from the 2,384 tonnes in FY2021/2022. Its recycling rate has also almost doubled at 278 tonnes compared to 144 tonnes in the previous year. This year, SDC Group started to track and disclose the amount of horticultural waste that was converted into compost, which amounts to about 920.6 tonnes. In addition, about 3.8 tonnes of food wastes were segregated and composted. The amount of waste recycled or composted across all waste streams has significantly increased from the last Reporting Period. These numbers demonstrate SDC's continued commitment to strengthening its recycling processes and facilities.

In addition to SDC's role in managing Sentosa Island and its wastes, SDC as a statutory board, is required to monitor its waste disposed within its premises.

#### SDC's Group's Total General Waste (tonnes)



#### **Waste Disposal Index (WDI)**

SDC's Waste Disposal Index (WDI) was 8.16 in FY2022/2023, derived as the total amount of waste disposed per day divided by the total number of public officer headcount and visitors to the premises. The unit for WDI is kg per person per day.



This index includes only standard infrastructures, which refers to publicly accessible buildings with a computable gross floor area, such as SDC's office and SDC-operated facilities. This index serves as a proxy for waste intensity.

Waste Disposal Index (WDI) is the total amount of waste disposed of per day divided by the total number of public officer headcount including visitors to the premises. The unit for WDI is kg per person per day. It is calculated only for standard infrastructures, which refers to publicly accessible buildings with a computable gross floor area, such as SDC's office and SDC-operated facilities.

<sup>&</sup>lt;sup>13</sup> General waste refers to non-hazardous waste, which are collected from SDC-managed bin centres, Sentosa Golf Club and Sentosa Cove Village. The data excludes waste disposed of by the Island's hotel partners and Resorts World Sentosa as they are managed through separate commercial contracts.

## **Waste Management**

#### **Waste Management Initiatives**

SDC has adopted a proactive approach to managing waste, implementing a series of initiatives aimed at reducing, recycling, and responsibly disposing of waste generated across its various activities. To minimise waste production, SDC has launched Sentosa's Playbook for Reducing Disposables, Singapore's first precinct-level disposables guidebook to help businesses reduce disposables waste. Apart from encouraging the use of sustainable materials and promoting recycling practices, SDC has instituted waste segregation programmes, ensuring that recyclable materials are diverted from the waste stream.





#### **Explorers of Sentosa**

In December 2022, SDC launched the "Explorers of Sentosa", an enthralling art installation by renowned Denmark recycling artist Thomas Dambo. The exhibit features a family of four giant sculptures — Little Lyn, Reef the Chief, Curious Sue, and Dreamer Dee — creatively crafted from upcycled and sustainable materials. This sustainable art initiative is part of SDC's commitment to promoting circularity and environmental stewardship on the island.

A total of 18 organisations contributed to this project, including five Island Partners, not-for-profit organisation The RICE Company Limited (TRCL) and 150 local volunteers. The sculptures were constructed from a total of 5.5 tonnes of upcycled wood, and further embellished with artwork made from upcycled plastic waste collected from Sentosa and other parts of Singapore. This creative integration of discarded materials highlights the value of waste and encourages viewers to consider alternative ways of reusing and repurposing resources. With this installation and a complementary wood-upcycling educational workshop conducted by SDC's partner Xcel, SDC hopes to provide guests with the opportunity to uncover the island's hidden side while gaining valuable insights into the significance of waste management and environmental conservation.

### **Waste Management**



## **Championing Green Practices and Sustainable Lifestyle Through the Sentosa Embraces Litter-Free (SELF) Programme**

Marine litter is a serious pollution issue globally, and is especially pertinent to Sentosa's businesses and biodiversity. Established in 2014, the SELF programme has evolved into a quarterly initiative to inspire Sentosians, Island Partners, and visitors to champion eco-friendly practices and embrace a sustainable lifestyle.

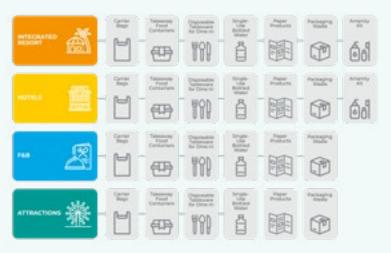
Set against the backdrop of Sentosa's Southern Islands, Sentosians and Island Partners did a beach clean-up and collected a total of 56 kg of litter in January 2023. Participants also learnt about intertidal organisms found along Singapore's offshore islands and the importance of conservation through a Marine Ecology and Conservation talk conducted by the Lee Kong Chian Natural History Museum, NUS.

#### **CASE STUDY 3**

## Sentosa Disposables Policy and Playbook for Reducing Disposables

In May 2023, SDC launched the Sentosa Disposables Policy and Sentosa Playbook for Reducing Disposables. Members of the SCNN including hotels, attractions and food and beverage (F&B) operators, have committed to remove single-use plastic bottled water by the end of 2023. This island-wide policy is estimated to reduce total island bottled water usage by at least two million bottles per year. In addition, SCNN members will implement at least one initiative to reduce each category of disposables (e.g. carrier bags, takeaway food containers, packaging waste) by 2023.

This is supported by the Playbook — Singapore's first precinct-level disposables guidebook for best practices in reducing disposables, developed in collaboration with WWF-Singapore. It provides 16 recommended measures to reduce disposables, grouped into 6 categories targeted at accommodations, attractions, and F&B industries, covering items from takeaway bags to food containers and amenity kits.



## **Sustainable Supply Chain**

SDC acknowledges that sustainability should encompass not only internal endeavours but also extend across its entire value chain. Therefore, SDC aims to implement sustainable initiatives within its supply chain, aligning them with the organisation's overarching goal of achieving carbon neutrality and international recognition as a certified sustainable tourism destination for Sentosa.

SDC leverages Whole-of-Government Demand Aggregation contracts that incorporate built-in sustainability criteria. Additionally, SDC has begun to include the sustainability performance of suppliers in its evaluation process for certain tenders.





#### **Farm-to-Table Local Food Sourcing**

Launched by the Singapore Food Agency (SFA) on 27 March 2023 in support of Singapore's "30 by 30" sustainable food systems goals, the Farm-To-Table (FTT) Recognition Programme is a tiered award system that recognises Hotels, Restaurants and Catering (HoReCa) businesses that procured at least 15% of locally-farmed produce in any of the specified categories. The FTT logo is Singapore's first-ever food logo to recognise food businesses in the HoReCa sector. SDC is proud to have a total of six Island Partners (IPs) forming 50% of the pioneer batch of FTT Recognition Programme Logo recipients, with three of them being awarded the Highest Tier.

## TOWARDS A NATURE- AND HERITAGE-RICH SENTOSA

This chapter encapsulates Sentosa's resolute journey towards its goal of becoming a globally recognised, certified sustainable tourism destination under the resonating theme — Towards a Nature- and Heritage-Rich Sentosa. Throughout this chapter, SDC demonstrates the transformative initiatives it has undertaken to propel Sentosa forward, presenting a harmonious blend of environmental stewardship, cultural reverence, and dynamic collaborations across communities.

Sentosa's unwavering dedication to becoming a Globally Recognised, Certified Sustainable Tourism Destination is exemplified through its robust efforts in biodiversity and heritage conservation. Guided by the Sentosa Nature Framework, the organisation has forged a path to safeguard biodiversity by conserving significant biodiverse sites, enhancing green spaces, and fostering collaborations.

Sentosa Island, with its rich heritage and historical landmarks, holds significant importance as a landmark in Singapore's history. In its role as a custodian of the island, SDC remains steadfast in its commitment to preserving Sentosa's cultural heritage through dedicated heritage conservation efforts. These cultural assets offer visitors an opportunity to gain insights into the island's historical significance and an opportunity to understand its rich past through Sentosa's military heritage, exemplified by sites such as Fort Siloso, Mount Imbiah Battery, Surrender Chambers, The Knolls, and The Barracks Hotel.

In this chapter, SDC focuses on two essential areas that contribute significantly to the organisation's sustainability efforts:

- · Nature and Biodiversity
- Heritage



#### **Achievements in FY2022/2023**

- Fort Siloso achieved the LEAF<sup>14</sup> Gold Level Certification
- Launch of the new Sentosa Heritage Trail



#### **Perpetual Targets**

- Maintain the LEAF Gold Level Certification for Fort Siloso
- · Maintain GSTC-D certification



Landscape Excellence Assessment Framework (LEAF) is a certification scheme in Singapore by Centre for Urban Greenery and Ecology (CUGE) to celebrate good landscape design, construction and management of parks and development projects.

## **Nature and Biodiversity**

Sentosa Island is home to a diverse array of coastal marine habitats and lush terrestrial secondary forests. Spanning across 40 hectares of protected nature areas, featuring 22 heritage trees, and teeming with rich biodiversity, Sentosa's natural ecosystem stands as a fundamental pillar of the island's identity as a sustainable leisure destination. Recognising its role as custodians of Sentosa, SDC's unwavering dedication to land-use planning and conservation initiatives forms the bedrock of safeguarding Sentosa's natural habitats, biodiversity, and intricate ecosystems.

On a global scale, the planet's rich biodiversity faces alarming threats from climate change-induced degradation of intricate ecosystems and increasing encroachment of built-up areas. With Sentosa being a renowned leisure destination and a habitat for 474 species of flora and fauna, of which 80 are estimated to be species of conservation concern, it is imperative for SDC to undertake proactive measures ensuring that island operations and future developments have minimal adverse effects on the delicate ecosystem and biodiversity of Sentosa.

As public interest in exploring Sentosa's nature areas increases, it becomes even more critical to preserve and protect ecologically sensitive zones from potential negative impacts such as waste pollution, soil or intertidal flats trampling, and noise and light pollution stemming from urban developments. Restoration efforts, such as SDC's native tree-planting project, where native flora species have been identified and planted in Sentosa, further support the ecosystem and increase resilience against climate change.

#### **Land-use Planning**

As a leading leisure destination in Asia, Sentosa is renowned for its diverse and distinctive range of leisure experiences, encompassing themed attractions, dining establishments, accommodation options, as well as pristine beaches and nature trails. Sustainable development stands as a vital cornerstone in SDC's plans as the island continues to enhance and revitalise its offerings to cater to evolving guest preferences.

Amidst the process of renewing its offerings, SDC remains resolutely dedicated to upholding environmental sustainability and preserving Sentosa's unique charm. This commitment is exemplified through site selection for new developments and a steadfast incorporation of biodiversity preservation throughout all stages of land-use planning and development.

To achieve these objectives, SDC has embraced two key measures in line with its commitment to sustainability. Firstly, it adopts an environmentally sensitive approach, ensuring that all initiatives align with environmentally-friendly practices and minimise ecological impact. Secondly, it diligently adheres to the guidelines and direction set forth by Sentosa's Master Plans, which have evolved over the years to encompass sustainable development principles. By adhering to these principles and remaining steadfast in their commitment to sustainability, SDC aims to ensure that Sentosa not only retains its allure but also sets a standard for responsible and conscious development within the leisure and tourism industry.

In alignment with the Government's sustainability endeavours, SDC conducts Environmental Impact Assessments (EIA) based on prevailing national guidelines before undertaking any new development in Sentosa. This rigorous process ensures that environmental impacts are minimised and effectively managed, reinforcing SDC's commitment to responsible and sustainable development practices.



## **Nature and Biodiversity**

#### Conservation

The protection of natural habitats in Sentosa and surrounding areas is a key pillar of SDC's approach to sustainability. SDC approaches conservation in three ways: Identification, Protection, and Enhancement.

	Approach	Ongoing efforts
Identification of Ecologically	By collaborating with various Government agencies, including the National Parks Board (NParks), SDC has undertaken	To uphold the island's 50% green cover, SDC has utilised satellite imagery.
Sensitive Sites and Understanding of Biodiversity	ensitive Sites and comprehensive studies and research to assess species richness and diversity within ecologically sensitive areas on Sentosa	Several ecologically-sensitive sites have been identified, including Tanjong Rimau, Imbiah Nature Area, Serapong Nature Area, and Serapong Reef. These coastal areas, secondary forests, and intertidal shores are home to a diverse range of rare and endangered flora, as well as terrestrial and marine wildlife. These precious habitats offer essential ecological connectivity to other forested regions on Sentosa, the neighbouring Southern Islands, and even mainland Singapore.
		SDC actively engages in conservation and restoration efforts for forest, and marine. Notable initiatives include compiling a centralised database for preliminary environmental and ecological information, providing a foundation for planning, identifying gaps, and formulating improvement plans to enhance habitats and biodiversity.
		The SDC team provided strong support and was actively involved in the Southern Island Biodiversity Survey (SIBS) led by NParks. A total of 44 surveys (floristic, fauna and intertidal surveys) have been conducted on Sentosa island since Feb 2020 involving key habitats such as Tanjong Rimau, Siloso, Mt. Imbiah, Mt. Serapong, Serapong Lake mangrove, Serapong fringing reef, and Pulau Selegu.
		Arising from the research interest generated during SIBS, Yale NUS has also collaborated with SDC on a comprehensive insect survey on Sentosa deploying different techniques to examine the insect population and diversity.

## **Nature and Biodiversity**

#### **Approach**

## Protection of Key Nature Areas through Multi-pronged Approaches

SDC adopts a multi-pronged approach to protect key nature areas, ensuring the conservation of the island's rich biodiversity. These efforts include (i) restricting access to sensitive ecological sites, allowing only educational guided tours, (ii) preventing intrusion into sensitive areas through the use of signages, guidelines, and virtual tours, and (iii) actively safeguarding and restoring the island's biodiversity. Through this comprehensive approach, SDC demonstrates its dedication to responsible conservation practices and the preservation of Sentosa's unique natural heritage.

## Enhancement of Awareness of Sustainability issues

SDC recognises that successful conservation endeavours depend on raising awareness of essential sustainability matters among diverse stakeholders. By cultivating a profound understanding among guests, they become more inclined to be mindful of their actions, thus safeguarding the surrounding environment from potential harm.

### **Ongoing efforts**

To strike a balance between allowing guests to appreciate sensitive ecological areas and managing their access, SDC employs a well-balanced approach that permits controlled entry through pre-arranged group tours and educational journeys. These initiatives provide guests with insights into the natural habitats and biodiversity, fostering a sense of conservation awareness. During FY2022/2023, 241 individuals participated in the Siloso Headland Intertidal Programme, and 558 individuals joined the nature-based SentoSights Tours.

SDC has organised several initiatives to attract guests and school groups to visit the island and participate in activities that allow them to explore Sentosa's diverse natural habitats and biodiversity. These activities are conducted with due consideration to safeguarding ecologically sensitive sites.

SDC works closely with partners such as researchers and NGOs to gain a better understanding of the island's environment and develop new sustainability solutions. For instance, SDC has partnered with NTU's Earth Observatory of Singapore and Asian School of the Environment for ecological studies. Additionally, SDC collaborates with the NUS Centre for Nature-based Climate Solutions to explore potential nature-based climate solutions and coastal protection measures. These initiatives reflect the organisation's dedication to advancing environmental knowledge and promoting sustainable practices.



### **Raising Awareness on Conservation**

To raise awareness on endangered wildlife, SDC partnered WWF to host a life-sized sculpture of a Malayan tiger at the Sentosa Nature Discovery. Jointly painted by Temenggong Artists-In-Residence and LASALLE College of the Arts, the sculpture is one of 33 life-sized tiger art sculptures exhibited throughout Singapore.

Following WWF's initiative, the sculpture was donated to the Sentosa Nature Discovery, where SDC has curated new displays to complement the "Tiger". By highlighting Sentosa's own "Tiger"-named biodiversity like the Tiger Cowrie and Tiger Beetle, these displays encourage visitors to explore Sentosa's nature trails and take action to better co-exist with our wildlife.

## **Nature and Biodiversity**

#### **CASE STUDY 2**

#### **Sentosa Nature Framework**

Building upon the established initiatives for Sentosa, SDC has embarked on a proactive journey to craft the Sentosa Nature Framework, with the overarching goal of fostering harmonious coexistence between the island's developmental pursuits and to strengthen Sentosa's credibility as a sustainable destination. The Sentosa Nature Framework, capitalises on established national benchmarks and new governance frameworks during the phases of planning, development, and operations; encompassing four key areas that hold profound relevance to the island's ecology and environment:

- (1) Green Sentosa
- (2) Blue Sentosa
- (3) Wildlife Management
- (4) Abiotic Environment

The key strategies will be based on native-driven and scientific approaches that benchmarks against national, international, and industry standards:

- (1) Conserve Significant Biodiverse Sites: Safeguarding Sentosa's significant biodiverse sites while mitigating climate change effects through commitment to store and sequester carbon and protection of biodiversity.
- (2) Enhance spaces and developable zones with greenery: Enhancing greenery between the built-natural environment while improving quality of greenery for increased ecological resiliency.
- (3) Grow connections and collaboration: Nurturing partnerships and commitment to create common ecological mindshare and possibilities in the nature-base and eco-tourism industry.

### **CASE STUDY 3**

## Involving the Community in Citizen Science Efforts



The future of conservation is a collaborative one, and a sense of ownership for nature will propel conservation efforts. Engaging the community in various citizen science initiatives is one of the ways in which SDC allows for the community to take action.

### **Engaging Volunteers in SDC-SEAA Intertidal Citizen Science Surveys**

With increased public interest in Sentosa's intertidal shores, and to effectively manage this sensitive habitat from human impact, a monitoring programme was initiated. In February 2023, SDC collaborated with the S.E.A. Aquarium (SEAA) to roll out the SDC-SEAA Intertidal Citizen Science Survey. This programme aims to monitor quarterly the intertidal population and collect scientifically sound data at the northern shoreline of Sentosa to lend insights to our conservation efforts. It also acts as an avenue for interested guests to contribute back to nature.

#### Volunteer-guided Siloso Headland Intertidal Programme

Sentosa's Siloso Headland Intertidal Programme is an educational exploration of a natural shore teeming with marine life, guided primarily by a team of 18 public volunteers. The volunteer programme was grown organically, driven by the passion and interest of guests from various backgrounds who had attended past editions of the programme. The result of a ripple effect of SDC's environmental outreach, these volunteers continue to spread awareness, successfully conducting 10 sessions for 241 individuals in FY2022/2023.

### Turtle Patrol by Youth Corp Singapore

Volunteers from Youth Corp Singapore were trained by SDC on turtle conservation efforts on Sentosa, including identifying turtle tracks and managing encounters with nesting turtles or turtle tracks while on their patrols along Sentosa's beaches during nesting season. As part of this pilot, volunteers also counted the number of ghost crab (a predator of turtle eggs and hatchlings) burrows along the beaches to provide a gauge of ghost crab populations.

## Heritage

Sentosa Island, with its rich heritage and historical landmarks, holds significant importance as a landmark in Singapore's history. SDC acknowledges the intangible value of Sentosa's historical legacy and considers it a responsibility to preserve and educate both local and international guests about its historical significance.

SDC's approach to heritage conservation extends beyond mere restoration of old buildings, as it also involves infusing renewed vibrancy into these structures. Two notable examples of this approach is evident in the public's free access to Fort Siloso, Singapore's 74th National Monument and the Sentosa Heritage Trail. Leveraging this historical backdrop, SDC strategically implements various programmes and initiatives to instil a sense of pride in Singapore's heritage. An exemplary instance is the collaborative effort between SDC and the National Heritage Board (NHB), exemplified by the Fort Connaught Rediscovery Tour launched under NHB's Battle for Singapore 2023 programme.

SDC continues to strengthen its relationship with National Heritage Board (NHB), through platforms like the Annual Museum Roundtable (MR) Management Meeting, an important avenue to convene and connect over issues pertaining to the museum sector, and the Preservation of Sites & Monuments (PSM) Stakeholders Engagement session, to share on guidelines and advice for the care of National Monuments. By adhering to the principles of safeguarding and preserving Sentosa's heritage, SDC ensures that the island's rich history remains cherished, valued, and shared for generations to come. Such endeavours not only serve to enrich the visitor experience but also contribute to the enduring appreciation and celebration of Sentosa's historical legacy.

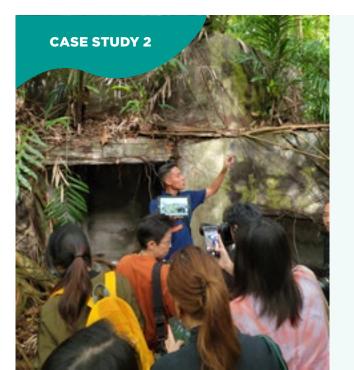
#### **CASE STUDY 1**

## Public Education on Sentosa's History Through Online Hub

An online content hub was created on SDC's website to celebrate Sentosa's rich history and allow guests to delve into Sentosa's heritage, much of which remains to be discovered. The hub strings together Sentosa's narratives and experiences that are authentic and unique; and reinterpreting the island's stories and myths. Accompanied by old photographs of Sentosa, guests can discover stories depicting Pulau Blakang Mati's Colonial Past, Folklore and Oral Traditions, Island Heritage, Modern Heritage, and the Untold Tales of Sentosa.



Children carrying buckets of water at Blakang Mati, undated



## **Launch of First-Ever Fort Connaught Rediscovery Tour**

In collaboration with National Heritage Board, SDC launched the Fort Connaught Rediscovery Tour in February 2023 - the first-ever public tour since the fort's construction in 1878. As part of the annual Battle for Singapore event commemorating the Fall of Singapore, this limited-time guided tour provided guests special access to explore the restricted grounds of Fort Connaught and revel in the stories of the historical significance of the abandoned fort and its structures.

# TOWARDS A SUSTAINABLE AND SOCIALLY-INCLUSIVE SENTOSA: AS ONE SENTOSA AND BEYOND







This chapter highlights Sentosa's efforts to engage its diverse stakeholders in an inclusive manner to champion sustainability throughout the entire island. SDC recognises that environmental sustainability and social responsibility goes hand-in-hand; both are necessary for Sentosa to become a truly world-class tourism destination that appeals to visitors regardless of their background. From the guests to the staff and Island Partners, SDC strives to leverage on its position as the custodian of the Sentosa Island precinct to bring its diverse stakeholders together to ensure that Sentosa becomes safer and more inclusive for all.

Beyond Sentosa Island, SDC actively engages with external stakeholders to support sustainability and social responsibility efforts as well. As a world-class tourist destination, SDC recognises the responsibility it holds not just in driving change on Sentosa Island, but also in contributing its influence and resources to other organisations and communities. This is why SDC actively collaborates with a wide range of external organisations, from the Ministry of Education (MOE) to the Singapore Green Building Council (SGBC), to support sustainability and social responsibility efforts beyond Sentosa.

Throughout this chapter, SDC highlights its efforts to advocate for a sustainable and socially inclusive Sentosa and beyond, through the following five areas:

- Cultivating a Culture of Sustainability
- Strengthening Partnerships
- Championing Transformation
- Sentosa's Commitment to Responsible Social Practices
- Giving Back to Local Communities

## **Cultivating a Culture** of **Sustainability**

SDC recognises the importance of investing in the organisation's culture as it transforms towards sustainable tourism. Stronger efforts to engage SDC's staff not only empowers them to become SDC's sustainability ambassadors when interacting with guests and visitors, but also benefits the organisation as staff can feel welcome in providing their feedback and advice on how best to design and implement sustainability initiatives, both internally in SDC and externally with SDC's stakeholders. Recognising the importance of involving staff in building this culture of sustainability, SDC has adopted various initiatives in FY2022/2023.

#### **CASE STUDY 1**

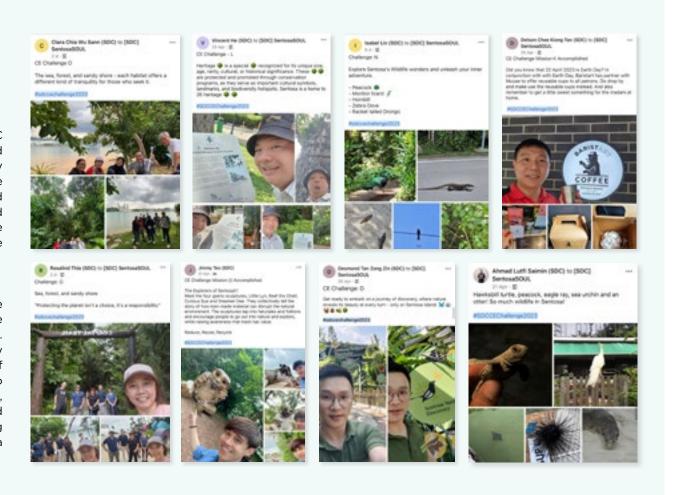
#### **Sustainability-related Trainings and Initiatives**

#### **Sustainability in Tourism Operations**

Formal training sessions are conducted for SDC staff and SCNN members, allowing for the island community to move ahead towards the sustainability goals alongside one another. An introductory course on Sustainability in Tourism Operations was attended by those serving various roles across the island, and valuable insights were gained through interactive lectures by the experienced Dr Nisha Abu Bakar, case studies, and sharing of best practices.

#### CE Sustainability Challenge 2.0

To build a culture of sustainability and evoke behavioural change, the CE Sustainability Challenge was launched in 2022 as an annual staff engagement. In 2023, the second edition of the CE Sustainability Challenge made use of gamification to engage staff in a Sustainability-themed Bingo. Staff were made to complete challenges across three themes — carbon, circular economy, and island environment — and involved them calculating their carbon footprint, doing beach clean-ups, and discovering the flora and fauna around Sentosa.



## Strengthening Partnerships

SDC recognises that the transformation of the Island towards sustainability is only possible through strong partnerships with its Island Partners and other stakeholders. In the past two years, SDC has invested significant time and effort into engaging its Island Partners, ensuring that they can meaningfully participate in the Island's sustainability journey.

With the light-touch activations of the Southern Islands overseen by SDC, efforts continue to be put in place in engaging new Island Partners, ensuring that proper considerations are taken in introducing new experiences to the Southern Islands. SDC plays a critical role in bridging the gap between our new partners and other stakeholders, such as nature groups. By establishing these partnerships from the onset, and working together to create a destination that meets the needs of various stakeholders, it is hoped that development can be harmoniously balanced with nature.

These efforts demonstrate SDC's continued investment in engaging its Island Partners and other stakeholders meaningfully, and will provide a strong foundation for further collaborations to be pursued in 2024 and beyond.



## **Tiny Away Escape @ Lazarus**

In collaboration with Big Tiny, the pioneer of "tiny houses" integrated with ecotourism in Singapore, SDC launched Tiny Away Escape @ Lazarus Island. These unique accommodation units encourage guests to rethink consumption patterns through compact yet functional living spaces.

Big Tiny, one of the newest members of the SCNN, has actively incorporated many sustainable design features and doing their part to build sustainability awareness. Durable, sustainable composite building materials made from recycled plastic and wood fibre was used in the construction; and solar energy serves as the primary power source, complemented by an energy-efficient grid for backup. Food waste composting systems are also made available to minimise and recycle food waste. To further enhance environmental consciousness, biodegradable shampoo and body wash are provided to guests, emphasising the importance of eco-conscious choices even during leisure stays.

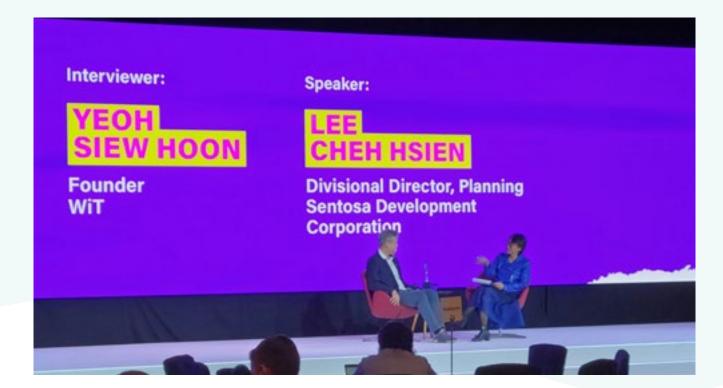
## **Championing Transformation**

SDC is a member of the following external associations:

- Singapore Green Building Council (SGBC) SDC benefits from attending various industry-specific programs and sector-oriented initiatives organised by SGBC, further expanding its knowledge and expertise in the pursuit of greener and more sustainable practices for the island.
- 2. **GSTC** is a global accreditation body for sustainable tourism. As a testament to its dedication to sustainability, SDC joined GSTC as a member in November 2021 and was conferred the GSTC-Destination certificate in July 2022, becoming the first island destination in Asia to achieve this esteemed recognition. This milestone underscores Sentosa's pioneering role in championing sustainable tourism and setting a remarkable example for other destinations in the region.
- 3. The Green Economy Working Group (GEWG), established by the Inter-Ministerial Committee on Climate Change (IMCCC), plays a vital role in coordinating and facilitating the advancement of Singapore's green economy. This strategic endeavour aims to leverage new economic prospects within the realm of sustainability, effectively capitalising on emerging opportunities while generating employment prospects for the citizens of Singapore<sup>15</sup>.

SDC is represented on the **Hotel Sustainability Committee**<sup>16</sup> by Anthony Tan, SDC's Director,
Sustainability. With the primary objective of fostering
the widespread adoption of sustainability practices
within hotels, the committee's overarching goal
is to position Singapore as a leading sustainable
destination. To achieve this, the Committee has given
its endorsement to the Hotel Sustainability Roadmap,
which outlines specific targets and strategies for hotels

to embrace on their journey towards sustainability. SDC is also represented on the MICE Sustainability Committee by Anthony Tan, that launched the Singapore MICE Sustainability Roadmap in December 2022, with the strategic vision for Singapore to become Asia Pacific's leading Sustainable MICE destination by 2030, through focussing on circular economy and reducing carbon emissions.



<sup>15</sup> National Climate Change Secretariat (NCCS). (n.d.). Inter-Ministerial Committee on Climate Change. https://www.nccs.gov.sg/who-we-are/inter-ministerial-committee-on-climate-change/

<sup>16</sup> Singapore Tourism Board. (n.d.). Launch of the Hotel Sustainability Roadmap by STB and SHA. https://www.stb.gov.sg/content/stb/en/media-centre/media-releases/Launch-of-the-Hotel-Sustainability-Roadmap-by-STB-and-SHA.html

## **Guest Health and Safety**

## Sentosa's Commitment to Responsible Social Practices

SDC places the highest priority on comprehensive risk management and the effective implementation of reduction measures to ensure the safety and wellbeing of all individuals who visit Sentosa. An exemplary demonstration of this commitment is the attainment of a significant milestone, with 100% of SDC's premises being certified as SG Clean<sup>17</sup>. This certification serves as a clear testament to SDC's unwavering dedication to upholding a clean and secure environment for every individual on the island. The achievement of this milestone is backed by SDC's close collaboration with Island Partners and a proactive approach to safety protocols. Through these collective efforts, SDC continually strives to maintain the highest standards of safety for all visitors to Sentosa.

Additionally, to further enhance guest safety, SDC has taken proactive steps by prominently displaying information on dos and don'ts at Sentosa's nature areas and trails, both on-site and through its official website. These reminders serve as a gentle but crucial prompt for guests to treat the ecosystem with utmost care and respect. Moreover, certain nature areas have limited entry to safeguard the natural environment and ensure the safety of all guests during their exploration. SDC's multifaceted approach to safety, including risk management, SG Clean certification, collaboration with partners, and informative guidelines, underscores their steadfast commitment to creating a secure and enjoyable experience for every individual who chooses to explore Sentosa's remarkable attractions and natural beauty.



### **Achievements in FY2022/2023**

 In FY2022/2023, the total number of injuries involving guests fell by 12.6% to 216, as compared to 247 in FY2021/2022

During the Reporting Period, there were zero incidents of non-compliance with applicable regulations and guidelines governing the health and safety of guests visiting Sentosa. There was a 12.6% decrease in the total number of injuries involving guests in Sentosa, from 247 in FY2021/2022 to 216 in FY2022/2023. This decrease was due to proactive identification of risks by ground staff and prompt mitigation measures being taken. Most of these incidents experienced are minor or due to guests' pre-existing medical conditions.

In line with its dedication to caring for the well-being of guests, SDC remains actively committed to implementing measures that minimise injuries and ensure a safe experience for all guests. By utilising the Sentosa Resilience Framework and drawing upon resources such as the Safety and Security Review Committee, SDC adopts a proactive stance in identifying and mitigating potential hazards. SDC's on-site front-liners undergo rigorous first aid training



## **Perpetual Targets**

 Achieve zero incidents of non-compliance with applicable regulations and guidelines governing the health and safety of guests visiting Sentosa

and certification to ensure their preparedness in handling emergencies effectively. Through these concerted efforts, SDC remains committed to providing a safe and secure environment for all visitors to Sentosa.

SDC also engages in close collaboration with all Island Partners through the Trade Specific Interest Group to establish and maintain safety measures throughout their operations towards ensuring the well-being of guests. The Trade Specific Interest Group, which is chaired by SDC, plays a crucial role as a platform for facilitating communication and information-sharing between SDC and all Island Partners. This collaborative forum enables the exchange of incident analysis, updates on upcoming activities, and relevant advisories received from Government agencies, fostering a collective commitment to guest safety and enhancing overall safety standards across the island.

<sup>&</sup>lt;sup>17</sup> SG Clean is a campaign launched by the National Environment Agency (NEA) on 16 February 2020 to rally stakeholders and members of the public to do their part, by adopting good personal habits and social responsibility, to raise standards of cleanliness and public hygiene in Singapore and safeguard public health.

## **Guest Health and Safety**

## Sentosa's Commitment to Responsible Social Practices



#### **Go!Mama Digitally Enabled Lactation Pods on Sentosa**

In line with its commitment to prioritising guests' well-being and build an inclusive destination, SDC has successfully introduced nursing pods through a pilot project conducted in 2022. This initiative aimed to provide breastfeeding mothers with clean, private, and secure spaces on the island. Building upon the positive outcomes of the pilot project, dedicated nursing pods are now conveniently accessible at various locations across Sentosa, including Beach Station and Emerald Pavilion. The pilot project received the Pro-Enterprise Panel — Singapore Business Federation (PEP-SBF) Awards 2022 in recognition of SDC's efforts to meet the needs of nursing mothers and provide for family-friendly amenities on Sentosa.

#### **CASE STUDY 2**

#### Exercise Tidal 2022 — Counter-Terrorism Exercise At Sentosa Cove Village

A counter-terrorism exercise codenamed "Exercise Tidal 2022" was held at Sentosa Cove Village on 30 September 2022. Led by the Singapore Police Force (SPF) and supported by the Singapore Civil Defence Force (SCDF), SDC, and SCRM, this event is part of a series of security exercises conducted by the Police on Sentosa Island.

Through a simulated terrorist incident, the exercise aimed to validate the coordination among different agencies, enhance community readiness in responding to such threats, and evaluate the overall response. Collaborating closely with various partners, the Police have been reinforcing security measures and emergency preparedness on Sentosa Island, encouraging stakeholders to develop contingency plans, and training staff in SDC to be well-versed in these protocols.



## Sentosa's Commitment to **Responsible Social Practices**

SDC prioritises the well-being and safety of its workforce, implementing a robust set of measures to establish a safe working environment. The organisation's Workplace Safety and Health Policy has been carefully formulated to address potential risks and provide guidance on effectively mitigating workplace incidents. Ensuring workplace health and safety is closely overseen and managed through the Sentosa Crisis Management Structure and SDC's dedicated Workplace Safety and Health Committee, emphasising the organisation's commitment to maintaining a safe and healthy workplace for its employees.

SDC continuously implements new measures and initiatives with the primary goal of enhancing workplace health and safety, thereby reducing the occurrence of workplace injuries. The Governance and

Compliance unit plays a central role, facilitating the exchange of best practices and insights. This proactive sharing of knowledge ensures that vital health and safety information reaches all staff members, fostering a collective commitment to maintaining a safe and healthy work environment.

One of the testaments for SDC's commitment to workplace safety and health is the achievement of bizSAFE level 3 certification. This certification requires the organisation to have implemented a comprehensive WSH management system that meets the requirements of the Workplace Safety and Health Act and its subsidiary legislation. To achieve this certification, SDC's Senior Management attended the bizSAFE Level 1 and bizSAFE Level 2 trainings in preparation for the rigorous audit process.

## **Workplace Health and Safety**



### **Achievements in FY2022/2023**

- In FY2022/2023, there were 16 recordable workplace injuries reported, the lowest compared to the previous two years.
- Attained bizSAFE level 3 certification



### **Perpetual Targets**

- Maintain a culture of zero tolerance for an unsafe workplace among employees across SDC.
- Maintain zero high-consequence<sup>18</sup> work-related injuries among employees across SDC's operations



In FY2022/2023, there were 16 workplace injury cases reported, compared to 17 and 18 in FY2021/2022 and FY2020/2021 respectively. This translates to 58 hours of total man-days lost due to work-related injuries, significantly lower than that of FY2021/2022 and FY2020/2021, at 186 hours and 94 hours respectively.



<sup>&</sup>lt;sup>18</sup> A high-consequence work-related injury is one that results in a fatality or in an injury from which the worker cannot, does not, or is not expected to recover fully to pre-injury health status within six months.

## **Sentosa's Commitment to Responsible Social Practices**

## **Talent Management**

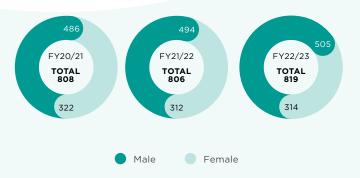
SDC acknowledges the crucial role its employees play in the organisation's overall success and sustainable development. The skillsets and expertise cultivated by employees are considered instrumental in spearheading transformative changes in SDC's operational strategies. Each member of the SDC team is highly regarded, and substantial emphasis is placed on recognising and leveraging the diverse backgrounds, skillsets, and talents of its employees. This collective understanding underscores the pivotal role of the workforce in driving organisational achievements and ensuring long-term growth.

As at 31 March 2023, SDC had a total employee strength of 819 full-time permanent employees, comprising 505 male employees and 314 female employees.

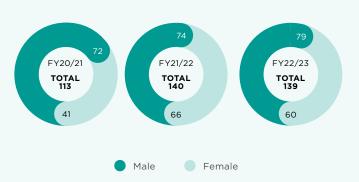
In FY2022/2023, 150 new hires joined the organisation (18% hire rate) while 139 employees left (17% turnover rate). The 150 new hires comprised 90 male employees and 60 female employees. The 139 turnovers comprised 79 male employees and 60 female employees.

SDC prioritises the well-being of its employees by offering various benefits, including healthcare and parental leave, among others. Recognising that talent is crucial to the organisation's success and growth, SDC actively invests in talent management. This includes providing all staff with training opportunities to equip them with the essential skillsets needed to tackle challenges and stay relevant in an ever-changing business environment. In FY2022/2023, each employee received an average of 24 training hours.

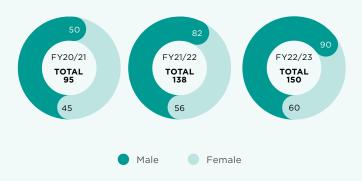
### **Total Number of Staff by Gender**



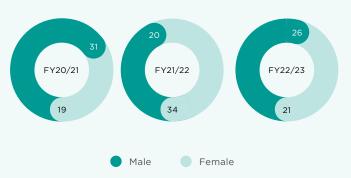
#### Total Employee Turnover by Gender



## **Total Employee Hire by Gender**



## Average Training Hours per Staff (based on full staff base)



## Sentosa's Commitment to Responsible Social Practices

#### **Board Effectiveness**

The Board and the management understand the importance of maintaining good corporate governance standards by having an effective Board where members actively participate in open and constructive discussions, challenging management's assumptions and proposals.

The Board is regularly updated on the progress of SDC's sustainability initiatives, and is also advised by the Sustainability Advisory Panel on subject-specific strategies and technical matters. Through these interactions, the Board is equipped with the most current insights and expertise, enabling them to offer well-informed advice and strategic direction, particularly in areas that are relevant to SDC's journey towards sustainable development.

#### **Respect for Freedom of Association**

SDC upholds the freedom of its employees to associate with and be part of trade unions. The organisation adheres to the regulations outlined in the Industrial Relations Act of Singapore, which grants employees the right to be represented by trade unions for collective bargaining. This provides an avenue for employees to seek resolution in the event of any disputes.

At SDC, employees have the opportunity to join recognised unions, including The Amalgamated Union of Public Employees (AUPE) and the National Trade Union Congress (NTUC). These unions provide representation and support to employees, allowing them to collectively address their interests and negotiate with the organisation. In FY2022/2023, approximately 45 per cent of the workforce is encompassed by collective bargaining agreements, designed to adhere to the relevant local legislation and are formulated in diverse ways to accommodate specific requirements. Employees who are not included in collective bargaining agreements have their working conditions and employment terms determined independently, separate from the collective agreements that cover other employees.

#### **CASE STUDY 1**

## **Building Leadership Capacity Through Leaders for Leaders Training Sessions**

In the past FY, SDC organised three Leaders for Leaders sessions to provide SDC leaders with the space to learn and exchange perspectives. On February 2023, SDC's Chief Executive Ms Thien Kwee Eng spoke about one of the organisation's core competencies, "Accelerating Possibilities", sharing her personal tips on embracing and owning change, having a growth mindset, and managing risks.



## Giving Back to Local Communities

SDC recognises the importance of giving back to the local community to promote a better and more inclusive society. SDC is committed to making Sentosa accessible to people from all walks of life and promoting volunteerism among all employees.

The Ministry of Culture, Community and Youth (MCCY) has advocated for greater volunteerism amongst Singaporeans to create stronger social bonds and inculcate values of community, compassion, and kindness in society. In line with this effort, SDC promotes a culture of corporate volunteerism and strives to deepen its engagement with the local community, as sustainable development goes beyond environmental initiatives. Ensuring social and economic sustainability is also key to meeting the needs of current and future generations. SDC therefore places a strong emphasis on promoting social inclusivity, supporting local Social Service Agencies (SSAs) in outreach and engagement efforts for underprivileged and persons with disabilities, and encouraging volunteerism among SDC's employees and Island Partners.

To bolster these initiatives, SDC has established a Social Inclusivity Workgroup under the Sustainable Sentosa Framework. This Workgroup is responsible for ensuring that present and future initiatives are aligned with SDC's approach to sustainability, establishing partnerships with relevant SSAs and providing employment opportunities.



## **Fundraising for Beneficiary and Social Service Agencies**

In August 2022, SDC celebrated Sentosa's Golden Jubilee with the main theme of remembering Sentosa's origins and giving back to the greater community. SDC organised a two-day Charity Golf event in support of the President's Challenge and Community Chest Singapore, in collaboration with Community Chest Singapore and Sentosa Golf Club, and hosted by Minister for Trade and Industry Gan Kim Yong and Minister for Social and Family Development and Second Minister for Health Masagos Zulkifli. With the support of SDC's avid golfers and donors, SDC raised more than \$3.9 million, which was presented to President Halimah Yacob during the gala dinner.

100% of the funds will be directed towards benefiting the President's Challenge agencies, as well as more than 100 social service agencies and 200 essential programmes supported by Community Chest. These organisations work to empower children with special needs and youth-at-risk, adults with disabilities, persons with mental health conditions, and seniors and families in need of assistance.

## Giving Back to Local Communities

**CASE STUDY 2** 

#### **Partnership with Educational Institutions**

## Integrating sustainability into the school curriculum

In an effort to cultivate knowledge among the youth in Singapore, SDC has partnered with the Ministry of Education (MOE) to integrate Sentosa case studies into the curriculum for Upper Secondary students. In the context of the Biology curriculum, SDC designed a case study employing Sentosa's carbon methodology. This exercise entails assessing the carbon footprint of a hypothetical visitor and business on Sentosa, imparting skills in carbon profiling to students. Moreover, the case study stimulates discussions on the significance of carbon mitigation in tackling climate change and global warming concerns. In collaboration with the MOE, SDC has crafted a tourism-focused case study for the Geography curriculum that studies the evolution stages of Sentosa's development trajectory, serving as an illustrative local example to educate students about Butler's Tourism Area Life Cycle Model.

## Raising awareness of conservation through our future generation

In February 2023, SDC hosted over 200 students and teachers from various PAP Community Foundation centres at the video launch of "My Little Red Dot and Friends on Sentosa: Let's save our ocean!". SDC collaborated with local artiste Edmund Chen from Asiatainment to curate a story of Bill the Hawksbill turtle and his friend, Little Red Dot, on the importance of protecting our ocean by disposing of litter responsibly. After watching the video, the students heard from Edmund on his inspiration for the video, and enjoyed some fun and educational activities on conservation. Through such engagements, SDC aims to reach more students, parents, and educators on the importance of conservation.





### Creating a fun way to learn — in multiple languages

With the support of the Lee Kuan Yew Fund for Bilingualism and Ah Guo Illustration, SDC has also published Bubu's Treasure Hunt, a Chinese story book that follows the adventures of Bubu as he explores Sentosa with his grandfather. Along with the picture book, SDC has also created accompanying itinerary and classroom activities for educators to use to enhance the learning experience of their preschoolers. 2,500 copies of the book are distributed preschools, and 2 sessions of storytelling were also conducted at the Vivocity National Library to reach out to pre-schoolers and families.



## **Grievance Mechanism**

## **Organisation Policies** and **Procedures**

SDC is fully committed to its employment guidelines and has established formal grievance reporting and escalation procedures for its employees. These measures are in place to ensure a workplace that is free from discrimination, harassment and violence. To facilitate this, SDC has implemented a whistleblowing policy to serve as a channel for employees and external parties (e.g. consultants, contractors, suppliers and island partners) to report any wrongdoings, unlawful conduct or malpractices within or involving SDC Group. Individuals may report concerns regarding potential improprieties, wrongdoings, unlawful conduct, harassment, or malpractices within or involving SDC Group. The Policy aims to provide individuals with a platform to raise their concerns about possible improprieties without fear of reprisals or adverse personal consequences.

The reporting channels are independently managed by the Sentosa Internal Audit Department (SDC-IAD). To report any improprieties, individuals can submit written reports via mail to SDC. All information received through the reporting channel will be handled with the utmost confidentiality. The identities and interests of the whistle-blowers will be safeguarded and protected throughout the process. For more information, please visit <a href="https://www.sentosa.gov.sg/whistleblowing">https://www.sentosa.gov.sg/whistleblowing</a>.

As an organisation, SDC firmly believes in its responsibility to advocate for policies that contribute to the growth of the business and the communities it operates in. SDC's corporate policies outline the core principles guiding the business conduct and ethical behaviour, obligatory for all employees and as a reference for stakeholders across SDC's value chain. For internal policies, the staff intranet provides access to these corporate policies, while external public policies can be found via the respective links below.

Policies & Procedures	Objectives
Publicly Available Policies	
SDC Whistleblowing Policy	Describes the approach SDC takes to enable individuals to report wrong-doings, unlawful conduct or malpractices within or involving SDC and its subsidiaries and proprietary club (SDC Group).
Personal Data Protection Policy	Establishes SDC's commitment to safeguarding information under its control by outlining how SDC collects, uses, discloses and/or processes the personal data provided to the organisation, as well as to assist individuals in making an informed decision before providing the organisation with any personal data.

Statement of Use	Sentosa Development Corporation has reported the information cited in this GRI content index for the period 1 April 2022 to 31 March 2023 with reference to the GRI Standards.		
	GRI 1: Foundation 2021		
GRI Used	GRI 2: General Disclosures 2021		
	GRI 3: Material Topics 2021		
GRI Sector Standards	No GRI Sector Standards adopted.		

GRI DISCLOSURE			Report Section and Remarks	Page Reference		
	The organisation and its reporting practices					
	2-1	Organisational details				
	2-2	Entities included in the organisation's sustainability reporting				
	2-3	Reporting period, frequency and contact point	About this Report	Page 3		
	2-4	Restatements of information				
	2-5	External assurance				
	Activities and workers					
GRI 2: General Disclosures 2021	2-6	Activities, value chain and other business relationships	About SDC in SDC Annual Report (AR) FY2022/2023	Page 5 in AR		
			Sustainable Supply Chain	Page 33		
	2-7	Employees	Talent Management	Page 47-48		
	2-8	Workers who are not employees	Sentosa's contract workers are managed by third- party staffing companies, with allocations based on project needs in terms of contractor count and days. Consequently, the number of contractors can differ across projects and staffing companies.			
	Governance					
	2-9	Governance structure and composition	Governance Structure	Page 11		

Governance			
2-10	The Board is composed of individuals who collectively contribute essential skills including expertise in areas such as accounting or finance, business or management, industry insight, strategic planning proficiency, and tourism-based experience or knowledge. Approved by the Singapore Cabinet, the Board adheres to SDC's Code of Conduct and Ethics, ensuring their responsibilities are carried out with prudence, expertise, and conscientiousness.		
2-11	Chair of the highest governance body	The chair of the Board is not a senior executive of the organisation.	
2-12	Role of the highest governance body in overseeing the management of impacts	Governance Structure	Page 11
2-13	Delegation of responsibility for managing impacts	Governance Structure	Page 11
2-14	Role of the highest governance body in sustainability reporting	Governance Structure	Page 11
2-15	Conflicts of interest	Processes to ensure that conflicts of interest are prevented and mitigated are set out in SDC's Code of Conduct. This includes sensitive information of SDC's business affairs and are not to be disclosed due to confidentiality reasons.	
2-16	Communication of critical concerns	This includes sensitive information of SDC's business affairs and are not to be disclosed due to confidentiality reasons.	
2-17	Collective knowledge of the highest governance body	Board Effectiveness	Page 48
2-18	Evaluation of the performance of the highest governance body	This includes sensitive information and is not disclosed due to confidentiality constraints.	
	2-11 2-12 2-13 2-14 2-15 2-16 2-17	2-11 Chair of the highest governance body 2-12 Role of the highest governance body in overseeing the management of impacts 2-13 Delegation of responsibility for managing impacts 2-14 Role of the highest governance body in sustainability reporting 2-15 Conflicts of interest 2-16 Communication of critical concerns 2-17 Collective knowledge of the highest governance body	2-10 Nomination and selection of the highest governance body  Strategic planning proficiency, and tourism-based experience or knowledge. Approved by the Singapore Cabinet, the Board adheres to SDC's Code of Conduct and Ethics, ensuring their responsibilities are carried out with prudence, expertise, and conscientiousness.  2-11 Chair of the highest governance body  Role of the highest governance body in overseeing the management of impacts  2-12 Delegation of responsibility for managing impacts  Delegation of responsibility for managing impacts  Conflicts of interest  Conflicts of interest  Conflicts of interest  Conflicts of interest  Communication of critical concerns  Collective knowledge of the highest governance body  Evaluation of the performance of the highest governance body  This includes sensitive information and is not  This includes sensitive information and is not

GRI DISCLOSURE			Report Section and Remarks	Page Reference	
	Governan	се			
	2-19 2-20	Remuneration policies Process to determine remuneration	The remuneration policy for Board members is based on guidelines established by the Ministry of Finance (MOF). The remuneration policy ensures comparability, motivation, measurement, and comprehensibility of the rules governing compensation while maintaining a balanced approach to remuneration packages. These topics pertain to confidential information about SDC's business and are not disclosed due to confidentiality concerns.		
	2-21	Annual total compensation ratio	This includes sensitive information and is not disclosed due to confidentiality constraints.		
GRI 2: General	Strategy,	policies and practices			
Disclosures 2021	2-22	Statement on sustainable development strategy	Chairman & Chief Executive Officer Message	Page 05-06	
	2-23	Policy commitments	Organisation Policies and Procedures	Page 52	
	2-24	Embedding policy commitments	Governance Structure Organisation Policies and Procedures	Page 11 Page 52	
	2-25	Processes to remediate negative impacts	Grievance Mechanism	Page 52	
	2-26	Mechanisms for seeking advice and raising concerns	Grievance Mechanism	Page 52	
	2-27	Compliance with laws and regulations	This includes sensitive information and is not disclosed due to confidentiality constraints.		
	2-28	Membership associations	Championing Transformation	Page 43	
	Stakeholder engagement				
	2-29	Approach to stakeholder engagement	Stakeholder Engagement	Page 13-15	
	2-30	Collective bargaining agreements	Respect for Freedom of Association	Page 48	
	Material t	opics			
GRI 3: Material Topics 2021	3-1	Process to determine material topics	Material Topics	Page 12	
100103 2021	3-2	List of material topics	Material Topics	Page 12	

GRI DISCLOSURE			Report Section and Remarks	Page Reference
Energy and Greenhou	se Gas Emissi	ons		
	3-3	Management of material topics		D 07.04
GRI 305: Emissions	305-1	Direct (Scope 1) GHG emissions	Cusanhayas Cas Engissians and Engusy	
2016	305-2	Energy indirect (Scope 2) GHG emissions	Greenhouse Gas Emissions and Energy	Page 23-24
	305-3	Other indirect (Scope 3) GHG emissions		
GRI 302: Energy	3-3	Management of material topics	Greenhouse Gas Emissions and Energy	Dago 25, 26
2016	302-1	Energy consumption within the organisation	Greenhouse Gas Emissions and Energy	Page 25-26
Water Management				
GRI 303: Water and	3-3	Management of material topics	Water Management	Page 27-29
Effluents 2016	303-3	Water withdrawal	water management	
Waste Management				
	3-3	Management of material topics		Page 30-32
CDI 706- E//l	306-2	Management of significant waste-related impacts		
GRI 306: Effluents and Waste 2020	306-3	Waste generated	Waste Management	
	306-4	Waste diverted from disposal		
	306-5	Waste directed to disposal		
Biodiversity				
GRI 304:	3-3	Management of material topics	Nature and Biodiversity	Page 35-38
Biodiversity 2016	304-3	Habitats protected of restored	inature and biodiversity	
<b>Guest Health and Safe</b>	ty			
GRI 416: Customer	3-3	Management of material topics		
Health and Safety 2016	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	Guest Health and Safety	Page 44-45

GRI DISCLOSURE			Report Section and Remarks	Page Reference	
Workplace Health and Safety					
GRI 403:	3-3	Management of material topics		Page 46	
Occupational Health and Safety	403-9	Work-related injuries	Workplace Health and Safety		
<b>Talent Management</b>					
	3-3	Management of material topics		Page 47-48	
GRI 401: Employment 2016	401-1	New employee hires and employee turnover	Talent Management	Page 47	
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	raient rianagement	Page 47-48	
GRI 404: Training	3-3	Management of material topics	T-l+ M	Page 47	
and Education 2016	404-1	Average hours of training per year per employee	Talent Management		
Local Communities					
CDI 417. Local	3-3	Management of material topics			
GRI 413: Local Communities 2016	413-1	Operations with local community engagement, impact assessments, and development programmes	Giving Back to Local Communities	Page 49-50	

MATERIAL TOPICS	Disclosure topic	Description	Impact boundary	Alignment to UN SDGs
Energy and Greenhouse Gas Emissions	GRI 302-1 GRI 305-1 GRI 305-2 GRI 305-3	Reducing energy consumption and greenhouse gas emissions in SDC's efforts to decarbonise and comply with relevant environmental regulations	Energy (SDC) GHG Emissions (SDC and Island)	Goal 7: Energy Goal 9: Industry, Innovation and Infrastructure Goal 12: Responsible consumption Goal 13: Climate action Goal 14: Life below water
Water Management	GRI 303-3	Improving water efficiency and reducing water usage across all operations and on Sentosa	SDC	Goal 6: Water Goal 12: Responsible consumption Goal 14: Life below water
Waste Management	GRI 306-2 GRI 306-3 GRI 306-4 GRI 306-5	Reducing the amount of waste generated and improving the recycling rate of waste on Sentosa	SDC	Goal 12: Responsible consumption
Biodiversity	GRI 304-3	Adopting new measures to conserve the rich biodiversity and habitats found on Sentosa as well as spreading conservation messages to guests	Island	Goal 14: Life below water Goal 15: Life on land
Heritage Conservation	Non-GRI topic	Conserving and preserving heritage infrastructure on Sentosa island, to create a sense of identity and deepen guests' understanding of Sentosa's rich heritage	Island	Goal 11: Sustainable cities and communities
Guest Health and Safety	GRI 416-2	Protecting the well-being of all guests through risk management and reduction measures	Island	Goal 3: Good Health and Well-Being Goal 11: Sustainable cities and communities
Local Communities	GRI 413-1	Investing in CSR projects to give back to the local community and promote volunteerism among staff to create a more inclusive society	SDC	Goal 4: Education Goal 17: Partnerships
Workplace Health and Safety	GRI 403-9	Building a safe working environment which promotes the health and safety of all SDC staff through robust measures implemented throughout its operations	SDC	Goal 8: Decent work
Talent Management	GRI 401-1 GRI 401-2 GRI 404-1	Ensuring fair employment practices as well as providing training and development opportunities for all staff	SDC	Goal 8: Decent work
Sustainable Supply Chain	GRI 2-6	Taking a holistic approach by integrating environmentally viable practices into the supply chain lifecycle and complying with environmental schemes and standards	SDC	Goal 12: Responsible consumption

