

# SUSTAINABILITY REPORT



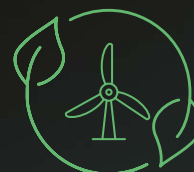
**50%**  
**reduction**  
in Scope 1 and 2  
emissions by 2030



**25%**  
**reduction**  
in Scope 3  
emissions by 2030



**30%**  
**renewable  
energy use**  
by 2030



**NET  
ZERO**  
by 2050

## Introduction

68	Executive Summary
70	Board Statement
70	About this Report
72	Performance Highlights FY2023
73	Awards and Recognition

## Sustainability at StarHub

74	Sustainability Framework
75	Sustainability Governance
77	Stakeholder Engagement
81	Materiality Assessment
82	Our Contribution to the UN SDGs
84	Goals and Targets FY2023

## Driving Sustainable Growth

87	Climate Change and Energy
87	Our SBT Journey
91	Our TCFD Progress
93	Our GHG and Energy Performance
96	Circularity
99	Green Tech Solutions

## Enabling A Digital Society

102	Product and Service Quality
104	Data Privacy, Cybersecurity and Online Safety
106	Digital Inclusion

## Caring For Our People & Communities

109	Health, Safety and Well-being
113	Talent Management
117	Community Outreach

## Responsible Business and Value Chain

123	Business Conduct and Ethics
125	Supply Chain Management

## Appendices

126	StarHub Value Creation Scorecard
127	Memberships and Associations
128	Climate Scenario Analysis Assumptions and Limitations
129	StarHub Environmental Data Accounting Methodology
132	GRI Content Index
137	SASB Index
139	TCFD Index
140	Independent Limited Assurance Report





# SUSTAINABILITY REPORT

## EXECUTIVE SUMMARY



### RECOGNITION AND SALIENT DEVELOPMENTS

We are pleased to report significant progress in our sustainability and social responsibility journey in FY2023. In particular, we are honoured that StarHub is recognised as the **World's Most Sustainable Wireless Telecommunication Provider and 80<sup>th</sup> Most Sustainable Corporation in the Corporate Knights Global 100 2024 rankings**, which is widely accepted as the gold standard in sustainability rankings.



We achieved **"A-" Leadership Score for CDP Climate Change 2023**, the global environmental disclosure platform.



To better address the needs and interests of investors and other stakeholders, we undertook our inaugural double materiality assessment from both impact and financial perspectives, in accordance with the Global Reporting Initiative (GRI) 2021 Standards and referencing the International Financial Reporting Standards (IFRS) Sustainability Disclosure Standards.

Leveraging on our existing Task Force on Climate-related Financial Disclosures (TCFD) reporting in FY2022, we refined our quantitative scenario analysis by extending the scope to include our subsidiaries beyond Singapore and reassessing the potential financial impact. We also prioritised key climate-related physical risks and transition risks as guided by the risk ratings disclosed in our Enterprise Risk Management (ERM) Framework.



### ENVIRONMENTAL

We are proud to have made tangible progress in our decarbonisation commitment. Our near- and long-term targets were validated and approved by the Science Based Targets initiative (SBTi) in November 2023, adding credibility to our goals. To achieve these new ambitious targets, we released our inaugural Climate Transition Plan, which lays out our initiatives ranging from energy optimisation, green products and services, climate resilience, and sustainable financing.

#### Our SBTi Commitment:

Details of StarHub's climate-related performance, initiatives, risks and opportunities can be found in Climate Change and Energy (refer to page 87)

Reduce absolute Scope 1 and 2 GHG emissions **50% by 2030** from a 2021 base year

Reduce absolute Scope 1, 2 and 3 GHG emissions **90% by 2050** from a 2021 base year

Reduce absolute Scope 3 GHG emissions from purchased goods and services, capital goods, fuel and energy-related activities, and downstream leased assets by 25% within the same timeframe

#### GHG and Energy Performance:

**16.3% decrease** in Scope 1 and 2 emissions (from 2021 base year)

Achieved interim target of **14.0% energy** use from renewable sources

Achieved target of **recycling 100% of ICT e-waste** from our corporate office and warehouse

**Reduced total water** consumption by **20.2%** from FY2022

Details of our environmental disclosures are provided under Driving Sustainable Growth (refer to pages 86-100).



## SOCIAL

In the social space, StarHub received the **Progressive Wage Mark accreditation from the Ministry of Manpower (MOM)**, which recognises the competitive remuneration packages we provided to empower our employees. As the drive to address climate change accelerates, sustainability-linked key performance indicators have been incorporated into our key management's remuneration starting from FY2024. We also placed a strong emphasis on supporting positive social outcomes for our communities using our skills, expertise and resources, investing close to \$600,000 and 1,215 employee volunteering hours, reaching over 4,180 beneficiaries. Of note is our drive to facilitate digital inclusion for our communities.

Achieved **99% 5G nationwide coverage** and launched new 10Gbps broadband service

Achieved **100% and 99.94% network availability** for our fibre broadband and mobile services

Improved our **Net Promoter Score (NPS) by 29%** from FY2022

Maintained **zero incidents** of non-compliance regarding the health and safety impact of our products and services

Maintained **zero information systems** and customer databases that were materially compromised



*Details of our product and service quality, employee health, safety, and well-being including our social responsibility initiatives are disclosed under Enabling a Digital Society (refer to pages 101-107) and Caring for Our People and Communities (refer to pages 108-120)*



## GOVERNANCE

Governance is the pillar that upholds of integrity, and we have established strong, transparent frameworks to ensure accountability. We conducted an anti-corruption risk assessment to identify activities which were vulnerable to corruption risk and have established mitigation measures to limit such activities. We are pleased to report that there were no incidents of non-compliance pertaining to marketing communications, fraud, corruption, anti-competitive and anti-trust behaviours in FY2023.

Achieved quality **score of "1"** for low governance risk from the Institutional Shareholder Services (ISS).

Maintained **zero incidents** of cyberattacks and no material data privacy breaches.

Based on our Supplier Self-Assessment Questionnaires (SAQ), around **98% of our suppliers have confirmed adherence to the Supplier Code of Conduct** and about half of them have established GHG reduction targets. We aim to enhance the ESG assessment and integrate sustainability elements in our procurement policy.



*Details of our corporate governance, responsible business practices and supply chain management are disclosed under Responsible Business and Value Chain (refer to pages 122-125)*

## CONCLUSION

We recognise that sustainability is a journey instead of a destination, and there will always be more we can do to improve. We are committed to making continuous improvement on sustainability and social responsibility, to facilitate a healthier environment for our future generations.

# SUSTAINABILITY REPORT

## INTRODUCTION

### Board Statement

The Board of Directors is proud to present StarHub's 13<sup>th</sup> Sustainability Report.

The unpredictability in the aftermath of COVID-19 and the geopolitical tensions in 2023 posed a global challenge. It was also the warmest year on record. At StarHub, addressing the root causes of climate change and implementing sustainable practices has never been more urgent. Our commitment to continuous improvement on sustainability and social responsibility remains unwavering, and we are excited about future possibilities.

We are pleased to share that our sustainability efforts have been globally recognised in 2023. Notably, StarHub emerged as the World's Most Sustainable Wireless Telecommunication Provider and 80th Most Sustainable Corporation in the Corporate Knights Global 100 2024 rankings, which is widely accepted as the gold standard in sustainability rankings.

The Board oversees StarHub's sustainability efforts, including the determination of material ESG factors, climate-rated disclosures and integration of material sustainability issues relating to both financial and impact aspects into the Group's overall strategy. The Board is supported by the Management in its efforts to manage material ESG issues and to embed the sustainability strategy into StarHub's operations.

In 2023, we reviewed and approved the double materiality exercise, validating the refreshed material topics for StarHub from both impact materiality and financial materiality perspectives, in accordance with the GRI 2021 Standards and the IFRS S1 Sustainability Disclosure Standards.

Further, we have committed to advance StarHub's climate ambitions by validating a set of bold new decarbonisation goals. During the year, we embarked on the next phase of our decarbonisation efforts with the official validation of our goals and targets by the SBTi. Please refer to pages 87-90 for our SBT adoption.

We continue to proactively decarbonise our operations. In 2023, 14% of our energy use came from renewable sources, and we will progressively work towards fulfilling 30% of our electricity needs using renewable energy by 2030. This year heralded the greening and modernisation of our legacy data centres, and we also started to integrate electric vehicles (EVs) into our corporate fleet. We will intensify our efforts to support the global race to net zero.

We also started monitoring the latest developments from the Sustainability Reporting Advisory Committee, to better inform our stakeholders on the material climate-related issues facing

our business. As a signatory of the Corporate Knights Action Declaration on climate policy engagement, we reaffirmed our commitment to align our policies and trade association engagements with the goals of the Paris Agreement.

Beyond environmental concerns, sustainability is also about ensuring that our employees and the community we operate in have a healthy and safe space to thrive. We continue to build a safe, diverse and inclusive workplace while attracting, retaining and investing in the training of our employees. We also support the less privileged children and youths and foster a digitally inclusive community, having invested close to \$600,000 in donations and 1,215 employee volunteering hours in 2023. We look forward to your continued support as we progress in our sustainability journey.

### About This Report

#### Reporting Scope and Boundary

Our 13th annual Sustainability Report covers information of StarHub and all our subsidiaries as listed on pages 241-244 (together the "StarHub Group" or the "Group"), unless otherwise stated. The sustainability information disclosed in this report aligns with StarHub's financial reporting period from 1 January 2023 to 31 December 2023 (FY2023).

Except for greenhouse gas (GHG) emissions and related data, our ESG data as well as targets published in this report cover StarHub and our wholly-owned subsidiaries, namely StarHub Cable Vision Ltd, StarHub Mobile Pte Ltd, StarHub Online Pte Ltd and Nucleus Connect Pte Ltd. Data collection and target setting for StarHub subsidiaries not covered in this report are in progress and will be reported as soon as practicable in future reports. For GHG emissions and related data, StarHub consolidates and reports the data and our progress against targets based on the operational control approach, which covers the StarHub Group.

#### Reporting Framework

Our report adheres to the Singapore Exchange Securities Trading Limited (SGX-ST) Listing Rule 711A on preparing an annual sustainability report and describes our sustainability practices with reference to the primary components set out in SGX-ST Listing Rule 711B.

This report has been prepared in accordance with the GRI Standards 2021 given its wide adoption and to the extent applicable to StarHub's business operations. We also began adopting the International Sustainability Standards Board's IFRS Sustainability Disclosure Standards that were released in June 2023. We have

also referenced the Sustainability Accounting Standards Board (SASB) based on Telecommunications Services (Industry Standard, Version 2013-12 ) to provide industry-specific disclosures for our stakeholders. In alignment with SGX's climate reporting requirements and our support for Singapore's decarbonisation efforts, this report includes the Taskforce on Climate-related Financial Disclosures (TCFD) reporting, which is now subsumed into IFRS S2 Climate-related disclosures. We also voluntarily report our climate action and GHG performance to CDP, the leading global environmental disclosure platform. We continue to support the UN Sustainable Development Goals (SDGs) and have disclosed our contributions towards the SDGs (on pages 82 to 83). References to the GRI Content Index, SASB Disclosure Index and the TCFD Index are set out at the end of this report on pages 132 to 139.

## Review and External Assurance

In 2023, our sustainability reporting process underwent an internal audit by PwC Singapore for the first time, and the results were assessed to be satisfactory. As in previous years, StarHub engaged an external assurance provider to give independent assurance over selected ESG metrics. This practice of obtaining independent assurance ensures credibility and provides a true and fair view of our selected sustainability information. The Board is responsible for reviewing our ESG assurance report and disclosures, overseeing our ESG assurance progress and managing the ESG-related risks. References to KPMG Singapore assurance opinion and scope of data assured are set out on pages 140 to 143 of this report.

## Feedback

We appreciate your comments and feedback on our Sustainability Report to help us progress in our sustainability journey. You may reach out to us at [sustainability@starhub.com](mailto:sustainability@starhub.com).





# SUSTAINABILITY REPORT



## PERFORMANCE HIGHLIGHTS FY2023

StarHub made significant progress towards enhancing our sustainability strategy and practices. Our FY2023 performance highlights are as follows:



### DRIVING SUSTAINABLE GROWTH

Continued to engage enterprise customers on StarHub's Green Tech solutions to assist to reduce energy use and increase productivity through automation 	Near-term and <b>net-zero targets</b> validated by SBTi	Transforming our corporate office based on a full Activity Based Working (ABW) concept embedding sustainability values
	Achieved " <b>A-</b> " Leadership Score for CDP Climate Change for the second consecutive year 	Developed a decarbonisation roadmap and published our inaugural StarHub Climate Transition Plan


### ENABLING A DIGITAL SOCIETY

Achieved <b>99% 5G</b> nationwide coverage 	Continued excellence in network operation, receiving recognition from Opensignal, an independent global standard for analysing consumer mobile experience
Introduced new <b>UltraSpeed 10Gbps</b> broadband plan	
Donated refurbished pre-loved laptops to beneficiaries of SHINE Children and Youth Services 	

### RESPONSIBLE BUSINESS AND VALUE CHAIN

<b>Zero incidents</b> of non-compliance pertaining to fraud, corruption, anti-competitive and anti-trust behaviours 	<b>Zero incidents</b> of non-compliance with regulations or voluntary codes concerning product and service information and labelling
All new suppliers onboarded in FY2023 completed the SAQ	
Continued recognition for corporate governance and transparency best practices, receiving the best possible quality score of '1' for low governance risk from ISS 	

### CARING FOR OUR PEOPLE & COMMUNITIES

Reached more than <b>4,180 beneficiaries</b> with our donation and hands-on community efforts, with staff contributing more than <b>1,215 volunteering hours</b>	Maintained <b>25%</b> female representation on the Board at the minimum 
	Training hours of <b>27,865</b> provided to our employees, representing <b>97%</b> of our workforce

## AWARDS AND RECOGNITION

### Environment



"A-" Leadership Score for CDP Climate Change 2023



World's Most Sustainable Wireless Telecommunication Service Provider and 80<sup>th</sup> most sustainable corporation globally



Produced by MSCI ESG  
Research as of January 2024  
Rated "AA" since 2017



FTSE4Good

Included in FTSE4Good Index Series since 2020<sup>1</sup>

### Governance



ISS best possible quality score of "1" for low governance risk throughout 2023

**Singapore Governance and Transparency Index 2023**  
Ranked 38<sup>th</sup> out of 474 SGX-listed companies



Winner of the best weighted return on equity for three years (Technology Equipment and Telecommunications Services sector)



**The Legal 500 GC Powerlist Southeast Asia Teams 2023**  
StarHub's Legal team recognised as one of Southeast Asia's leading legal teams

### Product & Service Quality



OPENSIGNAL

**Opensignal's Singapore Mobile Network Experience Awards (November 2023)**

Winner: Overall Video Experience, Overall Live Video Experience, Overall Games Experience, Overall Download Speed Experience, and Consistent Quality

Joint Winner: 5G Video Experience, 5G Live Video Experience, 5G Availability, and Availability



giga!: Silver for eCommerce Team of the year  
giga!: Silver for Best in eCommerce Brand - Electronics & Gadgets  
giga!: Bronze for Best eCommerce Loyalty - Programme



Best Pay TV Service Provider (Singapore)



StarHub: Second Best Internet Service Provider  
giga!: Second Best Mobile Carrier



giga!: Silver for Best Loyalty Strategy – eCommerce

giga!: Silver for Best Customer Experience  
StarHub: Bronze for Best Loyalty Strategy – Telecommunications

**Asia-Pacific Stevie Awards 2023 for Sales and Customer Service**

Innovation in Customer Service - Telecommunications Industries

### Social



**SPARK Digital Leaders Award 2023**  
StarHub Chief Executive, Nikhil Eapen, received the Top Digital CEO Award



**People's Association (PA) Community Spirit Awards 2023**  
Received Excellence Award for supporting Central Singapore Community Development Council (Central Singapore CDC) in bonding the community and building social capital through the "Junior Stars" programme



**Community Chest Awards 2023**  
Received Charity Silver Award for supporting educational, vocational or interventional programmes offered at Metta School, SHINE Children and Youth Services, and Singapore Anglican Community Services (SACS)

<sup>1</sup> FTSE Russell (the trading name of FTSE International Limited and Frank Russell Company) confirms that StarHub Ltd has been independently assessed according to the FTSE4Good criteria and has satisfied the requirements to become a constituent of the FTSE4Good Index Series. Created by the global index provider FTSE Russell, the FTSE4Good Index Series is designed to measure the performance of companies demonstrating strong ESG practices. The FTSE4Good indices are used by a wide variety of market participants to create and assess responsible investment funds and other products.



# SUSTAINABILITY REPORT

## SUSTAINABILITY AT STARHUB

### Sustainability Framework

StarHub remains steadfast in our ambition to create a better world enabled by digital solutions, while caring for our people and planet.

We continue to focus on the four key pillars of our sustainability framework in alignment with our double materiality assessment, so as to prioritise StarHub's sustainability strategies and efforts to address the most significant impacts of our business to the environment, people and the economy, as well as the relevant sustainability risks and opportunities.

Our implementation of strategic initiatives to drive performance under each pillar is monitored using key performance indicators and targets as further disclosed in this report.

### StarHub's Sustainability Framework Pillars



#### DRIVING SUSTAINABLE GROWTH

Minimising our own environmental footprint and building our climate-resilience, while enabling our clients to decarbonise through innovative Green Tech solutions



#### ENABLING A DIGITAL SOCIETY

Maximising the positive impact of information and communications technology (ICT) to businesses and communities through provision of safe, reliable and resilient services



#### CARING FOR OUR PEOPLE & COMMUNITIES

Supporting our employees and communities to reach their full potential in an inclusive environment



#### RESPONSIBLE BUSINESS AND VALUE CHAIN

Exercising robust corporate governance, responsible business practices and ethical sourcing throughout our value chain

## Sustainability Governance

The Board and Board Risk and Sustainability Committee (Board RSC) are responsible for sustainability and climate-related performance of the StarHub Group. The Board provides oversight with support from the Board RSC, of the Group's sustainability vision, strategies, policies, initiatives and practices, in alignment with the Management's planning and execution.

The Board RSC reviews sustainability and climate-related issues such as our decarbonisation roadmap, target setting and performance tracking, TCFD reporting and scenario analysis, ESG material topics, public policy engagement and external verification, as reported by the Management Risk Committee (MRC) via at least three scheduled RSC meetings yearly, with additional ad-hoc meetings and periodic email updates. Board level guidance and communications with our Chief Executive, Chief Corporate and Sustainability Officer (CCSO) and other Senior Executives also take place quarterly and as required.

### Our Sustainability Governance Structure

#### The Board

- Reviews and considers sustainability and climate-related issues as part of its strategic formulation, performance objective and target setting, and review of business plans including major capital expenditures. This includes consideration of StarHub's existing sustainability performance in managing its impact and exposure to ESG risks (such as climate risks and opportunities).
- Reviews and approves StarHub's material topics and sustainability report.

#### Board RSC

- Comprises members of the Board and the Chief Executive who are tasked with specific oversight of sustainability and climate-related matters.
- Keeps the Board informed on identification, assessment and monitoring of StarHub's impact on the environment, people and the economy, as well as climate-related risks and opportunities.
- Reviews business practices and risk management processes (including for climate risks and opportunities) to ensure alignment and integration of our sustainability strategy.

#### MRC

- Comprises the Senior Executives overseeing business units, chaired by the Chief Executive, with the sustainability agenda headed by the CCSO.
- Assists the Board RSC in developing management policies, strategies and frameworks for monitoring and mitigating our impact and climate-related risks and opportunities.
- Identifies new sustainability and carbon reduction initiatives and establishes priorities and targets for the short-, medium-, and long-term, based on input from working level staff and stakeholder feedback.
- Reports performance against goals and targets to the Board RSC.

#### Sustainability Advocate

- Working level committee responsible for developing, implementing, and coordinating programmes and initiatives with the support of cross-functional representatives.

# SUSTAINABILITY REPORT

When reviewing risks and opportunities, the Board RSC adopts a holistic and prudent approach in alignment with the precautionary and risk management principles in our ERM framework. The Board seeks to achieve a balance of short-, medium-, and long-term goals and success. Climate-related risks and opportunities that could have a substantive financial or strategic impact on our direct operations or across our upstream and downstream value chains were assessed through a top-down and bottom-up approach, with the aim to optimise the synergies and minimise and mitigate the trade-offs. Operational feasibility, commercial viability, significance of impact (both positive and negative), peer benchmarking, maturity of the marketplace and supporting ecosystem as well as forward-looking insights were taken into consideration during the assessment.

Following the Board's approval to set science-based targets as well as the development of our decarbonisation roadmap in early 2023, climate-related risk was identified and assessed to be one of StarHub's top risks in FY2023. The risk of not meeting StarHub's 2030 and 2050 climate-related goals and corresponding mitigation measures are tracked at the MRC level, with the performance against the GHG emissions reduction targets reported back to the Board RSC. The Sustainability Team, led by the CCSO, with guidance from the Board RSC and the Chief Executive, is primarily responsible for leading the carbon reduction initiatives. These initiatives span all business units and are supported by the respective management teams. The Sustainability Team works closely with the department sustainability advocates in each business unit to ensure alignment of approach, timeline and expected outcomes.

Concurrently at the Board level, the Audit Committee (AC), the Nominating and Governance Committee (NGC) and the Organisation Development and Compensation Committee (ODCC) provide support in areas such as internal controls and compliance, board effectiveness and corporate governance policies, executive remuneration, and sustainability-linked performance review. As part of the internal audit process, the AC reviews the results and recommendations from the internal audit conducted for our sustainability reporting process.

The NGC oversees Board composition including skills, qualification, experience and diversity, and reviews the appointment of Directors annually using a skills matrix as one criterion. To ascertain the Board's strength in overseeing climate-related issues, Board Members underwent a self-assessment in 2022 on their competency and experience across multi-disciplinary areas of expertise such as corporate governance practice, sustainability and risk oversight, proficiency in long-term value creation, knowledge of consumer and enterprise businesses, and talent development. Four Board members (corresponding to 36% of current total Board member strength) were found to have a good understanding of macro sustainability and ESG trends (including ethical supply chains, fair employment practices and age and gender diversity), as well as experience integrating sustainability into broader business practices and corporate strategy. A board skill analysis was also conducted at the collective Board level in 2023, to ensure that the StarHub Board has an appropriate mix of skills, composition, size and commitment, as well as to identify and address any skill gaps.

The Board also recognises that ongoing professional development is important for the Directors to serve effectively, with Directors encouraged to continually refresh their professional knowledge and skills. In 2023, various sustainability-related professional development programmes relating to Board leadership, remuneration and TCFD were made available to the Board.

StarHub understands the importance of incentivising the Management to prioritise climate-related issues and strategies. Consequently, performance in climate-related efforts including the development and implementation of the StarHub Climate Transition Plan and the achievement of GHG reduction targets are linked to key management's compensation. The ODCC has worked with the Management to identify sustainability-linked key performance indicators, which will be incorporated into our key management's remuneration starting FY2024.




For more details on our ERM framework and Board committees, composition and competency, refer to our Corporate Governance Report on page 146.

## Stakeholder Engagement





StarHub regularly engages with our key stakeholders through formal and informal channels to ensure continuity in value creation. Key stakeholders are identified based on their potential impact on our business as well as the potential impact of our business operations, products and services on them. Maintaining such ongoing communication is essential for us to identify and address their concerns while also allowing StarHub to receive feedback on our sustainability measures and performance.





### Stakeholder Engagement Efforts Summary

OG Ongoing  
 R Regularly  
 Q Quarterly  
 A Annually  
 AR As required

Stakeholder Group	Engagement Method & Frequency	ESG Issues or Impacts Raised	StarHub's Response
<b>Customers (Enterprise and consumer)</b> 	<ul style="list-style-type: none"> <li><span>OG</span> Customer surveys</li> <li>Hotlines</li> <li>Emails</li> <li>SMS</li> <li>Customer apps</li> <li>Online store</li> <li>Retail stores</li> <li>Company website and social media</li> <li>WhatsApp chat and Facebook</li> <li>Messenger chatbot</li> <li><span>A</span> Sustainability Report</li> </ul>	<ul style="list-style-type: none"> <li>• Network service quality and coverage</li> <li>• Cybersecurity and data protection measures</li> <li>• Products and services that support digital economy growth</li> <li>• Simplicity and clarity of StarHub's fees and contracts</li> <li>• Disclosure of our ESG performance and targets</li> </ul>	<ul style="list-style-type: none"> <li>• Ongoing investments in infrastructural upgrades</li> <li>• Active monitoring of cybersecurity trends</li> <li>• Continuous strengthening of StarHub's cybersecurity to protect customers' personal data</li> <li>• Greater focus on digital products and support channels</li> <li>• Self-service portals and apps allow customers to obtain information and complete transactions online 24x7</li> <li>• Embarked on science-based target setting and decarbonisation roadmap</li> </ul>
<b>Employees</b> 	<ul style="list-style-type: none"> <li><span>OG</span> Intranet</li> <li>Emails</li> <li>Workshops and webinars</li> <li>Employee social media</li> <li>Outreach and volunteering activities</li> <li>Employee feedback surveys</li> <li><span>Q</span> HubberHangout virtual staff communication session</li> <li><span>A</span> Performance review</li> <li>Annual Report and Sustainability Report</li> </ul>	<ul style="list-style-type: none"> <li>• Career and talent development</li> <li>• Salaries and benefits</li> <li>• Work-life balance</li> <li>• Access to communication channels</li> </ul>	<ul style="list-style-type: none"> <li>• Implemented hybrid workplace model since 2022</li> <li>• Instituted flexi-benefits scheme since 2019</li> <li>• Aligned contract employees' insurance plans with that of permanent employees since 2022</li> <li>• Integrated Annual Wage Supplement into employee monthly salaries to address rising costs of living</li> <li>• Introducing Caring Manager initiatives to train managers to lead with empathy and provide psychological safety net to staff</li> <li>• Access to Employee Assistance Programme (EAP)</li> </ul>
<b>Suppliers</b> 	<ul style="list-style-type: none"> <li><span>OG</span> Company website</li> <li>Face-to-face meetings</li> <li><span>R</span> Emails</li> <li>Teleconference</li> <li><span>AR</span> SAQ</li> <li><span>A</span> Sustainability Report</li> </ul>	<ul style="list-style-type: none"> <li>• Structured procurement process</li> <li>• Compliance with terms and conditions of purchasing policies, including StarHub's Supplier Code of Conduct</li> </ul>	<ul style="list-style-type: none"> <li>• Made our Supplier Code of Conduct and Responsible Sourcing Policy available online</li> <li>• Implemented an SAQ to collect information and guide compliance</li> </ul>

# SUSTAINABILITY REPORT

Stakeholder Group	Engagement Method & Frequency	ESG Issues or Impacts Raised	StarHub's Response
<b>Distributors and Retailers</b> 	<ul style="list-style-type: none"> <li><span style="background-color: #2c3e50; color: white; border-radius: 50%; padding: 2px;">R</span> Teleconference</li> <li><span style="background-color: #2c3e50; color: white; border-radius: 50%; padding: 2px;">R</span> Emails</li> <li><span style="background-color: #2c3e50; color: white; border-radius: 50%; padding: 2px;">R</span> Face-to-face meetings</li> <li><span style="background-color: #2c3e50; color: white; border-radius: 50%; padding: 2px;">AR</span> Shop visits</li> </ul>	<ul style="list-style-type: none"> <li>• StarHub's product and service quality (e.g. timely delivery, after-sales support, attractive promotions and sales)</li> <li>• Distributors and retailers' service quality to end customers</li> </ul>	<ul style="list-style-type: none"> <li>• Supported partners with simplified processes, systems and training</li> <li>• Provided digital sales tools to streamline sales process</li> <li>• Enhanced service offerings and promotions</li> </ul>
<b>Business Partners</b> 	<ul style="list-style-type: none"> <li><span style="background-color: #2c3e50; color: white; border-radius: 50%; padding: 2px;">R</span> Face-to-face meetings</li> <li><span style="background-color: #2c3e50; color: white; border-radius: 50%; padding: 2px;">R</span> Teleconference and seminar</li> <li><span style="background-color: #2c3e50; color: white; border-radius: 50%; padding: 2px;">A</span> Annual Report and Sustainability Report</li> </ul>	<ul style="list-style-type: none"> <li>• Supply and demand for renewable energy</li> <li>• Adoption of Green Tech solutions, collaborative innovation for user-friendly, energy-efficient and low carbon products and services</li> </ul>	<ul style="list-style-type: none"> <li>• Explored partnerships to seek mutually beneficial business opportunities in the areas of renewable energy as well as creation of digital products and solutions</li> </ul>
<b>Investors</b> 	<ul style="list-style-type: none"> <li><span style="background-color: #2c3e50; color: white; border-radius: 50%; padding: 2px;">OC</span> IR contact – email address and phone number listed on IR website</li> <li><span style="background-color: #2c3e50; color: white; border-radius: 50%; padding: 2px;">R</span> Financial disclosures</li> <li><span style="background-color: #2c3e50; color: white; border-radius: 50%; padding: 2px;">R</span> Investor conferences, meetings, and non-deal roadshows</li> <li><span style="background-color: #2c3e50; color: white; border-radius: 50%; padding: 2px;">R</span> Timely announcements via SGXNet and IR website</li> <li><span style="background-color: #2c3e50; color: white; border-radius: 50%; padding: 2px;">Q</span> Business performance update call for analysts</li> <li><span style="background-color: #2c3e50; color: white; border-radius: 50%; padding: 2px;">A</span> Annual General Meeting</li> <li><span style="background-color: #2c3e50; color: white; border-radius: 50%; padding: 2px;">A</span> Extraordinary General Meeting</li> <li><span style="background-color: #2c3e50; color: white; border-radius: 50%; padding: 2px;">A</span> Independent third-party Investor Relations (IR) perception study</li> <li><span style="background-color: #2c3e50; color: white; border-radius: 50%; padding: 2px;">A</span> Investor Day</li> <li><span style="background-color: #2c3e50; color: white; border-radius: 50%; padding: 2px;">A</span> Annual Report and Sustainability Report</li> </ul>	<ul style="list-style-type: none"> <li>• Transparency, timely information on business performance, strategy, views on operating landscape and business outlook</li> <li>• Timely response to queries</li> </ul>	<ul style="list-style-type: none"> <li>• Actively engaged the investment community through investor meetings, prompt responses to email and phone queries</li> <li>• Conducted regular update briefing with research analysts</li> <li>• Provided timely and comprehensive information to the market, and remained committed to best corporate governance and disclosure practices</li> </ul>
<b>Local Communities</b> 	<ul style="list-style-type: none"> <li><span style="background-color: #2c3e50; color: white; border-radius: 50%; padding: 2px;">OC</span> Community outreach programmes</li> <li><span style="background-color: #2c3e50; color: white; border-radius: 50%; padding: 2px;">A</span> Donations and sponsorships</li> <li><span style="background-color: #2c3e50; color: white; border-radius: 50%; padding: 2px;">A</span> Sustainability Report</li> </ul>	<ul style="list-style-type: none"> <li>• Social needs, including access to connectivity and digital technologies, employability and environmental awareness</li> </ul>	<ul style="list-style-type: none"> <li>• Regularly reviewed community needs to plan outreach programmes</li> <li>• Partnered with voluntary welfare organisations and investing in community projects to support less privileged youths and families</li> <li>• Provided a 50% discount to senior citizens for their Premier+ subscriptions and organised educational roadshows on streaming TV for seniors</li> <li>• Sponsored broadband plans to Unlocking ADHD for 2023-2024</li> <li>• Community screenings of the Premier League and ICC Cricket World Cup 2023</li> </ul>

Stakeholder Group	Engagement Method & Frequency	ESG Issues or Impacts Raised	StarHub's Response
<b>Media</b> 	<ul style="list-style-type: none"> <li><span style="color: #0070C0;">OC</span> Media contact - email address listed on corporate website</li> <li><span style="color: #0070C0;">R</span> Media releases</li> <li><span style="color: #0070C0;">R</span> Timely media responses</li> <li><span style="color: #0070C0;">R</span> Media events and briefings for media</li> <li><span style="color: #0070C0;">A</span> Annual Report and Sustainability Report</li> <li><span style="color: #0070C0;">AR</span> Bi-annual business performance update</li> </ul>	<ul style="list-style-type: none"> <li>• Exposure and access to company developments and news as well as breaking stories on products, services and entertainment content</li> </ul>	<ul style="list-style-type: none"> <li>• Provided dedicated media contacts</li> <li>• Offered timely and accurate information on company affairs of public interest</li> </ul>
<b>Government and Regulators</b> 	<ul style="list-style-type: none"> <li><span style="color: #0070C0;">R</span> Virtual and face-to-face meetings</li> <li><span style="color: #0070C0;">R</span> Consultation sessions</li> <li><span style="color: #0070C0;">R</span> Request for Proposals</li> <li><span style="color: #0070C0;">A</span> Annual Report and Sustainability Report</li> </ul>	<ul style="list-style-type: none"> <li>• Compliance with regulations, including the provision of resilient telecommunications services for our customers</li> <li>• Supporting the digital readiness of Singapore's telecommunications infrastructure, workforce and economy</li> <li>• Data privacy and online safety</li> <li>• Narrowing the digital divide</li> </ul>	<ul style="list-style-type: none"> <li>• Ongoing measures to ensure compliance with regulatory requirements, including relevant audits on our infrastructure</li> </ul>
<b>Trade Unions</b> 	<ul style="list-style-type: none"> <li><span style="color: #0070C0;">R</span> Informal/formal consultations</li> <li><span style="color: #0070C0;">R</span> Learning and development collaboration</li> <li><span style="color: #0070C0;">A</span> Annual Report and Sustainability Report</li> </ul>	<ul style="list-style-type: none"> <li>• Access to employees for promoting trade union memberships</li> <li>• Dialogue with Management on employment practices and trends</li> <li>• Knowledge sharing and capacity building</li> </ul>	<ul style="list-style-type: none"> <li>• Opportunities for open and honest dialogue with the Management</li> <li>• Memorandum of Understanding with the Singapore Industrial and Services Employees' Union (SISEU)</li> </ul>
<b>Non-Governmental Organisations (NGOs) and Advocacy Groups</b> 	<ul style="list-style-type: none"> <li><span style="color: #0070C0;">R</span> Emails</li> <li><span style="color: #0070C0;">R</span> Meetings</li> <li><span style="color: #0070C0;">R</span> Conferences</li> <li><span style="color: #0070C0;">A</span> Sustainability Report</li> </ul>	<ul style="list-style-type: none"> <li>• Responsible business practices</li> <li>• Disclosure of our sustainability performance</li> </ul>	<ul style="list-style-type: none"> <li>• Committed to the Ten Principles of the United Nations Global Compact (UNGC)</li> <li>• Committed to contribute to UN SDGs</li> </ul>

# SUSTAINABILITY REPORT

## Aligning our public engagement and membership associations with the Paris Agreement goals

Since November 2022, StarHub has been a signatory of the Corporate Knights Action Declaration on climate policy engagement (an initiative by Corporate Knights and the Global 200 Council), thereby committing to:

1. Support climate action aligned with the Paris Agreement when engaging with policymakers
2. Work with our major industry/trade associations to advance alignment with the Paris Agreement
3. Monitor and disclose climate policy alignment for StarHub and our major industry/trade associations

**Action Declaration**  
on climate policy engagement  
CORPORATE KNIGHTS GLOBAL 200 COUNCIL

StarHub works closely with the regulators including Government Technology Agency, Infocomm Media Development Authority (IMDA), MOM, Ministry of Sustainability and the Environment (MSE), National Environment Agency (NEA), National Parks Board (NParks), and SGX. We contribute to the Singapore Green Plan 2030 and the associated policies or programmes that uphold climate change, circular economy and sustainability reporting. We also collaborate with our peers and partners through various trade associations and alliances such as Global Compact Network Singapore (GCNS), GSM Association (GSMA), Singapore Business Federation (SBF), Singapore International Chamber of Commerce (SICC), Institute of Singapore Chartered Accountants (ISCA), Singapore Corporate Counsel Association (SCCA) and SGListCos to advocate the same.

Specifically, our CCSO has, since 2021, served as the Honorary Treasurer of GCNS, the Singapore chapter of the UNGC, which advances the stewardship of sustainable business practices and Singapore's national agenda of becoming a regional sustainable business hub as well as nurtures the next generation of responsible business leaders. As a member of SGListCos, an association representing companies listed on the Mainboard and Catalist of SGX, we reviewed and helped to shape the guidance paper on Renewable Energy Certificates (RECs), which is expected to be released in early 2024. This is a pivotal initiative that aims to provide essential guidance for companies in Singapore to navigate the RECs landscape.

Our CCSO also participated in a closed-door engagement session on GreenGov.SG organised by the Ministry of Sustainability and the Environment and facilitated by the Government Chief Sustainability Officer. The collaborative effort culminated in the establishment of sustainability targets at the government level.

Having pioneered the largest company-led voluntary e-waste recycling programme for Singapore consumers from 2012 to 2021, we contributed to the successful implementation of the national e-waste collection system by sharing our knowledge and data with NEA-appointed Producer Responsibility Scheme (PRS) Operator, ALBA E-Waste Smart Recycling Pte Ltd (ALBA). The regulated e-waste management based on the Extended Producer Responsibility (EPR) approach took effect from July 2021. In support of NParks' OneMillionTrees movement that aims to transform Singapore into a City of Nature, we contributed to the Garden City Fund and rallied our customers and employees to plant trees at various locations, including Dairy Farm Nature Park and Pulau Ubin. An estimated 172 tonnes of carbon dioxide will be sequestered over the lifetime of the trees planted.

For the full list of memberships and trade associations of which StarHub is a member, see page 127.

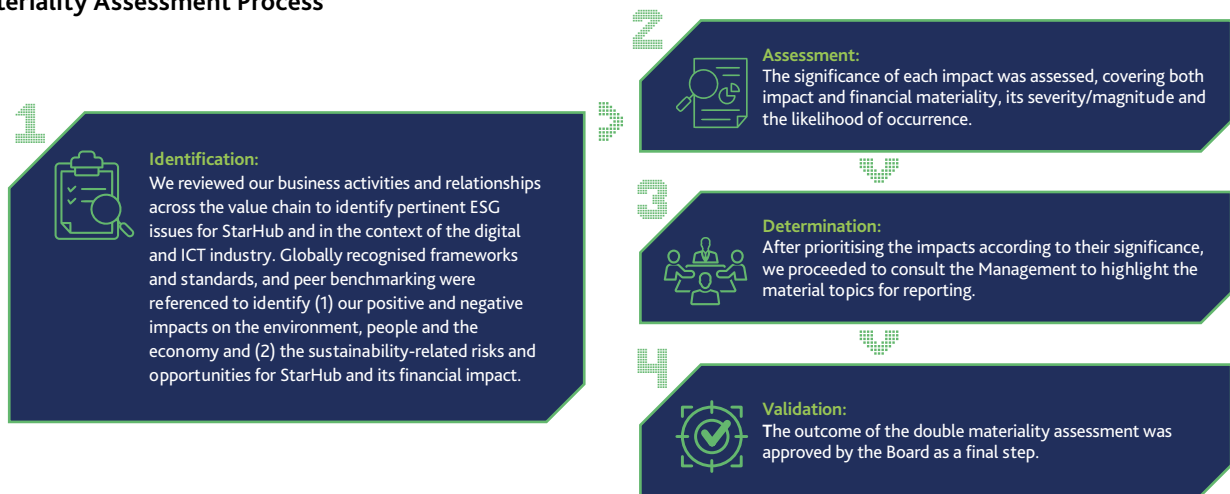


## Materiality Assessment

This year, we conducted our materiality assessment using the double materiality approach to identify and assess pertinent ESG issues, risks and opportunities in our business activities from both the impact and financial perspectives. By progressing from impact materiality assessment to double materiality assessment, StarHub has laid the groundwork for the new IFRS Sustainability Disclosure Standards which will be mandated by financial regulators and stock exchanges in the near future.

The assessment based on impact materiality was built on the materiality refresh we conducted in FY2022 in accordance with the GRI 2021 standards. We identified the impact on the environment, economy and society as a result of StarHub's business operations, products and services ("inside out"). The assessment based on financial materiality was conducted in accordance with the IFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information. Sustainability-related risks and opportunities that could affect StarHub's financial performance and/or enterprise value were then identified and evaluated ("outside in").

### Materiality Assessment Process



*Note: StarHub has a two-year materiality assessment cycle. Consultation with external stakeholders that was due to take place in FY2023 was not implemented as we commenced the double materiality approach. We will consult our external stakeholders as part of our next full materiality assessment process.*

StarHub's material topics are presented according to our four sustainability framework pillars. While the issues covered by the material topics remain consistent with the previous year, the material topics have been renamed or regrouped to better reflect and report on our most significant impacts based on our double-materiality impact assessment results.











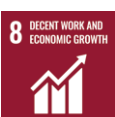

*Note: As per the double materiality assessment conducted in FY2023, the material topics "Data Privacy and Cybersecurity" and "Online Safety" have been combined into one material topic - "Data Privacy, Cybersecurity and Online Safety". "Responsible Selling" was removed as a standalone material topic, since StarHub continues to adhere to and report on strict compliance with local laws and regulations as part of our responsible business conduct.*



# SUSTAINABILITY REPORT

## Our Contribution to the UN SDGs

StarHub continues to support the following SDGs as part of the management of our impact on the environment, people and the economy. We report against 12 out of the 17 SDGs.

SDG (SDG targets)	Material Topic	Examples of Efforts and Initiatives
 <b>Goal 3</b> Ensure healthy lives and promoting well-being for all at all ages (3.4, 3.d)		<ul style="list-style-type: none"> <li>Offered company-wide initiatives to support mental health and well-being such as the Employee Assistance Programme (EAP) hotline, the ThoughtFull Chat app, quarterly early release from work, and no-meeting Thursday afternoons.</li> <li>Offered enhanced customer app with integrated security, privacy and advanced parental controls to better protect our customers against cyberattacks and unintended viewing of unsafe web content by children.</li> <li>Shared internet safety tips with less privileged children and youths.</li> <li>Regular cyber advisories and cybersecurity upskilling sessions for employees.</li> </ul>
 <b>Goal 4</b> Supporting quality education as the foundation to improving people's lives and sustainable development (4.4, 4.a)		<ul style="list-style-type: none"> <li>Donated refurbished pre-loved laptops to beneficiaries of SHINE Children and Youth Services.</li> <li>Supported intervention programmes to help at-risk youths improve their school attendance as well as outreach programmes that provide employment support to less privileged youths.</li> <li>Enrolled our key talents in career development programmes.</li> <li>Multi-faceted approach to upskilling our employees, including LinkedIn Learning, "Noontime Discovery" sessions tapping internal expertise, and providing our frontline workforce with comprehensive training in Workforce Skills Qualifications courses.</li> <li>Transforming the systems that handle personal data to include automation for seamless compliance with the Personal Data Protection Act 2012 (PDPA).</li> </ul>
 <b>Goal 5</b> Achieve gender equality and empower all women and girls (5.1)		<ul style="list-style-type: none"> <li>Adhered to the Tripartite Alliance for Fair Employment Practices (TAFEP) guidelines, prohibiting any kind of discrimination in employment or transactions.</li> <li>Maintained at least 25% female representation on the Board in 2023.</li> </ul>
 <b>Goal 7</b> Ensure access to affordable, reliable, sustainable and modern energy for all (7.2)		<ul style="list-style-type: none"> <li>Progressively raised the proportion of our renewable energy to reach 30% in 2030 by securing bundled RECs and power purchase agreements (PPAs).</li> <li>Conducted pilot test of solar-powered mobile base stations.</li> <li>Conducted feasibility studies of installing rooftop solar photovoltaic in our data centres, in partnership with Terrenus Energy Pte Ltd.</li> <li>Progressively integrated EVs into our corporate fleet.</li> <li>Rolled out solar-powered outdoor 5G WiFi access points across three National University of Singapore (NUS) campuses.</li> </ul>
 <b>Goal 8</b> Promote inclusive and sustainable economic growth by creating quality jobs for all (8.2, 8.8)		<ul style="list-style-type: none"> <li>Rolled out bizSAFE Level 2 Risk Management Champion training for our Workplace Safety and Health Risk Management Team.</li> <li>Entered into a new partnership with SISEU to form the Company Training Committee (CTC).</li> <li>Provide energy-efficient data centres, and significantly expanding our 5G network and cybersecurity services to facilitate the digital economy growth.</li> </ul>



Climate Change and Energy



Green Tech Solutions



Circularity



Product and Service Quality



Data Privacy, Cybersecurity and Online Safety

SDG (SDG targets)	Material Topic	Examples of Efforts and Initiatives
 <b>Goal 9</b> Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation (9.1, 9.4)		<ul style="list-style-type: none"> <li>Continually reduced our network infrastructure's carbon footprint by consolidating sites and equipment, optimising operating temperatures as well as switching to more energy-efficient technologies.</li> <li>Implemented Smart Hygiene proof-of-concept solution in partnership with NUS to help them monitor water consumption and reduce man hours for cleaning.</li> <li>Continually improved our ISO 22301 security and resilience – business continuity management systems.</li> </ul>
 <b>Goal 10</b> Reduce inequality within and among countries (10.2)		<ul style="list-style-type: none"> <li>Offered low-cost mobile service plans specially designed for seniors and visually- or hearing-impaired persons.</li> <li>Offered free community screenings of Premier League games and ICC Men's Cricket World Cup Final.</li> <li>Obtained MOM's Progressive Wage Mark accreditation for our support towards lower-wage employees.</li> <li>Adhered to the TAFEP guidelines, which prohibits any kind of discrimination in employment practices.</li> </ul>
 <b>Goal 11</b> Make cities and human settlements inclusive, safe, resilient and sustainable (11.6)		<ul style="list-style-type: none"> <li>Waste reduction initiatives including placing e-waste collection bins in our retail shops and offering one-for-one take-back service of regulated electronics for customers.</li> <li>Removed litter from Coney Island, making public places clean and safe for the well-being of the community.</li> <li>Working towards obtaining Green Mark certification for our data centres by 2026.</li> </ul>
 <b>Goal 12</b> Ensure sustainable consumption and production patterns (12.5, 12.8)		<ul style="list-style-type: none"> <li>Recycled e-waste from our corporate office and warehouse.</li> <li>Offered rental of set-top boxes, business routers and optical network terminals, extending the useful lifespan of these devices through repair and refurbishment.</li> <li>Offered fully managed Device Lifecycle Management service through our device leasing business model.</li> <li>Transitioning to electronic name card for employees.</li> </ul>
 <b>Goal 13</b> Take urgent action to combat climate change and its impacts (13.1)		<ul style="list-style-type: none"> <li>Continued to report against the TCFD framework and build on existing disclosures.</li> <li>Developed decarbonisation roadmap and action plans to achieve reduction in GHG emissions for Scope 1, 2 and 3.</li> <li>Offered Green Tech solutions, a comprehensive suite of end-to-end energy-efficient solutions to help businesses grow while better managing their carbon footprints.</li> </ul>
 <b>Goal 16</b> Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels (16.5)		<ul style="list-style-type: none"> <li>Continued to communicate Employee Code of Conduct and Ethics (which includes anti-corruption policies and procedures) to all employees during onboarding and thereafter annually.</li> <li>Included anti-corruption and bribery standards in StarHub's Supplier Code of Conduct.</li> <li>Instituted and maintained a whistle blowing channel under the oversight of the Board to allow employees and external parties to raise concerns without risk of reprisals.</li> <li>Various mechanisms and procedures are in place to ensure that we fully comply with the PDPA and Do-Not-Call (DNC) Policy.</li> <li>Established the Use of Generative Artificial Intelligence (GenAI) Policy to guide the ethical and responsible use of GenAI.</li> </ul>
 <b>Goal 17</b> Strengthen the means of implementation and revitalise the global partnership for sustainable development (17.17)		<ul style="list-style-type: none"> <li>Partnered NGOs and regulatory bodies to bridge the digital divide through donation of fibre broadband plans, roadshows to educate seniors about streaming TV, and scam public education.</li> <li>Continued to support local suppliers and integrate sustainability practices into our procurement and supply chain management processes.</li> </ul>

# SUSTAINABILITY REPORT

## GOALS AND TARGETS FY2023







Following our commitment to respond to the SBTi's urgent call for corporate climate action, StarHub in February 2023 submitted our near- and long-term company-wide GHG emissions reduction targets to the SBTi and obtained its validation in November 2023. We are also pleased to report that we published our inaugural Climate Transition Plan in July 2023, in line with the recommendations of the TCFD and CDP.


















We have also refreshed our other short-, medium- and long-term ESG targets this year to better align with our updated material

topics. Additional targets for each material topic under StarHub's four sustainability framework pillars are described under the respective sections of this report.

StarHub continues to place a strong emphasis on supporting positive social outcomes for our communities using our skills, expertise and resources. Please find further details under our non-material topic "Community Outreach" on pages 117-121.



 <b>Material Topic</b>	 <b>Performance Against FY2023 Targets</b>	<b>FY2023 Progress</b>	 <b>Key Targets for FY2024 and Beyond</b>
 <b>Climate Change and Energy</b>	<p>Achieved 16.3% reduction in absolute Scope 1 + 2 GHG emissions in FY2023 (from a 2021 base year)</p> <p>Achieved interim target of 14.0% energy use from renewable sources</p> <p>Completed the Green Mark gap analysis for the three data centres; action plans are put in place to meet the certification requirements for RCG</p> <p>Maintained carbon neutrality for our corporate office and four main retail shops for a consecutive year</p>	<p>👍</p> <p>👍</p> <p>👍</p> <p>👍</p>	<p>Net zero by 2050</p> <p>50% reduction in Scope 1 and 2 GHG emissions by 2030 (from a 2021 base year)</p> <p>25% reduction in absolute Scope 3 GHG emissions from purchased goods and services, capital goods, fuel and energy-related activities, and downstream leased assets by 2030 (from a 2021 base year)</p> <p>Increase energy use from renewable sources to 30% by 2030</p> <p>Achieve Green Mark certification for data centres – RCG by 2024, NC CO1 by 2025, SH CO2 by 2026</p> <p>Maintain carbon neutrality for our corporate office and four main retail shops</p>
 <b>Circularity</b>	<p>Diverted 100% of ICT e-waste from our corporate office and warehouse for recycling</p>	<p>👍</p>	<p>Divert 100% of ICT e-waste from our operations and all subsidiaries under our operational control in Singapore for recycling by 2030</p>
 <b>Green Tech Solutions</b>	<p>The solar-powered outdoor 5G WiFi proof-of-concept solution in FY2022 has been a success and NUS has since deployed more than 90 units across three campuses</p> <p>Smart Hygiene proof-of-concept solution in partnership with NUS helped to improve restroom usability and cleanliness and monitor water consumption through the use of IoT</p>	<p>👍</p>	<p>Accelerate the adoption of our Green Tech solutions to help create a more sustainable and green digital economy</p>

 <b>Material Topic</b>	 <b>Performance Against FY2023 Targets</b>	<b>FY2023 Progress</b>	 <b>Key Targets for FY2024 and Beyond</b>
 <b>Product and Service Quality</b>	Achieved 100% network availability for fibre services and 99.94% network availability for mobile services		Maintain 100% network availability for fibre broadband services and achieve more than 99.95% mobile service availability Strive to minimise instances of service disruption
 <b>Data Privacy, Cybersecurity and Online Safety</b>	Zero information systems and customer databases were materially compromised as a result of strict compliance with local regulatory requirements and industry best practices		Continue to enforce strict compliance with local regulatory requirements and industry best practices and maintain integrity of information systems and customer databases
 <b>Digital Inclusion</b>	Donated refurbished pre-loved laptops to beneficiaries of SHINE Children and Youth Services Offering low-cost mobile service plans specially designed for seniors and visually- or hearing-impaired persons Rolled out educational roadshows to introduce seniors to streaming TV technology		Continue sharing the positive impact of our products and services to seniors, needy students, low-income households and persons with disabilities (PWDs). We are also assessing suitable means to better measure impacts from our digital inclusion efforts for future reporting
 <b>Health, Safety and Well-being</b>	Maintained zero work-related fatalities and major injuries		Maintain zero work-related fatalities and major injuries
 <b>Talent Management</b>	Maintained a minimum of 25% female representation on the Board in FY2023 100% of our identified key talents have been invited for engagement sessions in FY2023		Continue to maintain a minimum of 25% female representation on the Board in the next two to four years Start Mentorship Programme in FY2024 as part of our key talent development
 <b>Business Conduct and Ethics</b>	Zero incidents of non-compliance pertaining to fraud, corruption, anti-competitive and anti-trust behaviours Zero incidents of non-compliance in marketing communications		Maintain zero incidents of non-compliance with local laws and regulations pertaining to fraud, corruption, anti-competitive and anti-trust behaviours. Maintain zero incidents of non-compliance in marketing communications
 <b>Supply Chain Management</b>	All new suppliers onboarded in 2023 have completed the SAQ 98% of all suppliers completed the SAQ confirmed adherence to our Supplier Code of Conduct		Enhance ESG assessment on StarHub's first-tier suppliers Integrate sustainability elements in our procurement policy



# DRIVING SUSTAINABLE GROWTH

StarHub's Environmental Policy describes energy, climate change, resources, water, waste, biodiversity and natural ecosystem as our focus areas. We are committed to prevent and/or minimise our environmental impact through conserving energy and resources, improving energy efficiency, adopting environmentally friendly technologies and materials, and raising environmental awareness of our employees, business partners and customers. As we strive to go beyond mere compliance, we continually review our goals and performances.





## CLIMATE CHANGE AND ENERGY

### Our SBT Journey

Addressing climate change is one of StarHub's utmost priorities. Our commitment to decarbonise has been strengthened following the debate at the COP28 climate summit and the release of Singapore's Third National Climate Change Study (V3) projecting higher temperatures, more wet and dry extremes and accelerating increase in mean sea levels for Singapore and Southeast Asia by the end of the century.

In early 2023, having completed the assessment of our GHG base year emissions covering all our subsidiaries in the prior year, we secured Board approval to set near- and long-term targets at the Group level and developed a decarbonisation roadmap with defined milestones.

Subsequently, we published our inaugural StarHub Climate Transition Plan in July 2023 which states our approach to the transition to a low carbon economy in alignment with the Paris Agreement to keep the average global temperature increase to less than 1.5°C above pre-industrial levels. The StarHub Climate Transition Plan also details the governance mechanisms employed by StarHub's Board and Management in their oversight of our decarbonisation efforts.

We are pleased to share that our near and long-term targets to meet the SBTi net-zero criteria have been validated and approved in November 2023.

Our science-based targets are as follows:



### Overall Net-Zero Target

StarHub commits to reach net-zero GHG emissions across the value chain by 2050.



### Near-Term Targets

StarHub commits to reduce absolute Scope 1 and 2 GHG emissions 50% by 2030 from a 2021 base year. StarHub also commits to reduce absolute Scope 3 GHG emissions from purchased goods and services, capital goods, fuel and energy-related activities, and downstream leased assets 25% within the same timeframe.



### Long-Term Targets

StarHub commits to reduce absolute Scope 1, 2 and 3 GHG emissions 90% by 2050 from a 2021 base year.



# SUSTAINABILITY REPORT

## Our Decarbonisation Strategies



### Transition to EVs and refrigerants and fuel of lower carbon footprint

We aim to progressively replace our internal combustion engine (ICE) fleet to EVs which have significantly lower carbon dioxide emissions. Given the EVs' zero tailpipe emissions, the use of EVs also contribute to better air quality and public health.



### Reduce energy consumption and improve energy efficiency

We seek to optimise energy use through decommissioning legacy network and systems, consolidating sites and equipment, increasing operating temperature in data centres and migrating information technology applications to the cloud.

We also strive to increase energy efficiency through cyclical replacement of energy-intensive computer room air conditioning units and uninterruptible power supply of a higher-efficiency model and adopting better rack and aisle design layout to contain cooled air.



### Build climate resilient network infrastructure

We aim to build and operate green network infrastructure that is resilient to climate change effects such as rising ambient temperature and more intense and frequent rain and flash floods

Conducting scenario analysis as part of the TCFD reporting is instrumental in understanding the impact of climate-related risks and opportunities on StarHub in the short, mid, and long term, and the corresponding mitigation and adaptation measures needed to be put in place.



### Increase share of renewable energy use

We remain committed to increase the use of renewable energy sources by conducting feasibility studies and trials to generate more on-site solar energy on our premises as well as for our mobile base stations.

To realise our 2030 target of achieving 30% renewable energy use, we continue to assess options to secure long-term renewable energy through PPAs and RECs.



### Green products and services

We seek to improve and expand our partnerships and collaborations with existing and new suppliers, customers, business partners and other stakeholders to procure and supply green products and services that meet our customers' needs.

We continue to engage with our customers to share our decarbonisation ambition and educate them about digital enabler technologies and energy-efficient solutions that would empower them to make better-informed decisions and reduce climate change impact in their operations.



### Sustainable financing

We aim to make use of sustainable financing opportunities to fund our decarbonisation efforts. We will set up our Sustainability Linked Funding Framework (SLFF) which will align our financing strategy with our sustainability targets. We believe the capital market investments will further incentivise StarHub to achieve our ESG goals.

To work towards achieving our 2030 near-term targets, we have set aside \$30 million for investment in renewable energy, EV transition and progressive modernisation of network infrastructure. When planning our capital expenditures, we consider factors such as government intervention, technology advancement and climate-related risks and opportunities as identified in our climate scenario analysis (see page 92).

In FY2023, we started integrating EVs into our fleet and using low GWP refrigerant. We continued with space optimisation initiatives that started in 2021 to increase energy efficiency in our data centres. We have since increased the operating temperature from 22°C to 25°C, tightened our housekeeping and space layout, shut down inactive equipment and consolidated sites and equipment. To ensure that such changes do not compromise the connectivity and service quality and reliability to our customers, these projects are planned ahead, with periodic engagements with representatives across all technical sites. We have also completed the gap analysis for BCA Green Mark certifications for our data centres which puts us on track to achieve the first certification for RCG data centre by 2024. In early 2024, we successfully secured green biomass energy of 12,000MWh annually (as bundled RECs) for the next four years, allowing us to meet our renewable energy target more cost-effectively.



StarHub's Hub Trooper driving an EV.

Some initiatives we commenced in 2023 remain a work in progress. We continue to roll out 5G mobile base stations with the automatic power amplifiers mute function to conserve energy use. As Singapore is due to turn off all 3G networks in 2024, we are migrating our 3G customers to 4G and 5G networks. We will continue shutting down legacy synchronous digital hierarchy (SDH) transmission equipment, while migrating to high-performance IP+ Optical transport network. We will also further pursue the pilot testing of our solar-powered mobile base stations to examine the feasibility of scaling up.



Engineers checking the signal strength of a mobile base station.

2023 was an exciting year as we began to transform our corporate office to one that will be based on a full Activity Based Working (ABW) concept, which embraces five key themes – Branding, Efficiency, Experience, Collaboration and Sustainability. The new office, which is scheduled to be ready for occupancy in the second quarter of 2024, has been designed to achieve the BCA-HPB Green Mark Platinum for Healthier Workplaces. In addition, we strive to reduce energy, water and material use and minimise the overall carbon footprint and create better indoor air quality for the health and well-being of all occupants including our employees, contractors and visitors. We believe the environmental sustainability of our corporate office should augment the social dimensions of a healthy workplace, such as universal design for inclusion, social interaction, work productivity, health, safety, and well-being, as well as occupant experience. Consequently, we have integrated the environmental sustainability concept in the overall office design and planning, from decommissioning to refurbishment, fit out commissioning, occupancy and maintenance.



# SUSTAINABILITY REPORT

## Main Energy and GHG Emissions Reduction Initiatives Implemented in FY2023

Initiatives	Estimated Annual Energy Reduction (kWh)	Estimated Annual Scope 2 Emissions Reduction (tCO <sub>2</sub> )	Estimated Annual Cost Savings (\$)	Investment/CAPEX Committed (\$)
<b>Energy efficiency in buildings</b>	<b>1,623,983</b>	<b>677</b>	<b>1,200,118</b>	<b>20,299,800</b>
1 Space optimisation in data centres: Progressively shut down inactive equipment and tightened cable housekeeping at SH CO2	204,306	85	760,018	
2 Cyclical replacement of HVAC equipment: Replacement of fan coil unit to a more energy-efficient model which also uses R32, a lower GWP refrigerant at SH CO2 <sup>#1</sup>	329,113	137	102,025	
3 Transforming the Corporate Office based on ABW concept with half the existing office space <sup>#2</sup>	1,090,564	455	338,075	
<b>Energy efficiency in processes</b>	<b>3,330,344</b>	<b>1,388</b>	<b>365,602</b>	<b>6,225,000</b>
1 Commenced shutting down of legacy SDH transmission equipment <sup>#2</sup>	2,400,000	1,000	196,598	
2 Continue with migration to high-performance multi-service transport access-layer routers <sup>#3</sup>	520,344	217	39,004	
3 Installed automatic power amplifiers on 5G base stations to mute when no downlink data is sent over the air <sup>#2</sup>	410,000	171	130,000	
4 Streamlined on-site infrastructure set-up process by reusing base station equipment and sharing infrastructure with business collaborators	#4	#4	#4	
<b>Electrification of company fleet</b>	<b>20,939</b>	<b>9</b>	<b>218</b>	<b>#5</b>
1 Leased six EVs as replacement to existing ICE vehicles	20,939	9	218	

**Table notes:**

#1 Emissions avoided with the use of new refrigerant, R32, has not been taken into account.

#2 These initiatives are expected to be completed in 2024.

#3 These initiatives are expected to take two years or more to complete.

#4 Emissions avoided and cost savings with reusing and sharing of equipment and infrastructure against purchasing new ones have not been quantified given lack of credible methodology to do so.

#5 There was no capital cost involved in FY2023.



## Our TCFD Progress

In FY2021, StarHub commenced TCFD reporting (which is now subsumed into IFRS S2 Climate-related disclosures) to better understand the climate risks and opportunities for our business. The disclosures allow us to convey to our stakeholders the impact of these climate risks and opportunities on our business and our Management's response to this impact to maintain our stakeholders' trust and confidence.

Building upon the progress in FY2021 and FY2022, we updated the quantitative scenario analysis in this year's iteration. The updates included covering more of our entities and geographies and updating the impact to compare with the latest available FY2022 data. We also analysed the financial impact on StarHub should the effect of climate change continue unabated or unmitigated, as well as the potential cost savings with respect to carbon price-related costs if decarbonisation is applied or targets are achieved. StarHub aims to continually build on and enhance our TCFD disclosures in subsequent years by quantifying the financial benefits from pursuing climate opportunities.

For the FY2023 enhanced climate scenario analysis, StarHub studied the 1.5°C and <3°C warming scenarios and analysed the impact of climate-related risks and opportunities on company-wide activities in the short (2025), medium (2030) and long term (2050). The geographic coverage of the analysis included Singapore, Malaysia and Hong Kong. The climate-related physical and transition risks included in the analysis are summarised in the table below.

Through the scenario analysis, we concluded that unmitigated physical climate risks may result in a moderate to major financial impact by 2050. Transition risks have a major financial impact primarily because of the combined effect of carbon tax increase

and higher energy costs from projected data volume growth. The predominant physical risk identified is rising temperatures resulting in heatwaves and flash floods (with a notable increase under the higher temperature scenario). This increases service disruption risk and the associated reputational and financial risks.

The identified risks and opportunities continue to influence our overall business strategy and we consider these factors in our decarbonisation roadmap and the targets set for the milestone years of 2030 and 2050, where we expect a significant reduction in our carbon cost exposure. The decarbonisation roadmap forms a vital part of StarHub's overall business strategic planning process. Our current and future budgets take into account the sustainable investments associated with the adoption of decarbonisation initiatives and drive our decision-making processes.

With climate risk being one of StarHub's top risks, climate risks are now fully integrated within our ERM framework. Through a comprehensive risk assessment, we assess the impact of climate change on our business and evaluate risk responses that will best protect and enhance the resilience of our infrastructure, products and services, thereby future-proofing our business as we transit to a low carbon economy. StarHub has both bottom-up (risk assessment at the business unit level) and top-down processes (Board and MRC reviews) to identify risks. Significant risks and opportunities identified based on a consideration of impact and likelihood against our internal thresholds are discussed and deliberated by the MRC to decide whether to pursue the opportunity or, accept, avoid, transfer or reduce the risk. The residual risk and corresponding risk mitigation measures are tracked on a quarterly basis and the results are reported to the Board RSC for their review. For more details of our Board's responsibility for climate-related issues and for our ERM framework, refer to pages 75-76 and pages 177-185.



# SUSTAINABILITY REPORT

## Climate-Related Risks

Key Risks	Related Impact to StarHub Group	Significance of Financial Impact <sup>#1</sup>		Key Mitigation Strategies
<b>Physical risks</b> Rising mean temperatures and increased heatwave risk	Increased cooling costs in data centres and potential for premature equipment failure Risk of power cuts due to high electricity demand nationwide risking service disruption	1.5°C scenario ■	<3°C scenario ■	Optimising IT loads using advanced algorithms and software
<b>Increased storm and flash flood risks</b>	Potential damage to assets resulting in reduced service availability Increased maintenance and repair costs and insurance premiums	1.5°C scenario ■	<3°C scenario ■	Carrying out site-specific assessment to prioritise future flood adaptation measures Including climate change effects in determining design criteria (e.g. wind load) for new infrastructure or existing infrastructure upgrade
<b>Increased extreme precipitation risk</b>	Increased rain shading of wireless signals, leading to increased energy costs for transmission and potential reduced service availability	1.5°C scenario ■	<3°C scenario ■	Constantly improving business continuity management procedures and disaster recovery plans
<b>Key Risks</b> <b>Transition risks</b> Carbon tax increase	Higher business costs (including higher cost pass-through when suppliers set higher prices for their products and services due to rising energy costs)	1.5°C scenario ■	<3°C scenario ■	Improving energy efficiencies of network equipment and data centres Retiring legacy systems and consolidating sites and equipment
<b>Data volume growth from increased demand for ICT services</b>	Higher energy operating costs	1.5°C scenario ■	<3°C scenario ■	Adopting lower emission technologies such as EVs, migration to hyperscale cloud
<b>Enhanced climate-related disclosure requirement and stakeholder expectations, with associated reputational risks</b>	Additional costs for capacity building to meet more stringent reporting requirements Potential cost of non-compliance including loss of revenue and investment opportunities due to reputational damage	Not quantified due to data limitations		Continually monitoring upcoming sustainability reporting regulations and stakeholders' needs and expectations

Legend: Low-Moderate significance (<\$5m potential financial impact) Major-Severe significance (≥\$5m potential financial impact)

## Climate-Related Opportunities

Key Opportunities <sup>#2</sup>	Related Impact to StarHub Group	Significance of Identified Opportunities	Key Actions
<b>Energy efficiency upgrades and operational optimisation</b>	Reduction in energy costs	Not quantitatively assessed but likely to present a moderate opportunity given StarHub's annual cost savings of \$2.1 million for its energy reduction initiatives in FY2022	Cyclical replacement of M&E equipment with better efficiency models Achieving Green Mark certifications for data centres
<b>Demand for green products from enterprise customers<sup>#3</sup></b>	Higher revenue from ICT solutions and changing revenue profile	Not quantitatively assessed but opportunity is likely to be significant in a <1.5°C scenario given demand for green ICT solutions	Continuous innovation to meet customers' evolving needs through Green Tech solutions
<b>Adoption of renewable energy</b>	Reduced exposure to carbon tax increase	Not quantitatively assessed but likely to offer a minor opportunity in a <3°C scenario given that cost of procuring RECs may be higher than carbon costs	Secure bundled RECs through PPAs Increase on-site solar energy generation
<b>New financing opportunities through green and sustainability linked bonds/ loans</b>	Increased availability of capital to implement decarbonisation initiatives	Not quantitatively assessed but likely to be a significant opportunity given that more funds can be raised through issuance of sustainability-linked bonds/ loans. StarHub secured the first sustainability-linked loan in FY2020 for approximately \$82 million	Exploring further sustainable funding opportunities Setting up and leveraging the sustainability-linked financing framework

### Table notes:

- #1 Significance of financial impact to StarHub by year 2050 before mitigation measures is assessed pursuant to StarHub's ERM framework. Further assumptions and limitations of this analysis have been stated on page 128.
- #2 Financial impacts arising from potential climate-related opportunities are not yet fully quantified and their quantification will be considered as part of future scenario analysis work. The above carbon price-related cost savings have not been accounted for when StarHub was preparing the decarbonisation costing budget or plan.
- #3 Green products are products and services with lower carbon footprint, or those that can bring about energy savings for our customers.

## Our GHG and Energy Performance

In FY2023, our energy reduction and efficiency measures have resulted in a substantial decrease of 64,463MWh (-11.8%) in total electricity consumption from FY2022. Energy use from renewable sources amounted to 18,692MWh or 14.0% of total electricity consumption. However, since some of our subsidiaries have reported refrigerant top-ups and fuel use from stationary and mobile sources for the first time this year, refrigerant and fuel use increased significantly by 244kg (+57%) and 207m<sup>3</sup> (+183%) respectively compared to the previous year. While the inclusion of additional refrigerants and fuel data resulted in an increase in Scope 1 emissions, we continue to make good progress towards our Scope 1 and 2 emission reduction targets. In this regard, we achieved 8.0% and 16.3% reduction in Scope 1 and 2 (market-based) from FY2022 and FY2021 base year respectively, and a 12.0% decrease in our energy consumption from FY2021, putting us on track to achieve our 2030 target. We continue to maintain carbon neutrality for our corporate office and four main retail shops in FY2023<sup>2</sup>.

Absolute  
reduction in  
Scope 1+2  
emissions:  
(from FY2021 base year)  
**16.3%**

Energy use  
from renewable  
sources:  
**14.0%**

Based on FY2021 and FY2022 data, Scope 3 remains the largest contributor of our total GHG emissions at around 80% of our total carbon footprint. In this report, we have reported seven out of 13 Scope 3 category emissions from StarHub which have all been externally assured. Data on Category 3 and Category 8 emissions are also reported at the StarHub Group level. Tracking, reporting and analysing all applicable Scope 3 emissions from the StarHub Group in time for the publication of this report was challenging. However, we will endeavour to report the full suite of Scope 3 emissions for the StarHub Group, and our performance against the Scope 3 target in our next update of the Climate Transition Plan, which will be published on our website.

Based on FY2022 results, the absolute scope 3 GHG emissions from purchased goods and services, capital goods, fuel and energy-related activities, and downstream leased assets have increased by 11.9% from base year 2021. We will continue to engage our suppliers and customers to reduce our carbon footprint upstream and downstream, through the purchase and offering of low-carbon products and services, as well as co-development of a more accurate emissions accounting methodology that is activity- or product-based.

All GHG emissions data and the related energy data such as fuel and electricity consumption for FY2021 and FY2022 have been restated to align with the operational control approach that StarHub has applied in the course of setting our science-based targets. Please refer to pages 130 to 131 for our GHG and energy accounting methodology.

	StarHub Group			
	FY2023	FY2022	FY2021 (base year)	% Change from base year (FY23-21)
<b>Scope 1 (tCO<sub>2e</sub>)</b>				
Fuel - stationary combustion	65	50	47	37.2%
Fuel - mobile combustion	726	255	269	169.9%
Refrigerants	1,171	882	1,040	12.6%
<b>Total Scope 1</b>	<b>1,962</b>	<b>1,187</b>	<b>1,356</b>	<b>44.6%</b>
<b>Scope 2 (tCO<sub>2e</sub>)</b>				
Purchased electricity (location-based)	61,534	67,083	67,148	-8.4%
Purchased electricity (market-based) <sup>#1</sup>	52,374	57,851	63,539	-17.6%
<b>Total Scope 1 + 2 (market-based) (tCO<sub>2e</sub>)</b>	<b>54,336</b>	<b>59,037</b>	<b>64,895</b>	<b>-16.3%</b>
<b>GHG Intensity (tCO<sub>2e</sub>/\$mil revenue)</b>	<b>22.9</b>	<b>25.4</b>	<b>31.8</b>	<b>-27.9%</b>

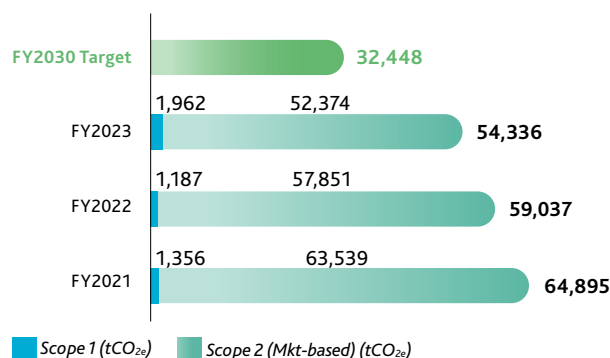
Table notes:

#1 Market-based Scope 2 GHG emissions take into account direct renewable electricity consumption and procurement of 18,685MWh unbundled RECs from solar and hydro-electric generation projects in Singapore, Malaysia and Vietnam.

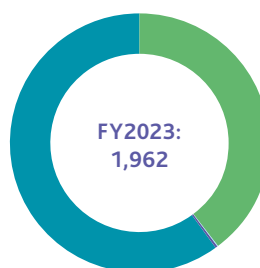
2 Carbon neutrality was achieved through the retirement of carbon credit of 395tCO<sub>2e</sub> avoided emissions generated from the protection and restoration of 149,800 hectares of peatland of the Katingan Mentaya Project in Central Kalimantan, Indonesia, and RECs of 3,546MWh (equivalent to 1,478tCO<sub>2e</sub>) renewable electricity generated from solar photovoltaics projects in Vietnam. These offsets did not count towards the emission reduction targets.

# SUSTAINABILITY REPORT

## Scope 1+ 2 GHG Emissions at StarHub Group



## Scope 1 Emissions



Greenhouse gas	Scope 1 (tCO <sub>2e</sub> )	% of total
CO <sub>2</sub>	784	39.9%
CH <sub>4</sub>	2	0.08%
N <sub>2</sub> O	5	0.28%
HFCs	1,171	59.7%

Scope 3 (tCO <sub>2e</sub> )	StarHub <sup>#1</sup>		
	FY2023	FY2022	FY2021 (base year)
Cat 1 Purchased goods & services	Not available	126,866	112,138
Cat 2 Capital goods	Not available	6,047	6,512
Cat 3 Fuel and energy related emissions <sup>#2</sup>	6,231 (StarHub Group: 10,465)	7,667 (StarHub Group: 11,446)	7,998 (StarHub Group: 11,410)
Cat 4 Upstream transportation & distribution	Not available	5,665	1,408
Cat 5 Waste generated in operation	8	11	3
Cat 6 Business travel <sup>#2</sup>	372	278	97
Cat 7 Employee commuting <sup>#3</sup>	304	370	200
Cat 8 Upstream leased assets	5,101 (StarHub Group: 6,022)	3,740 (StarHub Group: 4,435)	4,371 (StarHub Group: 5,291)
Cat 11 Use of sold products	Not available	28,596	29,593
Cat 12 End of Life (EoL) of sold products	Not available	33	53
Cat 13 Downstream leased assets <sup>#2</sup>	31,316	27,003	28,978
Cat 14 Franchises	66	68	108
Cat 15 Investments	Not available	5,235	6,408
<b>Total Scope 3</b>	<b>43,398<sup>#4</sup></b>	<b>211,579</b>	<b>197,869</b>

### Table notes:

<sup>#1</sup> Refers to StarHub Ltd and wholly owned subsidiaries - StarHub Cable Vision Ltd, StarHub Mobile Pte Ltd, StarHub Online Pte Ltd and Nucleus Connect Pte Ltd. See our GHG emissions accounting methodology on pages 129-131.

<sup>#2</sup> The following Scope 3 category emissions for StarHub in FY2021 and FY2022 have been restated:

- Cat 3 - excluded upstream leased asset of which we have no operational control over electricity consumption; the restated Cat 3 was 5% lower than the data previously reported.

- Cat 6 - error in calculation was corrected; the restated Cat 6 was 3% lower than the data previously reported.

- Cat 13 - included all downstream leased premises and leased products such as leased set-top boxes to customers; the restated Cat 13 was 50% more than the data previously reported. The previous data only accounted for one downstream leased premises.

<sup>#3</sup> Employee commute emissions for the reporting year FY2023 were estimated based on the valid results of 368 respondents from a survey conducted for all full-time and part-time employees. The survey took into account the company's official hybrid work schedules, the headcount as of 31 October 2023, as well as 11 days of public holidays and 18 days of annual leave per employee.

<sup>#4</sup> The total Scope 3 for the reporting year FY2023 excluded data that is not available at the time of publication of this report.

	StarHub Group		
	FY2023 GJ (MWh)	FY2022 GJ (MWh)	FY2021 GJ (MWh)
<b>Energy Consumption within Organisation</b>			
<b>Total Fuel Consumption</b>	<b>11,586</b>	<b>4,337</b>	<b>4,506</b>
	(3,218)	(1,205)	(1,252)
Stationary diesel	948	711	673
	(263)	(198)	(187)
Mobile diesel	3,995	3,526	3,547
	(1,110)	(979)	(985)
Mobile petrol	6,643	99	286
	(1,845)	(28)	(79)
<b>Total Electricity Consumption</b>	<b>479,827</b>	<b>544,290</b>	<b>553,685</b>
	(133,285)	(151,192)	(153,801)
Non-renewable sources	412,535	477,883	521,629
	(114,593)	(132,745)	(144,897)
Renewable sources	67,292	66,406	32,056
	(18,692)	(18,446)	(8,905)
(a) RECs/ PPA	67,266	66,377	32,026
	(18,685)	(18,438)	(8,896)
(b) Self-generated solar energy	26	29	31
	(7)	(8)	(9)
% RE	14.0%	12.2%	5.8%
<b>Total Energy Consumption</b>	<b>491,413</b>	<b>548,627</b>	<b>558,191</b>
	(136,504)	(152,396)	(155,053)
<b>Energy Intensity (per \$mil revenue)</b>	<b>207.1</b>	<b>235.7</b>	<b>273.3</b>
	(57.5)	(65.5)	75.9

	StarHub		
	FY2023 GJ (MWh)	FY2022 GJ (MWh)	FY2021 GJ (MWh)
<b>Energy Consumption outside Organisation</b>			
Upstream leased assets	44,063	38,410	38,786
	(12,240)	(10,669)	(10,774)
Downstream leased assets	184,761	146,205	120,728
	(51,323)	(40,613)	(33,535)
Partners' shops	570	602	956
	(158)	(167)	(266)
<b>Total Electricity Consumption</b>	<b>229,394</b>	<b>185,217</b>	<b>160,470</b>
	(63,720)	(51,449)	44,575

# SUSTAINABILITY REPORT



## CIRCULARITY

As part of our environmental stewardship, we seek to improve the circularity of our products and materials by encouraging reduce, reuse, repair and recycling practices.

### Waste Management

In 2022, we adopted a permanent hybrid work arrangement. Following that in late 2023, StarHub commenced renovation works to our corporate office to transform and reduce our physical office space. Prior to sending the resulting surplus of office supplies including equipment and furniture for recycling and disposal, we identified them for reuse or donation. We fostered a culture of reuse by enabling our employees to acquire used office chairs; the sale proceeds went into the StarHub Cares Fund which will be used for impactful social and environmental initiatives. We also

extended the lifespan of used furniture by diverting some to our technical sites and donating others to Animal Concerns Research and Education Society and Care Corner Singapore Ltd, which also allows these non-profit organisations to redirect their budgets to their core programmes.



Furniture collected for reuse and recycling to-date:  
**2,400+ pieces**



Carbon emissions avoided:  
**>35,200kg**



*Our used furniture donated in use at Care Corner Active Ageing Centres.*

StarHub recognises that we are directly linked to the impact of waste generated from our sold products. We support NEA's EPR and Mandatory Packaging Reporting (MPR). Since 2021, we have implemented the following initiatives to facilitate recycling of customers' e-waste and reduce our packaging:



#### E-waste recycling bin

Consumers can drop their e-waste into recycling bins located in our Plaza Singapura and Tampines Mall retail stores.



#### Trade-in service

Retail customers can trade in their used smartphones or tablets that are in working condition to offset the purchase price of a new product at StarHub shops or our Online Store. Our trade-in partners would refurbish these used devices for resale and responsibly recycle those that cannot be reconditioned.

#### One-for-one take-back service



Retail customers can dispose of their old electronic devices of the same class or type and quantity during product deliveries.

#### Rental of set-top boxes, business routers and optical network terminals



Instead of buy-use-throw, this business model allows customers to rent-use-return, fostering the transition to a circular economy. Products collected are reused and faulty ones are repaired for redeployment until they reach end-of-life, and then sent to licensed e-waste recyclers.

#### 3R initiatives for packaging to engage and educate consumers on reducing, reusing and recycling of packaging materials

**Skip the Bag** – We achieved a 95% reduction in paper bag usage since the launch of the 'Skip the Bag' initiative in 2019. StarHub uses FSC-certified biodegradable brown paper bags sourced from wood in forests that are responsibly managed and socially beneficial.

Defaulting to e-billing for all customers unless they choose to pay for paper bills.

#### Fully-managed Device Lifecycle Management service



This customised service allows enterprises to upgrade to the latest mobile devices under a lease period of 24-36 months, and at the end of the lease period, the devices would be returned to StarHub and traded in with device manufacturers.



#### Extension of SmartSupport service

We offer SmartSupport beyond mobile gadgets to provide breakdown coverage for 10 categories of common devices including laptop, smart TV and printer enabling them to have a longer lifecycle. It supports our sustainability objectives, with faulty or damaged devices collected back from subscribers being refurbished, rehomed or responsibly recycled through NEA-licensed recyclers. This service has been well received by consumers as evidenced by the year-on-year growth of subscribers.



# SUSTAINABILITY REPORT

StarHub remains committed to achieving our target of recycling 100% of our ICT e-waste from our corporate office and warehouse. In FY2023, StarHub achieved our target by sending all collected e-waste within our corporate office and warehouse to NEA licensed e-waste recyclers. Moving forward, we aim to direct e-waste from all subsidiaries under our operational control in Singapore for recycling by 2030.

With our ongoing 'Go Paperless' initiative, we have transitioned to using electronic forms of vouchers, sales agreements and work orders in our daily operations, and encourage customers to avoid paper bags. We have initiated the shift from conventional paper name cards to electronic alternatives in 2024, making another step towards reducing paper waste.

With the 6Rs – refuse, reduce, reuse, rethink, repair and recycle implemented and a lower amount of consumer e-waste collected for recycling at the warehouse, our e-waste in FY2023 decreased by 7.9% compared to FY2022. The e-waste sent for recycling in the reporting year comprised mostly obsolete fixed line telephones, outdated monitors, and old TVs and printers along with their cables, adaptors and remote controls, as we prepared for the corporate office transformation. Paper waste generated in FY2023 increased by 43 tonnes. Most of the wastepaper sent for recycling came from documents and records with expired retention and archival periods. The amount of general waste disposed of through waste-to-energy incineration plants decreased by 12.8% as a result of hybrid work arrangement and reduced corporate office space. Overall, the total waste generated increased by 17.7% compared to FY2022.

Waste Management (tonnes)	StarHub		
	FY2023	FY2022	FY2021
<b>Total waste generated</b>	<b>194.0</b>	<b>164.9</b>	<b>81.1</b>
<b>Waste directed to recycling</b>	<b>177.9</b>	<b>146.4</b>	<b>73.9</b>
(a) E-waste recycled	133.5	144.9	72.6
(b) Paper recycled	44.4	1.5	1.3
Recycling rate	91.7%	88.8%	91.1%
<b>General waste directed to waste-to-energy incineration</b>	<b>16.1</b>	<b>18.5</b>	<b>7.2</b>
<b>External e-waste collected through nationwide EPR system<sup>#1</sup></b>	<b>11.8</b>	<b>11.3</b>	<b>75.0</b>

Table notes:

<sup>#1</sup> External e-waste refers to e-waste collected at our premises as part of the nationwide EPR system. The weighted amount is provided by the NEA-appointed PRS Operator – ALBA.

## Water Management

To conserve water, we have implemented water-efficient fittings to reduce our water consumption. Our data centres are designed without using cooling towers, thereby minimising water usage. With our Employee Code of Conduct requiring staff to make prudent and effective use of the Group's resources, including water, our employees are instilled with an awareness of responsible resource usage.

Through these measures, coupled with hybrid work arrangement and reduced corporate office space, we achieved a 20.2% reduction in water consumption in FY2023 compared to the previous year.

### Water consumption

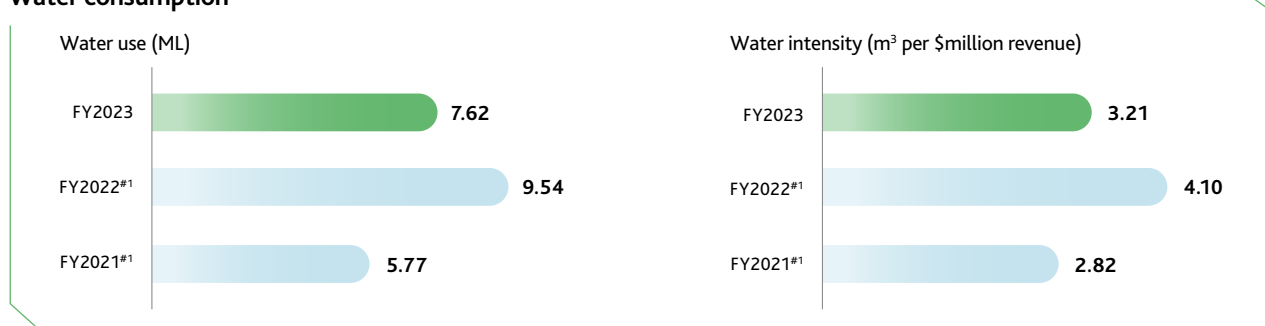
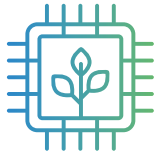


Table notes:

<sup>#1</sup> Water consumption in FY2021 and FY2022 have been restated to exclude water use in warehouse where we have no operational control. This is aligned with our GHG emissions accounting methodology. The restated value was 0.5% lower than previously reported data.

## GREEN TECH SOLUTIONS



StarHub seeks to reduce our own carbon footprint as well as that of our customers. By leveraging 5G, Internet of Things (IoT), data analytics and multi-cloud strategies, StarHub continues to innovate with our business partners, while responding to our customers' evolving needs and embracing smart technologies throughout our value chain.

Through our Green Tech solutions, we empower our enterprise customers to access and harness the power of the cloud and data in driving their own digital transformation and green transition. By installing and managing live sensors on our network, our customers can use dashboards to monitor live data on their operational performance.

Our enterprise solution offerings include a 5G IoT platform service which can be used to monitor a diverse set of metrics such as electricity and water consumption, cleanliness and footfall, helping enterprise customers to optimise resource and manpower use in building maintenance and meet Green Mark certification requirements. We aim to offer an integrated touchpoint with enhanced self-serve digital capabilities for our customers, giving them greater control and convenience.

As part of our DARE+ journey, StarHub will continue to accelerate our research and development efforts to create more sustainable products and services in the area of digital product and platforms and network cloudification.

### Singapore's First Solar-powered Outdoor 5G WiFi at the NUS Smart Campus

In partnership with the NUS Information Technology Department (NUS IT), the installation of Singapore's first solar-powered 5G outdoor WiFi at NUS has helped the university optimise power consumption and network performance of its outdoor wireless infrastructure. This has enabled seamless connectivity of their three campuses.

More than 90 solar-powered 5G outdoor WiFi access points have been installed, offering wireless connectivity at outdoor spaces on the campus. The project has also reduced network deployment time and cost with the elimination of laying underground power and fibre cables.



100% solar-powered outdoor WiFi by StarHub 5G at NUS.



StarHub's Smart Hygiene solution deployed at restrooms within NUS UTown.

### Smart Hygiene Solution

In partnership with NUS, StarHub implemented the Smart Hygiene proof-of-concept solution in 2022 to increase the efficiency of maintaining the cleanliness and usability of campus restrooms. With the aid of sensors, this solution, which is presently installed at restrooms within UTown, helps NUS monitor water consumption, usage of taps and the availability of hand soap.

The Smart Hygiene solution comes with an IoT dashboard which can detect abnormal water consumption and automatically send alerts to the maintenance crew, thereby addressing the problem of water wastage from leakages. Our solution also reduces manhours required to clean the restrooms, and allows the storage of a lower consumable inventory, resulting in higher user satisfaction.

# SUSTAINABILITY REPORT

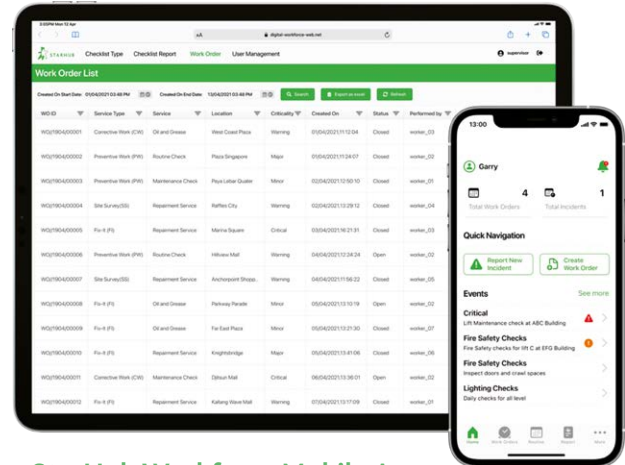
## Rainfall Project with Public Utilities Board and Hydroinformatics Institute

Since 2021, StarHub has been collaborating with the Public Utilities Board (PUB) and Hydroinformatics Institute, a water technology scale-up, to repurpose StarHub's ubiquitous network of mobile base stations as "opportunistic" rainfall sensors. During Phase 1 of the project, we analysed the impact of rain on mobile signal strength. The aim was to develop an accurate and cost-effective rainfall monitoring system to enable better storm water management to alleviate the effects of flash floods.

In Phase 2 that will take place over the next three years, StarHub will refine and advance our current procedures to automate data extraction seamlessly, integrating with a cloud-based server. This streamlined approach ensures a continual flow of near real-time data at 15-minute intervals, a notable improvement from the once-daily manual extraction process in Phase 1. Phase 2 will also explore further scaling up of the project.



Engineer maintaining a mobile base station.



## StarHub Workforce Mobile App

Aligning with our vision to transform into a mobile workforce which does not work from a fixed location, the Workforce Mobile app was developed in-house to empower our employees to conveniently access critical resources, enabling them to perform tasks anytime and anywhere and in a paperless manner. For instance, it enables our field engineers to perform tasks, submit reports and escalate incidents or concerns faster remotely. We plan to productise this solution and offer it to our enterprise customers.



Photovoltaic panels producing electricity directly from sunlight to power our mobile base stations.

## Solar-Powered Mobile Base Station Trial with Huawei

In 2023, StarHub collaborated with Huawei to conduct proof-of-concept for solar-powered mobile base stations on Jurong Island to increase consumption of renewable energy and reduce reliance on brown energy for our operational needs.



# ENABLING A DIGITAL SOCIETY

Providing seamless connectivity that is safe and secure from cyberattacks is a key priority for StarHub. While fortifying our own management systems and cyber defence, we strive to promote online safety among our customers and employees, and contribute towards narrowing the digital divide through our digital inclusion initiatives.



# SUSTAINABILITY REPORT

## PRODUCT AND SERVICE QUALITY



StarHub is an important enabler of information and communications within the digital industry. Our mobile and broadband services play an essential role in contributing towards Singapore's economic growth and Smart Nation aspirations by providing an essential business service and enabling digitalisation for different customers. It is our ambition to become the digital platform of choice.

Our network services positively impact both professional and personal lives by enabling remote working, home-based learning, leisure activities and global connectivity with social networks. Our services are crucial and integral for access to information and essential services such as health and education. As at the end of 2023, StarHub serves more than 2.162 million mobile and 580,000 broadband active subscribers in Singapore.

We recognise that any disruption to telecommunication services can have a serious impact on personal lives and business operations, especially businesses that rely largely on e-commerce or apps to provide services. Consequently, StarHub strives to maintain a reliable, resilient and low-latency mobile and broadband network.

Our measures include the following:

- Undergo periodic security risk assessments in accordance with applicable regulatory requirements, conducted by an independent third party.
- Continual improvement to our ISO 22301 security and resilience — business continuity management systems that include testing and updating the business continuity plan on a regular basis.
- Maintain robust controls over access to our systems, sites and information assets, as well as physical safety and security of our facilities and systems.
- Provide timely information and adopt all commercially reasonable remedial and mitigation measures and actions in the event of a security incident.



Resulting from these measures, we achieved 100% network availability for fibre broadband services and 99.94% availability for mobile services in 2023. The slight dip in network availability for mobile services from 99.95% in 2022 was due to an isolated disruption to mobile prepaid services in March 2023 which we promptly resolved, minimising the overall impact and duration of the incident. We have put in place additional measures to minimise instances of service disruption which affect our customers. Moving forward, we aim to maintain the same level of network availability for our fibre broadband services and achieve 99.95% for our mobile services.



In 2023, there was one incident with a \$50,000 fine by IMDA for the late implementation of a new network solution<sup>3</sup> in March 2023. In response, we implemented additional measures to strengthen this solution and cooperated with investigations by the regulator.



### From 3G to 4G/5G

Singapore's 3G services are scheduled to retire by end-July 2024 and StarHub is facilitating our 3G customers' transition to more superior 4G or 5G services, by offering them a wide selection of 4G and 5G mobile phones and SIM card upgrades.

We have invested significantly to expand our 5G network to unlock its ultra-low latency performance features for our customers. To meet increasing data demand and boost the delivery, scalability and performance of our services while optimising operating costs, StarHub has embarked on a Cloud Infinity Transformation. Additionally, we are working with partners such as Amazon Web Services, Google Cloud, IBM, NAVER Cloud and Nokia to deploy the new ultra-low latency multi-cloud architecture.

<sup>3</sup> Significant instances of non-compliance with laws and regulations refer to occurrences that are subject to a fine exceeding \$10,000.



### Insights-to-action

To improve our product service quality, StarHub adopts an "Insights-to-action" approach where we collect real-time customer feedback through surveys across various consumer and enterprise channels. We continue to enhance customer experience via our digital support channels, assisting customers with any issues using dedicated customer hotlines, WhatsApp, Facebook Messenger and email services. Following every interaction with our customer support team, customers are invited to rate their experience. This allows us to gauge their satisfaction levels and identify areas for improvement. These measures significantly contribute to the year-on-year improvement of our NPS, reflecting our commitment to upholding high standards in Product and Service Quality.



2023 NPS: **32.8**

Improvement of **29%** from 2022

Utilising the NPS as a key metric to track and enhance our customer experience, StarHub monitors feedback received through our App NPS polling. This continuous stream of customer insights has been instrumental in identifying and addressing specific areas of concern.

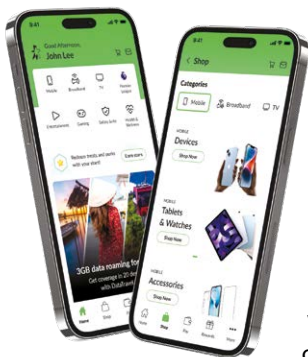
Notable improvement and innovation made based on customer feedback:

Recognising connectivity issues as a primary concern among detractors in the NPS surveys, we periodically analysed broadband router performance to identify potential connectivity problems proactively. We were able to initiate pre-emptive contact with customers to address the issues. This pilot initiative is currently being implemented on a select customer sample group, with plans to expand its scope.

Some of our enterprise customers provided feedback on the hassle of waiting for SIM card replacement and activation. In response, we implemented a SIM remapping service which allows customers to receive SIM cards upfront for self-activation when needed. This enhances customer experience and reduces the number of trips required for SIM card delivery.



Customer shopping for the latest mobile phone at StarHub Shop.



While we acknowledge the importance of maintaining high quality of products and services, we strictly comply with radio frequency (RF) emissions and safety standards<sup>4</sup> to address concerns of customers, regulators and members of the public on the perceived health risks associated with RF emissions from mobile devices and base stations. Where required, StarHub works closely with NEA and other mobile network operators to verify that the

mobile equipment installed comply with public health and safety standards in Singapore.

In FY2023, there were zero incidents of non-compliance regarding the health and safety impact of products and services. We have maintained and will strive to continue maintaining 100% compliance with relevant RF radiation safety standards set by local regulators.

#### Incidents of non-compliance concerning the health and safety impact of products and services:

Incidents of non-compliance with regulations resulting in fine or penalty	0
Incidents of non-compliance with regulations in a warning	0
Incidents of non-compliance with voluntary codes	0

<sup>4</sup> RF safety standards implemented by IMDA, NEA, and with the International Commission on Non-Ionizing Radiation Protection guidelines adopted by the World Health Organization (WHO).

# SUSTAINABILITY REPORT

## DATA PRIVACY, CYBERSECURITY AND ONLINE SAFETY



Amid booming online shopping and activity, the risk of scams, malware attacks, threat actors, and data and cyber breaches have escalated. This could cause disruptions to our products and services or result in a breach of personal data of our customers. To date, we have maintained zero incidents of cyberattacks and data privacy breaches, as well as substantiated complaints concerning breaches of customer privacy and losses of customer data leading to regulatory action taken against us.

To maintain the integrity of our information systems and customer databases, StarHub is committed to fortifying our defence against any cybersecurity, data privacy and security threats, and integrate appropriate safeguards into our data protection processes.

### Cybersecurity

Our Cybersecurity Governance Framework established in 2021 is aligned with the National Institute of Standards and Technology's cybersecurity framework, ISO/IEC 27001 standards, the Telecommunications Act 1999, the Broadcasting Act 1994 and the Cybersecurity Act 2018. We have incorporated this Cybersecurity Governance Framework into our operations through the Cybersecurity Policy, Information Classification and Handling Policy, and through a set of guidelines and checklists for

employees and third-party suppliers. The framework also includes StarHub's Data Protection Policy, which provides guidance to our stakeholders on how to collect, use, manage and disclose personal data in line with the PDPA.

Our multi-layered cyber defence consists of a series of successive cybersecurity controls and mechanisms designed with intentional redundancies, as summarised below:



## Data Privacy

Internal and external audits are conducted annually to provide assurance on the effectiveness of our data privacy control measures. Our data protection practices have been validated by a third-party certification process and we have been re-certified with the Data Protection Trustmark Certification (DPTM) in 2023.

We strive to continually improve our internal processes. We are upgrading the systems that handle personal data, to automate for seamless compliance with the PDPA. At the same time, we are working with our data intermediaries to make privacy by design as a default.

We constantly review our marketing processes and improve our systems while ensuring compliance with the DNC provisions. Our Cybersecurity team regularly engages with employees through email advisories, cybersecurity awareness trainings and webinars as well as e-learning opportunities. This helps to disseminate to employees the latest security information on threats, their prevention and mitigation steps. Our cybersecurity awareness training is mandatory for all our employees.

## Online Safety

As technology evolves, new threats will emerge. The number of scams perpetuated via phone calls, SMS, messaging apps, social media and emails continue to rise. Moreover, the demand for entertainment services has escalated the risk of unintended viewing of age-inappropriate content.

We are committed to provide proper safeguards and education to our customers on internet use. We regularly share information about safe online practices and scam warnings on StarHub App and our social media platforms, as well as curated topics to present trending issues to our employees and customers.

We have put in place several initiatives to reduce the prevalence of digital scams amongst our customers:

- Launch of Block Overseas Calls in January 2024, a new free service that allows customers to protect themselves from the rising threat of overseas scam calls
- Alerting our customers to phishing SMSes in circulation via our Facebook page and push notifications on StarHub App about online threats
- Continue working closely with the relevant authorities to block international calls that falsify local numbers and impersonate legitimate sources such as government agencies, as well as messages and websites that are being used to perpetrate scams
- Continue working closely with the relevant authorities to foster scam prevention public education
- Implement anti-scam network solution that filters potential scam SMS messages using machine learning technology
- Robust authentication mechanisms and resilient backend systems to prevent fraud and impersonation

StarHub also continues to offer the following cybersecurity services to protect and help our customers:



### JuniorProtect Basic

Parental control service which allows parents to manage their child's mobile data usage and block access to unsafe web content.



### CyberProtect

All-in-one online protection service which integrates antivirus and virtual private network access to offer security and privacy for customers' online activities.



### CyberCover

Cyber protection plans designed to provide financial support for customers affected by identity theft, unauthorised transactions and other cyber incidents.

### Mobile Threat Defence (MTD)

Enterprise mobile protection plans that provide comprehensive mobile security service for corporate-owned and BYOD devices. MTD delivers continuing protection through monitoring and analytics to prevent, detect and remediate sophisticated cyberattacks in real-time, such as advanced phishing attacks on devices, networks and applications. MTD is bundled with our enterprise mobile plan offerings.





# SUSTAINABILITY REPORT



## DIGITAL INCLUSION

At StarHub, we believe in digital inclusion. It brings quality of life to society, allowing our customers to enjoy the convenience of accessing information instantly and performing everyday tasks such as shopping, travelling and banking. StarHub is uniquely positioned to bridge the gap among the elderly and less privileged. Our key initiatives and CSR activities that aim to expand access to digital technologies in the community are highlighted below as well as on pages 117-119 in the Community Outreach section<sup>5</sup>:

### Unlocking ADHD: Donation of fibre broadband plan

**Objective:** Empowering people with ADHD and their families to live life to the fullest

- StarHub donated broadband plans for the period 2023-2025 to Unlocking ADHD.
- Our broadband service is used by the staff and volunteers of Unlocking ADHD who provide practical resources and support to its members.



Staff and volunteers of Unlocking ADHD.

### SHINE Children and Youth Services: Donation of refurbished pre-loved laptops

**Objective:** Helping less privileged students thrive in a digital world

- StarHub refurbished pre-loved laptops for donation to students identified by SHINE Children and Youth Services.
- Each laptop was thoroughly cleaned, upgraded for faster speeds, installed with the latest operating system, and equipped with a power cord, a mouse, and a laptop bag.
- Our staff volunteers from the Cybersecurity team shared essential online safety tips with the students.

"The refurbished laptops have been a great resource for our students and their families, who are utilising the laptops for schoolwork and various personal activities, including internet surfing. This initiative has brought about increased access to technology and added convenience in their daily lives," said Ms Kia Jie Xi, Social Worker.



StarHubbers and social workers at SHINE Children and Youth Services.

<sup>5</sup> Singapore is the primary area of operation for StarHub's telecommunication services and all our operations in Singapore and Malaysia are involved in our digital inclusion programme.

## Enabling Singapore Civil Defence Force (SCDF) through AR smart glasses and AI visual recognition technologies

**Objective:** A two-year 5G project that will enable SCDF frontliners to enhance operational readiness through automating equipment inspection process and facilitating remote assistance using smart glasses, AI and AR technologies.

- This project is supported by IMDA's 5G Innovation Programme and is developed in partnership with IBM. IBM delivers the end-to-end solution leveraging on AI technology, automation and AR while StarHub provides secured 5G connectivity and hardware to ensure optimal performance of these solutions.
- The project comprises two phases: Phase 1 will be tested in SCDF's Smart Fire Station in Punggol and includes features such as AI-powered visual inspection (5G-connected smart glasses to enhance monitoring of equipment inventory) and AR-assisted real-time remote assistance. Phase 2 aims to achieve full integration of solutions with backend services and ongoing field testing.



Minister for Communications and Information Mrs Josephine Teo (middle), StarHub Head of Enterprise Business Group Tan Kit Yong (far left), and partners.



Senior customer at the streaming TV educational roadshow.

## Premier+ discount for Pioneer Generation

**Objective:** Assisting senior citizens to embrace digital technology and streaming services

- StarHub provided a 50% discount for Pioneer Generation's subscriptions to our Premier+ streaming services to watch the Premier League on any device or network.
- We also rolled out roadshows at designated supermarket outlets to educate seniors about streaming TV.

## Supporting the Singapore Police Force on scam public education

**Objective:** To help foil scams by being actively involved in raising consumer awareness

- Displaying e-posters on scam prevention and distributing pamphlets on the ScamShield app to consumers at all our retail stores.
- Sharing scam prevention educational messages via our social media channels and StarHub App.

## Live screening of ICC Men's Cricket World Cup Final to migrant workers

**Objective:** Bringing connectivity through technology and shared experiences to migrant workers

- StarHub in collaboration with Assurance Care Engagement Group (ACE) hosted live screenings of the ICC Men's Cricket World Cup Finals between India and Australia to 3,000 migrant workers at two recreation centres in November 2023. This initiative was supported by our partners DBS, Nokia and Singapore Anti-Tuberculosis Association.



Migrant workers rooting for their favourite cricket team.



# CARING FOR OUR PEOPLE AND COMMUNITIES

Taking care of the mental and physical wellness of our employees is a fundamental focus. We believe in creating a positive social impact by supporting our employees and communities to reach their full potential. We also endeavour to actively engage with and support our communities through various outreach initiatives.



## HEALTH, SAFETY AND WELL-BEING



### Occupational Health & Safety Management System

Through our occupational health, safety and well-being management policies, procedures and initiatives, we ensure that our employees and all other workers who perform work for and/or with us are equipped with the necessary engineering controls, safe work procedures, competencies and trainings, as well as personal protective equipment (PPE) to carry out their work safely and ensure the protection of public health and safety when work is carried out in public areas.

Our occupational health and safety (OH&S) management system covers all our employees and other persons who may be affected by our workplace activities. StarHub was awarded the bizSAFE Level 3 certification by the Workplace Safety and Health Council Singapore following an independent audit of

the system triennially. Other workers who are not our employees as well as suppliers are covered under their respective employers' health and safety management systems. However, when performing work on StarHub's premises, they are all subject to and must comply with StarHub's OH&S requirements and procedures.

StarHub's Workplace Safety and Health Committee (WSHC), comprising employee and management representatives meet at least once every quarter. The WSHC is responsible for managing and reviewing our OH&S management system based on the latest regulations and best practices, taking feedback from our employees and lessons learnt from risk assessments, incidents and near-misses. The WSHC also monitors StarHub's OH&S performance against pre-determined targets and curates OH&S training content.

The components of our OH&S management system are as follows:

#### Hazard Identification and Risk Assessment

Our trained risk assessment leaders and managers within the WSHC work with our nominated employees across the organisation to identify and assess the WSH hazards of every work activity that may result in injury or ill health in the workplace.

Risks are first eliminated where possible before mitigation measures to minimise the hazard are considered. Risk assessment is updated at least once every three years, or after an incident or a near-miss event occurs, or whenever there is a significant change in work processes. Risk assessment also specifies the appropriate PPE required to protect the worker against any residual risk. At each worksite or office, at least one employee will be designated and trained as a first-aid emergency responder.

We also require contractors to submit a risk assessment report for verification prior to carrying out any telecommunications infrastructure construction or maintenance work on-site. All StarHub contractors undertaking work at our sites must also comply with the provisions of the Workplace Safety and Health Act 2006 (WSH Act).

#### Near-miss and Incident Reporting and Investigation Systems

We have set up dedicated communication channels for our employees and external partners to report any WSH-related issues such as potential safe work procedure shortcomings, unsafe conditions, near-misses or incidents.

Our employees and other workers may first report any issue that has arisen on our premises to their direct supervisor or Division WSH representative, who will then escalate the issue and report it to MOM if necessary. Our external partners and their workers may also choose to escalate the issue directly to MOM.

Aside from informing their immediate supervisor, our employees or other workers who believe they are in situations that could result in injury or ill health, may choose to remove themselves from the situation immediately. Reporters are protected against reprisal under our Whistle Blowing Policy, which classifies incidents that cause danger to the health or safety of others as reportable.

# SUSTAINABILITY REPORT

## Training

StarHub continues to provide company-sponsored training to update the skills and capabilities for employees whose job scopes require WSH domain knowledge, including first aid training and training on work-at-height, incident management processes and how to respond to emergencies.

As of December 2023, 75 StarHub employees, including key appointment holders in the WSH Risk Management Team, have completed the bizSAFE Level 2 Risk Management Champion training.

## Contractor Management

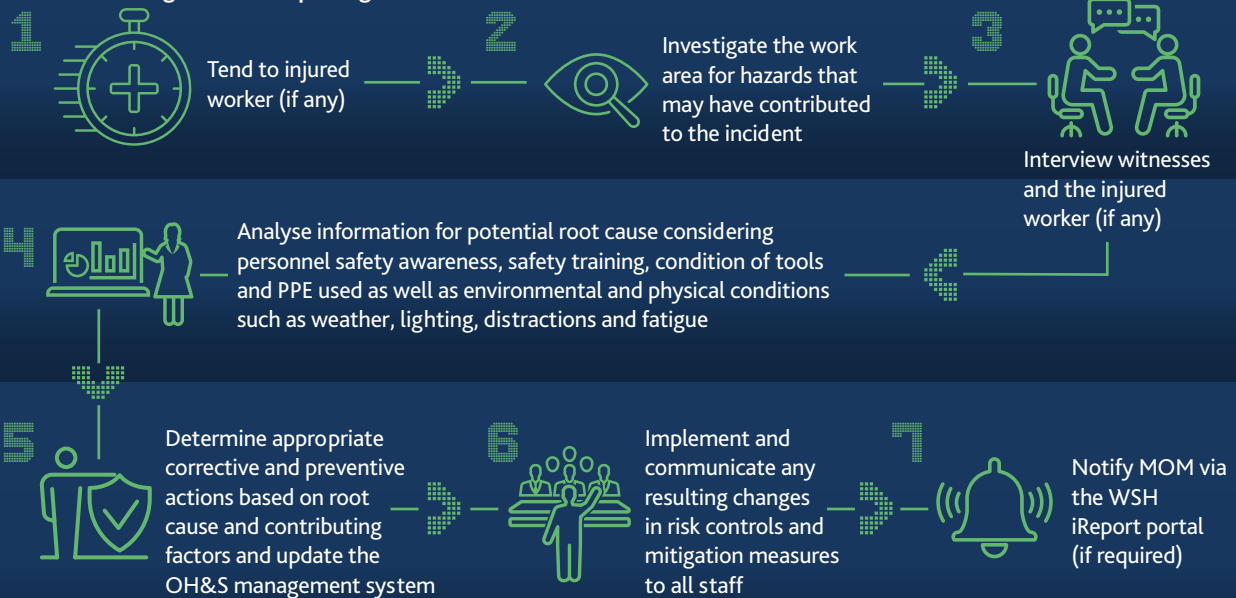
When working on StarHub's premises, all contractors' workers are expected to abide by StarHub's health and safety requirements, which will be communicated to them by their StarHub supervisors. They will be provided with access to first

aid and emergency treatment on-site, and guidance on any PPE and risk control procedures as part of pre-work risk assessment review. StarHub will consider the worker's historical training and experience as part of our risk assessments prior to the start of any high-risk task.

Where needed, we provide briefings and mandate main contractors to conduct toolbox meetings to raise awareness of the hazards and reinforce the importance of mitigation measures. All workers can provide suggestions for improvement through their immediate StarHub supervisors, who may then raise it to their WSHC representative as appropriate.

We require all our contractors to provide their workers with health insurance in accordance with legal requirements. In Singapore, all Citizens and Permanent Residents may also use their MediSave to cover or offset eligible medical expenses.

## Incident Investigation and Reporting Process for Near-misses and Incidents



## Key Takeaways for 2023

In 2023, StarHub has identified and implemented improvements to our health, safety and well-being practices. These include:

- Keeping track of contractor WSH incidents.
- In addition to the quarterly WSH meetings, the committee also meets to address issues that arise from time to time, such as haze management and heat management.
- More frequent communication to staff on safety awareness.

## Workplace Safety and Health Performance

The following table sets out our WSH performance for our employees.

Workplace Safety and Health Performance for Employees <sup>#1</sup>	FY2023	FY2022	FY2021
Number of workplace fatalities (including from work-related ill health)	0	0	0
Number of occupational disease cases <sup>#2</sup>	0	0	0
Number of high-consequence work-related injuries <sup>#3</sup> (excluding fatalities)	0	0	0
Number of recordable work-related injuries <sup>#4</sup>	3	4	0
Recordable injury rate (per 1,000,000 hours worked) <sup>#5</sup>	0.96	1.2	0
Workplace injury rate (per 100,000 employees) <sup>#6</sup>	188	233	0
Number of hours worked	3,139,475	3,419,758	3,257,192

### Table notes:

- #1. WSH performance metrics are reported based on the International Labour Organization and the MOM definitions.
- #2. Occupational disease refers to the Second Schedule of the Singapore WSH Act which is reportable to MOM. Any disease not found on the list, but which results from exposure to chemical or biological agents at work is also an occupational disease.
- #3. High-consequence work-related injuries refer to injuries from which the worker cannot recover or be expected to recover fully to pre-injury health status within six months. Based on our risk assessment process, we have identified the following work-related hazards that pose a risk of high-consequence injury: working at height of more than two metres and collision/accident between vehicles on the roads.
- #4. Recordable work-related injuries refer to injuries due to work exposure, resulting in medical/hospitalisation leave and light duty, all of which are reportable to MOM under the Singapore WSH Act. The three reportable injuries in FY2023 refer to a) two musculoskeletal (back pain) injuries for which one employee was treated as outpatient while the other needed surgical intervention; both staff returned to work within two months; and b) an abrasion on the chin sustained during a traffic accident and the employee was treated as outpatient and returned to work within five days.
- #5. Recordable injury rate refers to (no. recordable work-related injuries)/(no. working hours worked) x 1,000,000.
- #6. Workplace injury rate refers to (no. recordable work-related injuries)/(no. of FTE) x 100,000; FTE in FY2023 was 1,594.

Besides our own employees, we also have more than 1,000 third-party contractors' workers supporting StarHub's operations<sup>6</sup>. In FY2023, we identified about 100 third-party contractors who support StarHub physically in Singapore on a regular basis in the areas of finance, IT, facility management, product delivery and on-site service installation assistance. We shortlisted and prioritised 43 of these third-party contractors based on their manpower resources allocated to support StarHub projects and

the nature of their work at StarHub and/or at our customers' premises. We rolled out two dialogue sessions to inform them on the WSH performance reporting requirements and to understand their concerns in respect of health and safety. At these dialogue sessions, we also took the opportunity to reinforce our incident communication channels and share our Supplier Code of Conduct, SAQ and sustainability commitments. The following table sets out our WSH performance for our contractors.

Workplace Safety and Health Performance for Contractors <sup>#1</sup>	FY2023
Number of workplace fatalities (including from work-related ill health)	0
Number of occupational disease cases	0
Number of high-consequence work-related injuries (excluding fatalities)	0
Number of recordable work-related injuries	0
Recordable injury rate (per 1,000,000 hours worked)	0
Workplace injury rate (per 100,000 contractors)	0
Number of hours worked	89,063

### Table notes:

- #1. Contractors' WSH performance accounts for contractors that submitted full-year WSH data to StarHub.

<sup>6</sup> Based on estimated full-time equivalent (FTE) when we first collected data on workers who are not employees in FY2022.

# SUSTAINABILITY REPORT

## Caring for Mental Well-being

We care for the mental well-being of our staff and have put in place initiatives after obtaining feedback from our employees.

Our care initiatives in 2023 include:

- **Unlimited mobile talk-time:** To facilitate greater connections with their families, friends and colleagues, all staff were given unlimited mobile talk-time.
- Flexible benefits scheme extended to support work from home (WFH): This programme (**HubbaFlex**) was launched in 2019 to support employees' various needs. E.g. HubbaFlex can be used to pay for WFH equipment such as ergonomic chairs and computer monitors.
- **HubbaWellness:** Wellness talks and fitness classes were organised to provide employees with structured time-outs.
- **Keep Calm and Be ThoughtFull:** Continued partnership with ThoughtFull to provide a company-wide mental wellness programme with on-demand mental wellness resources, webinars, and the ThoughtFull Chat app, which allows employees to reach out to a counsellor online for personalised one-on-one support. We also continually support our managers to build their leadership capabilities in providing psychological first aid to their team members.
- Maintained a designated no-meetings afternoon (**#NoMeetingThuPMS**) to enable employees to focus on ideas generation and professional learning.
- Quarterly early release: Maintained "**Eat with Your Family Day**" by letting employees leave work early every quarter so that they can enjoy dinner with their families.
- Continued to practise regular **one-on-one staff engagements** and support managers with toolkits to conduct effective engagements.
- Organised employee engagement activities to commemorate World Mental Health Day and championed activities over one month encouraging physical and mental well-being (**#SHMOOVEIT**).
- Dedicated the last two weeks of December to "**Renew and Recharge**", where employees were encouraged to avoid scheduling meetings to allow them to unwind, reflect and prepare for the upcoming year.
- **Hybrid work arrangement** allowing employees to work up to two days a week at home if they are not required to work on-site.
- Townhalls: Management hosted quarterly **#HubberHangout** sessions to provide updates and answer employee questions about business and people matters.



StarHubbers having fun together.



## TALENT MANAGEMENT

Our employees are the driving force behind our success, and we believe in fostering a healthy and empowering workplace. We are mindful of the impact of our manpower management, compensation and benefits, diversity and talent development policies on the well-being and satisfaction of our employees and contract workers.

### Talent Attraction and Employee Benefits

We offer extensive career progression programmes and attractive compensation packages to retain our top talents. Our Leadership Accelerator Programme (LEAP) was designed to accelerate the development of key talents and leaders for StarHub.

Through this programme, each key talent had a personal development plan and was supported by their direct manager, the Management and a personal external coach to keep track of their career growth. A total of 97 key talents have completed LEAP in 2023.

Moving forward, we plan to launch a new Key Talent Development Programme, which comprises a mentorship programme and a series of signature learning events to provide a good mix of experience, exposure and education. To-date, 53 key talents have been nominated to participate in this six-month programme.

Regular performance and career development reviews are conducted for all our permanent employees as part of performance management based on targets set by the employees and their supervisors under four categories: Financial, Customer, Process and People.

We also offer competitive remuneration packages to our permanent and contract employees in line with their job responsibilities, level of experience and performance. Our full-time employees in Singapore<sup>7</sup> are entitled to:

- Leave benefits including annual leave, medical leave, birthday leave, childcare leave, eldercare leave, paternity leave and volunteerism leave. From 1 January 2024, our paternity leave entitlement will be extended from two weeks to four weeks, allowing fathers more time to bond with their new-born child and better support their spouses.
- Employee mobile, entertainment and broadband benefits.
- HubbaFlex benefits including health insurance coverage for outpatient and inpatient medical, dental and personal accidents.
- Re-employment for staff who have reached the statutory retirement age of 63 on a term contract basis, which is renewable up to the age of 68, subject to the availability of position, work performance and medical clearance.

In 2023, we were awarded the Progressive Wage Mark accreditation by MOM, which recognises firms that pay progressive wages in support of lower-wage employees. A total of 520 StarHubbers are members of SISEU<sup>8</sup>. StarHub also entered into a new partnership with SISEU to form the Company Training Committee (CTC) comprising StarHub Management, union representatives and other industry stakeholders. The CTC aims to identify the training needs of StarHub employees and plug the skills gap. This is in line with StarHub's goal of ensuring that our employees' skills stay relevant as we undergo our business transformation.



Noontime Discovery session on StarHub's Green Tech solutions.

<sup>7</sup> StarHub's significant location of operation is Singapore since most of our staff are based in Singapore.

<sup>8</sup> The nature of our MOU with SISEU does not constitute what would generally be expected under a collective bargaining agreement, where our employees, as members of SISEU, receive education grants, access to Care Funds, etc. The working conditions and terms of employment of our employees are currently not influenced or determined based on the collective bargaining agreement from other organisations and are based on current market best practice and applicable MOM regulations.



# SUSTAINABILITY REPORT

## Training and Development

Developing our talents and enhancing our human capital across the organisation is important to StarHub. Providing upskilling opportunities is paramount not only for employee retention but also to keep up with rapidly evolving technology.

Permanent employees can access digital learning programmes for their professional and personal development such as LinkedIn Learning, Coursera, classroom training, leadership development workshops, professional certifications, and on-the-job training.

We keep our professional programmes updated with the latest industry developments, best practices and regular feedback from our employees. Where necessary, re-training programmes are also provided to our re-employed staff who have reached the statutory retirement age.

Our training programmes in 2023 mainly focused on 5G, network virtualisation, cloud connectivity, GenAI, cybersecurity, data analytics and sustainability to build critical skills to advance StarHub's DARE+ strategy.

We established a quarterly "Noontime Discovery" session to foster a culture of continuous learning and spark curiosity, which includes talks by internal subject matter experts.

We rolled out Mojo@Scale for the second consecutive year, focusing on changing the mindset and culture and embedding the principles of "agile and customer-centricity" in our ways of working. We continue to practise portfolio rotation in most divisions, encouraging our employees to step up, develop new skills and expand their connections.

We also continued our partnerships with multiple government agencies, such as SkillsFuture Singapore and IMDA, to provide valuable long-term career development opportunities for our employees. In FY2023, approximately \$1,059,121 was invested in training programmes and we received \$790,631 in training subsidies from various government agencies, including IMDA's Company-Led Training fund. In total, we provided 27,865 hours of training for 97% of our workforce.

## Diversity and Inclusion

StarHub believes that a diverse and inclusive workplace makes an organisation more resilient. We endeavour to be a diverse and inclusive organisation where all employees are treated fairly and with respect, protecting their right to be free from discrimination.

Diversity, equality and inclusion principles are embedded in our practices across all areas such as hiring, employee code of conduct, training as well as performance management.

In line with the Board Diversity Policy established in FY2022, the Board has met its target of maintaining at least 25% female representation on the Board in 2023. Furthermore, StarHub has

also put in place our Management and Staff Diversity Policy, Workplace Harassment Prevention Policy as well as Grievance Policy to guide our implementation of the principles of diversity, equality and inclusion.

Management conducts regular reviews on these policies and supports StarHub's commitment to TAFEP, a national initiative advocating fair employment practices and prohibition of discriminatory practices in employment or transactions. We are proud to report that in 2023, no incidents of discrimination were reported directly to StarHub or through TAFEP. We aim to continue to maintain zero incidents of discrimination in future.

## StarHub's Diversity, Equality and Inclusion Practices

### Equal opportunity employment:

We are committed to be an equal opportunity employer. We practise merit-based hiring and remuneration, and determine career progression, recognition and reward based on performance.

### Safe and non-discriminatory work environment:

We strive to provide a safe, non-discriminatory and respectful work environment for our employees through our Employee Code of Conduct. Our Workplace Harassment Prevention Policy protects employees who report any incidents or harassment from any reprisals.

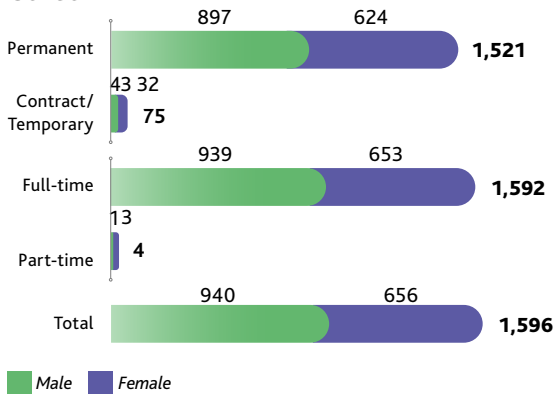
Employees may raise their grievance to their immediate supervisor, a neutral party in StarHub, or escalate their concerns to the Head of Department or Chief of People, Organisation and Communications Officer. Our grievance procedures are communicated to every employee during onboarding and through an annual mandatory refresher e-learning. Once a grievance is raised, a committee will be formed to investigate and ensure that appropriate remedial actions are taken to manage and resolve the issue. All our employees and contractors' workers may also raise discrimination complaints with protection from reprisal through our dedicated whistle blowing channel under our Whistle Blowing Policy. More information on our Whistle Blowing Policy can be found on page 175.

In 2023, our subsidiary Ensign InfoSecurity (Singapore) Pte Ltd (Ensign) continued its partnership with the Autism Resource Centre (Singapore) to support neurodiverse employees and encourage the nurturing of special needs talents in cybersecurity. Ensign rolled out an employment scheme designed for individuals on the spectrum. Since its launch in 2021, a group of neurodiverse individuals have been onboarded as Ensign's Security Operations Centre Analysts. Ensign recently welcomed its first individual with disability as a cybersecurity professional. Ensign's efforts to forge an inclusive workforce have been recognised with the SG Enabling Mark (Silver) Award 2023. The company remains unwavering in its endeavour to identify, train and create careers for these talents as it bolsters its capability to address the ever-evolving challenges in cybersecurity.

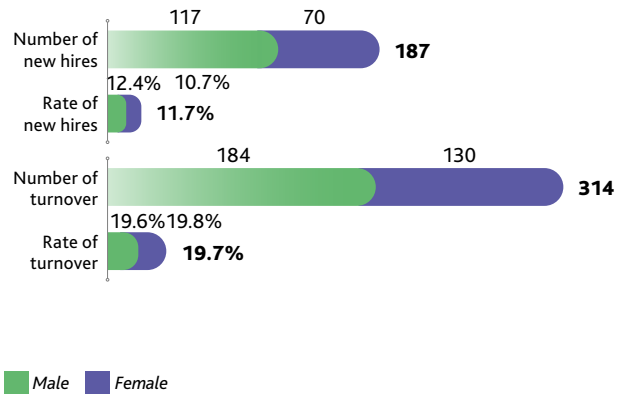


Ensign's Security Operations Centre Analysts.

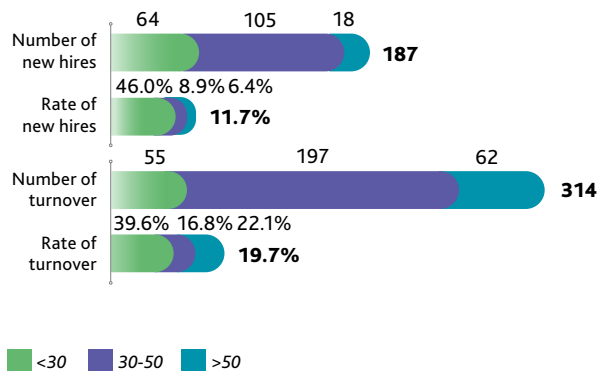
### Number of Employees by Employment Contract<sup>#1</sup> by Gender



### New Employee Hires and Turnover by Gender



### New Employee Hires and Turnover by Age Group



### Average Training Hours<sup>#2</sup> Per Employee Category by Gender

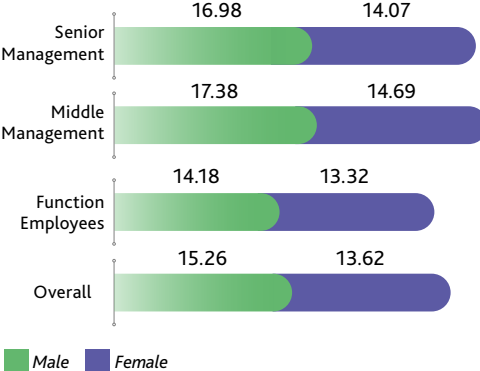


Table notes:

#1 Employee numbers disclosed covers our operation in Singapore based on headcount as of end 2023. In 2023, StarHub did not have any employees on the basis of nonguaranteed hours. Contract/temporary employees refer to employees on fixed term contracts. No significant fluctuation in numbers compared to 2022.

#2 Training hours included that of employees who had resigned during the reporting year.

# SUSTAINABILITY REPORT

## Parental Leave

Total number of employees entitled to parental leave



Total number of employees who returned to work after parental leave ended and were still employed for 12 months after their return to work



Total number of employees who took parental leave



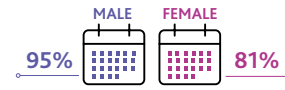
Return to work rate



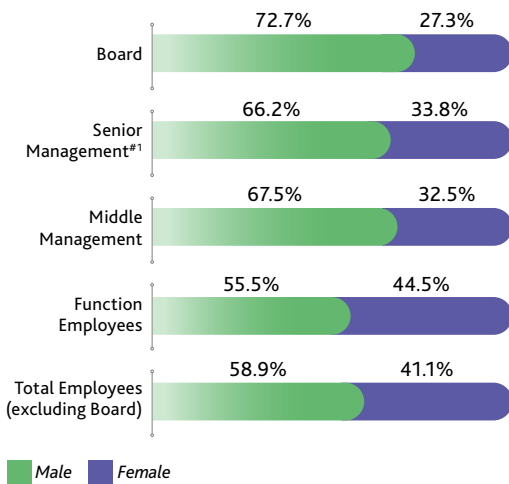
Total number of employees who returned to work in 2023 after parental leave ended



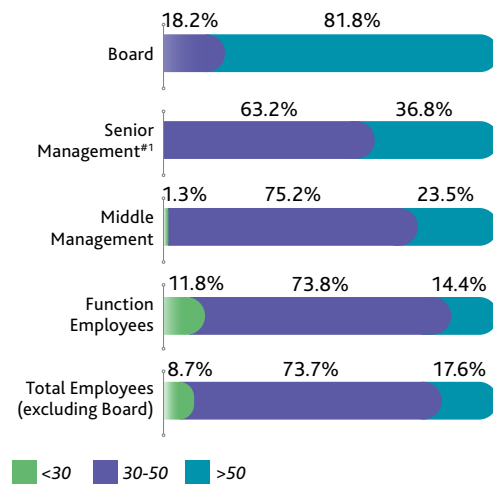
Retention rate



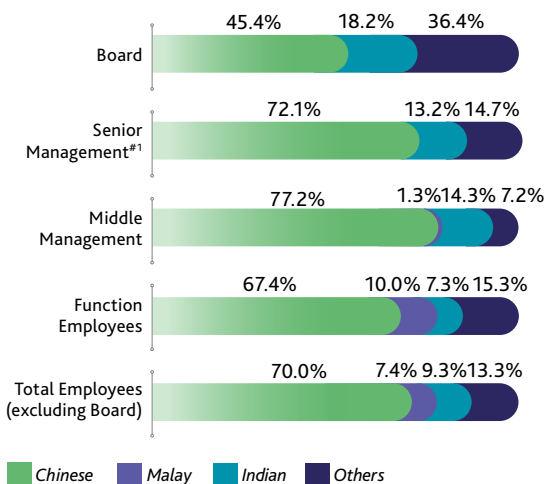
## Gender Diversity by Employee Category



## Age Diversity by Employee Category



## Ethnic Diversity by Employee Category



## Ratio of Base Salary and Remuneration

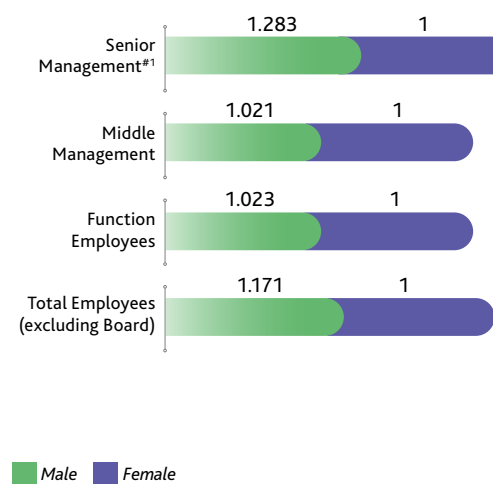


Table notes:

#1 Senior Management encompasses Heads of Departments and Senior Level Managers.

## COMMUNITY OUTREACH

StarHub believes in creating positive social impact through our CSR initiatives and community investments. Our initiatives include donations, the conduct of educational workshops, campaigns and corporate volunteering programmes. In 2023, we partnered with a wide range of NGOs and charitable organisations to benefit our local community.

StarHub offered opportunities for personal growth and development to the less privileged, disabled and at-risk youths. We also supported green initiatives with other organisations (as listed on page 121). StarHub has contributed close to \$600,000 to community causes, reaching more than 4,180 beneficiaries such as Care Corner Singapore Ltd, Riding for the Disabled Association (RDA), Central Singapore CDC and Unlocking ADHD through our various community initiatives. Beyond monetary support, our employees also contributed over 1,215 volunteering hours in 2023.

Below are some key contributions made by StarHub in 2023.

### RDA

**Objective:** Supporting RDA's equine-assisted therapy for special needs children to build core strength, motor coordination and enhance social functioning.

- StarHubbers supported special needs children by walking alongside them for confidence building during the free horse-riding lessons.
- StarHub sponsored therapy horse "Consentida", an Argentinian Polo Pony, for one year.



StarHubbers serving as side-walkers to special needs children.



StarHubbers with RDA staff and beneficiaries.

### Tech for Good – "At Home with Horses" VR Equine-assisted Learning Programme

**Objective:** To provide children and youths facing trauma with a chance to interact with a horse in the virtual world to reap the well-recognised benefits of equine therapy, impacting 70 beneficiaries.

- In line with StarHub's commitment to use Tech for Good, our Engineering team partnered with the Rotary Club of Singapore and EQUAL to launch a metaverse experience on the Roblox platform in June 2023, gamifying the therapeutic engagement with a horse to help vulnerable children and youths with challenging backgrounds. It provided a holistic experience as well as prepared the children to interact with a real horse with confidence for more effective equine-assisted programme.



Our engineers created a metaverse experience to engage children and youths facing trauma.

### EQUAL

**Objective:** Supporting EQUAL's animal-assisted programme that aims to develop social-emotional skills such as managing impulsivity, resilience and respect in children and youths facing mental challenges.

- StarHub sponsored the care, nutrition and health treatment for "Falco", an equine partner of EQUAL's, for one year.



"Falco".

# SUSTAINABILITY REPORT

## “Football for All” Football Clinic

**Objective:** Providing an opportunity for aspiring young footballers to improve their skills and learn from former renowned players from Manchester United.

- The inaugural football clinic in partnership with ActiveSG Football Academy (AFA) and Our Tampines Hub (OTH) hosted over 60 aspiring footballers and featured a variety of training drills and exercises that focused on technical skills, shooting accuracy, dribbling techniques and game intelligence.
- Manchester United legends Dwight Yorke and Andy Cole accompanied by experienced AFA coaches provided personalised guidance and feedback as well as shared inspiring stories from their careers with the participants.



Football training in session.



Customers at our Premier League live screening.

## Community Screenings of Premier League Games

Recognising the power of sports in community building, we offered multiple live screenings of Premier League matches to entertain football fans:

- Regular screening at OTH and One Punggol.
- Special screenings in Sentosa, Capitol Singapore and D’Marquee.

## Junior Stars Programme

**Objective:** Empowering primary school students from disadvantaged backgrounds with greater access and exposure to learning opportunities.

- In partnership with the Central Singapore CDC, we are funding 80 Nurture lessons on communication and problem-solving skills, 16 Holiday Enrichment Workshops focusing on creative, digital and tech skills for future jobs, four Sustainability Workshops, and a Football Clinic trained by Premier League coaches for the period 2023-2024.
- These programmes will collectively engage 1,440 beneficiaries, with the involvement of 40 teachers and close to 300 volunteers across the two years.

Key Statistics for January to December 2023:

### Outreach:



**603**  
Beneficiaries



**130**  
Active Volunteers

### Partners:



**14**  
Nurture Centres



**23**  
Industry and Community Partners

## Success Stories of Junior Stars Nurture:

“I am grateful to the teachers for teaching me how to communicate effectively and solve problems strategically. I am also thankful for the fun activities designed to teach us.”

– **Ong Cheng En Roy**,  
aged 12,  
Nurture @ Ang Mo Kio



Children exercising their creativity using recyclable materials.

“NURTURE has helped my son in various ways, such as how to communicate with people more effectively, how to manage his emotions, how to solve problems easily and how to approach decisions systematically. CDC and its partners’ commitment to education and personal development is truly remarkable and we are thankful for the opportunities you have provided for my son, Roy.”

– **Ong Cheng En Roy’s mother**

“The workshop (Comics Illustration Workshop with Malaysian Illustrator and Comic Artist Arif Rafhan) was fun as I explored my love for drawing through comic illustrations. We drew comic characters out of odd-shaped doodles to make them come to life!”

– **Muhammad Azmi Bin Muhammad Affandi**, aged 11,  
Nurture @ Yio Chu Kang

## Design Competition for Solar-powered Outdoor WiFi

**Objective:** Providing reliable outdoor connectivity on NUS campus in partnership with NUS IT, engendering a seamless experience for all staff and students.

- The design competition was open to all NUS students with the task of redesigning the existing outdoor WiFi structure.
- Winners received awards from leaders of StarHub and NUS
- NUS IT together with StarHub were able to roll out an outdoor 5G campus WiFi solution extensively.



Winners with StarHub and NUS leaders.

## Care Corner Singapore Ltd (Youth Services)

**Objective:** Strategic street outreach, meaningful engagement and mentorship to support 122 at-risk adolescents.

- Enhanced Step-UP+ (ESU+) programme helps students with high absenteeism at schools with more intensive socio-emotional support.
- "Seen, be Loved, be Accepted and be You" (SLAY) project aims to empower girls with low self-confidence to improve their sense of self-love and self-worth through programmes targeting mental health challenges, negative self-perception, and skill acquisition, enabling them to be seen, accepted, loved and true to themselves. Under SLAY, participants explored new places such as the Art Science Museum and learnt new skills such as baking.
- Street Outreach programme provides support to at-risk youths through people-engaging activities to enable them to connect better, to experience meaningful outings and supportive learning journeys while expanding their perspectives and horizons.
- Vacation Period Engagements: Multiple activities were organised during the vacation period to engage the youths through their areas of interest. These not only allowed youth workers to assess the youths' communication, group dynamics and risks, but also provided the youths with opportunities to develop social, team building and problem-solving skills.



Football training and team talk by coach at SAFRA Tampines.

## SHINE Children and Youth Services

**Objective:** To support The Scaffold Programme (TSP), developed by the National Council of Social Services, that aims to provide early intervention and support to lower secondary school students in mainstream schools who are at risk of premature withdrawal from school. 354 students were impacted.

**Key Statistics for 1 April 2022 to 31 March 2023:**

Number of clients served:	786	Number of youths:	522
Number of parents/partners:	192	Number of school personnel:	72



Students learning problem solving skills.

- TSP runs for one year and includes group work sessions on a wide range of topics (e.g. problem solving, working together and perspective thinking, discovering strengths) conducted by social workers and other fun activities such as dragon boating.
- Of the students who enrolled, 78% achieved at least 80% attendance and completed TSP.
- Of the students who completed TSP, 58% successfully improved on their social-emotional competencies.

## Metta School

**Objective:** To support Metta School with educational needs of children and youths with special needs. 509 students were impacted.

- Metta School provides a vocational certification pathway through structured programmes that lead to industry-recognised vocational qualifications, such as the ITE Skills Certificate (ISC) or Workforce Skills Qualifications (WSQ), preparing the students for employment.
- The 48 students who graduated from Metta School proceeded to follow different pathways. Most of them received open employment, while others proceeded to obtain further vocational training, post-secondary education, internships, and/or other supported employment arrangements.



The R3OCK Star reiterating Metta School's values at R3OCK Fiesta.



Students pursuing ISC in Facility Services.

# SUSTAINABILITY REPORT

## Metta School Achievers in 2023



**Tan Hui Min, Jerica**

- Graduated in 2022 from ISC in Baking Practices
- Currently pursuing Nitec in Pastry and Baking in ITE

12-year-old Jerica enrolled at Metta School in 2014, where she blossomed from a shy little girl to a confident young lady becoming a role model for her juniors. Jerica not only excelled academically and in vocational training but was also outstanding in sports. She is a talented badminton player who won the Gold medal in the 2022 Special Youth Olympics and even represented Singapore at the Special Olympics World Games held in Berlin in 2023. She is also a proud recipient of the Lee Kuan Yew Exemplary Student Award and the National Youth Achievement Award (Silver) in 2020 and 2022 respectively. Jerica is currently coping well with her studies in ITE and aims to continue to pursue Higher Nitec or Work-Study Diploma in 2025.



**Nabilah Binte Mohamed Jabal Al**

- Graduated in 2019 from ISC in Hospitality Services
- Currently working full-time as Customer Service Assistant in Secret Recipe

Nabilah enrolled at Metta School at the age of 11 in 2010. She was the epitome of the school value, "Openness" and was known for her bubbly and mild-mannered spirit.

Nabilah was placed in Secret Recipe for her final year on-the-job training, and received a full-time employment offer after graduation in 2019 due to her exceptional performance and willingness to learn. Mr Kuan Phang Thien, Kitchen Operation Manager at Secret Recipe (Plaza Singapura), said: "Nabilah is a valuable member of our team and having her on the team makes a huge difference. We are so thankful to have her."

Nabilah has fulfilled her goals of being independent and able to contribute financially to support her grandmother.

## SACS

**Objective:** Assisting individuals with mental health conditions to secure sustainable employment and reintegrating them into the community. 501 youths impacted.

- The programme provided employment support to 35.7% more beneficiaries than the previous year. It also provided Work Integrated Skills Training where beneficiaries learnt employability skills, became aware of mental health issues, and were equipped with handles to cope with work related stress.
- 125 employers engaged by SACS offered employment or internship opportunities to beneficiaries.

## The Third Malaysia Lions International Chess Championship for the Disabled

**Objective:** To foster the well-being of PWDs in support of inclusion and equality initiatives.

- Organised by the Lions Club International for PWDs, the event created public awareness and appreciation of the chess game and promoted the inclusion of PWDs in society by providing opportunities for them to take part in healthy and meaningful activities.
- The donation by our subsidiary, Strateq, went to cash prizes, trophies, medals, and certificates for the winners as well as accommodation and refreshments for the outstation contestants from six regions in Malaysia.



Strateq's HR Executive Siti Zaharah Halimat with event officials.

## Our 2023 Green Initiatives:

### Coney Island Clean-up

With a view to contribute towards waste reduction efforts in wider society, StarHub organised the Coney Island Clean-up in June 2023, with StarHubbers taking a morning walk and picking up litter along the trail and on the beach. The group removed 66 kilogrammes of garbage including cigarette butts, plastic bottles, plastic bags, plastic straws, styrofoam and glass containers. Participation in this activity demonstrated StarHubbers' efforts to do their part to protect our environment and marine life, while also making public places clean and safe for the well-being of the community.



StarHubbers hard at work on Coney Island.



Spicy Mix microgreens harvested by StarHubber.

### Edible Garden City Visit

Beyond a company-wide effort to reduce energy consumption and GHG emissions, StarHub is also cognisant of the large positive impact that individual actions can have on our environment.

In July 2023, we organised a visit to Edible Garden City, where our StarHubbers spent an engaging afternoon learning about food security, urban agriculture and understanding how this aligns with our national agenda of producing 30% of Singapore's nutritional needs by 2030. Participants also learnt how to grow microgreens which they brought back home to harvest 14 days later.



StarHubbers learnt about food security and urban agriculture



StarHubbers learnt about water sustainability.

### Trip to NEWater Visitor Centre

StarHub's water management initiatives are driven by a deep-seated belief in the importance of managing this precious resource.

In April 2023, our StarHubbers spent time at the NEWater Visitor Centre to understand how Singapore manages our scarce water resources. NEWater, Singapore's Third National Tap (alongside water catchments, imported water and desalinated water), is a key pillar of Singapore's water sustainability. Our participants also pledged to save water in our everyday lives, including taking shorter showers and reusing water around the home.

## JOScares: Plant A Tree, Save The Earth – Collaboration between JOS MY and Free Tree Society

- In support of Greening Malaysia Programme's 100 Million Tree Planting Campaign, a group of employees from our subsidiary JOS MY planted trees at Taman Tugu Negara located in Kuala Lumpur, Malaysia.
- The Campaign, with a duration of five years from its 2021 launch, aims to foster a spirit of love for nature through the planting of various types of trees in society and supports the commitment to maintain green spaces and forests to improve the ecosystem and biodiversity of Malaysia.
- Taman Tugu Negara is a 66-acre vast green-lung in the heart of Kuala Lumpur turned into an urban forest park for the community



JOS MY staff planting tree saplings.





# RESPONSIBLE BUSINESS AND VALUE CHAIN

StarHub exercises robust corporate governance, responsible business practices and sustainable sourcing throughout our value chain. Our established policies and practices are monitored to ensure ethical business behaviour, responsible selling and sustainable management of our supply chain.





## BUSINESS CONDUCT AND ETHICS

StarHub honours high standards of business integrity and ethical conduct to secure healthy financial growth, responsible operation of our telecommunications network, and compliance with laws and regulations. We are pleased to report that we received the best possible quality score of “1” for low governance risk from ISS in 2023. This reflects StarHub’s commitment to higher-quality business practices in governance, across aspects such as Board structure, compensation/remuneration, shareholder rights and audit practices. Such transparent governance practices and adherence to a culture of compliance in turn fosters trust in our shareholders and investors.

We have zero tolerance towards corruption or legal violations. We engage the regulators periodically to keep abreast of the latest compliance requirements and update our policies and procedures accordingly. We fully adhere to the SGX-ST listing requirements, the revised Code of Corporate Governance issued by the Monetary Authority of Singapore on 6 August 2018 and all applicable laws in Singapore. We have in place a control self-assessment process as part of our Group’s internal audit to support and foster awareness among functional managers on the effectiveness of the process controls in their areas of responsibility and any identified control weakness and inadequacies.

To address the standards of behaviour and business conduct for our employees, we have established policies covering areas such as safety, harassment, corruption, as well as procedures for dealing with customers, business associates and other stakeholders. StarHub also upholds fundamental human rights, and our policy commitments regarding human rights are embedded in our employee and supplier policies. These policies and all our other policies are aligned with our commitment to the UNGC Ten Principles for responsible businesses in the areas of human rights, labour, environment and anti-corruption<sup>9</sup>. StarHub has been a signatory member of the UNGC since 2012.

At StarHub, we recognise that GenAI holds huge potential in encouraging innovation and enhancing business productivity and efficiency. While GenAI is seeing a boom in all industries and sectors, its adoption by businesses comes with a degree of ethical risk. In 2023, we established the Use of Generative Artificial Intelligence Policy to provide guidelines for the ethical and responsible use of GenAI such as ChatGPT, Google Bard, Microsoft CoPilot or other similar tools by our employees, contractors, developers, vendors, temporary staff, consultants or other third parties. To capture the value of GenAI and to help our employees

navigate the use of GenAI, we worked with a technology partner to provide tailored training sessions to cater for different levels of expertise and interest. We also included GenAI awareness training in our onboarding and annual mandatory refresher course for all employees. In addition, we are committed to continuously monitoring the evolving legal landscape of GenAI and its oversight.

Our policies are reviewed and approved by the Management and/or Board. Our policy commitments for responsible business conduct, including the commitment to respect human rights can be publicly accessed<sup>10</sup>. All our policies are communicated to our employees upon hiring and during yearly mandatory refresher e-learning to ensure they are kept up to date with the latest requirements. These resources can also be readily accessed through our intranet. Employees can reach out to the respective owners of the policies or HR if they have any queries about the policies. If any employees are found to be in breach of our Employee Code or other applicable policies, appropriate disciplinary and/or legal actions will be taken, including dismissal where necessary. Refer to pages 174-176 for more information on our available policies.

In 2023, we conducted an anti-corruption risk assessment on all our operations to identify the forms of corruption and risk factors that are significant to StarHub. We assessed the adequacy and effectiveness of our mitigation measures against weaknesses within our operations which may present opportunities for corruption to occur. For robustness, our mitigation measures were implemented across all business units, to minimise the likelihood of corruption and increase the chances of early detection. We also incorporated anti-corruption training in our onboarding and annual mandatory refresher course for all employees. Please see the table on the next page for the significant risks related to corruption identified through our assessment and our mitigation measures.

<sup>9</sup> The Ten Principles of the UNGC are derived from the Universal Declaration of Human Rights, the International Labour Organization’s Declaration on Fundamental Principles and Rights at Work, the Rio Declaration on Environment and Development, and the United Nations Convention Against Corruption.

<sup>10</sup> Refer to <https://www.starhub.com/about-us/corporate-sustainability/climate.html>, <https://www.starhub.com/about-us/corporate-sustainability/people.html>, <https://www.starhub.com/about-us/legal-notice-and-terms/terms-and-conditions/vendor.html>, as well as StarHub’s Annual Report 2023. In addition, StarHub complies with IMDA’s Net Neutrality Policy, which ensures internet service or network providers are treating all sources of internet content equally and the right of a consumer to access content and services on the internet on a non-discriminatory basis. It is against abuse of significant market power and anti-competitive behaviour, which is in line with international competition law principles. Network management is solely used to allocate access to finite network resources and bandwidth according to our customers’ subscription plans, to promote fair use of network resources.

# SUSTAINABILITY REPORT

## Specific Activities in StarHub Identified as Vulnerable to Corruption Risk



### Sales

- Lavish gifts and entertainment
- Bribes to intermediaries



### Business units Dealing with Sensitive Data (e.g. consumer data, financial data)

- Bribes for data



### Business units with Close Interaction with Government

- Kickbacks to government
- Pressure to assist with projects/programmes to support certain politicians or political parties



### Business units offering Charitable Contributions and Sponsorships

- Avoid clandestine money laundering vehicles or kickbacks to third parties



### Business units with Substantial and/or Frequent Procurement

- Kickbacks
- Inflated invoice
- Bid rigging/price fixing

## Mitigation Measures in Place



Enhancement of the Anti-Corruption, Corporate Gift and Hospitality Policy mandating all directors and employees to comply with all applicable laws and regulations relating to the giving and receiving of any form of gratification



Employee Code of Conduct and Ethics Policy mandating all employees to maintain fair dealings and avoid conflict of interest



Annual declaration of conflict of interest



Accounting controls on vendor invoice review, approval and payments



Multiple levels of vendor contract approval/internal sign-off



Enforce Insider Trading Policy and Share Trading Policy



Compliance Leave Policy for employees with sensitive job functions



Robust business travel and expense approval process



Public disclosure of charitable donations



Whistle Blowing channel to the General Counsel or the AC Chairman



Anti-corruption training and annual refresher course

We have a whistle blowing mechanism for our employees and external parties to raise concerns so we can effectively address the grievances raised by our stakeholders. Our Whistle Blowing Policy provides accessible channels to raise concerns in good faith, in confidence and without the risk of reprisals. The AC Chairman and the General Counsel oversee the whistle blowing channel and are dedicated to remediating any negative impact raised.

In FY2023, after investigating complaints received, we did not find any critical concerns to raise to the Board. There were no other significant instances of non-compliance resulting in non-monetary sanctions. We maintained zero incidents of non-compliance pertaining to fraud, corruption, anti-competitive and anti-trust behaviours.

Incidents Of Non-compliance	FY2023	FY2022	FY2021
Incidents of fraud/corruption	0	0	0
Incidents of bribery and anti-competitive behaviour	0	0	0
Incidents of non-compliance with voluntary codes	0	0	0
Total number of incidents of non-compliance with standard requirement and/or voluntary codes	0	0	0



## SUPPLY CHAIN MANAGEMENT

We have an extensive network of supply chain across different regions and sectors. Maintaining a sustainable supply chain is crucial for our long-term business operations.



Our main suppliers comprise major telecommunication infrastructure providers (hardware manufacturers, software, infrastructure solution and maintenance providers) and major customer equipment (handset and router) manufacturers and distributors. In FY2023, 70% of our total supplier base of 2,207 were local<sup>11</sup>. They made up 85% of our total procurement spend of \$1.29 billion in the reporting year.

At StarHub, we have integrated sustainability practices into our procurement and supply chain management processes. We continue to actively enhance our supply chain management practices to address the environmental, social, economic and business impacts of our supply chain more diligently.

All our vendors are expected to adhere to our Supplier Code of Conduct, which requires them to take a precautionary approach towards environmental challenges, to commit to minimising the environmental, social and human rights impacts of their upstream raw material sourcing (e.g. use of conflict minerals), manufacturing and other business activities, as well as prohibiting all forms of corruption and bribery in line with the UNGC Ten Principles. The Supplier Code of Conduct is available on StarHub's website and communicated to the vendors as part of our procurement process.

Since 2021, StarHub progressively requires new and existing suppliers to complete the SAQ during onboarding and every three years. The SAQ, comprises screening questions for environmental and social impacts based on the UNGC Ten Principles, is StarHub's first step towards establishing a collaborative dialogue with our suppliers. It allows us to better understand how our

suppliers manage their impact on the environment, people and economy. Any potential concerns identified during this process will be communicated to the relevant suppliers for a thorough understanding of the issues. This will enable us to collaboratively come up with mitigation measures before deciding on the continuation of our business relationship. In FY2023, we secured confirmation from 98% of all our suppliers that they adhere to our Supplier Code of Conduct, via the SAQ.

In the same reporting year, StarHub commenced our inaugural ESG assessment of our first-tier suppliers<sup>12</sup>, utilising their responses to the SAQ. We are pleased to note that about half of them have established GHG emission reduction targets, demonstrating their commitment towards minimising their carbon footprint. Furthermore, the majority of these suppliers have implemented full or partial policies and procedures to identify and address adverse impact associated with ESG matters that are pertinent to their operations.

StarHub aims to deepen our supplier evaluation in coming years whilst continuing to build and strengthen mutually beneficial business relationships in the long run. This is particularly pertinent as we start building the momentum to decarbonise our supply chain in order to meet our Scope 3 emissions reduction near-term target by 2030. We look forward to having more dialogues with our suppliers to learn from those who are also heading towards their net zero targets and encourage those who are still in early stages of their decarbonisation journey to report their emissions footprint and set emissions reduction targets.

<sup>11</sup> StarHub's significant location of operation is Singapore.

<sup>12</sup> First-tier suppliers refer to suppliers with an annual spending of at least \$1 million.

# SUSTAINABILITY REPORT

## APPENDICES

### StarHub Value Scorecard Creation

	FY2023	FY2022	FY2021
<b>ENVIRONMENT</b>			
GHG emissions for Scope 1+2 (market-based) (tCO <sub>2e</sub> )	54,336	59,037	64,895
GHG emissions intensity (tCO <sub>2e</sub> per \$million revenue)	22.9	25.4	31.8
Renewable energy use (as % of total electricity use)	14.0%	12.2%	5.8%
Electricity used within the organisation (million kWh)	133.3	151.2	153.8
Energy consumption within the organisation (GJ)	491,413	548,627	558,191
Energy intensity (GJ per \$million revenue)	207.1	235.7	273.3
Water consumption (megalitres)	7.62	9.54	5.77
General waste (non-hazardous) (tonnes)	16.1	18.5	7.2
Internal e-waste recycled (tonnes)	133.5	144.9	72.6
Paper recycled (tonnes)	44.4	1.5	1.3
<b>SOCIAL</b>			
Permanent employees	1,521	1,631	1,539
Local employees (% of Singapore citizens)	62	68	75
Female employees (%)	41	42	42
Female managers (% of Senior level)	37	34	38
Female managers (% of Middle level)	32	32	34
Female Heads of Department (% of HODs)	13	22	20
Average training hours per employee	14.6	8.5	14
Training expenditure per employee (\$)	555	600	561
Employee turnover rate (%)	20	22	27
Number of reported work injuries	3	4	0
Fatal accidents	0	0	0
Community employee volunteerism participation (% of workforce)	10.4	8.5	7
Community investment and donations to charities (\$million)	0.6	1.9	0.7
<b>GOVERNANCE AND MARKETPLACE</b>			
Revenue (\$million)	2,373.1	2,327.3	2,042.6
Net profit (\$million)	145.8	62.2	149.3
Dividends paid to shareholders (\$million)	86.4	110.8	86.6
Share of local suppliers as percentage of total procurement spend (%)	85	82	94
Proportion of local suppliers (%)	70	84	87

## Memberships and Associations FY2023

The full list of industry and trade associations of which StarHub is a member is as follows:

- + Asia Pacific Network Information Centre (APNIC)
- + Asia Video Industry Association (AVIA)
- + Association of Certified Fraud Examiners (ACFE)
- + Association of Chartered Certified Accountants (ACCA)
- + Chartered Institute of Management Accountants
- + Chartered Secretaries Institute of Singapore
- + Conexus Mobile Alliance
- + Contact Centre Association of Singapore (CCAS)
- + CPA Australia
- + Disaster Recovery Institute International (DRI)
- + GCNS
- + GSMA
- + Income Tax Board of Review
- + Information Systems Audit and Control Association (ISACA)
- + ISCA
- + International Information System Security Certification Consortium (ISC)<sup>2</sup>
- + National Sustainable Procurement Roundtable (NSPR)
- + Project Management Institute (PMI)
- + Promax Asia
- + Singapore Academy of Law
- + Singapore Accountancy Commission (SAC)
- + Singapore Advanced Research & Education Network (SingAREN)
- + Singapore Association of the Institute of Chartered Secretaries and Administrators
- + SBF
- + Singapore Computer Society (SCS)
- + SCCA
- + Singapore Hotel Association (SHA)
- + Singapore Institute of Directors
- + SICC
- + Singapore National Employers' Federation (SNEF)

# SUSTAINABILITY REPORT

## Climate Scenario Analysis Assumptions and Limitations

Area	Assumptions and Limitations
<b>General scenario analysis</b>	As per the TCFD, scenario analysis describes a path of development leading to a particular outcome and scenarios are not intended to represent a full description of the future, but rather to highlight central elements of a possible future and to draw attention to the key factors that will drive future developments.
<b>Sources used</b>	A number of well referenced and recognised sources have been used to estimate the potential impacts from the scenario analysis. These include but are not limited to: <ul style="list-style-type: none"> <li>• The NGFS &amp; Climate Impact Explorer (physical risk indicators)</li> <li>• The IEA World Energy Outlook (carbon prices)</li> <li>• The IPCC AR6 Report (physical risk factors)</li> <li>• Other country specific sources and academic studies</li> </ul>
<b>Carbon price assumptions</b>	<p>The carbon prices used in the scenario analysis were estimated based on announced prices (e.g. for Singapore) and based on scenario prices obtained from the IEA World Energy Outlook 2022. Since scenario prices for future years were not directly available for the countries in scope, proxy prices were used.</p> <p>It is assumed that the carbon cost is passed through in full to StarHub from the electricity providers. It is also assumed that StarHub is bearing the entire cost and not passing it through further. This is a conservative assumption and in reality there is potential for passing through of the cost.</p>
<b>Financial and environmental data assumptions</b>	<p>In the scenario analysis StarHub's 2022 baseline information is used. It is assumed that this is constant in the future timeframes (2025, 2030, 2050) – i.e. no business growth is assumed. Similarly, no inflation growth is assumed.</p> <p>These are simplifying assumptions which would present a more conservative picture of the climate impacts and isolate the effects of climate-related risks and opportunities.</p>
<b>Legal, reputational risks and contingent liability</b>	These types of risks are mostly intangible and challenging to quantify with reasonable confidence at this point of time, i.e. there is higher measurement uncertainty associated with these risks.
<b>Data</b>	The area of climate scenario analysis including the associated modelling is still evolving. Therefore, it is important that the uncertainties and limitations associated with climate scenario analysis are noted to ensure that the results are interpreted and used appropriately.
<b>Methodology</b>	<p>To account for the long-term build-up of climate impacts, the climate scenario analysis extends to a longer time horizon (2030, 2050), which is longer than in traditional stress tests, as well as a typical business planning horizons. This introduces a higher degree of complexity and uncertainty from potential changes in the pace of technology advancement, geopolitical and demographic shifts and occurrence of climate tipping points. In addition, credit rating and natural catastrophe models are calibrated to forecast over the short term and not over the decades-long time horizon required for climate scenario analysis.</p> <p>Scenario analysis does not capture potential non-linearities and some indirect impacts, such as losses borne by insurance companies and costs of adaptation measures introduced to limit losses. This may therefore understate the climate exposure and vulnerabilities. For example, the assessment of business interruption due to extreme climate events does not capture the potential costs associated with repair and maintenance, business continuity planning activation and any reputational impact related to non-performance of the operations, but it purely captures the losses in revenues associated with an extreme climate event.</p>
<b>Granularity</b>	The climate scenarios and parameters from international think tanks and research bodies are often calibrated at levels of granularity which may not fully reflect local market dynamics and constraints.

## StarHub Environmental Data Accounting Methodology

### GHG Emissions

#### Reporting Boundary

StarHub consolidates and reports the GHG emissions data and our progress against targets based on operational control, covering the StarHub Group. Emissions arising from all subsidiaries, from 1 January 2023 to 31 December 2023, except those evaluated to have zero emissions, are reported as Scope 1 and Scope 2 emissions at the Group level.

The operations of StarHub Ltd and these wholly owned subsidiaries - StarHub Cable Vision Ltd, StarHub Mobile Pte Ltd, StarHub Online Pte Ltd and Nucleus Connect Pte Ltd are fully integrated; hence their emissions are tracked and reported as "StarHub".

Other subsidiaries where their emissions are included in the StarHub Group GHG inventory include Ensign InfoSecurity Pte. Ltd. and its subsidiaries (Ensign), Strateq Sdn Bhd and its subsidiaries (Strateq), JOS (SG) Pte Ltd, JOS (Malaysia) Sdn Bhd (a subsidiary of Malaren), and MyRepublic Broadband Pte Ltd (a subsidiary of StarHub Online Pte Ltd).

For the following subsidiaries, we have evaluated and determined that there are zero emissions:

- StarHub (Hong Kong) Limited is a registered business entity to hold the necessary business licenses to operate as a point of presence for network connection in Hong Kong. There is no physical office nor staff. Hence, we evaluated this entity to have zero emissions.
- Investment holding companies such as Malaren International Sdn Bhd, Nettilling Sdn Bhd and Taman Kenyir Holdings Sdn Bhd are registered business entities that own investments. These entities do not have physical office nor staff. Hence, we evaluated these entities to have zero emissions.

StarHub has no control or joint control over the financial and operating policies of associate and joint ventures. Emissions from these entities are reported in Scope 3 Category 15 Investments.

Our GHG reporting approach is aligned with our consolidated financial accounting policies. For the full list of subsidiaries, associates and joint ventures and their equity share for the reporting year, refer to the Annual Report Financial Statements.

#### GHG Calculation Methodologies

GHG emissions are computed in accordance with the requirements of "The GHG Protocol: A Corporate Accounting and Reporting Standard", "The GHG Protocol: Scope 2 Guidance", "The GHG: Corporate Value Chain (Scope 3) Accounting and Reporting Standard", and "The GHG Protocol: Technical Guidance for Calculating Scope 3 Emissions". Our GHG inventory covers seven main gases specified in the Kyoto Protocol, i.e. CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCS, PFCs, SF<sub>6</sub> and NF<sub>3</sub>.

**Scope 1** direct emissions include emissions from stationary and mobile combustion of fuel, and fugitive emissions from refrigerant gases. These are computed using activity-based method, with emission factors obtained from the UK DESNZ-DEFRA and supplier Shell (for biodiesel). The GWPs used in the calculation of CO<sub>2e</sub> are based on the IPCC Fifth Assessment Report (AR5) over a 100-year period.

**Scope 2** emissions include emissions from purchased electricity. Emissions from both location-based and market-based methods are reported. The location-based emissions are derived using grid-average emission factors from the Singapore Energy Market Authority (EMA), the Indonesia Minister of Energy and Mineral Resources, the Institute for Global Environmental Strategies (IGES) and supplier CLP Power Hong Kong. Market-based emissions are emissions from the electricity we purchased, reflecting the zero or lower carbon intensity of energy sources through the procurement of energy renewable certificates (RECs). We use market-based emissions to track our performance towards the Group's GHG targets.

**Scope 3** emissions take into consideration all 15 categories defined by the GHG Protocol. We have evaluated and determined that Category 9 (downstream transportation and distribution) and Category 10 (processing of sold products) are not relevant. Category 9 emissions refer to emissions from third-party storage and distribution which we estimate to be about 5-10% of our reported Category 4 (or less than 0.1% of total Scope 3 emissions) and hence deemed immaterial. Our sold products include routers, mobile devices, wearables and accessories and servers, but we do not process them. Hence Category 10 is not applicable to StarHub.



# SUSTAINABILITY REPORT

The following table summarises the remaining 13 categories we are reporting:

Scope 3 Category	Calculation Methodology
<b>Category 1</b> Purchased goods and services	Spend-based method. Emissions computed based on expenditure on purchased goods and services and US EPA Supply Chain GHG emission factors.
<b>Category 2</b> Capital goods	Spend-based method. Emissions computed based on expenditure on capital goods and US EPA Supply Chain GHG emission factors.
<b>Category 3</b> Fuel and energy related emissions	Activity-based method. Emissions computed based on fuel consumed and associated well-to-tank (WtT) emission factors and purchased electricity and associated transmission and distribution (T&D) loss using upstream fugitive methane emission factor from Singapore EMA and other WtT emission factors from UK DESNZ-DEFRA.
<b>Category 4</b> Upstream transportation & distribution	Spend-based method. Emissions computed based on expenditure on delivery, couriers or any transportation related fees and US EPA Supply Chain GHG emission factors.
<b>Category 5</b> Waste generated in operation	Activity-based method. Emissions computed based on type, amount and disposal methods of waste generated, and emission factors from the US GHG Emission Factors Hub.
<b>Category 6</b> Business travel	Hybrid method. Calculated in two parts. For air travel and hotel accommodation, activity-based emissions are computed based on distance travelled and hotel nights and emission factors from UK DESNZ-DEFRA. For land transport by Grab or taxi, spend-based emissions are computed based on the fees shown on receipts and US EPA Supply Chain GHG emission factors.
<b>Category 7</b> Employee commuting	Activity-based method. A survey of representative size of employee population is conducted to collect the typical mode of transport (e.g. car, bus, train) and distance travelled between home and worksite. In the absence of local emission factors for the different transportation mode, emission factors from UK DESNZ-DEFRA are used.
<b>Category 8</b> Upstream leased assets	Activity-based method. Emissions computed based on purchased electricity consumed at upstream leased premises, and grid average-emission factors.
<b>Category 11</b> Use of sold products	Activity-based method. Emissions computed based on units of equipment sold, estimated average power rating, average product lifetime and likely user habit. Grid average-emission factors are used.
<b>Category 12</b> EoL of sold products	Activity-based method. Emissions computed based on type, amount and disposal methods of products sold, and emission factors from the US GHG Emission Factors Hub.
<b>Category 13</b> Downstream leased assets	Activity-based method. Calculated in two parts. For downstream leased premises, emissions are computed based on purchased electricity consumed; for downstream leased products, emissions are computed based on units of equipment leased, estimated average power rating, average product lifetime and likely user habit. Grid average-emission factors are used in all calculations.
<b>Category 14</b> Franchises	Activity-based method. Emissions are computed based on purchased electricity consumed at our partners' shops, and grid average-emission factors.
<b>Category 15</b> Investments	Investment-specific method. Emissions are allocated based on StarHub's share of equity of the Scope 1 & 2 emissions generated in associate companies and joint ventures – 50% equity in Antina Pte Ltd, and 30% equity in Shine Systems Assets Pte Ltd.

We excluded mm2 Asia Ltd where we only have 4.09% equity interest. We estimate this excluded source represents less than 0.05% of total Scope 3 emissions, based on our equity share and the energy consumption disclosed in mm2 Asia Ltd Sustainability Report 2022.

## GHG Target Maintenance and Progress Reporting

StarHub aligns our targets maintenance and progress reporting with the SBTi Criteria and Recommendations. We report GHG emissions and progress against our science-based GHG emissions reduction targets at the Group level in our annual Sustainability Report, Climate Transition Plan and/or CDP Climate Change questionnaire.

Our primary strategies in emissions reduction comprises reducing fuel and electricity consumption, increasing energy efficiency, transitioning to electric vehicle and lower GWP refrigerants and increasing the use of energy from renewable sources. The procurement of REC will also form part of our decarbonisation roadmap. Singapore is small, highly reliant on natural gas import for our energy needs and has limited renewable energy options locally. As such, we source for unbundled RECs from both Singapore and other Southeast Asian nations to meet the requirements of the Singapore Standard SS673 Code of Practice for Renewable Energy Certificates which states that "any REC that originates from an installation located in Singapore and Southeast Asia as defined by the UN geoscheme classification system and connected to a grid operated by a regulator or a regulator-appointed party, to be retired and claimed for use in Singapore, shall comply and be consistent with the requirements of this Singapore Standard".

Where offsets from carbon credits are used, they do not count towards StarHub's emission reduction targets.

## Emissions and Energy Consumption Reduction

GHG emissions and energy reduction resulting from initiatives such as energy efficiency in buildings and processes are computed based on the difference of energy consumption before and after the implementation of project. The energy savings is then multiplied by the relevant emission factors to arrive at emissions reduction.

## Rebaselining

StarHub recalculates the base year emissions once every five years, unless there is a significant change in the company structure, business activities, or calculation methodologies that result in a change of 5% or more in the organisation's total base year emissions. Currently, the base year for our near and long-term targets is 2021, the earliest year where we have the most reliable and complete data sets.

## Continual Improvement

StarHub prioritise using activity data, e.g. kilowatt hours (kWh) of electricity, to compute our emissions. Where activity data is incomplete or unavailable, we use spend-based data or other proxy to estimate the emissions. We endeavour to transit from spend-based data to activity data when the process of measurement, reporting and verification across our value chain and in the broader ecosystem gets better over time.

*NOTE: Numbers in tables/ charts may not add up to total or 100% due to rounding.*

## Energy

StarHub reports energy consumption within the Group and this includes fuel consumption in diesel generators (stationary source) and company-owned vehicles (mobile sources), purchased electricity from the grid and solar energy generated on site for electricity. Use of renewable energy generated from sources such as solar, wind, hydropower, acquired through the retirement of RECs during the reporting year are reported as well.

Reporting of energy consumption outside the organization is limited to StarHub only, and this includes electricity use at the upstream and downstream leased premises and partners' shops. Gross calorific value (GCV) or higher heating value (HVV) are used to compute the heating value of the fuel.

## Waste & Water

Reporting boundary of waste & water is limited to StarHub only.

StarHub reports two categories of wastes, namely, e-wastes and non-hazardous wastes. E-waste amounts correspond to ICT e-waste generated from our corporate office and electronic devices collected back from our customers at the warehouse. Collected electronic devices such as set top boxes are first checked for reusability and refurbishment. Where the devices are faulty beyond repair, damage and/or obsolete, they are sent for recycling as e-wastes. The e-waste is weighed at the respective premises prior to collection by licensed e-waste recycling vendors and the weighted amount is verified against the vendor's e-waste disposal certificate. For materials and parts that are usable, the vendors would likely refurbish and resell them in the second-hand market; for those unusable ones, they would segregate the items into base materials such as metal, aluminium and copper, and send them to downstream vendors for further recycling and recovery of precious materials (if any).

Non-hazardous wastes refer to general refuse and paper waste. General wastes are weighed daily and disposed of at waste-to-energy incineration plants through the building's waste management system. Clean wastepaper is collected separately for recycling, and the weighted amount is verified against the recycler's wastepaper report. General waste generated in our shops are disposed of through the landlord's building waste management system and therefore data is not available. We have put in place measures to monitor and collect data on the waste generated from our technical centres and we will disclose the data in subsequent report.

Water is not a material topic for StarHub given our water consumption is relatively small in comparison to companies using water-cooled chillers. However, we have chosen to continue reporting on our water use footprint considering Singapore's scarce water resources. StarHub operates in Singapore where all potable water is supplied by the national water agency, PUB. Water withdrawal comes from four sources, namely freshwater from local catchment, imported freshwater from neighbouring country, reclaimed or treated used water (also known as 'NEWater') and desalinated seawater.

# SUSTAINABILITY REPORT

## GRI Content Index

Statement of use	StarHub has reported in accordance with the GRI Standards for the period 1 January 2023 to 31 December 2023.
GRI 1 used	GRI 1: Foundation 2021
Applicable GRI Sector Standard(s)	None; GRI Sector Standard for the Telecommunications industry is not available yet

GRI Standard	Disclosure	Location
GRI 2:  General disclosures 2021	2-1 Organizational details	70, 129, 210 and 240-244 Our headquarters is in Singapore.
	2-2 Entities included in the organisation's sustainability reporting	70 and 129
	2-3 Reporting period, frequency, and contact point	70-71 and 129 This report publication date is 3 April 2024.
	2-4 Restatements of information	129-131
	2-5 External assurance	140-143 Independent Limited Assurance Report
	2-6 Activities, value chain and other business relationships	42-57, 77-79, 125 and 210 There are no significant changes in activities, value chain and other business relationship compared to FY2022.
	2-7 Employees	115-116
	2-8 Workers who are not employees	111
	2-9 Governance structure and composition	12-33, 75-76, 150, 152-154
	2-10 Nomination and selection of the highest governance body	153 - 155
	2-11 Chair of the highest governance body	8-25, 148-149
	2-12 Role of the highest governance body in overseeing the management of impacts	8-25, 75-76, 148-149, 156-158
	2-13 Delegation of responsibility for managing impacts	75-76, 156-158
	2-14 Role of highest governance body in sustainability reporting	75-76
	2-15 Conflicts of interest	124, 171
	2-16 Communication of critical concerns	124, 175
	2-17 Collective knowledge of the highest governance body	151
	2-18 Evaluation of the performance of the highest governance body	155-156
	2-19 Remuneration policies	157-163 Other than the Central Provident Funds contributions mandated by law for Singaporean and Permanent Residents, StarHub does not provide other retirement benefits for the Board and senior executives

GRI Standard	Disclosure	Location	
GRI 2: General disclosures 2021	2-20	Process to determine remuneration	157-163
	2-21	Annual total compensation ratio	Omitted due to confidentiality constraints.  Staff compensation is company confidential information given the current competitive labour market in Singapore
	2-22	Statement on sustainable development strategy	70
	2-23	Policy commitments	123, 174-176
	2-24	Embedding policy commitments	123
	2-25	Processes to remediate negative impacts	114, 124, 175
	2-26	Mechanisms for seeking advice and raising concerns	114, 124, 175
	2-27	Compliance with laws and regulations	123
	2-28	Membership associations	127
	2-29	Approach to stakeholder engagement	77-79
GRI 3: Material topics 2021	3-1	Process to determine material topics	81
	3-2	List of material topics	81
<b>CLIMATE CHANGE AND ENERGY</b>			
GRI 3: Material topics 2021	3-3	Management of material topics	87-95
GRI 302: Energy 2016	302-1	Energy consumption within the organization	95, 131
	302-2	Energy consumption outside of the organization	95, 131
	302-3	Energy intensity	95
	302-4	Reduction of energy consumption	93
GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions	93, 129
	305-2	Energy indirect (Scope 2) GHG emissions	93, 129
	305-3	Other indirect (Scope 3) GHG emissions	93, 129-130
	305-4	GHG emissions intensity	93, 129
	305-5	Reduction of GHG emissions	90
<b>CIRCULARITY</b>			
GRI 3: Material topics 2021	3-3	Management of material topics	96-98
GRI 303: Water and effluents 2018	303-3	Water withdrawal	98, 131, 140
GRI 306: Waste 2020	306-1	Waste generation and significant waste-related impacts	96-97
	306-2	Management of significant waste-related impacts	96-98
	306-3	Waste generated	98, 131
	306-4	Waste diverted from disposal	98, 131
	306-5	Waste directed to disposal	98, 131

# SUSTAINABILITY REPORT

## GRI Content Index

GRI Standard	Disclosure	Location
<b>GREEN TECH SOLUTIONS</b>		
GRI 3: Material topics 2021	3-3 Management of material topics	99-100
GRI 203: Indirect economic impacts 2016	203-2 Significant indirect economic impacts	99-100
<b>PRODUCT AND SERVICE QUALITY</b>		
GRI 3: Material topics 2021	3-3 Management of material topics	102-103
GRI 203: Indirect economic impacts 2016	203-2 Significant indirect economic impacts	102
GRI 416: Customer Health, Safety and Well-being 2016	416-2 Incidents of non-compliance concerning the Health, Safety and Well-being impacts of products and services	103
<b>DATA PRIVACY, CYBERSECURITY AND ONLINE SAFETY</b>		
GRI 3: Material topics 2021	3-3 Management of material topics	104-105
GRI 418: Customer privacy 2016	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	104
<b>DIGITAL INCLUSION</b>		
GRI 3: Material topics 2021	3-3 Management of material topics	106-107
GRI 203: Indirect economic impacts 2016	203-2 Significant indirect economic impacts	106-107
GRI 413: Local communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	106-107

GRI Standard	Disclosure	Location
<b>HEALTH, SAFETY AND WELL-BEING</b>		
GRI 3: Material topics 2021	3-3 Management of material topics	109-112
GRI 403: Occupational Health, Safety and Well-being 2018	403-1 Occupational Health, Safety and Well-being management system	109
	403-2 Hazard identification, risk assessment, and incident investigation	109-110
	403-3 Occupational health services	110, 112
	403-4 Worker participation, consultation, and communication on occupational Health, Safety and Well-being	109
	403-5 Worker training on occupational Health, Safety and Well-being	110
	403-6 Promotion of worker health	112-113
	403-7 Prevention and mitigation of occupational Health, Safety and Well-being impacts directly linked by business relationships	110-111
	403-8 Workers covered by an occupational Health, Safety and Well-being management system	109
	403-9 Work-related injuries	111
	403-10 Work-related ill health	111
<b>TALENT MANAGEMENT (INCLUDING EQUALITY, DIVERSITY AND INCLUSION)</b>		
GRI 3: Material topics 2021	3-3 Management of material topics	113-116
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	115
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	113
	401-3 Parental leave	116
GRI 404: Training and education 2016	404-1 Average hours of training per year per employee	115
	404-2 Programs for upgrading employee skills and transition assistance programs	114
	404-3 Percentage of employees receiving regular performance and career development reviews	113
GRI 405: Diversity and equal opportunity 2016	405-1 Diversity of governance bodies and employees	116, 153
	405-2 Ratio of basic salary and remuneration of women to men	116
GRI 406: Non-discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	114

# SUSTAINABILITY REPORT

## GRI Content Index

GRI Standard	Disclosure	Location
<b>BUSINESS CONDUCT AND ETHICS</b>		
GRI 3: Material topics 2021	3-3 Management of material topics	123-124
GRI 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	123-124
	205-2 Communication and training about anti-corruption policies and procedures	123
	205-3 Confirmed incidents of corruption and actions taken	124
GRI 206: Anti-competitive behavior 2016	206-1 Legal actions for anti-competitive behavior, anti-trust and monopoly practices	124
<b>SUPPLY CHAIN MANAGEMENT</b>		
GRI 3: Material topics 2021	3-3 Management of material topics	125
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	125
GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	125

## SASB Index

Code	Metric Description	FY2023	FY2022	FY2021
<b>Activity Measures</b>				
TC-TL-000.A	Number of wireless subscribers (million)	2.162	2.156	2.0
TC-TL-000.B	Number of wireline subscribers (thousand)	226	239	279
TC-TL-000.C	Number of broadband subscribers (thousand)	580,000	578	484
TC-TL-000.D	Network traffic (Petabyte)	3,518	3,431	3,330
<b>Environmental Footprint of Operations</b>				
TC-TL-130a.1	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	491,413GJ Grid: 83.9% Renewable: 13.7%	548,627GJ Grid: 87.1% Renewable: 12.1%	558,191GJ Grid: 93.4% Renewable: 5.7%
<b>Data Privacy</b>				
TC-TL-220a.1	Description of policies and practices relating to targeted advertising and customer privacy	Please refer to our Cybersecurity and data protection policies on our AR 2023, pages 104-105, 123, and 174-176.		
TC-TL-220a.2	Number of customers whose information is used for secondary purposes	StarHub complies with our PDPA obligations with regards to giving customers choice over how their information is used.		
TC-TL-220a.3	Total amount of monetary losses as a result of legal proceedings associated with customer privacy	0	0	0
TC-TL-220a.4	(1) Number of law enforcement requests for customer information, (2) number of customers whose information was requested, (3) percentage resulting in disclosure	Unable to disclose due to confidentiality obligations.		
<b>Data Security</b>				
TC-TL-230a.1	(1) Number of data breaches, (2) percentage that are personal data breaches <sup>#1</sup> , (3) number of customers affected	0	0	(1) One incident of data breach related to customer data from before 2007 (2) 100% involved personally identifiable information (3) 57,191 customers were affected
TC-TL-230a.2	Description of approach to identifying and addressing data security risks, including use of third-party cybersecurity standards	Please refer to our Cybersecurity and data protection policies on our AR 2023, pages 104-105, 174-176.		



# SUSTAINABILITY REPORT

## SASB Index

Code	Metric Description	FY2023	FY2022	FY2021
<b>Product End-of-life Management</b>				
TC-TL-440a.1	(1) Materials recovered through take back programs, percentage of recovered materials that were (2) reused, (3) recycled, and (4) landfilled	Internal e-waste: 133.5t External e-waste: 11.8t	Internal e-waste: 144.9t External e-waste: 11.3t	Internal e-waste: 72.6t External e-waste: 75.0t
All internal e-waste collected are sent to licensed e-waste recyclers; external e-wastes are managed by the appointed PRS Operator. See page 98.				
<b>Competitive Behaviour &amp; Open Internet</b>				
TC-TL-520a.1	Total amount of monetary losses as a result of legal proceedings associated with anticompetitive behaviour regulations	0	0	0
TC-TL-520a.2	Average actual sustained download speed of (1) owned and commercially associated content and (2) non-associated content	The speeds are non-specific to our owned content or other non-associated content.		
TC-TL-520a.3	Description of risks and opportunities associated with net neutrality, paid peering, zero rating, and related practices	StarHub complies with IMDA's Net Neutrality Policy.		
<b>Managing Systemic Risks from Technology Disruptions</b>				
TC-TL-550a.1	(1) System average interruption duration <sup>#2</sup> (2) System average interruption frequency (3) Customer average interruption duration	StarHub's Quality of Service reports to IMDA showed that the network availability of StarHub's fibre broadband was 100% and StarHub's mobile broadband service was 99.94%.	StarHub's Quality of Service reports to IMDA showed that the network availability of StarHub's fibre broadband was 100% and StarHub's mobile broadband service was higher than 99.95%.	1) An independent infrastructure audit conducted in 2020 confirmed that overall service availability of mobile services was higher than 99.95%. 2) StarHub's Quality of Service reports to IMDA showed that the network availability of StarHub's broadband service was higher than 99.99%.
TC-TL-550a.2	Discussion of systems to provide unimpeded service during service interruptions	StarHub continues to maintain a reliable, resilient and low-latency mobile and broadband network through (1) periodic security risk assessments, (2) continual improvement to our ISO 22301 security and resilience (3) robust controls over access to our systems, sites and information assets as well as physical safety and security of our facilities and systems (4) provide timely information and adopt all commercially reasonable remedial and mitigation measures and actions in the event of a security incident		
More details on SR2023, pages 102-103.				

#1 Based on SASB – Telecommunication Services Version 2023-12, the percentage involving personally identifiable information (PII) has been updated to percentage that are personal data breaches.

#2 This is newly added where the system average interruption duration is defined as the total duration of service disruptions for the average customer during the reporting period.

## TCFD Index

TCFD Pillar	TCFD Recommendations	2023 Disclosures
<b>Governance</b>	Describe the Board's oversight of climate-related risks and opportunities.	Please refer to Sustainability Governance, pages 75-76.
	Describe Management's role in assessing and managing climate-related risks and opportunities.	
<b>Strategy</b>	Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term.	Please refer to Sustainability Governance, page 76, Climate Change and Energy, pages 87-90, and our TCFD Progress, pages 91-92.
	Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning.	
	Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	
<b>Risk Management</b>	Describe the organisation's processes for identifying and assessing climate-related risks.	
	Describe the organisation's processes for managing climate-related risks.	
	Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management.	
<b>Metrics &amp; Targets</b>	Disclose the metrics used by the organisation to assess climate related risks and opportunities in line with its strategy and risk management process.	Please refer to Goals and Targets FY2023, pages 84-85, and Climate Change and Energy, pages 87-90 and 93-95.
	Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 GHG emissions, and the related risks.	
	Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets.	

# SUSTAINABILITY REPORT

## Independent Limited Assurance Report

### To the Directors of StarHub Ltd

Report on StarHub Ltd's Sustainability Report 2023

### Conclusion

We have performed a limited assurance engagement on whether StarHub's ("the Company") Sustainability Report 2023 ("the Report") for the year ended 31 December 2023 has been prepared in accordance with Global Reporting Initiative Sustainability Reporting Standards (GRI Standards).

Based on the procedures performed and evidence obtained, nothing has come to our attention to cause us to believe that:

- the Report has not described the sustainability practices on a comply-or-explain basis with reference to the following components as listed under Rule 711B of the Singapore Exchange's (SGX) Listing Manual;
  - Material environmental, social and governance factors;
  - Policies, practices and performance;
  - Targets;
  - Sustainability reporting framework; and
  - Board statement and associated governance structure for sustainability practices.
- the Selected GRI Disclosures as identified in the table below, are not presented, in all material respects, in accordance with the relevant topic-specific disclosures requirements in the Global Reporting Initiative Sustainability Reporting Standards (GRI Standards); and
- the Selected GRI Disclosures as identified in the table below, are not calculated, in all material respects, in accordance with the relevant topic-specific disclosures requirements in the GRI Standards.

Material Topic	GRI Standards topic-specific disclosure	Selected GRI Disclosures	
<b>Energy</b>	GRI 302-1 (2016)	Energy consumption within the organisation 491,413 gigajoules (GJ)	
	GRI 302-2 (2016)	Energy consumption outside of the organisation 229,394 gigajoules (GJ) (for StarHub)	
	GRI 302-3 (2016)	Energy intensity 207.1 GJ per \$million revenue (for energy consumption within the organisation)	
	GRI 302-4 (2016)	Reduction of energy consumption Decreased by 12.0% (from 2021)	
<b>Water Use</b>	GRI 303-3 (2018)	Water withdrawal 7.62 megalitres	
<b>Emissions</b>	GRI 305-1 (2016)	Direct (Scope 1) GHG emissions 1,962 tCO <sub>2e</sub>	
	GRI 305-2 (2016)	Energy indirect (Scope 2) GHG emissions (location-based) 61,534 tCO <sub>2e</sub>	
	GRI 305-2 (2016)	Energy indirect (Scope 2) GHG emissions (market-based) 52,374 tCO <sub>2e</sub>	
<b>Emissions</b>	GRI 305-3 (2016)	Other indirect (Scope 3) GHG emissions	
		<b>Scope 3</b>	<b>tCO<sub>2e</sub></b>
		Cat 3 Fuel and energy related emissions	10,465*
		Cat 5 Waste generated in operation	8
		Cat 6 Business travel	372
		Cat 7 Employee commuting	304
		Cat 8 Upstream leased assets	6,022*
		Cat 13 Downstream leased assets	31,316
Cat 14 Franchises	66		
<b>Total</b>	<b>48,552</b>		

\* includes subsidiaries i.e. Ensign InfoSecurity (Singapore) Pte Ltd and its subsidiaries, Strateq Sdn Bhd and its subsidiaries, JOS (SG) Pte Ltd, JOS (Malaysia) Sdn Bhd, and MyRepublic Broadband Pte Ltd.

Material Topic	GRI Standards topic-specific disclosure	Selected GRI Disclosures				
<b>Emissions</b>	GRI 305-4 (2016) GHG emissions intensity	22.9 tCO <sub>2e</sub> per \$million revenue				
	GRI 305-5 (2016) Reduction of GHG emissions	Decreased by 16.3% (from 2021 base year)				
<b>Waste</b>	GRI 306-3 (2020) Waste generated	Total waste generated: 194.0 tonnes Non-hazardous general waste disposed of: 16.1 tonnes Internal e-waste recycled: 133.5 tonnes Paper recycled: 44.4 tonnes				
	GRI 306-4 (2020) Waste diverted from disposal	Internal e-waste recycled: 133.5 tonnes Paper recycled: 44.4 tonnes				
<b>Employment</b>	GRI 401-1 (2016) New employee hires and employee turnover	<b>Gender</b>				
		Male				
		Female				
		Total				
		Number of new hires	117	70	187	
		Rate of new hires	12.4%	10.7%	11.7%	
		Number of turnovers	184	130	314	
		Rate of turnover	19.6%	19.8%	19.7%	
		<b>Age Group</b>	<30	30-50	>50	Total
		Number of new hires	64	105	18	187
Rate of new hires	46.0%	8.9%	6.4%	11.7%		
Number of turnovers	55	197	62	314		
Rate of turnover	39.6%	16.8%	22.1%	19.7%		
<b>Talent Management</b>	GRI 404-1 (2016) Average hours of training per year per employee	<b>Male</b>				
		<b>Female</b>				
		Senior Management	16.98	14.07		
		Middle Management	17.38	14.69		
		Function Employees	14.18	13.32		
		Overall	15.26	13.62		
<b>Equality, Diversity, and Inclusion</b>	GRI 405-1 (2016) Diversity of governance bodies and employees	<b>Gender</b>				
		<b>Male</b>				
		<b>Female</b>				
		Board	72.7%	27.3%		
		Senior Management	66.2%	33.8%		
		Middle Management	67.5%	32.5%		
		Function Employees	55.5%	44.5%		
		Total Employees (excluding Board)	58.9%	41.1%		
		<b>Age Group</b>	<30	30-50	>50	
		Board	0%	18.2%	81.8%	
		Senior Management	0%	63.2%	36.8%	
		Middle Management	1.3%	75.2%	23.5%	
		Function Employees	11.8%	73.8%	14.4%	
		Total Employees (excluding Board)	8.7%	73.7%	17.6%	
		<b>Ethnic Group</b>	Chinese	Malay	Indian	Others
		Board	45.4%	0%	18.2%	36.4%
Senior Management	72.1%	0%	13.2%	14.7%		
Middle Management	77.2%	1.3%	14.3%	7.2%		
Function Employees	67.4%	10.0%	7.3%	15.3%		
Total Employees (excluding Board)	70.0%	7.4%	9.3%	13.3%		

# SUSTAINABILITY REPORT

## Independent Limited Assurance Report

Material Topic	GRI Standards topic-specific disclosure	Selected GRI Disclosures		
Equality, Diversity, and Inclusion	GRI 405-2 (2016) Ratio of the basic salary and remuneration of women to men	<b>Ratio of Base Salary</b>	<b>Female</b>	<b>Male</b>
		Senior Management	1	1.283
		Middle Management	1	1.021
		Function Employees	1	1.023
		Overall	1	1.171
Workplace Health and Safety	GRI 403-9 (2018) Work-related injuries	<b>Work-Related Fatalities</b>	<b>2023</b>	
		Number of Work-related Fatalities	0	
		<b>Work-Related Injuries</b>	<b>2023</b>	
		Number of Work-related Injuries	3	
		Workplace Injury Frequency Rate (per 1,000,000 hours worked)	0.96	
		Workplace injury incidence rate (per 100,000 employees)	188	
		Number of Man Days Lost	85	
		Workplace injury severity rate (man days lost per 1,000,000 hours worked)	27	
		<b>Occupational Disease</b>	<b>2023</b>	
		Number of Occupational Disease Incidences	0	
Equality, Diversity & Inclusion	GRI 406-1 (2016) Incidents of discrimination and corrective actions taken	Incidents of discrimination and corrective actions taken: 0 cases		
Procurement practices	GRI 204-1 (2016) Proportion of spending on local suppliers	Share of local suppliers as a percentage of total supplier payments: 85%		
		Proportion of local suppliers as a percentage of total suppliers: 70%		

### Basis for Conclusion

We conducted our engagement in accordance with Singapore Standard on Assurance Engagements (SSAE) 3000 Assurance Engagements Other Than Audits or Reviews of Historical Financial Information. Our responsibilities under this standard are further described in the "Our Responsibilities" section of our report.

We have complied with the independence and other ethical requirements of the Accounting and Corporate Regulatory Authority (ACRA) Code of Professional Conduct and Ethics for Public Accountants and Accounting Entities (ACRA Code), which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality, and professional behaviour.

Our firm applies Singapore Standard on Quality Management (SSQM) 1, Quality Management for Firms that Perform Audits or Reviews of Financial Statements, or Other Assurance or Related Services Engagements, issued by the ISCA. This standard requires the firm to design, implement, and operate a system of quality management, including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion.

### Responsibilities of Management

Management is responsible for:

- designing, implementing and maintaining internal control relevant to the preparation of the Report that is free from material misstatement, whether due to fraud or error;
- selecting or developing suitable criteria for preparing the Report and appropriately referring to or describing the criteria used; and
- preparing and presenting the Report in accordance with the GRI Standards and Rule 711B of the SGX Listing Manual, and the information and assertions contained within it;
- determining the Company's objectives in respect of sustainable development performance and reporting, including the identification of stakeholders and material issues;

- preventing and detecting fraud and for identifying and ensuring that the Company complies with laws and regulations applicable to its activities; and
- ensuring that staff involved with the preparation and presentation of the Report are properly trained, information systems are properly updated and that any changes in reporting encompass all significant reporting units.

The directors' responsibilities include overseeing the Company's sustainability reporting process.

## Our Responsibilities

We are responsible for:

- planning and performing the engagement to obtain limited assurance about whether the Company's Report is free from material misstatement, whether due to fraud or error;
- forming an independent conclusion, based on the procedures we have performed and the evidence we have obtained; and
- reporting our conclusion

### Summary of the work we performed as the basis for our conclusion

We exercised professional judgment and maintained professional skepticism throughout the engagement. We designed and performed our procedures to obtain evidence about the Company's Report that is sufficient and appropriate to provide a basis for our conclusion. Our procedures selected depended on our understanding of the Report and other engagement circumstances, and our consideration of areas where material misstatements are likely to arise.

A limited assurance engagement consists of making inquiries, primarily of persons responsible for the preparation of information presented in the Report, and applying analytical and other evidence gathering procedures, as appropriate. These procedures included:

- Inquiries of management to gain an understanding of the Company's processes for determining the material issues for the Company's key stakeholder groups;
- Interviews with relevant staff at the Company and selected business unit level concerning sustainability strategy and policies for material issues, and the implementation of these across the business;
- Interviews with relevant staff at the corporate and business unit level responsible for providing the information in the Report;
- Inquiries about the design and implementation of the systems and methods used to collect and report on the GRI Disclosures, including the aggregation of the reported information;
- Comparison of the GRI Disclosures presented in the Report to corresponding information in the relevant underlying sources to determine whether all the relevant information contained in such underlying sources has been appropriately included in the GRI Disclosures; and
- Reading of the information presented in the Report to determine whether it is in line with our overall knowledge of, and experience with, the sustainability performance of the Company.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

Due to the inherent limitations of any internal control structure, it is possible that errors or irregularities in the information presented in the Report may occur and not be detected. Our engagement is not designed to detect all weaknesses in the internal controls over the preparation and presentation of the Report, as the engagement has not been performed continuously throughout the period and the procedures performed were undertaken on a test basis.

### Restriction on use

This report has been prepared for the Directors of StarHub Ltd for the purpose of providing an assurance conclusion on the Report and Selected GRI Disclosures and may not be suitable for another purpose. We disclaim any assumption of responsibility for any reliance on this report, to any person other than the Directors of StarHub Ltd, or for any other purpose than that for which it was prepared.

 KPMG LLP

Public Accountants and  
Chartered Accountants

Singapore  
8 March 2024