

# Sustainability Report

## INTRODUCTION

- 113 Board Statement
- 113 About This Report
- 114 FY2022 Performance Highlights
- 115 Awards and Recognition

## APPROACH TO SUSTAINABILITY

- 116 StarHub's Sustainability Framework
- 117 Sustainability Governance
- 118 Stakeholder Engagement
- 121 Materiality Assessment
- 122 Supporting the UN Sustainable Development Goals
- 124 FY2022 Goals and Targets

## DRIVING SUSTAINABLE GROWTH

- 126 Energy and Climate Change
- 130 Our TCFD Progress
- 131 Circularity
- 134 Green Tech Solutions

## ENABLING A DIGITAL SOCIETY

- 138 Product and Service Quality
- 140 Data Privacy and Cybersecurity
- 141 Online Safety
- 142 Digital Inclusion

## CARING FOR OUR PEOPLE & COMMUNITIES

- 144 Health, Safety and Well-being
- 148 Talent Management
- 154 CSR Initiatives

## RESPONSIBLE BUSINESS AND VALUE CHAIN

- 160 Business Conduct and Ethics
- 161 Responsible Selling
- 162 Supply Chain Management

## APPENDICES

- 163 StarHub Value Creation Scorecard
- 164 FY2022 Memberships and Associations
- 165 GRI Content Index
- 170 SASB Index
- 172 TCFD Index
- 173 Independent Limited Assurance 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

### BOARD STATEMENT

The Board of Directors is pleased to present StarHub's 12<sup>th</sup> Sustainability Report.

Notwithstanding the challenges brought about by the COVID-19 pandemic, our charter and resolve for sustainability remain unwavering and strong. The global events over the last 12 months have highlighted the interaction between environmental and social goals of ESG, and consequentially the need to be thoughtful and balanced in our implementation to achieve success across all goals.

In recognition of our work, StarHub was named the World's Most Sustainable Telco (Fixed and Wireless) on the 2023 Corporate Knights Global 100, widely accepted as the gold standard in sustainability rankings.

We continue to oversee StarHub's overall sustainability strategy in alignment with Management's planning and execution of the same. This includes the integration of material sustainability issues as part of the Group's overall strategy, as well as monitoring and management of our ESG risks and impacts. This year, the Board

has reviewed and approved a refreshed set of material topics taking into consideration StarHub's impact on the environment, people and the economy in accordance with the Global Reporting Initiative (GRI) Standards 2021.

Decarbonising our operations is a critical part of our sustainability strategy. Key milestones were achieved this year with our inaugural quantitative climate change scenario analysis and our new decarbonisation goals. The Board fully supports StarHub's ambition to reduce, by 2030, our Scope 1 and 2 emissions by 50%, and Scope 3 emissions by 25% from the 2021 baseline, and to reach net zero by 2050.

This year, we adopted a new Board Diversity Policy, which sets out the Board's commitment to consider all aspects of diversity and the needs and plans of the Group in the review of Board composition succession planning. We also continued to support disadvantaged children and youths and foster a digitally-inclusive community, having invested \$1.9 million and 621 employee hours. We look forward to your continued support as we progress in our sustainability journey.

### ABOUT THIS REPORT

#### Reporting scope and boundary

This report covers StarHub Ltd, our subsidiaries, associates and joint ventures (as listed on pages 229-235), directly held by StarHub unless otherwise stated. The information presented corresponds to our financial year ended 31 December 2022 (FY2022).

Operational control is used as the basis for determining data consolidation boundaries across multiple entities<sup>1</sup>. Unless otherwise stated, the ESG data as well as targets presented in this report will exclude certain subsidiaries<sup>2</sup> due to incomplete data. Data collection for these subsidiaries are in progress and will be completed and reported as soon as practicable in future reports.

#### Reporting framework

This 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 the SGX-ST Listing Rule 711B.

To the extent applicable to StarHub's business operations, this report has been prepared in accordance with the GRI Standards 2021 given its widespread. A GRI content index is provided on pages 165-169.

We have also included relevant metrics recommended by the Sustainability Accounting Standards Board (SASB) based on the Telecommunications Services (Industry Standard, Version 2018-10) to provide industry-specific disclosures for our stakeholders, as summarised in our SASB disclosure index (pages 170-171). As part of the SGX-ST's climate reporting requirements and in our support of Singapore's decarbonisation commitment, this report also includes the Taskforce on Climate-related Financial Disclosures (TCFD) reporting (see our TCFD index on page 172). We continue to support the UN Sustainable Development Goals (SDGs) and have included our contributions to the SDG goals and targets (pages 122-123).

#### Review and external assurance

StarHub has engaged KPMG LLP to provide independent assurance of selected ESG metrics. Our independent assurance practice is conducted annually to ensure credibility and to obtain 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. Please refer to pages 173-176 for the assurance opinion and scope of data assured. Pending completion of our internal review, StarHub has included sustainability reporting disclosures as part of our upcoming internal audit plan.

#### Feedback

We appreciate your comments and feedback on our sustainability report to help us progress further on our sustainability journey. Please contact us at: [sustainability@starhub.com](mailto:sustainability@starhub.com).

<sup>1</sup> Excluding entities where StarHub has a minority interest.

<sup>2</sup> These include Ensign InfoSecurity Pte. Ltd. (Ensign), Strateq Sdn. Bhd. (Strateq), JOS (SG) Pte. Ltd. (JOS SG), JOS (Malaysia) Sdn. Bhd. (JOS Malaysia) and MyRepublic Broadband Pte. Ltd., which were acquired between 2018 and 2022. In November 2022, we conducted a review of our operational control boundary and determined that we will include the aforementioned subsidiaries.

# Sustainability Report

## FY2022 PERFORMANCE HIGHLIGHTS



### Driving sustainable growth

- + Launched StarHub's Green Tech solutions to help enterprise customers achieve sustainability outcomes through customised solutions
- + Rolled out Singapore's first 100% solar-powered outdoor campus WiFi on StarHub 5G in partnership with the National University of Singapore (NUS)
- + Signatory to the Corporate Knight's COP27 Action Declaration on Climate Policy Engagement to align our climate policy engagements with the Paris Agreement



### Enabling a digital society

- + Continued excellence in network operations: Winner in seven categories of Opensignal Awards' Singapore Mobile Network Experience Report November 2022
- + Continued improvement in our customer satisfaction, as reflected in a 10% increase in our Net Promoter Score (NPS) from customer feedback
- + Sponsored up to 10,000 mobile lines for persons with disabilities (PwDs) in partnership with Infocomm Media Development Authority (IMDA) and SG Enable



### Caring for our people and communities

- + Adopted the inaugural Board Diversity Policy in 2022 and set a new target to maintain a minimum of 25% female representation on the Board within the next three to five years
- + 17,665 hours of training provided to our employees, which represents 96% of our workforce
- + Celebrated the 10<sup>th</sup> anniversary of our partnership with Central Singapore Community Development Council (CDC) to provide vulnerable children with greater learning opportunities through the 'Junior Stars' programme
- + Reached 12,829 beneficiaries with our contribution and hands-on community efforts, with staff volunteering 621 hours



### Responsible business and value chain

- + Zero incidents of non-compliance pertaining to fraud and corruption
- + Zero incidents of non-compliance with regulations or voluntary codes concerning product and service information and labelling
- + Continued recognition for corporate governance and transparency best practices, receiving the best possible quality score of '1' for low governance risk from Institutional Shareholder Services (ISS)
- + All new suppliers have completed our Supplier Self-Assessment Questionnaires (SAQ) and 89% of all our suppliers confirmed that they adhere to StarHub's Supplier Code of Conduct

## AWARDS AND RECOGNITION

## Environment



World's Most Sustainable Telecommunication Service Provider (Fixed and Wireless). Overall global ranking moved up to 34<sup>th</sup> in 2023 from 72<sup>nd</sup> in 2022



Sustainable Business winner



Produced by MSCI ESG Research as of Oct 22

Rated 'AA' since 2017



"A-" Leadership Score for CDP Climate Change 2022



Recipient of LowCarbonSG 2022 Logo for effective measurement and monitoring of our carbon footprint



Included in FTSE4Good Index Series since 2020<sup>3</sup>

## Governance



Most Transparent Company (Communications category)



ISS best possible quality score of "1" for low governance risk throughout 2022

Ranked 34<sup>th</sup> out of 489 SGX-listed companies in the Singapore Governance and Transparency Index



Amongst ASEAN Asset Class (Singapore) top publicly listed companies



IR Magazine Forum & Awards – South East Asia 2022

Best investor event

## Product &amp; Service Quality



Winner in seven categories of Opensignal Awards' Singapore Mobile Network Experience Report November 2022

StarHub won all award categories for overall experience in Singapore<sup>4</sup>

Won Gartner Eye on Innovation Awards for Education 2022 (Infrastructure category), for the NUS Outdoor WiFi Powered by 5G and Solar Energy project, a collaboration between NUS and StarHub



Ranked highest in customer satisfaction scores for Mobile and TV services nationwide



Ministry of Home Affairs National Day Award (team) for key role in Project FRONTIER's national anti-scam operations

## Social



7<sup>th</sup> in Singapore for Equileap 2022 Gender Equality Reporting & Ranking

In support of:



IMDA Digital for Life 2022 Champion



Charity Silver Award at the Community Chest Awards 2022



Recipient of the People's Association Community Spirit Awards 2022 – Excellence Award for StarHub's efforts in supporting Central Singapore CDC in bonding the community and building social capital

<sup>3</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 Environment, Social and Governance (ESG) practices. The FTSE4Good indices are used by a wide variety of market participants to create and assess responsible investment funds and other products.

<sup>4</sup> Opensignal Awards – Singapore: Mobile Network Experience Report November 2022 (opensignal.com), based on independent analysis of mobile measurements recorded during the period August 1 – October 29, 2022 © 2023 Opensignal Limited.

# Sustainability Report

## Approach to Sustainability

### STARHUB'S SUSTAINABILITY FRAMEWORK

StarHub believes in creating a better world enabled by digital solutions, while playing our part for our planet and its people.

We reviewed the four key pillars within our sustainability framework this year against our materiality impact assessment results.

By aligning towards the revised priority areas, we focus our sustainability strategies and work on the most significant identified impacts of our business on the economy, environment, people and the wider community. StarHub continues to implement policies and initiatives to drive performance under each pillar, which are monitored using the key performance indicators and targets further elaborated in this report.

### StarHub's Sustainability Framework Pillars



#### DRIVING SUSTAINABLE GROWTH

Minimising our own environmental footprint and building our climate-resiliency, while helping our customers decarbonise through innovative Green Tech solutions



#### ENABLING A DIGITAL SOCIETY

Maximising the positive impacts of information and communications technology (ICT) in businesses and communities through the provision of safe, reliable and inclusive services



#### CARING FOR OUR PEOPLE AND OUR COMMUNITIES

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



#### RESPONSIBLE BUSINESS AND VALUE CHAIN

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

## SUSTAINABILITY GOVERNANCE

The Board oversees StarHub's overall sustainability strategy and efforts, and reviews matters relating to StarHub's sustainability and climate management reported by the Management Risk Committee (MRC) at least twice a year. Sustainability-related topics such as our TCFD compliance and decarbonisation roadmap as well as the

sustainability-linked financing framework (SLFF) were raised to the Board Risk & Sustainability Committee (RSC) during the meetings held in FY2022. Board level guidance and communications with the CEO and Chief Corporate & Sustainability Officer (CCSO) on sustainability and climate-related issues also take place whenever required.

<h3>The Board</h3>	<ul style="list-style-type: none"> <li>+ Reviews and considers sustainability and climate-related issues as part of its strategic formulation, performance objective and target-setting, including StarHub's existing sustainability performance in managing its impacts and exposure to ESG risks (such as climate risks and opportunities)</li> <li>+ Reviews and approves StarHub's material topics and sustainability report</li> </ul>
<h3>Board RSC</h3> <p><i>Please also refer to the Annual Report page 92 for more information about the Board RSC's responsibilities.</i></p>	<ul style="list-style-type: none"> <li>+ Comprises members of the Board and the CEO who are tasked with specific oversight of the Group's sustainability and climate-related matters</li> <li>+ Oversees and reviews the management of the Group's impact on the economy, environment and people through identification, assessment and monitoring of material sustainability topics, risks and opportunities</li> <li>+ Reviews the development and implementation of our sustainability framework, commitments, strategies, targets, opportunities, initiatives and policies, and recommends necessary updates based on the review outcomes</li> </ul>
<h3>MRC</h3>	<ul style="list-style-type: none"> <li>+ Comprises cross-functional members of Management across business units, with the sustainability agenda headed by the CCSO</li> <li>+ Assists the Board RSC in developing management policies, strategies and frameworks for monitoring and mitigating our impacts as well as climate-related risks and opportunities</li> <li>+ Identifies new sustainability and climate management initiatives and establishes priorities and targets for the short, medium and long term, based on input from working level staff and stakeholder feedback</li> <li>+ Reports performance against goals and targets to the Board RSC</li> </ul>
<h3>Sustainability Advocate</h3>	<ul style="list-style-type: none"> <li>+ Working level committee responsible for developing, implementing and coordinating programmes and initiatives with the support of cross-functional representatives</li> </ul>





# Sustainability Report

## STAKEHOLDER ENGAGEMENT





StarHub regularly engages with our key stakeholders through both formal and informal channels. Key stakeholders have been identified based on their potential impact on our business as well as the

potential impact of our business activities, products and services on them. Ongoing communication with our stakeholders is essential to allowing us to identify and address their concerns, in addition to obtaining their feedback on our sustainability measures and performance.

## Stakeholder engagement efforts summary




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>OG Customer surveys</li> <li>Hotlines</li> <li>Emails</li> <li>SMS</li> <li>StarHub App</li> <li>OG giga! app</li> <li>"StarHub Business Manager" app</li> <li>Company website and social media</li> <li>WhatsApp chat and Facebook Messenger chatbot channels</li> <li>Customer service touchpoints at retail stores</li> <li>A 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 latest cybersecurity trends and continuous strengthening of StarHub's cybersecurity to protect customers' personal data</li> <li>+ Greater focus on digital products and support channels</li> <li>+ Multilingual hotlines to support Mandarin-speaking customers</li> <li>+ Flyers targeted at elderly customers are printed in the Chinese language</li> <li>+ Redesigned StarHub App to offer more services on a 24x7 self-serve basis</li> <li>+ Embarked on Scope 3 target-setting and decarbonisation roadmap</li> </ul>
<b>Employees</b> 	<ul style="list-style-type: none"> <li>OG Intranet</li> <li>R Emails</li> <li>Workshops</li> <li>R Employee social media app</li> <li>Employee engagement activities, such as webinars and volunteering activities</li> <li>Q HubberHangout virtual staff communication session</li> <li>A Employee feedback survey</li> <li>A 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>+ Implementation of hybrid workplace model</li> <li>+ Flexi-benefits scheme since 2019</li> <li>+ Aligned contract employees' insurance plans with that of permanent employees</li> <li>+ Planned integration of Annual Wage Supplement into employee monthly salaries to address rising costs of living</li> <li>+ Caring Manager initiatives to train managers to lead with empathy and provide psychological safety net</li> </ul>
<b>Suppliers</b> 	<ul style="list-style-type: none"> <li>OG Company website</li> <li>R Face-to-face meetings</li> <li>R Emails</li> <li>Teleconference</li> <li>AR SAQ</li> <li>A Sustainability Report</li> </ul>	<ul style="list-style-type: none"> <li>+ 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>+ Making our Supplier Code of Conduct and Responsible Sourcing Policy available online</li> <li>+ Continued implementation of SAQ to collect information and understand supplier behaviour</li> </ul>
<b>Distributors and Retailers</b> 	<ul style="list-style-type: none"> <li>R Teleconference</li> <li>R Emails</li> <li>AR Face-to-face meetings</li> <li>AR 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>+ Supporting partners with simplified processes and systems (including training)</li> <li>+ Digital sales tools</li> <li>+ Enhanced service offerings and promotions</li> </ul>

A Annually AR As required OG Ongoing Q Quarterly R Regularly T Timely

Stakeholder group	Engagement method & frequency	ESG issues or impacts raised	StarHub's response
<b>Business Partners</b> 	<ul style="list-style-type: none"> <li><b>R</b> Face-to-face meetings, teleconference and seminars</li> <li><b>A</b> 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>+ Explore partnerships to seek mutually beneficial business opportunities in the areas of solar energy as well as creation of digital products and solutions</li> </ul>
<b>Investors</b> 	<ul style="list-style-type: none"> <li><b>R</b> Financial reports and disclosures</li> <li>Investor conferences, meetings and non-deal roadshows</li> <li>Annual Report and Sustainability Report</li> <li>Annual General Meeting</li> <li><b>A</b> Analyst and media briefings for full year results announcements, with webcast available for public participation</li> <li>Independent third-party Investor Relations (IR) perception study</li> <li>Annual Investor Day</li> <li><b>Q</b> Analyst and media results update call</li> <li><b>T</b> Announcements via SGXNet and IR website</li> <li>+ IR contact – email address and phone number listed on IR website</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 engage the investment community through investor meetings, prompt responses to email and phone queries</li> <li>+ Conduct regular update meetings with research analysts</li> <li>+ Provide timely and meaningful information to the market and remain committed to best corporate governance and disclosure practices</li> </ul>
<b>Local Communities</b> 	<ul style="list-style-type: none"> <li><b>OG</b> Community outreach programmes</li> <li>Sponsorships</li> <li><b>A</b> Sustainability Report</li> </ul>	<ul style="list-style-type: none"> <li>+ Social needs, including digital inclusion and employability</li> </ul>	<ul style="list-style-type: none"> <li>+ Regularly reviewing community needs to plan corporate social responsibility (CSR) programmes</li> <li>+ Partnering with Voluntary Welfare Organisations and investing in community projects to support underprivileged youths and families</li> <li>+ Providing affordable mobile data plans and basic smartphones for lower-income seniors</li> <li>+ Providing affordable mobile plans (SmartBuddy) to visually- and hearing-impaired customers as well as complimentary mobile plans (giga!) for PwDs</li> <li>+ Memorandum of Understanding (MOU) with the National Trade Union Congress (NTUC), offering NTUC members exclusive mobile and broadband deals as well as entry level mobile plans for lower-income members and Family Membership deals</li> </ul>
<b>Media</b> 	<ul style="list-style-type: none"> <li><b>R</b> Media releases</li> <li><b>T</b> Media responses</li> <li><b>A</b> Annual Report and Sustainability Report</li> <li>+ Media contact - email addresses listed on corporate website</li> <li>+ Media events / briefings</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, entertainment, and related content</li> </ul>	<ul style="list-style-type: none"> <li>+ Provide dedicated media contacts</li> <li>+ Offering timely and accurate information on company affairs of public interest</li> </ul>



# Sustainability Report

Stakeholder group	Engagement method & frequency	ESG issues or impacts raised	StarHub's response
<b>Government and Regulators</b> 	<ul style="list-style-type: none"> <li><b>R</b> Virtual and face-to-face meetings</li> <li>Consultation sessions</li> <li>Requests for proposal</li> <li><b>A</b> 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>+ 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> <li>+ Participated and served as a member of the Digital Readiness Network</li> </ul>
<b>Trade Unions</b> 	<ul style="list-style-type: none"> <li><b>R</b> Informal / formal consultations</li> <li><b>A</b> Annual Report and Sustainability Report</li> </ul>	<ul style="list-style-type: none"> <li>+ Access to employees for promoting 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 Management</li> <li>+ MOU with 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><b>R</b> Meetings</li> <li>Conferences</li> <li><b>A</b> 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 UN Global Compact</li> <li>+ Committed to contribute to the UN SDGs</li> </ul>

## Our industry and trade associations memberships and climate policy engagement

StarHub is an active member of the Global Compact Network Singapore (GCNS), the local chapter of the United Nations Global Compact. Our CCSO serves as the Honorary Treasurer of the Management Committee since 2021. We support the Carbon Pricing Leadership Coalition (CPLC), jointly launched by GCNS and the World Bank's CPLC, and participate in the LowCarbonSG, a capability-building programme for local businesses to start measuring and monitoring their carbon footprints.

StarHub is also one of the founding members of the National Sustainable Procurement Roundtable (NSPR), established in 2019. The NSPR is a

nationwide movement to promote sustainable procurement, with the objective of building an innovative and sustainable supply chain that efficiently meets sustainability objectives.

In November 2022, in conjunction with the Sharm el-Sheikh Climate Change Conference (COP27), StarHub became a signatory of the Action Declaration on Climate Policy Engagement, an initiative by Corporate Knights and the Global 100 Council. We commit to support alignment with the Paris Agreement when engaging with policymakers, industry and trade associations.



For the full list of industry and trade associations of which StarHub is a member, see page 164.



CCSO Veronica Lai receiving the Sustainable Business Winner 2022 award from President Halimah Yacob.

## MATERIALITY ASSESSMENT

In FY2022, StarHub conducted an impact assessment as part of a refresh of our materiality assessment to identify the impacts of our business activities and relationships on the environment, people (including human rights) and the wider economy, in line with GRI 2021.

### Materiality assessment process



\* Note: StarHub has a two-year materiality assessment cycle and will consult our employees and external stakeholders as part of our next full materiality assessment in FY2023.

The list of StarHub's material topics is 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 our most significant impacts on the environment, people (including human rights) and the wider economy.

#### DRIVING SUSTAINABLE GROWTH

- + Energy & Climate Change
- + Circularity
- + Green Tech Solutions

#### ENABLING A DIGITAL SOCIETY

- + Product & Service Quality
- + Data Privacy & Cybersecurity
- + Online Safety
- + Digital Inclusion

#### CARING FOR OUR PEOPLE AND OUR COMMUNITIES

- + Health, Safety & Well-being
- + Talent Management

#### RESPONSIBLE BUSINESS AND VALUE CHAIN

- + Business Conduct & Ethics
- + Responsible Selling
- + Supply Chain Management






#### Notes:




- <sup>1</sup> "Circularity" describes our approach to the management of waste and water. While "Waste" remains a material topic, "Water Use" is a non-material topic, as StarHub's water use impact is mitigated by our existing water conservation practices. Nonetheless, our water use and management efforts will still be reported.
- <sup>2</sup> "Green Tech Solutions" has replaced the FY2021 topic of "Innovation and Technology" to reflect the actual and potential significant positive impact of StarHub's DARE+ innovation efforts on enterprise customers.
- <sup>3</sup> StarHub's employee equality, diversity and inclusion is now reported as part of a combined "Talent Management" material topic.
- <sup>4</sup> "Digital Inclusion" is a new material topic that builds on FY2021 material topic "Investing in Communities". This reflects the significant impact of StarHub's operations in facilitating telecommunication services access and digital connectivity in the wider community. Our community investment and CSR activities will continue to be reported as a non-material topic.
- <sup>5</sup> "Product & Service Quality" is now reported separately from "Responsible Selling" as a standalone material topic given the significance of the social and economic impacts attributable to the provision of reliable telecommunication services to individuals and businesses.

# Sustainability Report

## SUPPORTING THE UN SUSTAINABLE DEVELOPMENT GOALS

StarHub supports the following SDGs as part of the management of our impact on the economy, environment and people.

SDG (SDG targets)	Material Topic	Our Contributions
 <p><b>Goal 3</b> Ensure healthy lives and promoting well-being for all at all ages (3.4, 3.d)</p>	<p>+ Health, Safety &amp; Well-being + Online Safety + Green Tech Solutions</p>	<p>+ Established company-wide initiatives to support mental health and well-being such as Keep Calm and Be Thoughtful, Hubba Wellness and no-meetings Thursday afternoons (see page 147) + Offering enhanced customer app with integrated security, privacy and advanced parental controls to better protect customers against cyberattacks and unintended viewing of unsafe web content by children (see page 141) + Co-created a digital health service that helps consumers receive early intervention when they develop health risk factors; this aids in the prevention of chronic diseases and also encourages consumers to lead healthier lifestyles (see page 136)</p>
 <p><b>Goal 4</b> Supporting quality education as the foundation to improving people's lives and sustainable development (4.4, 4.a)</p>	<p>+ Talent Management + Product &amp; Service Quality + Digital Inclusion</p>	<p>+ Developing our staff to provide them with new skills and knowledge in the emerging areas of 5G, network visualisation, cybersecurity, data analytics and sustainability (see page 150) + Provided reliable network services enabling adults and students to continue with remote working and home-based learning during the COVID-19 pandemic (see page 138) + Supporting intervention programmes to help at-risk youths improve their school attendance as well as outreach programmes that provide educational and employment support to disadvantaged adolescents (see page 156) + Supporting vocational skills and training for children with special needs, and providing free enrichment classes to equip children from disadvantaged backgrounds with future-ready skills (see page 157)</p>
 <p><b>Goal 5</b> Achieve gender equality and empower all women and girls (5.1)</p>	<p>+ Talent Management</p>	<p>+ Established an inaugural Board Diversity Policy with a target to maintain a minimum of 25% female representation on the Board within the next three to five years (see pages 78 and 152) + Adopted Management and Staff Diversity Policy to facilitate equal opportunity and recognition (see page 152)</p>
 <p><b>Goal 7</b> Ensure access to affordable, reliable, sustainable and modern energy for all (7.2)</p>	<p>+ Energy &amp; Climate Change</p>	<p>+ Progressively raising the proportion of our renewable energy use - achieved the target of 10% in 2022 and to reach 30% by 2030 (see page 126)</p>
 <p><b>Goal 8</b> Promote inclusive and sustainable economic growth by creating quality jobs for all (8.2, 8.8)</p>	<p>+ Health, Safety &amp; Well-being + Talent Management + Data Privacy &amp; Cybersecurity + Green Tech Solutions + Product &amp; Service Quality</p>	<p>+ Continually improving our health and safety management system by providing more frequent communication, training and appointing first aid responders at all work sites (see pages 144-145) + Aligning our contract employees' insurance plans and annual leave entitlement with those of full-time permanent employees (see page 148) + Provide energy-efficient data centres, and significantly expanding our 5G network and cybersecurity services to facilitate the digital economy growth (see pages 134-136, 138 and 140)</p>






SDG (SDG targets)	Material Topic	Our Contributions
 <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>+ Green Tech Solutions</li> <li>+ Energy &amp; Climate Change</li> <li>+ Data Privacy &amp; Cybersecurity</li> </ul>	<ul style="list-style-type: none"> <li>+ Rolled out Singapore's first 100% solar-powered campus WiFi over StarHub 5G (see page 136)</li> <li>+ Achieved the target of monthly average power usage effectiveness (PUE) ratio of 1.7 for our five data centres in 2022 (see page 126)</li> <li>+ Continually reducing our network infrastructure's carbon footprint by consolidating sites and equipment, optimising operating temperatures as well as switching to more energy-efficient technologies (see page 128)</li> <li>+ In the process of implementing ISO 27001 Information Security Management System (see page 140)</li> </ul>
 <b>Goal 10</b> Reduce inequality within and among countries (10.2)	<ul style="list-style-type: none"> <li>+ Digital Inclusion</li> <li>+ Talent Management</li> </ul>	<ul style="list-style-type: none"> <li>+ Committed to provide 10,000 mobile lines for PwDs and their caregivers under IMDA's Data for All initiative (see page 142)</li> <li>+ Offering low-cost mobile service plans specially designed for seniors and visually or hearing-impaired persons (see page 142)</li> <li>+ Adherence to the Tripartite Alliance for Fair Employment Practices (TAFEP) guidelines, which prohibits any kind of discrimination in employment practices (see page 152)</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>+ Energy &amp; Climate Change</li> <li>+ Circularity</li> </ul>	<ul style="list-style-type: none"> <li>+ Setting targets to achieve Green Mark certification for our data centres in the near term (see pages 126-127)</li> <li>+ Implement various waste reduction initiatives, including placing e-waste recycling bins, offering online trade-in of mobile devices, and one-for-one take back service of regulated electronics for customers (see page 131)</li> </ul>
 <b>Goal 12</b> Ensure sustainable consumption and production patterns (12.5, 12.8)	<ul style="list-style-type: none"> <li>+ Circularity</li> </ul>	<ul style="list-style-type: none"> <li>+ Offer rental of set-top boxes, business routers and optical network terminal monitors and extend the useful lifespan of these devices through repair and refurbishment (see page 131)</li> <li>+ Provide fully managed device lifecycle management service through our device leasing business model (see pages 131-132)</li> <li>+ Recycle e-wastes from our corporate office (see page 132)</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>+ Energy &amp; Climate Change</li> <li>+ Green Tech Solutions</li> </ul>	<ul style="list-style-type: none"> <li>+ Setting net zero target by 2025 and near term targets for Scope 1, 2 and 3 emissions reduction (see page 126)</li> <li>+ Continued adoption of TCFD framework and building upon existing disclosures (see page 130)</li> <li>+ Completed our inaugural climate scenario analysis to identify the key climate risks and opportunities for our business and identifying actions to mitigate risks and capitalise on opportunities (see page 130)</li> <li>+ Offering Green Tech solutions, a comprehensive suite of end-to-end sustainability solutions to help businesses grow while better managing their carbon footprint (see pages 134-136)</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>+ Business Conduct &amp; Ethics</li> <li>+ Responsible Selling</li> </ul>	<ul style="list-style-type: none"> <li>+ Communicate Employee Code of Conduct and Ethics, which includes anti-corruption policies and procedures, to all employees upon hiring (see page 160)</li> <li>+ Maintain Whistle Blowing Policy to allow employees and external parties to raise concerns without risk of reprisals- the Whistle Blowing Policy channel is under the oversight of the Board (see page 100)</li> <li>+ Putting in place various mechanisms and procedures to ensure we fully comply with the Personal Data Protection Act 2012 (PDPA) and Do-Not-Call (DNC) Policy (see page 161)</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>+ Supply Chain Management</li> <li>+ Digital Inclusion</li> <li>+ Energy &amp; Climate Change</li> </ul>	<ul style="list-style-type: none"> <li>+ Exceeded the target of assessing 70% of our suppliers for adherence the Supplier Code of Conduct through our SAQ (see page 162)</li> <li>+ Our 'Be our Partner' programme allows SMEs to tap the large network of StarHub customers and grow their brand visibility digitally (see page 142)</li> <li>+ Partnering NGOs and regulatory bodies to bridge the digital divide through Senior Go Digital, Data for All, and Junior Stars initiatives (see pages 142 and 154)</li> <li>+ Supporter of WWF Earth Hour since 2013, providing free TV airtime to raise awareness about climate change (see page 158)</li> </ul>

# Sustainability Report

## FY2022 Goals and Targets

Aligned with our support for the Paris Agreement, StarHub has taken a leap to substantively strengthen our decarbonisation commitments this year. We have committed to set near- and long-term company-wide emission reductions in line with science-based net-zero with the Science Based Target initiative (SBTi). We have also made our maiden purchase of carbon credits to achieve carbon neutrality for our corporate office and four main retail shops.

As part of the continuous progression of our sustainability efforts, we also renewed our other short, medium and long-term key targets for greater alignment with our updated material topics. Additional targets for each material topic under our four sustainability framework pillars are detailed under the respective sections of this report.

Material Topic	FY2022 achievement(s)	Key Targets for FY2023 and beyond
<b>Greenhouse Gas (GHG) Emissions &amp; Energy</b> 	<ul style="list-style-type: none"> <li>+ Achieved 8.4% reduction in Scope 1 and 2 GHG emissions from 2021<sup>5</sup>, putting us on track for our 2030 target</li> <li>+ Achieved interim target of 10% energy use from renewable sources</li> <li>+ Achieved target of monthly average Power Usage Effectiveness (PUE) ratio of 1.70 for our data centres</li> <li>+ Achieved carbon neutrality for our corporate office and four main retail shops</li> </ul>	<ul style="list-style-type: none"> <li>+ <b>New!</b> Reach net zero by 2050</li> <li>+ Reduce 50% in Scope 1 and 2 GHG emissions by 2030 (against 2021 baseline)<sup>5</sup></li> <li>+ <b>New!</b> Reduce 25% in Scope 3 GHG emissions by 2030 (against 2021 baseline)</li> <li>+ Increase energy use from renewable sources to 12% in 2023 and 30% by 2030</li> <li>+ <b>New!</b> Achieve Green Mark certification for our data centres – RCG by 2024, NC CO1 by 2025 and SH CO2 by 2026</li> <li>+ Maintain carbon neutrality for our corporate office and four main retail shops in 2023</li> </ul>
<b>Data Privacy &amp; Cybersecurity</b> 	<ul style="list-style-type: none"> <li>+ Achieved target since zero information systems and customer databases were materially compromised as a result of strict compliance with local regulatory requirements and industry best practices</li> </ul>	<ul style="list-style-type: none"> <li>+ Continue to enforce strict compliance with local regulatory requirements and industry best practices and maintain the integrity of information systems and customer databases</li> </ul>
<b>Talent Management</b> 	<ul style="list-style-type: none"> <li>+ Achieved target to maintain zero reported incidents of discrimination</li> </ul>	<ul style="list-style-type: none"> <li>+ <b>New!</b> Maintain a minimum of 25% female representation on the Board within the next three to five years</li> <li>+ Maintain zero reported incidents of discrimination</li> </ul>
<b>Business Conduct &amp; Ethics</b> 	<ul style="list-style-type: none"> <li>+ Achieved target given zero incidents of non-compliance with local legal and regulatory requirements pertaining to fraud, corruption and unethical actions</li> </ul>	<ul style="list-style-type: none"> <li>+ Maintain zero incidents of non-compliance with local laws and regulations pertaining to fraud, corruption, anti-competitive and anti-trust behaviours</li> </ul>
<b>Supply Chain Management</b> 	<ul style="list-style-type: none"> <li>+ 89% of our suppliers confirmed that they adhere to our Supplier Code of Conduct, exceeding our 70% target for 2022</li> </ul>	<ul style="list-style-type: none"> <li>+ Secure confirmation from 90% of our suppliers that they adhere to our Supplier Code of Conduct in 2023</li> </ul>

<sup>5</sup> We have revised our baseline year for our Scope 1 and 2 emissions reduction targets from 2019 to 2021 to be consistent with our upcoming SBTi-verified targets.

# DRIVING SUSTAINABLE GROWTH



StarHub is committed to minimising our environmental impact through optimising energy consumption, reducing GHG emissions, using eco-friendly materials, minimising waste as well as raising the environmental awareness of our customers, partners and stakeholders. With a key focus on innovation, we are also helping our customers decarbonise their operations through Green Tech solutions. Our newly-revised Environmental Policy further describes our focus areas with regard to energy, climate change, resources, water, waste, biodiversity and the natural ecosystem.

# Sustainability Report

## ENERGY AND CLIMATE CHANGE

Climate change is an important part of StarHub's agenda. The effects of climate change are evident and will continue to intensify and impact our stakeholders for the foreseeable future. We recognise that we have a responsibility to minimise the carbon footprint of our operations.

In FY2022, we completed the review of our Scope 3 inventories and the assessment of all Scope 1, 2 and 3 baseline emissions for FY2021. Based on the assessment, we concluded that our Scope 3 emissions contribute around 79% of our total carbon footprint. We went on to establish business-as-usual (BAU) emission projections and identified decarbonisation levers that will enable us to prioritise actions required to

meet near- and long-term targets. Following the review, we have set new and ambitious decarbonisation targets, which will become a critical part of our business strategy moving forward. We will be submitting the decarbonisation targets for validation by the SBTi in FY2023.

FY2022 targets <sup>6</sup>	Our FY2022 performance	Going forward
<p><b>50%</b> reduction in Scope 1 and 2 GHG emissions by 2030</p> <p><b>10%</b> energy use from renewable sources by 2022 and 30% by 2030</p> <p>Improve monthly average <b>PUE ratio to 1.70</b> for our data centres in 2022</p> <p><b>Offset our Scope 1 and 2 GHG emissions</b> for our corporate office and four main retail shops in 2022</p>	<p>Achieved <b>8.4% reduction</b> in Scope 1 and 2 GHG emissions from 2021<sup>5</sup>, putting us on track for our 2030 target</p> <p><b>Achieved interim target of 10% energy use from renewable sources</b> through procurement of 13,758MWh of Renewable Energy Certificates (RECs)<sup>7</sup></p> <p><b>Achieved target of monthly average PUE ratio of 1.70</b> for our data centres<sup>8</sup></p> <p><b>Achieved carbon neutrality</b> for our corporate office and four main retail shops using high quality carbon credits and RECs<sup>9</sup></p>	<p><b>New!</b> Reach net zero by 2050</p> <p>Reduce 50% in Scope 1 and 2 GHG emissions by 2030 (against 2021 baseline)<sup>5</sup></p> <p><b>New!</b> Reduce 25% in Scope 3 GHG emissions by 2030 (against 2021 baseline)</p> <p>Increase energy use from renewable sources to 12% by 2023 and 30% by 2030</p> <p><b>New!</b> Achieve Green Mark certification for our data centres – RCG by 2024, NC CO1 by 2025 and SH CO2 by 2026</p> <p>Maintain carbon neutrality for our corporate office and four main retail shops in 2023</p>

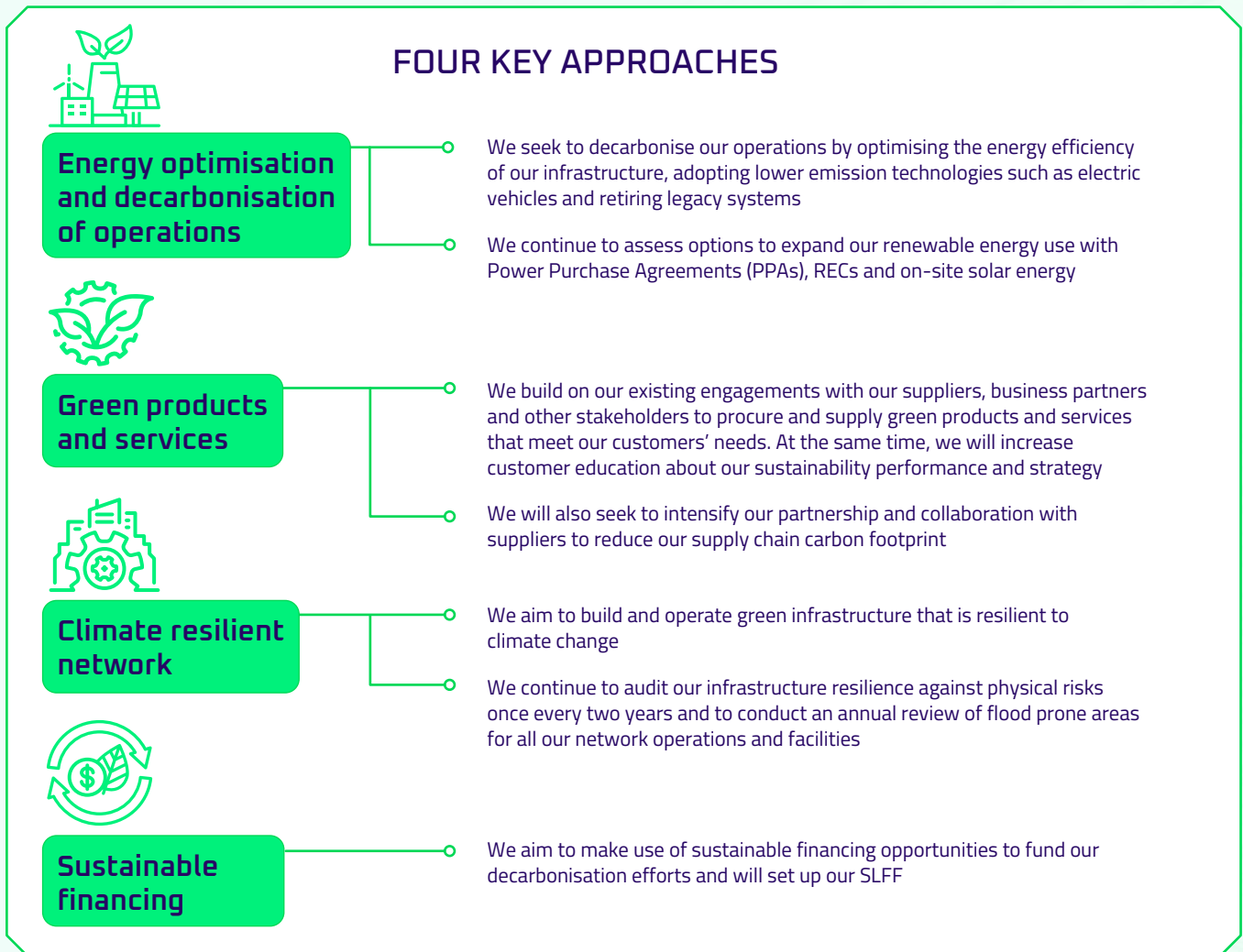
<sup>6</sup> Targets for FY2022 as described in our 2021 Sustainability Report.

<sup>7</sup> Of the 13,758MWh of RECs purchased, 3,072MWh of RECs were generated from local solar photovoltaics in 2020 and 2021, and 10,686MWh of RECs were generated from solar photovoltaics in Vietnam in 2021 and 2022.

<sup>8</sup> The data centres refer to SH CO2, NC CO1, NC CO2, RCG and MediaHub.

<sup>9</sup> Our carbon credits for offsetting 799tCO<sub>2e</sub> Scope 1 emissions were generated from the Adjusted Water Management for Rice Cultivation Project in Dazu District, China. The 3,892MWh of RECs purchased for offsetting 1,579tCO<sub>2</sub> Scope 2 emissions were generated from solar photovoltaics in Vietnam in 2021. These offsets did not count towards the emission reduction targets.

We are in the process of finalising our decarbonisation roadmap with clear milestones to achieve our targets. The roadmap will take into account the results from the scenario analyses we have conducted as part of our TCFD reporting (see pg 130 for details). Our decarbonisation and climate change management strategies consist of the following four key approaches:



In FY2022, our measures have resulted in a 3.9% reduction in our total electricity consumption and a 3.8% reduction in fuel use from FY2021. Combined with our purchases of solar RECs, this translates to a reduction of 8.4% (4,709tCO<sub>2e</sub>) in our Scope 1 and 2 emissions from our target base year of FY2021. To secure more renewable energy for a longer term and contribute to the generation of clean energy, we signed a Virtual PPA with Terrenus Energy Pte Ltd (Terrenus Energy) in 2022. StarHub will procure 100% of the renewable electricity to be generated from Terrenus Energy's 13.2MWp solar farm on Jurong Island over the next 13 years.

In recognition of the need to reduce energy use in our base transceiver stations (BTS) and data centres, which are the major contributors to our carbon emissions, we are working towards reducing our infrastructure's carbon footprint by consolidating sites and equipment, optimising operating temperatures and switching to more energy-efficient technologies. We also aim to achieve Green Mark certification for our data centres in the near term.



Photo credit: Terrenus Energy

StarHub signed a Virtual PPA with Terrenus Energy in 2022.



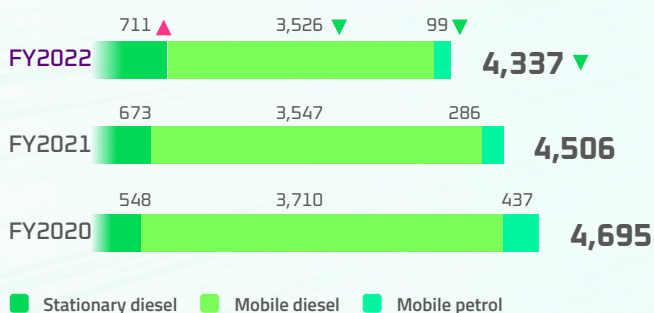
# Sustainability Report

## Main electricity use reductions (from 2021 baseline)<sup>10</sup> implemented in FY2022

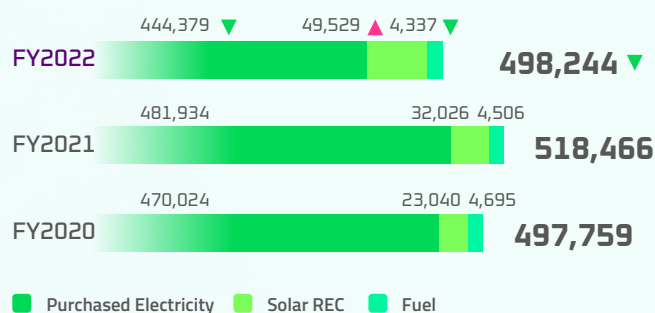
Initiative	Site	Estimated Annual Cost Savings (\$)	Estimated Annual Electricity Reduction (kWh)	Estimated Annual Avoided Scope 2 Emissions (tCO <sub>2e</sub> )
Static Transfer Switches shutdown	NC CO1 & NC CO2	270,000	489,596	199
Increasing temperature set points from 22°C to 25°C	NC CO2 & RCG	111,468	445,079	181
Replacement of uninterruptable power supply (UPS) systems to a higher efficiency model	NC CO2	128,000	541,856	220
Shutdown of CO3	CO3	1,199,075	3,547,561	1,439
Replacement of UPS battery with lithium battery instead of conventional valve regulated lead acid (VRLA) battery*	NC CO2	400,000	*	*
<b>Total Savings</b>		<b>2,108,543</b>	<b>5,024,093</b>	<b>2,038</b>

\* Lifecycle assessment has shown that lithium-ion batteries have a lower environmental impact compared to VRLA batteries including carbon emissions. Lithium-ion batteries also have a smaller footprint and tend to have a longer lifespan of 10 years compared to five years for VRLA batteries. However, in the absence of a credible methodology, we have not computed the estimated annual electricity reduction and carbon emissions avoided.

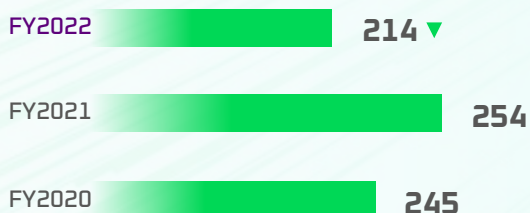
### Fuel consumption within organisation (GJ)



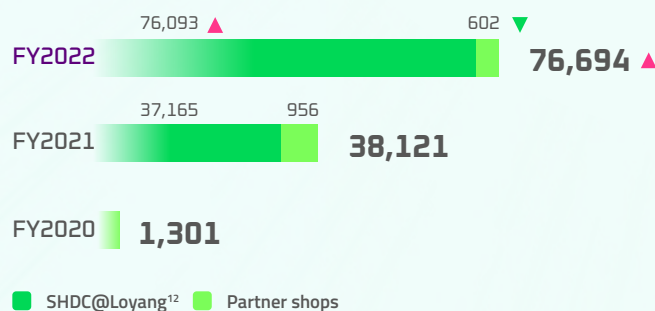
### Energy consumption within organisation (GJ)



### Energy intensity<sup>11</sup> (GJ per \$million revenue)



### Electricity use outside organisation (GJ)



<sup>10</sup> The baseline chosen is consistent with our GHG goals baseline.

<sup>11</sup> Energy intensity includes fuel and electricity consumption within organisation only.

<sup>12</sup> SHDC@Loyang commenced operations in March 2021.

## GHG emissions sources <sup>13</sup>

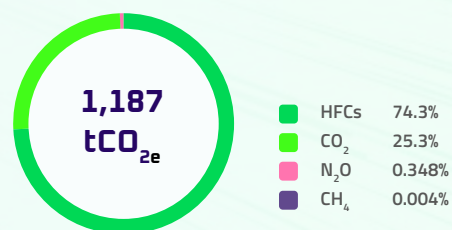
Our GHG emissions inventory for FY2022 is shown below. We are currently in the process of completing the inventory calculations for all our applicable Scope 3 categories for disclosure in future reports.

Scope 1 (tCO <sub>2e</sub> )	FY2022	FY2021	FY2020
Stationary combustion <sup>14</sup>	50	47	38
Mobile combustion <sup>15</sup>	255	269	290
Fugitive emissions - refrigerant gases	882	1,040	1,775
<b>Total Scope 1</b>	<b>1,187</b>	<b>1,356</b>	<b>2,103</b>
Scope 2 (tCO <sub>2e</sub> )	FY2022	FY2021	FY2020
Purchased electricity (location-based)	55,661	58,249	55,949
Purchased electricity (market-based) <sup>16</sup>	50,079	54,619	53,335
<b>Total Scope 1 + 2 (tCO<sub>2e</sub>)<sup>17</sup></b>	<b>51,266</b>	<b>55,975</b>	<b>55,438</b>
Scope 3 (tCO <sub>2e</sub> )	FY2022	FY2021	FY2020
Category 3: Fuel and energy-related emissions (not already covered by Scope 1 and 2)	8,307	8,475	8,130
Category 5: Waste generated in operations	11.3	3.5	No data
Category 6: Employee business travel	284	102 <sup>18</sup>	8
Category 7: Employee commute	370 <sup>19</sup>	200	372
Category 13: Downstream leased assets - SHDC@Loyang	8,575	4,212	NA <sup>12</sup>
Category 14: Electricity consumption by exclusive partners' shops	68	108	148
<b>Total Scope 3</b>	<b>17,615</b>	<b>13,100<sup>20</sup></b>	<b>8,658</b>

## GHG emissions intensity<sup>17</sup> (tCO<sub>2e</sub> per \$million revenue)

FY2022	22.0 ▼
FY2021	27.4
FY2020	27.3

## GHG emissions by gas type (Scope 1)



<sup>13</sup> All GHG emissions are calculated in accordance with the GHG Protocol. Operational control has been selected as the reporting boundary. The CO<sub>2</sub> equivalent (CO<sub>2e</sub>) emissions include CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, SF<sub>6</sub> and NF<sub>3</sub>. Emissions for fuels, refrigerants, business air travel and hotel accommodation as well as employee commute are calculated based on the 2022 UK Government GHG Conversion Factors for Company Reporting. Other reference sources include 2014 IPCC Fifth Assessment Report (AR5) for Global Warming Potential (GWP) values, 2021 Singapore Energy Market Authority (EMA) electricity grid emission factor (for Scope 2) and upstream fugitive emission factor (for Scope 3 Cat 3), 2021 UK Government GHG emission factors for Scope 3 Cat 3, 2022 US EPA emission factors for Scope 3 Cat 5, and 2020 US EPA Supply Chain Greenhouse Gas Emission Factors for US Industries and Commodities (for employee business land transport).

<sup>14</sup> Stationary combustion refers to the combustion of diesel fuel for generation of electricity.

<sup>15</sup> Mobile combustion refers to the combustion of petrol and diesel fuels for company fleet vehicles.

<sup>16</sup> Market-based Scope 2 GHG emissions takes into account of 13,758MWh of RECs purchased.

<sup>17</sup> Total Scope 1+ 2 and GHG emissions intensity is based on Scope 1 and 2 (market-based) emissions.

<sup>18</sup> Business travel data from FY2021 onwards includes air travel, hotel accommodation and land transport; FY2021 data was restated to include land transport; there were no emissions from air travel and hotel accommodation in FY2021 due to COVID-19 travel restrictions.

<sup>19</sup> Employee commute emissions were estimated based on the valid results of 425 respondents from a survey conducted in FY2022. The survey took into account the company's official hybrid work schedules, the year-end headcount, as well as 11 days of public holidays and 18 days of annual leave taken per employee. Employees who are required to work on site daily and those who work from home daily are excluded from the survey.

<sup>20</sup> FY2021 total Scope 3 emissions data was restated to include Cat 5 and the restated Cat 6 data. This had resulted in less than 1% increase from what was reported previously.

# Sustainability Report

## OUR TCFD PROGRESS

In FY2021, StarHub commenced TCFD reporting to better understand the climate risks and opportunities for our business. The disclosures allow us to communicate with our stakeholders on the impact of climate change and our management response so as to maintain their trust and confidence. Our climate governance report can be found on page 117.

Our Climate Risk Framework is integrated within our Enterprise Risk Management framework, which assesses the impact of

climate change on our business and the resilience of our infrastructure, products and services. StarHub has both bottom-up (risk assessment at the business unit level) and top-down processes (MRC review) to identify risks. Significant risks and opportunities identified based on a consideration of impact and likelihood against our internal thresholds are then escalated to the MRC for a decision on whether to pursue the opportunity, or to accept, avoid, transfer or reduce the risk.

Building on our progress in FY2021, we conducted our inaugural quantitative climate

scenario analysis in FY2022 to enhance our understanding of the transitional and physical risks of our business over selected timeframes and scenarios, as well as the associated potential financial impact. In particular, we looked at both 1.5°C and <3°C warming scenarios, analysing the impact of climate-related risks and opportunities on company-wide activities in the short term (2025), medium term (2030) and long term (2050). We view this as a proactive step to better anticipate and prepare for future climate events.

### Key transition risks identified

	1.5°C	<3°C
Carbon tax increase, leading to higher energy costs	■	■
Data volume growth from increased demand for information technology services, leading to higher energy costs	■	■
Enhanced climate-related disclosure requirement and stakeholder expectations, with associated reputational risks <sup>#2</sup> and increased compliance costs	■	■

### Key physical risks identified

	1.5°C	<3°C
Rising mean temperatures and increased heatwave risks, leading to higher cooling costs	■	■
Increased storm and flash flood risks, resulting in potential damage to assets and service disruptions <sup>#2</sup>	■	■
Increased extreme precipitation resulting in higher attenuation of wireless signal, affecting quality of service	■	■

### Key opportunities identified<sup>#1</sup>

- Energy efficiency upgrades and operational optimisation to reduce energy use
- Demand for green products<sup>#3</sup> from enterprise customers
- Adoption of renewable energy
- New financing opportunities through green and sustainability-linked bonds

#### Legend:

Assessed significance of financial impact<sup>#4</sup> to StarHub in Year 2050 before mitigation measures as follows:

- Not expected to be significant
- Not expected to be significant unless resulting in service disruption<sup>#2</sup>
- Major or severe significance
- Minor significance
- Minor significance, but with risk of becoming more significant if resulting in service disruption<sup>#2</sup>

#### Notes:

- Opportunities are not yet quantified and will be considered as part of future scenario analysis work.
- Reputational risks and service disruption risk financial impacts are not quantified due to data limitations.
- Green products are products and services with lower carbon footprint, or those that can bring about GHG savings for our customers.
- Significance of financial impact is determined per StarHub's ERM framework.

Through the scenario analysis, we concluded that unmitigated climate risks may result in a severe financial impact by 2050. For both warming scenarios considered, the vast majority of the impact will be attributable to transition risks from the combined effects of carbon tax increase and higher energy costs due to projected data volume growth.

The predominant physical risk identified is flash flood risk (with a notable increase under the higher temperature scenario), with resultant service disruption risk and the associated reputational and financial risks. We note that our exposure to transition risks can be mitigated by our efforts to reduce energy use and GHG emissions.

Moving forward, we will look into aligning our climate risk assessment with our upcoming decarbonisation roadmap. We will further assess climate-related opportunities and enhance our disclosures as we progress in our TCFD reporting journey.

## CIRCULARITY

In line with our Environmental Policy and as part of our environmental stewardship, StarHub aims to reduce our resource use and adopt circularity by promoting reuse, repair and recycling practices throughout our value chain.

### Waste management

StarHub recognises that our efforts to reduce and recycle waste will help to mitigate the






negative environmental impact of waste disposal. Recycling initiatives such as salvaging used metals from telecommunications infrastructure and customer electronic equipment can also help to reduce the potential environmental and social impact of new resource extraction.

StarHub practises recycling of e-waste within our operations, and currently recycles all ICT e-waste from our corporate office. As a telecommunications service provider,

we are aware that we are directly linked to the impact of waste generated from our customers' old devices. We support the National Environment Agency's (NEA) Extended Producer Responsibility (EPR) System for e-waste, under which producers bear the responsibility for the collection and treatment of their used products. We also engage NEA-licensed waste and e-waste collectors to manage our waste for disposal and recycling.



We have implemented the following initiatives for both consumers and enterprise customers to facilitate the recycling of e-waste. Collected e-waste is brought to our warehouse for sorting prior to recycling.

 <p><b>E-waste recycling bin</b> Consumers can drop their e-waste at StarHub Shops in Plaza Singapura and Tampines Mall.</p>	 <p><b>Online trade-in service</b> Customers can opt to trade in their current mobile phones when upgrading to newer models, allowing their used mobile phones to be reused by others.</p>	 <p><b>One-for-one take-back service</b> Customers can dispose of old devices of the same class or type and quantity during product delivery.</p>
 <p><b>Rentals of set-top boxes, business routers and optical network terminal monitors</b> Used products are repaired and refurbished for redeployment until they reach end-of-life, whereby they will be diverted to licensed e-waste recyclers.</p>	 <p><b>Fully managed device lifecycle management service</b> Through this service, enterprise customers can upgrade their mobile workforce to 5G network solutions through a device leasing period of 24-36 months. At the end of the period, the devices would be collected and traded in with device manufacturers.</p>	

# Sustainability Report



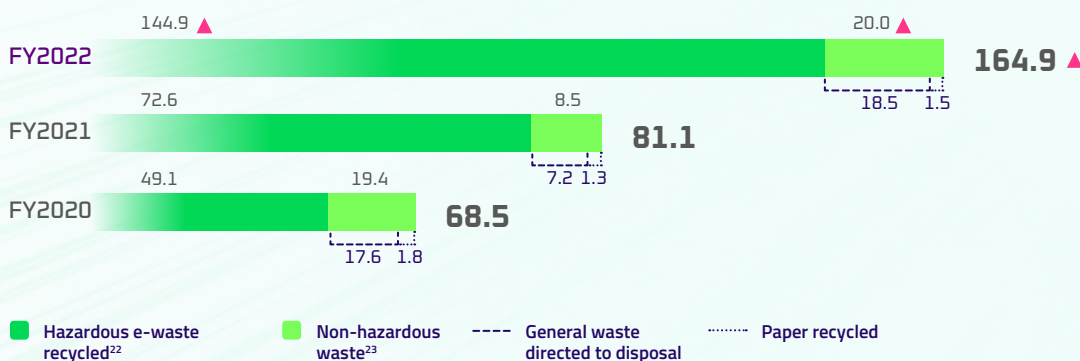
## How StarHub's Device Lifecycle Management Service supported Cotton On

In April 2022, StarHub supported Cotton On Group, Australia's largest global retailer known for its fashion clothing and stationery brands, to stay ahead in the fast fashion industry with digital adoption whilst reducing its e-waste production. By choosing our subscription-based Device Lifecycle Management Service, Cotton On potentially reduces its e-waste generation while simultaneously saving on the high costs of device ownership as well as avoiding the unproductive use of time to send devices out for repairs and upgrades.

Paper waste is also generated in our offices and retail stores. Through our ongoing Go Paperless initiative, we adopt the use of electronic form of vouchers, sales agreements, gift redemption letters and work orders in our daily operations, thereby reducing paper use. We have also applied a \$2.68 monthly fee per billing account for customers who choose to receive paper bills, incentivising them to go paperless. We continue implementing the Skip the Bag initiative and charge for paper bags across our shops to drive consumer behaviour. This resulted in an 85% reduction in the number of bags used since the initiative was launched in 2020.

Despite measures implemented in FY2022, our total general waste disposed through waste-to-energy incineration plants has increased by 157% compared to FY2021, as full operations resumed after the COVID-19 pandemic. E-waste quantity sent to be reused or recycled through our corporate office and warehouse increased in the reporting year as well. This is due to the accumulated ICT e-waste that was not processed for fixed asset disposal in FY2021 and increase in returned devices from customers as they upgraded to StarHub TV+ service for better features and viewing experience.

### Total Waste Generated<sup>21</sup> (tonnes)



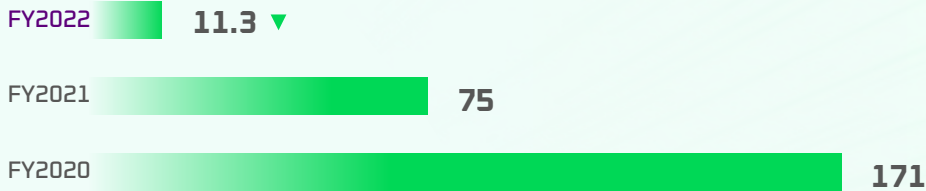
<sup>21</sup> Total waste generated is equal to the sum of waste directed to disposal and waste recycled.

<sup>22</sup> Hazardous e-waste amounts correspond to ICT e-waste generated from our corporate office and customer ICT e-waste collected at the warehouse. The e-waste is weighed at the respective premises prior to recycling. The weighted amount is validated against the vendor's e-waste disposal certificate. For items that are usable, the vendors would 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 recycling and recovery of precious materials (if any).

<sup>23</sup> Non-hazardous waste amounts correspond to general waste generated from our corporate office and paper waste recycled. General waste is weighed daily and disposed of at waste-to-energy incineration plants through the building's waste management system. Waste paper is collected separately and the weighted amount is validated against the recycler's waste paper report. General waste generated in our shops are disposed of through the landlord's building waste management system and therefore data is not available. Going forward, we will be working on collecting data on the waste generated from our technical centres.

External e-waste amounts collected at our retail shops as part of the nationwide EPR System is presented below. The weighted amount is provided by the appointed Producer Responsibility Scheme Operator – ALBA E-Waste Smart Recycling Pte Ltd.

### External e-waste (tonnes)

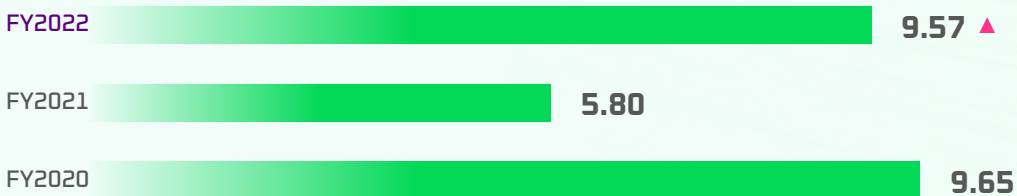


### Water management<sup>24</sup>

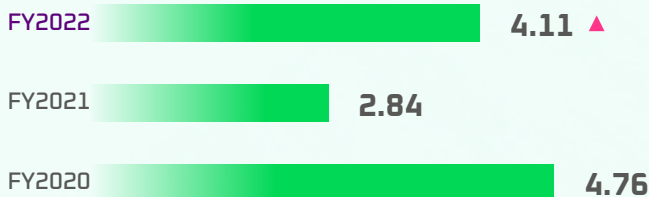
To promote efficient water use, StarHub has implemented water-efficient fittings to reduce water consumption. Our data centres are also designed not to use cooling towers, allowing us to better control the usage of water. We seek to instil a deep sense of responsibility towards resource usage in our employees, with our Employee Code requiring staff to make prudent and effective use of the Group's resources, including water.

In FY2022, we set the target to detect and manage leaks promptly to minimise water wastage. We completed this through our proactive monthly monitoring of our water infrastructure. The following charts highlight the progress that we have made towards reducing our water consumption.

### Water use<sup>25</sup> (megalitres)



### Water intensity (cubic meters per \$million revenue)



<sup>24</sup> Water is not a material topic for FY2022; however, StarHub has chosen to continue reporting on its water use footprint considering of Singapore's limited water resources.

<sup>25</sup> All water withdrawal comes from the national water agency - Public Utilities Board (PUB); the water withdrawal sources include surface water (comprising water from local catchment, imported water and reclaimed water (also known as 'NEWater')), and desalinated seawater.

# Sustainability Report

## GREEN TECH SOLUTIONS

As a provider of 5G network and enterprise digital solutions, StarHub's products and services can help enable a more sustainable and green economy, creating potential benefits for the wider economy, environment and society. 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 metrics, as well as their water and energy usage and efficiency. Moving forward, we aim to harness all the data captured by these sensors to create cloud workloads on the core and on the edge. This will help our customers optimise their energy usage and better manage their real estate assets.

Through the provision of energy-efficient data hosting services, we also facilitate the reduction of energy use by our enterprise



StarHub is committed to secure more renewable energy and contribute to the generation of clean energy.

customers. StarHub's data centre, SHDC@Loyang, located within AirTrunk SGP1, is a state-of-the-art hyperscale data centre with a design PUE of 1.25. Compared to hosting their data in a conventional data centre with a typical PUE of 1.8 or above, our customers at SHDC@Loyang potentially saved more than 6,800MWh<sup>26</sup> of electricity consumption in FY2022.

Complementary to our Green Tech solutions for enterprise customers, we aim to empower Singapore consumers to self-serve or self-access our digital platform by offering a whole new range of digital products available on the enhanced StarHub App. We will continue to conduct trials with government customers and firms across various industries to find

breakthrough solutions to address our customers' most pressing concerns.

To advance our DARE+ five-year growth programme, we will be accelerating our Green Tech solutions with Cloud Infinity. Cloud Infinity, conceptualised by StarHub and the first of its kind in the world, is a low-latency multi-cloud infrastructure that would enable StarHub to improve customer experiences, launch new services quicker and deploy more data security measures. This lays the groundwork for StarHub to become more flexible and agile in anticipating and responding to customer needs.

### FY2022 targets<sup>6</sup>

Continue to innovate with customers' evolving needs, embracing new technologies and fostering innovation through our value chain

### Our FY2022 performance

Examples of our innovation efforts in FY2022 include our newly minted Green Tech solutions, Digital Health Service, as well as solar-powered WiFi connectivity

### Going forward

Accelerate our Green Tech solutions to help create a more sustainable and green digital economy

<sup>26</sup> Based on average operating PUE of 1.36 in 2022.

## Launching StarHub's Green Tech solutions

With more companies globally embracing sustainability and embarking on decarbonisation efforts, StarHub launched our Green Tech solutions in FY2022. Our solutions aim to help businesses adopt a comprehensive suite of end-to-end sustainability managed services that will concurrently drive productivity growth and positively impact the environment and our customers. These solutions are tailored to meet diverse customer needs by providing a variety of services including energy audits, consultancy services, solution customisation as well as relevant reporting and monitoring. Through data-driven cost synergies and operational integration, the services aim to drive improvements in productivity, alleviate staffing pressure and manpower costs as well as improve workplace safety. The services will also help businesses attain Building and Construction Authority's Green Mark certification and comply with environmental standards to create a positive impact on the environment.



StarHub's smart workflow solution - a remote expert assistant.



StarHub's latest 5G and IoT solutions.



StarHub's mobile base stations across Singapore are used as rainfall sensors.



# Sustainability Report

## Digital health service and LifeHub+ partnerships

In October 2022, StarHub launched LifeHub+, a digital health service in partnership with Alexandra Hospital (AH) and ConnectedLife with Fitbit. During an initial trial consisting of 300 eligible patients from AH and General Practitioner clinics, users can choose to share their Fitbit data through the LifeHub+ app, recording metrics such as steps, exercise, sleep patterns, heart rate, heart rate variability, skin temperature variation, breathing rate, oxygen saturation and more. This data is then used to create dynamic health scores, data alerts and metrics which would give users clear insights into their health for tracking and daily improvement. This in turn enables the creation of a personalised health plan to manage and support primary care patients, especially in the prevention and management of chronic diseases.



The LifeHub+ partnership consists of StarHub, AH, ConnectedLife and Fitbit.

## Rolling out Singapore's first 100% solar-powered campus WiFi over StarHub 5G

Under our first proof of concept (POC) deployment, StarHub collaborated with NUS to provide WiFi connectivity in the large outdoor areas of its campus. We installed two first-in-class outdoor WiFi units, each fully-powered by solar energy. As these units are wireless and do not require any underground cable installation, deployment time and costs were reduced by 50%. Leveraging StarHub's technology and IoT solutions, NUS can enable learning and working to take place anywhere, anytime and through any device, creating a smart and sustainable campus.

Building on the success of our first POC, our solar solution will be deployed campus-wide across 10 sites at NUS, with a full command centre monitoring dashboard to provide information on each solar panel stand, which can be used to improve operational efficiency and service satisfaction. Utilising our 5G SA network, we have also rolled out smart sensors and digital solutions with applications for facade inspection, housekeeping and landscape management, waste management, security management and augmented/virtual reality applications, thereby enabling a 5G smart campus.



Singapore's first 100% solar-powered campus WiFi by StarHub 5G within NUS.

# ENABLING A DIGITAL SOCIETY



StarHub strives to enable a digital society by providing seamless connectivity that is safe and secure from cyberattacks. In addition to strengthening our own systems and cyber defences, we also raise awareness about online safety amongst our customers and communities, and contribute to bridging the digital divide through our digital inclusion initiatives.

# Sustainability Report

## PRODUCT AND SERVICE QUALITY

As one of Singapore's major providers of telecommunications services providers, StarHub is driven to accelerate digital adoption through our range of products and services. Our mobile and broadband services play an important role in Singapore's sustainable economic growth and Smart Nation aspirations by providing an essential business service and enabling digitalisation for different customers.

Moreover, 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 also crucial and integral for accessing public emergency services, information and essential services such as health and education, especially during periods of crisis and emergency (e.g., the COVID-19 pandemic). StarHub currently has 2,156,000 wireless and 578,000 broadband active subscribers in Singapore as of end 2022.

We recognise that any disruptions to telecommunication services will affect personal lives and business operations, especially businesses that rely heavily on e-commerce or online apps to provide services. Consequently, StarHub continues to dedicate our efforts to minimise any service disruptions by maintaining a reliable, resilient and low-latency mobile and broadband network.

### Our measures to build and maintain a reliable, robust and resilient network:

- + Undergo periodic security risk assessments in accordance with applicable regulatory requirements, conducted by an external 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 have achieved<sup>27</sup>:

**100%** network availability for fibre broadband

**99.95%** mobile broadband services availability

Moving forward, we aim to continue to maintain  $\geq 99.95\%$  network availability for our fibre and mobile broadband services respectively

We have also invested significantly to expand our 5G network to unlock the ultra-low latency performance features for our customers. To meet increasing data demand and ensure network stability, we have deployed a cloud-native 5G core network to manage our 5G SA bandwidth. This upgrade allows 5G technology to run independently from the 4G network, allowing greater agility and adaptability to support our products and services. As of end 2022, our 5G SA network has surpassed 95% nationwide outdoor coverage. We continue to offer our

customers complete packages of 5G services, including 5G SIM cards, fixed contract and SIM Only plans, devices and streaming services at various price points catering for the wide-ranging needs of our customer base.

To address product defects and improve service quality, StarHub also takes an "Insights-to-action" approach where we collect real-time customer feedback through surveys across various consumer and enterprise touchpoints. We continue to enhance customer experience via our digital

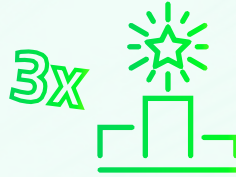
support channels, assisting customers with any issues through the use of dedicated customer hotlines, WhatsApp and Facebook Messenger services. Following every interaction with our customer support team, customers are invited to rate their experience, enabling us to understand their level of satisfaction and possible areas for our improvement. These steps have allowed us to improve our NPS year-on-year, which reflect the improvements made in upholding our product and service quality.

<sup>27</sup> Based on IMDA's published quality of service performance results for Jan – Sept 2022 available at: <https://www.imda.gov.sg/regulations-and-licensing-listing/dealer-and-equipment-registration-framework/compliance-to-imda-standards/Quality-of-Service/quality-of-service-reports>.

## Recognition in the Customer Satisfaction Index of Singapore 2022 study:



Highest customer satisfaction scores for Mobile and TV services in the info-communications sector



Third consecutive year leading in the Mobile category

### Gleaning insights from our customers' feedback to improve their satisfaction

StarHub uses NPS to track our customers' user experience and determine the long-term value of our brand. Using results collated from customer feedback, we analyse detractor statements and study customer responses on the NPS scale to take actions that enhance customer experience. For example, some of our SME customers provided feedback on the challenges of selecting appropriate channels for their queries, which was resolved when we reviewed all our support touchpoints and classified them clearly on the "My Business Account" self-help portal and "StarHub Business Manager" app for SME customers.

We also regularly benchmark our NPS against close competitors and regional telecommunications companies.



**2022 NPS: 25.5**

▲ Improvement of 10% from 2021

In addition, StarHub acknowledges the need to address concerns of customers, regulators and the general public on the perceived health risks associated with radio frequency (RF) emissions from mobile devices and base stations. We strictly comply with RF emissions and safety standards implemented by IMDA, NEA, and with the International

Commission on Non-Ionizing Radiation Protection guidelines adopted by the World Health Organization (WHO). 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 2022, as in prior years, StarHub had zero incidents of non-compliance regarding the health and safety impact of products and services. We maintained 100% compliance with relevant RF radiation safety standards set by local regulators, and we endeavour to continue doing so.

# Sustainability Report

## DATA PRIVACY AND CYBERSECURITY

Given our role as a critical information infrastructure operator, StarHub is subject to a spectrum of cybersecurity threats. A serious cyber incident could cause disruptions to our products and services, thereby bringing about potential financial losses for our customers. It could also result in a breach involving sensitive and/or confidential information of our customers, jeopardising their safety and privacy. StarHub therefore understands the importance of

maintaining the integrity of our information systems and customer databases.

To mitigate the impact of cybersecurity risks, StarHub established a Cybersecurity Governance Framework in 2021, which is aligned with the National Institute of Standards and Technology's cybersecurity framework, ISO/IEC 27001 standards, Telecommunications Act 1999, Broadcasting Act 1994 and the CyberSecurity Act 2018. We implemented this framework in our operations through our Cybersecurity Policy, Information Classification and Handling

Policy, as well as a set of guidelines and checklists for employees and third-party suppliers to follow. The framework also includes StarHub's Data Protection Policy, which provides guidance 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:

Monitoring and Surveillance	Advanced cybersecurity features	Capacity-building and maintaining heightened staff cybersecurity awareness
<ul style="list-style-type: none"> <li>+ Dedicated Centralised Data Protection Office (DPO) to ensure strict compliance with the PDPA</li> <li>+ Active monitoring of threats by our Security Operations Centre (SOC) team<sup>28</sup></li> <li>+ Proactive surveillance such as risk assessments, penetration tests, vulnerability assessments and cybersecurity exercises</li> </ul>	<ul style="list-style-type: none"> <li>+ Cloud-based identity and access management</li> <li>+ Cloud-based secure remote access</li> <li>+ Vulnerability Disclosure Programme to reduce risks associated with exploiting vulnerabilities of public-facing systems<sup>29</sup></li> </ul>	<ul style="list-style-type: none"> <li>+ Specialised training as part of cybersecurity team competency development plan (e.g., ISACA's CRISC, CCOP Ver 2.0 update and Microsoft information protection)</li> <li>+ Third-party vendor cybersecurity engagement/forums<sup>30</sup></li> <li>+ Timely alerts and advisories to our workforce on regular internal communication channels<sup>31</sup> to highlight new security vulnerabilities and emerging cyber threats</li> </ul>
<p>StarHub is also in the process of implementing an ISO 27001 compliant Information ISMS by 2024, which would provide a framework to systematically manage, monitor, review and improve our information security practices.</p>		

We carry out annual internal and external audits to provide assurance on the effectiveness of our control measures. Furthermore, our data protection practices have been validated by a third-party certification process, achieving the Data Protection Trustmark (DPTM) in 2020 (which is valid for three years). StarHub has since renewed its DPTM for another three years.

FY2022 targets <sup>6</sup>	Our FY2022 performance	Going forward
Continue to enforce strict compliance with local regulatory requirements and industry best practices and maintain the integrity of information systems and customer databases	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 the integrity of information systems and customer databases

<sup>28</sup> This includes triaging identified incidents, executing response and recovery processes to remediate the incident impact, and escalating incidents to Management when necessary.

<sup>29</sup> Includes 20 websites and four mobile applications.

<sup>30</sup> Topics covered in FY2022 include different cybersecurity trends, attack tactics and techniques, and the role of staff to help combat an organisation's security threats.

<sup>31</sup> Including the intranet, electronic newsletters and employee social media platform.

## ONLINE SAFETY

The evolution of technology brings about emerging new threats from the digital realm which can jeopardise our customers' well-being. Scams via phone calls, SMS and emails that potentially result in mental distress and financial losses for victims have proliferated. In addition, the growth of on-demand entertainment services increases the risk of unintended viewing of age-inappropriate content. Excessive screen time can also potentially lead to reduced well-being stemming from social isolation as well as lack of sleep and exercise. Our progress against our FY2022 goal to encourage and promote the appropriate and safe use of online technologies, educate customers on potential scams, and cooperate with requests from government agencies is outlined below, and we will maintain this target for FY2023.

StarHub is committed to educating our customers on safe internet use. We regularly share information about safe online practices and warnings on common scams on our website, StarHub App and social media platforms. We curate the topics based on customer feedback and trending issues relevant to internal stakeholders and other external parties.

We have also put in place several initiatives to reduce the likelihood of our customers falling prey to digital scams, such as:

- + Alerting our customers to phishing SMSes in circulation via our Facebook page and push notifications on StarHub App, to caution them against online threats
- + Working closely with the relevant authorities to block international calls that spoof local numbers and impersonate legitimate sources such as government agencies, as well as messages and websites that are being used to perpetrate scams
- + Robust authentication mechanisms and resilient backend systems to prevent fraud and impersonation
- + Suspended dormant Hub ID Lite accounts which no longer support any active StarHub services
- + Ceased voicemail services for mobile customers as they can be used to perpetuate scams

StarHub also offers cybersecurity services (see below) to safeguard customers from cyber risks and other online threats, and help those affected by these threats:

### JuniorProtect Plus

Parental control service which allows parents to manage their child's 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



StarHub received the Singapore Police Force's Anti-Scam Centre Award in 2022 in recognition of our online safety measures and the hard work of our Customer Experience team. Moving forward, we remain committed to continuously enhance our efforts in promoting online safety.

# Sustainability Report

## DIGITAL INCLUSION

StarHub believes that everyone should have the right to enjoy digital connectivity in an era where technology is an increasingly vital component of our everyday lives. As more information and services have moved online, digital inclusion improves quality of life, allowing our customers greater convenience in accessing information and performing

daily tasks such as shopping, travelling and banking. Consequently, building upon our efforts to establish a safe, secure and reliable network infrastructure, StarHub also undertakes initiatives and CSR activities to bridge the digital divide, particularly for the elderly and disadvantaged in Singapore<sup>32</sup>.

We continue to offer affordable mobile plans exclusively for seniors aged 60 and above (Seniors' Exclusive plans) and at discounted rates for visually- and hearing-impaired customers (SmartBuddy Mobile Plan). Other digital inclusion initiatives are highlighted below as well as on pages 154-158.

For 2023, we aim to continue expanding the positive impact of our products and services to seniors, needy students, low-income households and PwDs. We are also assessing suitable means to better measure impacts from our digital inclusion efforts for future reporting.<sup>33</sup>

### Data for All initiative: Up to 10,000 mobile lines in support of Digital for Life

StarHub supports IMDA's Digital for Life movement by participating in the Data for All scheme, which was launched in May 2022 to provide digital connectivity and support to vulnerable segments of our population. Under this initiative, StarHub committed to provide up to 10,000 giga! mobile lines<sup>34</sup> for PwDs and their caregivers. Each beneficiary received 10GB of data, 300 minutes of talktime and 300 SMSes monthly for a full year, enabling them to access essential services and participate in a digitally connected society.



Beneficiaries who have signed up for complimentary giga! lines.



StarHub Chief of Consumer Business Group Johan Buse receiving a Digital for Life award from Communications and Information Minister Josephine Teo.

### StarHub's sponsorship of Fibre Broadband plans to Autism Resource Centre Singapore (ARC)

To help ARC alumni members better integrate into society, StarHub sponsored complimentary Fibre Broadband plans and equipment to ARC, empowering these individuals with digital connectivity solutions for greater independence.



Speco Pylon at StarHub Shop in NEX.

### StarHub Rewards Partner Programme for SMEs

StarHub offers a 'Be our Partner' programme to allow SMEs to tap the large network of StarHub customers and grow their brand visibility digitally by becoming a StarHub Rewards partner, with zero setup costs and no recurring platform fees. As a StarHub Rewards partner, SMEs can reach out to StarHub customers digitally with attractive offers on their products and services through StarHub App.

One of our new partners in 2022 is Speco, a social enterprise that offers biodegradable, eco-friendly and non-cytotoxic indoor air purifying solutions and employs socially-disadvantaged Singaporeans such as PwDs, ex-offenders and single parents. Besides onboarding Speco to the StarHub Rewards platform, we have also deployed Speco Pylons in the four main StarHub Shops with high human traffic, to provide cleaner air for our customers and employees.

<sup>32</sup> Singapore is the primary area of operation for StarHub's telecommunication services and all our operations in Singapore are involved in our digital inclusion programmes.

<sup>33</sup> There is no FY2021 goal for this topic since this is a new material topic for FY2022.

<sup>34</sup> Worth \$1.2 million.

# CARING FOR OUR PEOPLE AND COMMUNITIES



StarHub takes care of our employees with a core focus on their physical and psychological wellness. We place priority on supporting our employees and communities to reach their full potential in a diverse and inclusive environment. We remain actively engaged with our communities through our various CSR initiatives.



# Sustainability Report

## HEALTH, SAFETY AND WELL-BEING

StarHub is invested in protecting the physical and psychological well-being of all our employees and all other workers who perform work for and/or with us. We have established an Occupational Health and Safety (OH&S) management system, with policies, procedures and practices to ensure that we carry out all our work in our data centres, field sites and offices safely. Our OH&S management system is aligned with the requirements of our bizSAFE Level 3 certification, which was awarded by the Workplace Safety and Health Council Singapore following an independent audit.

StarHub's Workplace Safety and Health (WSH) Committee comprises employee and management representatives and meets on a quarterly basis. The WSH Committee is responsible for managing and updating our OH&S management system based on the latest regulations and best practices, feedback from our employees and other stakeholders as well as lessons learnt from risk assessments, incidents and near-misses. The WSH Committee also monitors StarHub's OH&S performance against pre-determined targets and curates OH&S training content for the organisation.

Our OH&S management system covers all our employees. Other workers who are not our employees as well as suppliers are covered under the health and safety management system of their own employers where applicable. Nonetheless, when performing work at our premises, they are all subject to StarHub's health and safety requirements and procedures.

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

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### Hazard identification and risk assessment

Our trained risk assessment leaders and managers within the WSH Committee work with our nominated staff representatives across the organisation to identify and assess the WSH hazards of work activities that may result in injury or ill health in the workplace. Risks are first eliminated wherever possible before considering mitigation measures to manage the hazard through control measures. Where appropriate, personal protective equipment (PPE) will also be provided to the relevant personnel to protect them against any residual risk. Risk assessments are updated at least once every three years, after an incident or a near-miss occurs or whenever there is a significant change in work processes. At each worksite and office, at least one employee will also be designated and trained as a first-aid emergency responder.

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

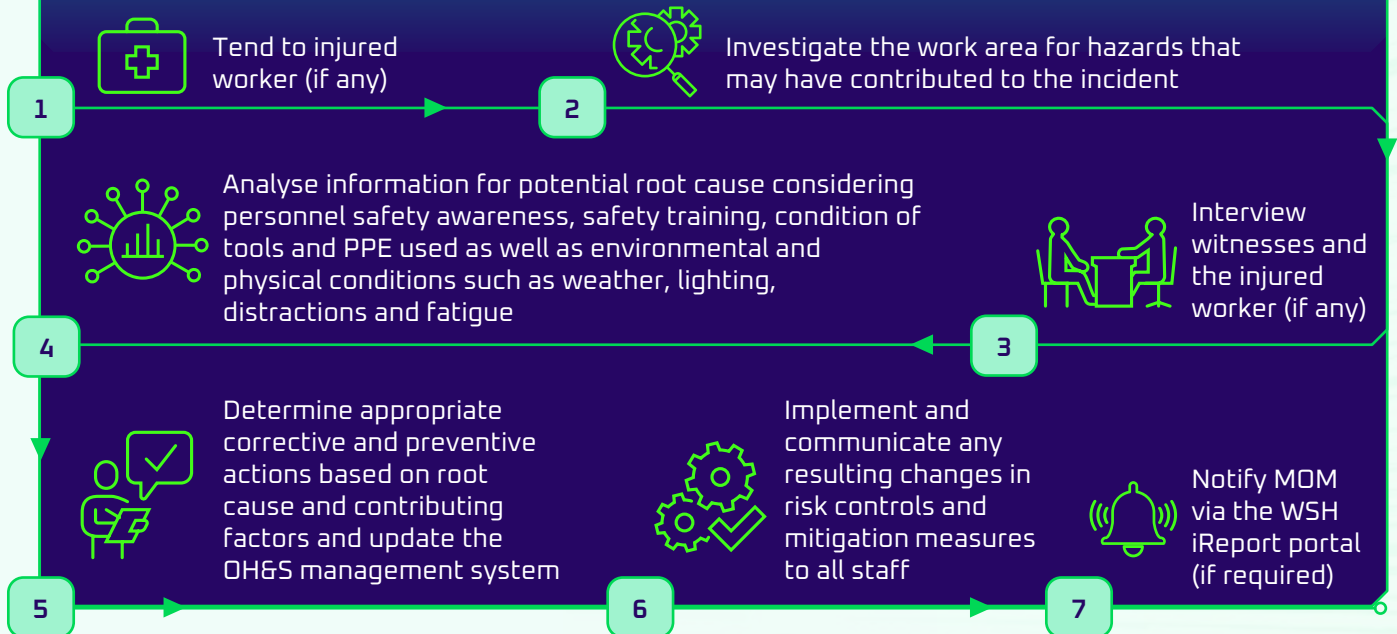
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### Near-miss and incident reporting and investigation systems

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 or other workers on our sites may first report any issues to their direct supervisor or Division WSH representative, who will then escalate the issue and report it to the Ministry of Manpower (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, any employee or other workers who believe themselves to be in situations that could cause injury or ill health, may also choose to remove themselves from the situation immediately. Reporters are protected against reprisal under our Whistle Blowing Policy, which includes reportable incidents involving causing danger to the health or safety of others.

## Incident investigation and reporting process for near-misses and incidents



### Lessons learnt in FY2022

In FY2022, StarHub identified and implemented a number of improvements to our health and safety system based on employee and contractor feedback as well as lessons learnt. Examples include:

- + More frequent communication on safety awareness
- + Appointing first-aid responders at all sites
- + Completed bizSAFE 2 training for all Risk Management managers

#### Training

For employees in job roles that require WSH domain knowledge, StarHub provides company-sponsored training to enhance their skills and capabilities to deal with WSH-related issues. Examples of training support include first aid, work-at-height and incident management procedures to respond to emergencies.

#### Contractor management

Besides our permanent and contract employees, we also have more than 1,000<sup>35</sup> third-party contractors' workers who support StarHub in the areas of customer care, finance, IT, facility management, product delivery, and on-site installation assistance.

When working at 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, as well as guidance on any PPE and risk control procedures as part of pre-work risk assessment review. Prior to the start of high-risk work, we will consider the worker's historical training and experience as part of our evaluation of the adequacy of risk assessments submitted by contractors. Where needed, we provide health and safety briefs to raise awareness of the risks associated with their tasks and reinforce the importance of risk mitigation measures. Workers can also provide any feedback or suggestions for improvements through their immediate StarHub supervisors, who may then choose to raise it to their WSH Committee representative as appropriate.

We require all StarHub's contractors to provide their workers with health insurance to the extent required by law. In Singapore, all Singaporeans and Permanent Residents may also use their MediSave to cover or offset eligible medical expenses.

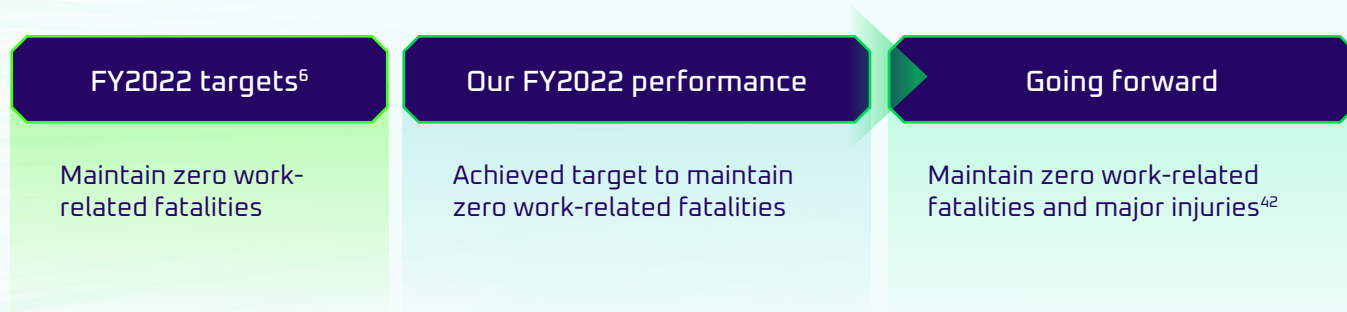
<sup>35</sup> Based on estimated full-time equivalent (FTE) for FY2022. This is the first year that StarHub is collecting data on workers who are not employees.

# Sustainability Report

## Workplace health and safety performance<sup>36</sup>

StarHub's WSH performance for all our employees is set out below. Our reported health and safety metrics do not cover the employees of our contractors and franchisees. This is the first year that StarHub is disclosing data on workers who are not employees, and the health and safety information is not captured within our data collection processes. We are working towards collecting the required data for workers who are not employees and will report it as soon as practicable in future reports.

	FY2022	FY2021	FY2020
Number of workplace fatalities (including from work-related ill health)	0	0	0
Number of occupational disease cases	0	0	0
Number of high-consequence work-related injuries <sup>37</sup> (excluding fatalities)	0	0	0
Number of recordable work-related injuries <sup>38</sup>	4 <sup>39</sup>	0	2
Recordable injury rate (per 1,000,000 hours worked) <sup>40</sup>	1.2	0	0.6
Workplace injury rate (per 100,000 employees) <sup>41</sup>	233	0	112
Number of hours worked	3,419,758	3,257,192	3,602,457



### Caring for mental well-being

Caring for the mental well-being of our permanent and contract employees is important to StarHub. We have put in place initiatives to obtain feedback on our employees' well-being. Care initiatives in FY2022 include the following:

- + Regular two-way communication: Team leaders were empowered to conduct regular well-being checks. To facilitate greater connections with their family, friends and colleagues, all staff were given unlimited mobile talktime

- + Flexible benefits scheme extended to support work from home (WFH): A flexible benefits programme (#HubbaFlex) was launched in 2019 to support employees' various needs. For example, flexible benefit credits can be used to pay for WFH equipment such as ergonomic chairs, computer monitors, etc
- + HubbaWellness: Wellness talks and fitness classes were organised to provide employees with structured time-outs

<sup>36</sup> Workplace health and safety performance metrics are reported based on the International Labour Organization and the MOM definitions.

<sup>37</sup> 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, for example, working at height of more than 2m and collision/ accident between vehicles on the roads.

<sup>38</sup> Recordable work-related injuries refer to injuries due to work exposure, resulting in outpatient/hospitalisation leave, light duty, death, all of which are reportable to MOM under the Singapore Workplace Safety and Health Act.

<sup>39</sup> The four injuries refer to 2 incidents of falling from stairs, 1 incident of slip and trip, and 1 incident of finger cut.

<sup>40</sup> Recordable injury rate refers to (no. recordable work-related injuries)/(no. working hours worked) x 1,000,000.

<sup>41</sup> Workplace injury rate refers to (no. recordable work-related injuries)/(no. of FTE) x 100,000; FTE in FY2022 was 1,720.

<sup>42</sup> Taking reference from MOM, major injuries refer to non-fatal injuries which are more severe in nature, for example, amputation, blindness, crushing, fractures and dislocations of head, back and hip, burns with more than 20 days of medical leave etc.

- + 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 up 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 spend time on professional learning
- + Quarterly early release: Maintained Eat with Your Family Day by letting employees leave work early every calendar 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
- + 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 questions about business and people matters



StarHubbers having fun together outside of work.

# Sustainability Report

## TALENT MANAGEMENT

As an employer, StarHub understands that our manpower management, compensation, benefits, diversity and talent development policies impact the well-being and satisfaction of all our employees. By taking care of our people, we are in turn empowered to better manage our network and serve our customers by preserving a skilled and experienced workforce.

### Talent attraction and employee benefits

StarHub has implemented career progression programmes and attractive compensation packages to retain our top talents. This year marks the third anniversary of our Leadership Accelerator Programme, which seeks to accelerate the development of selected key

talents through the right mix of experience, exposure and education to maximise their learning outcomes. A total of 70 nominated individuals participated in the 6-month leadership journey.

All our permanent employees also receive regular performance and career development reviews as part of StarHub's performance management system. Personal targets are set by supervisors and employees under four broad categories - Financial, Customer, Process and People.

We are also constantly on the lookout for fresh talents and use alternative recruitment channels. In FY2022, we hired three mid-career employees through the Amazon Web Services (AWS) re/Start programme<sup>43</sup>. We plan to continue our partnership with

AWS to identify more cloud talents in FY2023.

Our permanent and contract employees are offered competitive remuneration packages commensurate with their job responsibilities, level of experience and performance. We are in the process of aligning the key benefits for our contract employees with those for our permanent employees, starting with upgrading their medical and insurance plans and subsequently increasing their leave entitlement.<sup>44</sup>

## Full-time employees in Singapore<sup>45</sup> are entitled to:

A

Leave benefits including annual leave, medical leave, birthday leave, paternal/maternal leave, childcare leave and eldercare leave

B

Employee mobile, entertainment and broadband benefits

C

HubbaFlex benefits including health insurance coverage for outpatient medical, dental, hospitalisation and personal accidents

D

Re-employment for employees 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

Our corporate office at StarHub Green is also fitted out with nursing rooms and childcare facilities for parents returning to work.

<sup>43</sup> AWS re/Start programme aims to build local talent by providing AWS Cloud skills development and job opportunities to unemployed or underemployed populations.

<sup>44</sup> Increase of leave entitlement for contract employees will take effect from 1 Jan 2023.

<sup>45</sup> StarHub's significant location of operation is Singapore since all our staff are based in Singapore.

In FY2022, 31% of our employees are members of SISEU. We have in place an MOU and maintain a collaborative partnership with SISEU.<sup>46</sup> Through open and timely dialogues, we will continue to work closely with SISEU to support fair and progressive employment practices and to ensure our employees' skills stay relevant as we undergo our business transformation.



StarHubbers at various trainings and activities.

<sup>46</sup> In FY2021, we reported 34% of our employees as members of SISEU under our collective bargaining agreement disclosure. We have since clarified that the nature of our MOU with SISEU does not constitute what would generally be expected under a collective bargaining agreement. While our employees are currently not covered under a collective bargaining agreement, as members of SISEU, they 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 collective bargaining agreement from other organisations and are based on current market best practice and applicable MOM regulations.

# Sustainability Report

## Training and development



StarHub is dedicated to the development of all talents within the organisation. Building our employees' skills and capabilities is essential for employee retention and keeping their skills relevant in the fast-moving telecommunications industry. This in turn helps their personal growth and also enhances StarHub's human capital.

We co-design individual development plans with identified high-potential employees. For all other employees, we continue to ensure access to programmes for their professional development in technical skills and personal effectiveness. A dedicated team keeps our professional programmes updated with the latest industry developments and best practices and incorporates feedback from our managers and employees. Re-training is also provided for our re-employed staff who have reached the statutory retirement age where necessary.

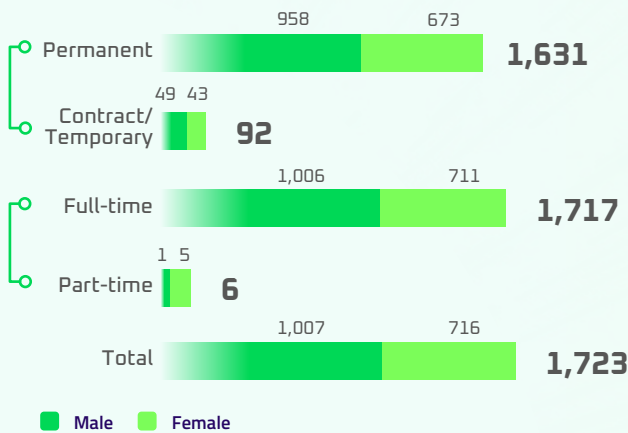
Our training programmes in FY2022 concentrated on the areas of 5G, network virtualisation, cybersecurity, data analytics and sustainability to build critical skills for the advancement of StarHub's DARE+ strategy. We rolled out Mojo@Scale, which focused on changing mindsets and culture, creating a StarHub Way of Working to embed the principles of "agile and customer-centricity". We continue to practise portfolio rotation in most divisions, which enables our staff

to develop new skills, build new connections, and to diversify our workforce. Following positive feedback from our employees, we have maintained our quarterly Learning Week sessions to foster a culture of continuous learning, which included talks by external and internal industry leaders.

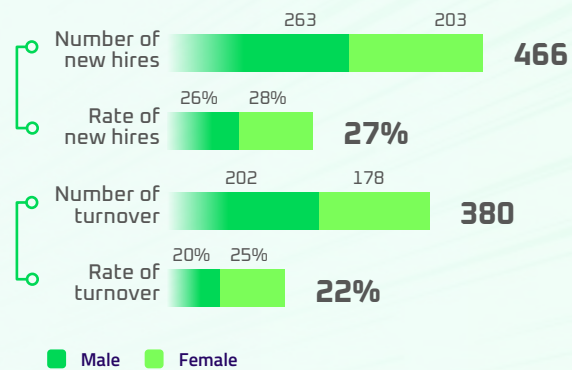
All StarHub employees also have access to digital learning platforms such as LinkedIn Learning, classroom training, leadership development workshops, professional certifications, and on-the-job training. To provide more digital learning options, we embarked on a pilot initiative with 300 employees on a new online learning platform, Coursera, with focus on data analytics, data visualisation and data wrangling training.

To maximise learning opportunities for our employees, we also established partnerships with multiple government agencies, such as SkillsFuture Singapore and IMDA. During FY2022, we invested \$1.25 million in training and received \$10,037 in training subsidies from various government agencies. These include IMDA's Company-Led Training funding. In total, we provided 17,665 hours of training that reached 96% of our employees.

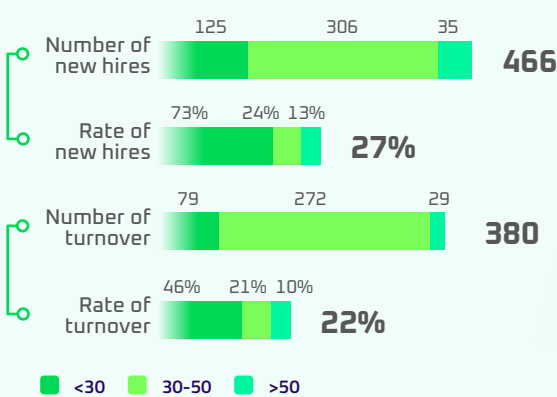
### Number of Employees by Employment Contract<sup>47</sup> by Gender



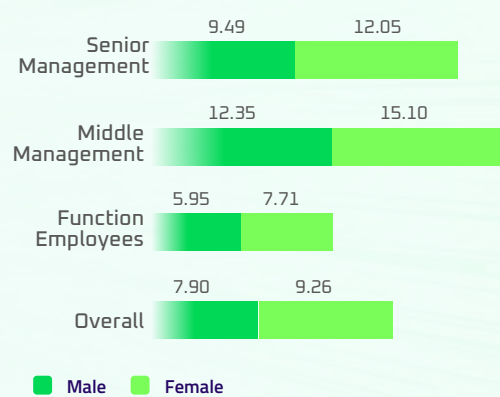
### New Employee Hires and Turnover by Gender



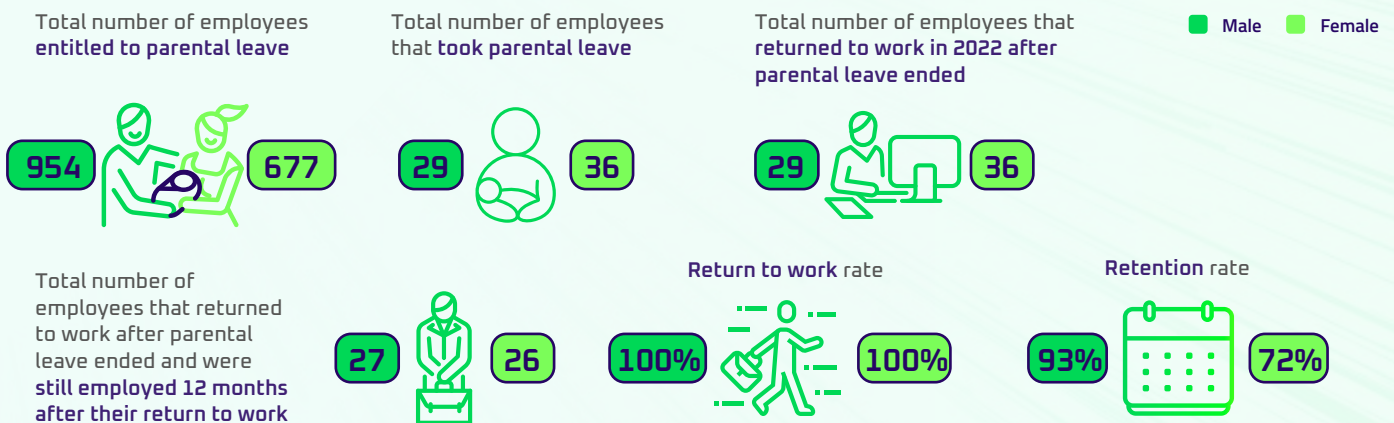
### New Employees Hires and Turnover by Age Group



### Average Training Hours Per Employee Category by Gender



### Parental Leave



<sup>47</sup> Employee numbers are reported for our significant location of operation in Singapore. StarHub currently does not have any employees on non-guaranteed hours basis. Our contract/ temporary employees refer to employees on fixed term contracts. Employee numbers are based on headcount as of year-end FY2022. There was no significant fluctuation in numbers compared to FY2021.



# Sustainability Report

## Diversity and inclusion

A diverse and inclusive workforce contributes to a more resilient organisation through varied skills and perspectives. We aim to promote this and foster a culture where all employees are treated fairly and with respect, protecting their right to be free from discrimination. This year, we have a newly-established Board Diversity Policy, which sets out the Board's commitment to consider all aspects of diversity and the needs and plans of the Group for the Board composition review and succession planning. In tandem, we have also formalised and adopted a Management and Staff Diversity Policy.

## StarHub's diversity, equality and inclusion practices

### Equal opportunity employment

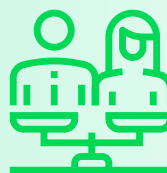
We practise merit-based hiring and remuneration, with career progression and rewards determined based on performance. We also consider training and development opportunities based on employees' strengths and needs.

### Safe, non-discriminatory work environment

Our Employee Code of Conduct mandates non-discriminatory and respectful conduct amongst our employees. Our anti-harassment and grievance procedures protect employees who report any incidents or harassment or other forms of grievance 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 Human Resource Officer (CHRO). 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. Our employees are informed about how to raise any grievances through StarHub's grievance procedures during onboarding.

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 100.

StarHub's practices to promote and protect diversity, equality and inclusion are implemented in accordance with our policies relating to Board diversity, Management and Staff diversity as well as reporting of harassment (Workplace Harassment Prevention Policy) and grievance policies. Management regularly reviews 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. Any workplace discrimination complaint involving a StarHub employee or contractor's worker may also be filed by the employee, contractor's worker or any external witness to TAFEP instead of StarHub.



In recognition of the Board's changing needs over time, the Board targets to **maintain  $\geq 25\%$  female representation** within the next three to five years



**The following statistics demonstrate the diversity of our workforce and leadership:**

We are pleased to report that in FY2022, no incidents of discrimination were reported directly to StarHub or through TAFEP, meeting our previous target to maintain zero incidents of discrimination. **We aim to continue to maintain zero incidents of discrimination in FY2023.**

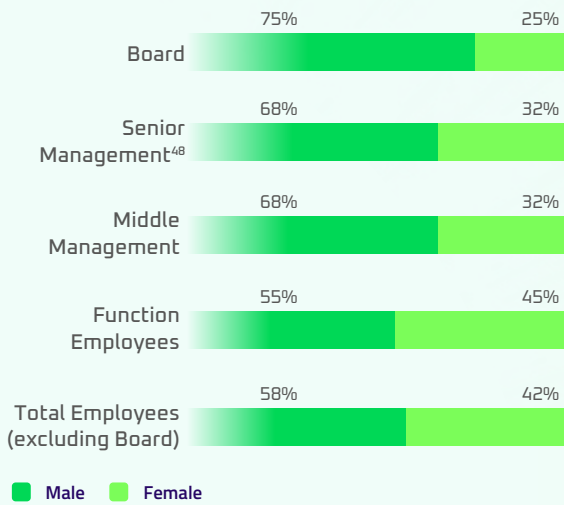
## Ensign's partnership with ARC

Ensign is committed to continuing its neurodiversity journey and plans to run its training and hiring process at least twice a year. Since the launch of the initiative in November 2021, Ensign has welcomed a group of neurodiverse talents as Security Operations Centre Analysts. The objective is to support neurodiverse talents with the passion and aptitude for cybersecurity to capitalise on job opportunities in this growing sector, and to allow them to pursue a meaningful and long-term career as a cyber professional. Ensign hopes to leverage the unique talents and skills of these individuals to foster a culture of inclusivity and drive its long-term success.

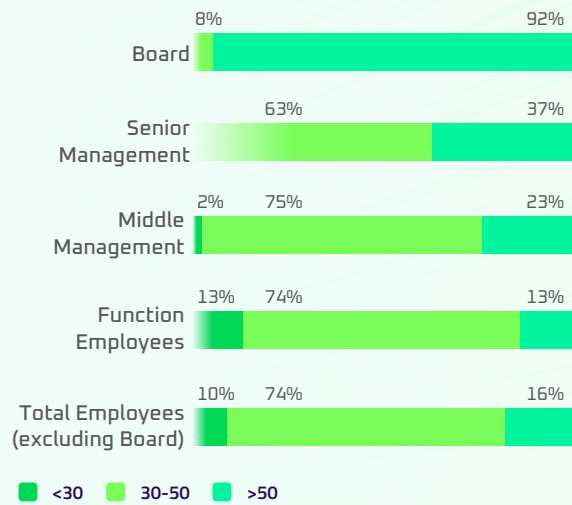


Ensign has welcomed a group of neurodiverse talents.

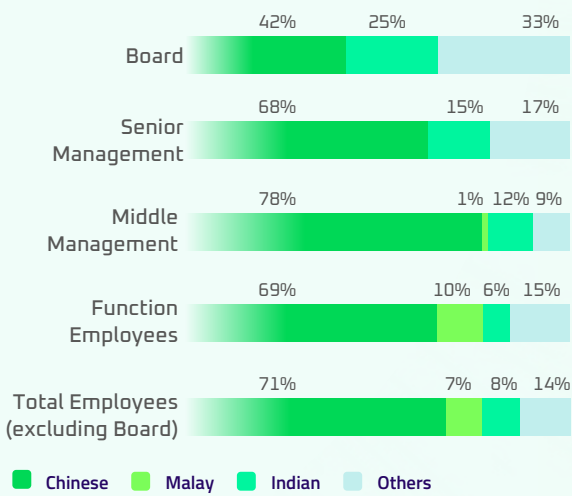
### Gender Diversity by Employee Category



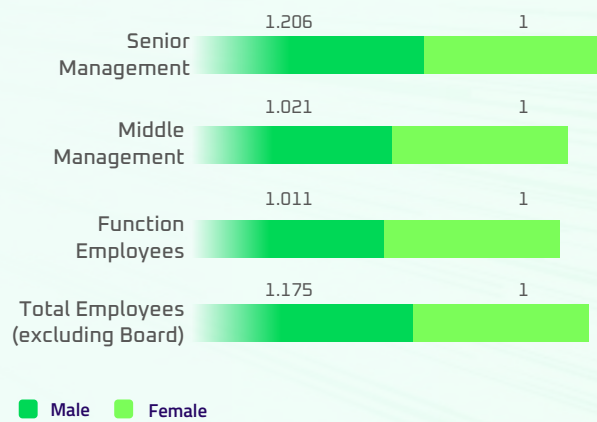
### Age Diversity by Employee Category



### Ethnic Diversity by Employee Category



### Ratio of Base Salary and Remuneration<sup>45</sup>



<sup>48</sup> Senior Management encompasses Heads of Department (HODs) and Senior Level Managers.

# Sustainability Report

## CSR INITIATIVES

StarHub continues to commit to our CSR initiatives even though it is no longer a standalone material topic. We have longstanding commitments to create positive social impacts through a variety of CSR initiatives which address the needs of our local communities. We are pleased to report that we have expanded our efforts to reach a larger pool of beneficiaries this year.

In FY2022, StarHub contributed an aggregate of almost \$1.9 million towards CSR initiatives, reaching 12,829 beneficiaries through our various community causes, including the digital inclusion initiatives listed on page 142. All our operations in Singapore actively support and participate in our CSR initiatives, with our employees also actively participating in volunteering programmes in FY2022.

**"Junior Stars" programme,  
funding support:**

**\$500,000 joint funding with Central  
Singapore CDC for FY2021 and FY2022**

### Key statistics for January to December 2022

#### Outreach



**710**  
Beneficiaries

#### Partners



**152**  
Active Volunteers



**14**  
Nurture Centres



**27**  
Industry & Community  
Partners

### About Junior Stars

#### Programme period

**January to December 2022**

- + Junior Stars 'Nurture' – Weekly from January to December
- + Junior Stars 'Holiday Enrichment Series' – June to December, clustered around school holidays

#### Competencies

- + Communications
- + Creativity
- + Problem-Solving
- + Digital & Media Literacy

### Objective

Empowering primary school children from disadvantaged backgrounds with equal learning opportunities and equipping them with future-ready skillsets for work of the future and a better life

- + In partnership with the Central Singapore CDC, we funded a series of free enrichment classes and workshops to equip underprivileged children with key future-ready skills in the areas of sustainability, entrepreneurship, public speaking and communications. The Junior Stars 'Nurture' session happens weekly where students learn problem-solving and communications skills at the Nurture centres. The two-year programme ran from FY2021 to FY2022.
- + Our volunteers supported learning at the "Junior Star Holiday Enrichment Series" sustainability workshops, which educated the children about global issues through a fun-filled board game and quiz on Singapore's food security as well as a micro-greens planting session.

#### Summary Statistics for Junior Stars in FY2022:

The Junior Stars programme engaged more than 1,400 children and 288 volunteers over 2021 and 2022 through the signature Junior Stars 'Nurture' workshops and Junior Stars 'Holiday Enrichment Series'.

## Success Stories of Junior Stars 'Nurture' Workshops

"Nurture lessons are fun, and the teachers are kind. I enjoy learning how to communicate better and seeing my grades improve through these years."

**Jason, aged 12**  
Nurture @ Toa Payoh East

"We learn new things every week, such as how to respect each other. I like learning about line graphs too in our Problem-Solving module!"

**Syafiq, aged 10**  
Nurture @ Toa Payoh East

## Feedback on Junior Stars 'Kid Entrepreneurs' Workshops

"I was pleasantly surprised by my son's enthusiasm. Darwisy had worked on his team's project diligently in class and even continued working on it at home."

**Mrs Nora**  
Darwisy's mother



Launch of Junior Stars Programme.



StarHub CFO Dennis Chia with children at Junior Stars workshop.



StarHubber with children of Junior Stars making a self-watering planter.

# Sustainability Report

## StarHub tree-planting, funding support:

**\$30,000, trees planted: 100**



StarHub supports NParks' OneMillionTrees movement.



StarHubbers tree-planting on Pulau Ubin.

### Objective

Restoring nature in our city by increasing natural shade and ecological connectivity to help mitigate climate change

- + In support of the National Parks Board's (NParks) OneMillionTrees movement, we collaborated with our customers to contribute to NParks charity, Garden City Fund, to plant 50 trees at the Dairy Farm Nature Park and another 50 trees on Pulau Ubin. The tree species planted are native to Singapore, many of which are vulnerable and critically endangered. StarHub's efforts have helped bring the nation closer to realising NParks' City in Nature vision, a key pillar of the SG Green Plan.
- + An estimated 172 tonnes of carbon dioxide will be sequestered over the lifetime of the planted trees.



StarHub customers joining us at the Dairy Farm Nature Park.

## Care Corner Singapore Ltd (Youth Services), funding support:

**\$50,000**



StarHub CCSO Veronica Lai receiving a plaque from Deputy Prime Minister Lawrence Wong.

### Objective

- + Supporting at-risk adolescents in Youth Services' Youth Outreach Programme
- + To promote engagement through youth-favoured social media platforms like Instagram (IG) since youths are multi-modal in their communications

The programme supported more than 180 youths through our intervention efforts using online/IG conversations with at-risk youths. Care Corner Youth Service's IG page (@youthxcarecorner) shared positive messages and stories of youths via more than 150 IG posts and over 700 IG stories, which received a total of more than 160,000 likes, comments and views.

## Other CSR initiatives

Metta Welfare Association,  
funding support:

\$100,000\*

Supported 495 students from Metta School with educational needs for children with special needs, by offering a vocational pathway through structured programmes that lead to industry-recognised vocational qualifications.

Singapore Anglican  
Community Services (SACS),  
funding support:

\$60,000\*

Supported 369 customers and 165 individuals with mental health conditions to secure sustainable employment and reintegrating them into the community.

SHINE Children and Youth  
Services, funding support:

\$20,000\*

Supported 327 students in the Scaffold programme, which provides early intervention targeted at lower secondary school students to prevent school disengagement and absenteeism.



COMMUNITY  
CHEST  
AWARDS 2021



Photo credit: Community Chest

StarHub at Community Chest Awards 2021.

\* The reporting period for Metta, SACS and SHINE is for 1 April 2021 – 31 March 2022.

# Sustainability Report

## Partnering IMDA in Data for All initiative, funding support:

Up to \$1.2 Million

Sponsored digital access with donation of up to 10,000 mobile lines to PwDs and their caregivers.



StarHub CEO Nikhil Eapen (centre, in black) with StarHubbers at Digital for Life roadshow.



giga! team assisting beneficiaries to sign up for complimentary giga! lines

## Earth Hour 2022 | WWF-Singapore funding support:

\$300,000 worth of TV airtime

Continuous effort in promoting awareness of Earth Hour Switch Off, which encourages Singapore residents to take action on climate change since 2013.



Earth Hour 2022 poster at StarHub Shop.

## The Food Bank Singapore

Objective: Alleviating food insecurity

StarHub staff volunteered their time to sort groceries at The Food Bank Singapore warehouse and replenished its vending machines located in housing estates with food items for lower-income families and individuals.



StarHubbers replenishing food vending machines.



StarHub CHRO, Catherine Chia (right most) packing food with StarHubbers.

# RESPONSIBLE BUSINESS AND VALUE CHAIN



StarHub makes a focused effort to exercise robust corporate governance, responsible business practices and sustainable sourcing throughout our value chain. We have established policies and practices to ensure ethical business behaviour, responsible selling and sustainable management of our supply chain.



# Sustainability Report

## BUSINESS CONDUCT AND ETHICS

StarHub adopts a zero-tolerance stance towards corruption or legal violations. 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, as it is paramount to ensure proper operation of our telecommunications network and to minimise any negative impact from non-compliance.



We have in place a self-assessment process as part of our Group's internal audit to ensure the effectiveness of our compliance risk controls. We engage regulators periodically to keep abreast of the latest compliance requirements and update our policies and procedures accordingly.

StarHub has established policies to address the standards of behaviour and business conduct expected of our employees, covering areas such as safety, harassment and corruption, as well as proper procedures when dealing with colleagues, customers, suppliers, 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>49</sup> We have been a signatory member of the UNGC since 2012. Refer to the UNGC website for our latest Communication on Progress (CoP)<sup>50</sup>.

We also apply the precautionary principle in our risk management approach, which is reflected in our policies and procedures.

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>51</sup>. Please refer to the Annual Report pages 100-102 for more information on our available policies.

All our policies are communicated to our employees upon hiring and can be readily accessed through our intranet. 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.

StarHub has also established a mechanism for raising concerns and to address the grievances brought up by our stakeholders through our Whistle Blowing Policy. In FY2022, after investigating complaints received, we did not find any critical concerns to raise to the Board (see page 100 for our whistle blowing procedure). This year, there were also no significant instances of non-compliance with laws and regulations resulting in fines<sup>52</sup> or non-monetary sanctions meted out to StarHub.

<sup>49</sup> The Ten Principles of the UN Global Compact 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>50</sup> Our completed CoP report, submit through UNGC digital platform, will be accessible by any stakeholder and the public after 30 June 2023 at <https://unglobalcompact.org/what-is-gc/participants/18218-StarHub-Limited>.

<sup>51</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-notices-and-terms/terms-and-conditions/vendor.html>, as well as this FY2022 sustainability and annual report. In addition, StarHub is also in compliance with IMDA's Net Neutrality Policy. IMDA's Net Neutrality Policy 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 the finite network resources and bandwidth according to our customers' subscription plans, to promote fair use of network resources.

<sup>52</sup> Significant instances of non-compliance with laws and regulations are those that would result a material impact on the Group's ESG performance. Only significant fines above \$10,000 are reported.

## RESPONSIBLE SELLING

StarHub acknowledges the importance of marketing and advertising products and services in a responsible manner. We ensure transparency in our pricing and billing across our direct operations and value chain to eliminate risks of perceived hidden fees which may lead to customer dissatisfaction and the early termination of customer contracts.



Our sales and customer service teams as well as staff of our partners who are distributors, retailers or franchisees are trained and periodically retrained to ensure they communicate our pricing structure and contractual terms clearly and transparently to our customers. In addition, we provide an internal knowledge base to equip these teams with answers to FAQs, documentation and how-tos that make it easier for them to proactively provide after-sales support, educate customers and improve customer satisfaction.

To build customer confidence, we anticipate customer needs and develop solutions for issues that may be raised by our customers in the future. We also practise proactive service recovery by detecting issues internally and pre-emptively advising customers of issue resolutions even before they contact us.

StarHub also fully complies with all applicable local regulations and guidelines, such as the Television and Radio Advertising and Sponsorship Code. Our DPO supervises compliance with our DNC Policy, which guides and ensures that we comply with the PDPA and DNC Registry provisions. Targeted marketing messages will only be sent to mobile numbers in Singapore where consent has been obtained, and any messages sent will have an appropriate tag prefixed to ensure the clear intent of our communications. Our DNC Policy is complemented by our customer communication guidelines and serves as further guidance for customer communications.

As in prior years, StarHub in FY2022 had zero incidents of non-compliance with regulations or voluntary codes concerning product and service information and labelling, as well as marketing communications.

# Sustainability Report

## SUPPLY CHAIN MANAGEMENT

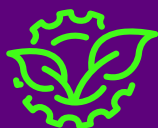
StarHub has an extensive supply chain network across different regions and sectors. Our main suppliers include major telecommunications infrastructure providers (hardware manufacturers as well as software, infrastructure solution and maintenance providers) and major customer equipment (handset and router) manufacturers and distributors. 84% of our total supplier base of 896 suppliers were local.<sup>53</sup> They made up 82% of our total procurement spend of \$1.68 billion in FY2022.

StarHub has put in place measures to integrate sustainability practices and improve the management of the environmental, social, economic and business impact of our supply chain and

procurement processes. All 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 impact 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. We expressly reserve our rights not to procure goods and services from suppliers who do not adhere to the Supplier Code of Conduct under our Responsible Sourcing Policy. The Supplier Code of Conduct and Responsible Sourcing Policy are available on our website and they are communicated to the vendors during the procurement process.



**Our process to screen for the environmental and social impacts of our supply chain:**



SAQ<sup>54</sup>:

Mandatory for all new vendors to complete at the time of onboarding

**Additional ESG assessment for first-tier suppliers:**

First-tier suppliers (those with an annual spend of at least \$1 million) are subject to further assessment to identify significant ESG risks. Any potential concerns flagged out during this process will be addressed with the relevant suppliers to better understand the issues and assess mitigation measures which can be put in place by the suppliers before a decision is made on the continuance of our supplier relationship.

With our new Scope 3 emissions reduction target, StarHub has also identified GHG emissions contributed by our suppliers as a significant component of our total Scope 3 emissions. Consequently, we will be looking to develop additional engagement initiatives to encourage our suppliers to reduce their own emissions as part of our upcoming decarbonisation roadmap. These initiatives may include collaboration and incentivisation programmes.

StarHub also considers our global exposure to business risks, such as climate change in our supply chain management. We periodically review our supply chain portfolio to build resilience, reduce disruption, enhance efficiencies and safeguard our reputation.

<sup>53</sup> StarHub's significant location of operation is Singapore.

<sup>54</sup> The self-assessment include screening for environmental and social impacts per the UNGC Ten Principles.

## Appendices

### STARHUB VALUE CREATION SCORECARD

	FY2022	FY2021	FY2020
<b>ENVIRONMENTAL</b>			
GHG emissions for Scope 1+2 (tCO <sub>2e</sub> )	51,266	55,975	55,438
GHG emissions intensity (tCO <sub>2e</sub> per \$million revenue)	22.0	27.4	27.3
Renewable energy use (as % of total electricity use)	10	6	4.6
Electricity used within the organisation (million kWh)	137.2	142.8	137.0
Energy consumption within the organisation (GJ)	498,244	518,466	497,759
Energy intensity (GJ per \$million revenue)	214	254	245
Water consumption (megalitres)	9.57	5.80	9.65
General waste (non-hazardous) (tonnes)	18.5	7.2	17.6
Internal e-waste recycled (tonnes)	144.9	72.6	49.1
Paper recycled (tonnes)	1.5	1.3	1.8
<b>SOCIAL</b>			
<b>Employees</b>			
Permanent employees	1,631	1,539	1,686
Local employees (% of Singapore citizens)	68	75	74
Female employees (%)	42	42	43
Female managers (% of Senior level)	34	38	35
Female managers (% of Middle level)	32	34	36
Female directors (% of HODs)	22	20	20
Female members of the Board (% of Board)	25	25	25
Average training hours per employee	8.5	14	9.4
Training expenditure per employee (\$)	600	561	238
New hires rate (%)	27	17	12
Employee turnover rate (%)	22	27	29
Number of reported work injuries	4	0	2
Number of fatal accidents	0	0	0
<b>Community</b>			
Employee volunteerism participation (% of workforce)	8.5	7	4
Community investment and donations to charities <sup>55</sup> (\$million)	1.9	0.7	1.7
<b>GOVERNANCE &amp; MARKETPLACE</b>			
Revenue (\$million)	2,327.3	2,042.6	2,028.8
Net profit (\$million)	62.2	149.3	157.9
Dividends paid to shareholders (\$million)	110.8	86.6	82.2
Share of local suppliers as percentage of total procurement spend (%)	82	94	95
Proportion of local suppliers (%)	84	87	90

<sup>55</sup> Community investment amounts is inclusive of digital inclusion investment.

# Sustainability Report

## FY2022 MEMBERSHIPS AND ASSOCIATIONS

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

- + American Chamber of Commerce in Singapore
- + Asia Pacific Network Information Centre
- + Association of Certified Fraud Examiners
- + Association of Chartered Certified Accountants
- + British Chamber of Commerce, Singapore
- + Chartered Institute of Management Accountants
- + Chartered Secretaries Institute of Singapore
- + Cloud Security Alliance
- + Contact Centre Association of Singapore
- + CPA Australia
- + Disaster Recovery Institute International
- + Global Compact Network Singapore
- + GSM Association (GSMA)
- + IMDA's 5G Workforce Transformation Committee
- + Income Tax Board of Review
- + Information Systems Audit and Control Association
- + Institute of Service Excellence at Singapore Management University
- + Institute of Singapore Chartered Accountants
- + Intelligent Transportation Society Singapore
- + International Council of E-Commerce Consultants
- + International Information System Security Certification Consortium
- + National Sustainable Procurement Roundtable
- + Project Management Institute
- + Promax Asia
- + Singapore Academy of Law
- + Singapore Accountancy Commission
- + Singapore Advanced Research & Education Network
- + Singapore Association of the Institute of Chartered Secretaries and Administrators
- + Singapore Business Federation
- + Singapore Chinese Chamber of Commerce & Industry
- + Singapore Computer Society
- + Singapore Corporate Counsel Association
- + Singapore Hotel Association
- + Singapore Institute of Directors
- + Singapore International Chamber of Commerce
- + Singapore National Employers' Federation
- + Wireless Broadband Alliance

## GRI CONTENT INDEX

StarHub has aligned its sustainability reporting disclosures to GRI2021 standards this year, and will continuously strive to improve its disclosures.

Statement of use	StarHub has reported in accordance with the GRI Standards for the period 1 Jan 2022 to 31 Dec 2022.
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
<b>GENERAL DISCLOSURES</b>		
GRI 2: General disclosures 2021	2-1	Organizational details AR (pg 202, 229-234). Our headquarters is in Singapore.
	2-2	Entities included in the organisation's sustainability reporting 113
	2-3	Reporting period, frequency, and contact point 113 This report publication date is March 2023.
	2-4	Restatements of information 129, 149
	2-5	External assurance 113, 173-176
	2-6	Activities, value chain and other business relationships 118-120, 162 and AR (pg 18-19, 29, 34-47, 202) MyRepublic acquisition announced in AR2021 has been completed in FY2022. There are no significant changes in activities, value chain and other business relationship compared to FY2021.
	2-7	Employees 151,153
	2-8	Workers who are not employees 145
	2-9	Governance structure and composition 117 and AR (pg 56-63, 74)
	2-10	Nomination and selection of the highest governance body AR (pg 80)
	2-11	Chair of the highest governance body AR (pg79)
	2-12	Role of the highest governance body in overseeing the management of impacts 117, 121 and AR (pg 92)
	2-13	Delegation of responsibility for managing impacts 117
	2-14	Role of highest governance body in sustainability reporting 117, 121 and AR (pg 92)
	2-15	Conflicts of interest AR (pg 62-63, 81, 97, 263, 283-285)
	2-16	Communication of critical concerns 160 and AR (pg 100)
	2-17	Collective knowledge of the highest governance body AR (pg 76)
	2-18	Evaluation of the performance of the highest governance body AR (pg 82)
	2-19	Remuneration policies AR (pg 83 to 88). 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.
	2-20	Process to determine remuneration AR (pg 83 to 85) and please refer to our <a href="#">AGM minutes</a> for results of stakeholder votes on remuneration policies and proposals.
	2-21	Annual total compensation ratio Omitted due to confidentiality constraints. Staff compensation is company confidential given the current competitive labour market in Singapore.
	2-22	Statement on sustainable development strategy 113
	2-23	Policy commitments 160, 162, AR (pg 100-102)
	2-24	Embedding policy commitments 144-149, 160, 162 and AR (pg 76, 90-91, 100-102)

# Sustainability Report

## GRI CONTENT INDEX

GRI Standard	Disclosure	Location
GRI 2: General disclosures 2021	2-25	Processes to remediate negative impacts 117-120, 138-139, 152, 161, AR (pg 100)
	2-26	Mechanisms for seeking advice and raising concerns 118-120, 160, AR (pg 100)
	2-27	Compliance with laws and regulations 139, 149, 160
	2-28	Membership associations 120  A full list of our memberships and associations for FY2022 is also available on pg 164.
	2-29	Approach to stakeholder engagement 118-120
	2-30	Collective bargaining agreements 149
<b>MATERIAL TOPICS</b>		
GRI 3: Material topics 2021	3-1	Process to determine material topics 121
	3-2	List of material topics 121
<b>ENERGY AND CLIMATE CHANGE</b>		
GRI 3: Material topics 2021	3-3	Management of material topics 126 -129 and pg 118 for our engagement with stakeholders on renewable energy and energy efficient products.
GRI 302: Energy 2016	302-1	Energy consumption within the organization 128
	302-2	Energy consumption outside of the organization 128
	302-3	Energy intensity 128
	302-4	Reduction of energy consumption 127-128
GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions 129
	305-2	Energy indirect (Scope 2) GHG emissions 129
	305-3	Other indirect (Scope 3) GHG emissions 129
	305-4	GHG emissions intensity 129
	305-5	Reduction of GHG emissions 127, 129
<b>CIRCULARITY</b>		
GRI 3: Material topics 2021	3-3	Management of material topics 131-133
GRI 303: Water and effluents 2018	303-3 <sup>24</sup>	Water withdrawal 133
GRI 306: Waste 2020	306-1	Waste generation and significant waste-related impacts 131-132
	306-2	Management of significant waste-related impacts 131-133
	306-3	Waste generated 132-133
	306-4	Waste diverted from disposal 132-133
	306-5	Waste directed to disposal 132-133
<b>GREEN TECH SOLUTIONS</b>		
GRI 3: Material topics 2021	3-3	Management of material topics 134-136, and pg 119 for our engagement with business partners on adoption of Green Tech solutions.
GRI 203: Indirect economic impacts 2016	203-2	Significant indirect economic impacts 134-136

GRI Standard		Disclosure	Location
<b>PRODUCT AND SERVICE QUALITY</b>			
GRI 3: Material topics 2021	3-3	Management of material topics	138-139
GRI 203: Indirect economic impacts 2016	203-2	Significant indirect economic impacts	138
GRI 416: Customer health and safety 2016	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	139
<b>DATA PRIVACY AND CYBERSECURITY</b>			
GRI 3: Material topics 2021	3-3	Management of material topics	140, AR (pg 101-102)
GRI 418: Customer privacy 2016	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	140
<b>ONLINE SAFETY</b>			
GRI 3: Material topics 2021	3-3	Management of material topics	141
<b>DIGITAL INCLUSION</b>			
GRI 3: Material topics 2021	3-3	Management of material topics	142
GRI 413: Local communities 2016	413-1	Operations with local community engagement, impact assessments, and development programmes	142
<b>HEALTH, SAFETY AND WELL-BEING</b>			
GRI 3: Material topics 2021	3-3	Management of material topics	144-147
GRI 403: Occupational health and safety 2018	403-1	Occupational health and safety management system	144-145
	403-2	Hazard identification, risk assessment, and incident investigation	144-145
	403-3	Occupational health services	144-145
	403-4	Worker participation, consultation, and communication on occupational health and safety	144-145
	403-5	Worker training on occupational health and safety	145
	403-6	Promotion of worker health	145, 147 and 148  Voluntary health promotion services and programmes to address major non-work-related health risks are not available for workers who are not employees.
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	145 and 162



# Sustainability Report

## GRI CONTENT INDEX

GRI Standard	Disclosure	Location
GRI 403: Occupational health and safety 2018	403-8	Workers covered by an occupational health and safety management system 144-145
	403-9	Work-related injuries 146  GRI 403-9 b to g: Omission due to information unavailable/incomplete for workers who are not employees but whose work and/or workplace is controlled by the organisation.  This is the first year that StarHub is disclosing data on all workers who are not employees, and the health and safety information are not fully captured within our data collection processes. We are working towards collecting the required data for workers who are not employees and will report it as soon as practicable in future reports.
	403-10	Work-related ill health 146  GRI 403-10 b to g: Omission due to information unavailable/incomplete for workers who are not employees but whose work and/or workplace is controlled by the organisation.  This is the first year that StarHub is disclosing data on all workers who are not employees, and the health and safety information are not fully captured within our data collection processes. We are working towards collecting the required data for workers who are not employees and will report it as soon as practicable in future reports.
<b>TALENT MANAGEMENT</b>		
GRI 3: Material topics 2021	3-3	Management of material topics 148-153
GRI 401: Employment 2016	401-1	New employee hires and employee turnover 151
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees 148
	401-3	Parental leave 151
GRI 404: Training and education 2016	404-1	Average hours of training per year per employee 151
	404-2	Programmes for upgrading employee skills and transition assistance programmes 150
	404-3	Percentage of employees receiving regular performance and career development reviews 148
GRI 405: Diversity and equal opportunity 2016	405-1	Diversity of governance bodies and employees 153
	405-2	Ratio of basic salary and remuneration of women to men 153
GRI 406: Non-discrimination 2016	406-1	Incidents of discrimination and corrective actions taken 152

GRI Standard	Disclosure		Location
<b>BUSINESS CONDUCT AND ETHICS</b>			
GRI 3: Material topics 2021	3-3	Management of material topics	160
GRI 205: Anti-corruption 2016	205-1	Operations assessed for risks related to corruption	There is no operation assessed this year; we are currently working to incorporate corruption risk assessment as part of our existing compliance assessment process and will report on progress in future reports.
	205-2	Communication and training about anti-corruption policies and procedures	160, 162 and AR (pg 76). For the Board, corporate governance policies communication and training (including anti-corruption) are provided as part of Board orientation.
	205-3	Confirmed incidents of corruption and actions taken	160
GRI 206: Anti-competitive behavior 2016	206-1	Legal actions for anti-competitive behavior, anti-trust and monopoly practices	160
<b>RESPONSIBLE SELLING</b>			
GRI 3: Material topics 2021	3-3	Management of material topics	161
GRI 417: Marketing and Labeling 2016	417-2	Incidents of non-compliance concerning product and service information and labeling	161
	417-3	Incidents of non-compliance concerning marketing communications	161
<b>SUPPLY CHAIN MANAGEMENT</b>			
GRI 3: Material topics 2021	3-3	Management of material topics	162
GRI 204: Procurement Practices 2016	204-1	Proportion of spending on local suppliers	162
GRI 308: Supplier Environmental Assessment 2016	308-1	New suppliers that were screened using environmental criteria	162
	308-2	Negative environmental impacts in the supply chain and actions taken	Omitted due to information unavailable/incomplete.  StarHub is still working on conducting assessment for environmental impacts based on the information received in our SAQ and the results are not available yet. We aim to complete the assessment for our first-tier suppliers and report our assessment progress in future reports.
GRI 414: Supplier Social Assessment 2016	414-1	New suppliers that were screened using social criteria	162
	414-2	Negative social impacts in the supply chain and actions taken	Omitted due to information unavailable/incomplete.  StarHub is still working on conducting assessment for social impacts based on the information received in our SAQ and the results are not available yet. We aim to complete the assessment for our first-tier suppliers and report our assessment progress in future reports.

# Sustainability Report

## SASB INDEX

Code	Metric Description	Unit of Measure	2022
<b>ACTIVITY METRIC</b>			
TC-TL-000.A	Number of wireless subscribers	Number	2,156,000
TC-TL-000.B	Number of wireline subscribers	Number	239,000
TC-TL-000.C	Number of broadband subscribers	Number	578,000
TC-TL-000.D	Network traffic	Petabytes	3,431
<b>Environmental Footprint of Operations</b>			
TC-TL-130a.1	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Gigajoules (GJ), Percentage (%)	498,244 Grid: 89% Renewable: 10% *Remaining 1% is fuel
<b>Data Privacy</b>			
TC-TL-220a.1	Description of policies and practices relating to behavioural advertising and customer privacy	n/a	Refer to report pg 140, 161 and AR (pg 101-102).
TC-TL-220a.2	Number of customers whose information is used for secondary purposes	Number	StarHub complies with our PDPA obligations with regards to giving customers choice over how their information is used. Refer to report pg 140 and 161.
TC-TL-220a.3	Total amount of monetary losses as a result of legal proceedings associated with customer privacy	Reporting currency – Singapore Dollar (SGD)	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	Number, Percentage (%)	Unable to disclose due to confidentiality obligations.
<b>Data Security</b>			
TC-TL-230a.1	(1) Number of data breaches, (2) percentage involving personally identifiable information (PII), (3) number of customers affected	Number, Percentage (%)	0
TC-TL-230a.2	Description of approach to identifying and addressing data security risks, including use of third-party cybersecurity standards	n/a	Refer to report pg 140 and AR (pg 101-102).

Code	Metric Description	Unit of Measure	2022
<b>Product End-of-life Management</b>			
TC-TL-440a.1	(1) Materials recovered through take back programmes, percentage of recovered materials that were (2) reused, (3) recycled, and (4) landfilled	Metric tons (t), Percentage (%)	Internal e-waste: 144.9 External e-waste: 11.3 Reuse: 0% Recycled: 100% Landfilled: 0%
<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	Reporting currency – Singapore Dollar (SGD)	0
TC-TL-520a.2	Average actual sustained download speed of (1) owned and commercially-associated content and (2) non-associated content	Megabits per second (Mbps)	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	n/a	StarHub complies with IMDA's Net Neutrality Policy.
<b>Managing Systemic Risks from Technology Disruptions</b>			
TC-TL-550a.1	(1) System average interruption frequency and (2) customer average interruption duration	Disruptions per customer, Hours per customer	StarHub does not report on these metrics defined by the standard. Please refer to report pg 138 on our network and broadband services availability.
TC-TL-550a.2	Discussion of systems to provide unimpeded service during service interruptions	n/a	Refer to report pg 138-139.

# Sustainability Report

## TCFD INDEX

TCFD Pillar	TCFD recommendations	2022 Disclosures
Governance	Describe the Board's oversight of climate-related risks and opportunities.	Please refer to Sustainability Governance, page 117.
	Describe Management's role in assessing and managing climate-related risks and opportunities.	
Strategy	Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term.	Please refer to Our TCFD progress, page 130 and Energy and Climate Change, page 126-127.
	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.	
Risk Management	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.	
Metrics & Targets	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 Energy and Climate Change, page 126-129.
	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.	

## INDEPENDENT LIMITED ASSURANCE REPORT

### To the Directors of StarHub Ltd

We were engaged by the Board of Directors of StarHub Ltd (the Company) to provide limited assurance on the accompanying StarHub Sustainability Report 2022 for the year ended 31 December 2022 (the Report), and the selected Global Reporting Initiative Sustainability Reporting Standards disclosures (Selected GRI Disclosures) as identified below.

### Conclusion

Based on the evidence we obtained from the procedures performed as described in the *Auditors' Responsibilities* section of our report, nothing has come to our attention that causes us to believe that:

- (a) 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.
- (b) 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
- (c) 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
Energy	GRI 302-1 (2016)	Energy consumption within the organisation 498,244 gigajoules (GJ)
	GRI 302-2 (2016)	Energy consumption outside of the organisation 76,694 gigajoules (GJ)
	GRI 302-3 (2016)	Energy intensity 214 GJ per \$million revenue (for energy consumption within the organisation)
	GRI 302-4 (2016)	Reduction of energy consumption Decreased by 3.9% (from 2021)
Water Use	GRI 303-3 (2018)	Water withdrawal 9.57 megalitres
Emissions	GRI 305-1 (2016)	Direct (Scope 1) GHG emissions 1,187 tCO <sub>2e</sub>
	GRI 305-2 (2016)	Energy indirect (Scope 2) GHG emissions (location-based) 55,661 tCO <sub>2e</sub>
	GRI 305-2 (2016)	Energy indirect (Scope 2) GHG emissions (market-based) 50,079 tCO <sub>2e</sub>
	GRI 305-3 (2016)	Other indirect (Scope 3) GHG emissions 17,615 tCO <sub>2e</sub>
	GRI 305-4 (2016)	GHG emissions intensity 22.0 tCO <sub>2e</sub> per \$million revenue
	GRI 305-5 (2016)	Reduction of GHG emissions Decreased by 8.4% (from 2021 baseline)
Waste	GRI 306-3 (2020)	Waste generated <b>Internal e-waste recycled:</b> 144.9 tonnes <b>Paper recycled:</b> 1.5 tonnes <b>Non-hazardous general waste disposed:</b> 18.5 tonnes
	GRI 306-4 (2020)	Waste diverted from disposal <b>Internal e-waste recycled:</b> 144.9 tonnes <b>Paper recycled:</b> 1.5 tonnes

# Sustainability Report

Material Topic	GRI Standards topic-specific disclosure	Selected GRI Disclosures						
Employment	GRI 401-1 (2016)	New employee hires and employee turnover	<b>Gender</b>		<b>Male</b>	<b>Female</b>	<b>Total</b>	
			Number of new hires	263	203	466		
			Rate of new hires	26%	28%	27%		
			Number of turnovers	202	178	380		
			Rate of turnover	20%	25%	22%		
			<b>Age Group</b>		<b>&lt;30</b>	<b>30-50</b>	<b>&gt;50</b>	<b>Total</b>
			Number of new hires	125	306	35	466	
			Rate of new hires	73%	24%	13%	27%	
			Number of turnovers	79	272	29	380	
			Rate of turnover	46%	21%	10%	22%	
Talent Management	GRI 404-1 (2016)	Average hours of training per year per employee			<b>Male</b>	<b>Female</b>		
			Senior Management	9.49	12.05			
			Middle Management	12.35	15.10			
			Function Employees	5.95	7.71			
			Overall	7.90	9.26			
Equality, Diversity, and Inclusion	GRI 405-1 (2016)	Diversity of governance bodies and employees	<b>Gender</b>		<b>Male</b>	<b>Female</b>		
			Board	75%	25%			
			Senior Management	68%	32%			
			Middle Management	68%	32%			
			Function Employees	55%	45%			
			Overall Workforce (excl. Board)	58%	42%			
			<b>Age Group</b>		<b>&lt;30</b>	<b>30-50</b>	<b>&gt;50</b>	
			Board	0%	8%	92%		
			Senior Management	0%	63%	37%		
			Middle Management	2%	75%	23%		
			Function Employees	13%	74%	13%		
			Overall Workforce (excl. Board)	10%	74%	16%		
			<b>Ethnic Group</b>		<b>Chinese</b>	<b>Malay</b>	<b>Indian</b>	<b>Others</b>
			Board	42%	0%	25%	33%	
			Senior Management	68%	0%	15%	17%	
			Middle Management	78%	1%	12%	9%	
			Function Employees	69%	10%	6%	15%	
Overall Workforce (excl. Board)	71%	7%	8%	14%				
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	1.206			
			Middle Management	1	1.021			
			Function Employees	1	1.011			
			Overall	1	1.175			

Material Topic	GRI Standards topic-specific disclosure	Selected GRI Disclosures	
Workplace Health and Safety	GRI 403-9 (2018)	Work-related injuries	
		<b>Workplace Health and Safety</b> 2022	
		Number of Workplace Accidents	
		Workplace Injury Frequency Rate	
		<b>Workplace Injury Severity Rate</b> 2022	
		Number of Man Days Lost	
		Workplace injury severity rate	
		<b>Workplace Injury Incidence Rate</b> 2022	
		Number of Workplace Injuries	
		Workplace injury incidence rate	
		<b>Workplace Fatalities</b> 2022	
		Number of Workplace Fatalities	
<b>Occupational Disease</b> 2022			
Number of Occupational Disease Incidences			
Equality, Diversity & Inclusion	GRI 406-1 (2016)	Incidents of discrimination and corrective actions taken	<b>Incidents of discrimination and corrective actions taken:</b> 0 cases
Procurement practices	GRI 204-1 (2016)	Proportion of spending on local suppliers	<b>Share of local suppliers as a percentage of total supplier payments:</b> 82% <b>Proportion of local suppliers as a percentage of total suppliers:</b> 84%

### Basis for Conclusion

We conducted our limited assurance engagement in accordance with Singapore Standard on Assurance Engagement 3000 *Assurance Engagements other than Audits or Reviews of Historical Financial Information* (SSAE 3000). Our responsibilities are further described in the *Auditors' 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 Control 1 and, accordingly, maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

### Responsibilities of Management

Management is responsible for:

- + 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;
- + establishing and maintaining appropriate internal control systems that enable the preparation and presentation of the Report and the selected GRI disclosures that are free from material misstatement, whether due to fraud or error;
- + 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.



# Sustainability Report

## Auditors' Responsibilities

Our responsibility is to carry out a limited assurance engagement in accordance with SSAE 3000 and to express a conclusion based on the work performed. SSAE 3000 requires that we plan and perform the engagement to obtain limited assurance about whether the Report is free from material misstatement. The extent of our work performed depends on our professional judgement and our assessment of the engagement risk.

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:

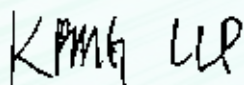
- + Inquiries of management to gain an understanding of the Company's processes for determining the material issues for the Company's key stakeholder groups;
- + Interviews with relevant staff at the Company and selected business unit level concerning sustainability strategy and policies for material 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  
6 March 2023