EMPOWER EVERY GENERATION

SUSTAINABILITY REPORT 2022

Singtel

About this report

This is the eighth annual Group Sustainability Report (SR2022) by Singapore Telecommunications Limited (Singtel) for the financial year 1 April 2021 to 31 March 2022 (FY2022), and published on 30 June 2022. It covers the Group's strategies, initiatives and performance in relation to Environmental, Social and Governance (ESG) topics of our operations in Singapore, where Singtel is headquartered, and Optus, our wholly-owned subsidiary in Australia. All data, statistics and targets are in relation to the Group's operations in Singapore and Australia unless stated otherwise. Group-level figures are in Singapore dollars, using the exchange rate of A$1 to S$0.99722.

No restatements were made from the previous report except electricity and Scope 2-related figures for Singtel and Singtel Group in 2021 in the Environmental Performance Indicators (page 25-26). We however retained key methodologies on our stakeholder engagement and materiality to provide context on our ambitions and actions that have not changed since our strategic reset in 2021. During the year, we made investments in four IT and digital services companies in Australia. There were no significant changes to our supply chain.

This report captures the highlights and achievements of FY2022 and should be read together with the Singtel Annual Report 2022, Singtel Sustainability and SR2022 webpages, and Optus Sustainability Report, which contain our corporate sustainability information and additional annexes like the GRI Index and EY assurance statement, as well as our inaugural standalone TCFD Report 2022.

GRI, SASB and TCFD
This report has been prepared to be in line with the updated GRI Universal Standards 2021. It complies with SGX Listing Rule 711 (A) and (B) and incorporates SGX's enhanced disclosures on climate-related information which was released in 2021 where applicable. It also contains our disclosures recommended by SASB based on the Telecommunications Services (Industry Standard, Version 2 18-10).

We endorsed the TCFD framework in 2017 and our TCFD Report 2022 presents a detailed discussion of our approach to climate-related governance, strategy, risk management, metrics and targets.

External Assurance
We have engaged Ernst & Young LLP to independently assure a selection of our key ESG disclosures. The independent limited assurance statement (page 67-73) can be read here.

The assurance statement has details on material topics assured, assurance standards used and our procedures, methodologies and assumptions.

Feedback
We are fully committed to listening to our stakeholders and we welcome feedback on this report and any aspect of our sustainability performance. Please address all feedback to the Group Chief People and Sustainability Officer at sustainability@singtel.com.

KEY HIGHLIGHTS FY2022

Achieved **A- score** in CDP 2021

Piloted an **internal carbon price** at **S$50 per tonne** of CO₂e on selected Singapore energy-intensive investments

Completed nationwide **TCFD** analysis for Singapore and Australia

Achieved improvement in GHG emissions intensity of **0.035 tCO₂e/TB** from 0.045 tCO₂e/TB last year

APCO Award for our Optus sustainable packaging achievements and efforts in the telecommunications sector for the 5th consecutive year

Achieved **7.2%** Scope 1 and 2 absolute GHG emissions reductions from last year through energy efficiency initiatives and purchase of Renewable Energy Certificates

Recognised by the 2022 **Bloomberg Gender Equality Index** for the 4th consecutive year

Published our Singtel Group **Human Rights Statement**

Launched **iCare** programme to Singapore employees to raise greater awareness of the importance of mental well-being

Training investment of **S$19.2** million in Singapore and Australia, with **S$7.8** million focused on future skills

Social Enterprise Champion of the Year at the President's Challenge Social Enterprise Awards 2021

Community investment of **S$33.4** million in Singapore and Australia

Singtel Group's Digital Enablement programmes have supported **>740,000 beneficiaries** since 2015

Singtel Touching Lives Fund has raised **>S$50 million** since it was set up in 2002

Launched **GOMO Donate Your Data** and **Optus Donate Your Device**

Completed and externally assured our **Scope 3** baseline assessment of all **15 categories** indirect GHG emissions in accordance with the Greenhouse Gas Protocol

Launched our **5G standalone network,** which offers customers early access to the most advanced 5G connectivity

Successful completion of sustainability-linked financing:

S$750 million sustainability-linked loan in April 2021

Launched Singtel Group **Sustainability-Linked Bond Framework**, the first such framework for a telco in Asia Pacific

A$300 million Optus sustainability-linked bond, the first telco in Australia to do so

About this Report Contents

Our Sustainability Approach

Climate Change & Environment

People & Future of Work

Community Impact

Sustainable Value Creation

Appendix

Message from Chairman and Group CEO

2021 was a year of transformation and continuous adaptation. While competitive pressures accelerated in our key markets of Singapore and Australia, COVID-19 made the operating and business environment all that more challenging. As lingering COVID risks remain, we are also seeing the Ukraine conflict impact the global economy, people, businesses and supply chains.

In these tumultuous times, our new corporate purpose, Empower Every Generation, has guided us as we move beyond the current disruption and reinvent ourselves for the 5G era. Introduced last October alongside a set of refreshed core values, it underpins our strategy and reflects our focus on harnessing technology to empower people and businesses and create a more sustainable digital future.

Since we embarked on a reset of our business priorities as well as purpose, we have doubled down on efforts to build our digital core, optimise capital use and unlock value from our assets. We further built on our 5G leadership to reinvigorate our consumer and enterprise businesses, which will place us at the front and centre of this hyper-connected world. Our strategic reset also elevates the importance of people and sustainability, ensuring no one gets left behind, and sustainability is integrated across our network infrastructure and operations. We want to create sustained, purpose-driven impact and value as we embark on our growth areas.

In this eighth Singtel Group Sustainability Report 2022, endorsed by the Singtel Board and Management, we highlight efforts taken as we embraced our new purpose and sustainability framework and executed our digital strategy, and take stock of our progress and achievements against our five-year sustainability 2025 targets.

Taking climate action

The Singtel Group continues to enhance and embed climate action and deliverables into our business plans. We were the first telco in Asia Pacific to establish a sustainability-linked bond framework in October last year to further align our financing approach with our sustainability strategy. The framework outlines individual Key Performance Indicators (KPIs) and Sustainability Performance Targets (SPTs) that are core to our business, such as emissions reduction targets by 2025, which line up to our previously approved 2030 SBTi targets to achieve net-zero emissions by 2050. These KPIs are also aligned to our management's short and long-term incentive plans. Sustainability-linked financing, such as the A$300 million Optus sustainability-linked bond issued in November last year, provides investors with the opportunity to participate in our sustainability journey.

During the year, we also mobilised key business units including Networks, Property and Finance to further minimise our environmental footprint.

In February this year, we announced that we will be redeveloping the Comcentre building, our corporate headquarters since 1979. The building design and construction of this site will be guided by sustainability principles and an end-to-end carbon neutral development, in support of our vision to forge a greener, sustainable future.

Renewable energy is an area of focus for the Singtel Group, and we appointed a sub-committee within our Management Committee to oversee our renewable energy and decarbonisation strategy. During the year, we awarded a contract for onsite solar photovoltaic deployment at up to eight of our Singapore facilities. The sites, which will be operational by end-2022, will bring our renewable energy in Singapore to ~5 GWh per annum. Energy sources for our Australian operations will also be backed by 100% renewable energy by end-2025. In addition, we retired 44 GWh of renewable energy certificates to lower our Scope 2 emissions across the Group, with more renewable plans in the pipeline to achieve our emissions targets.

To ensure the business continues to reduce emissions from our operations and factor in externalities such as carbon taxes, we piloted an internal carbon price at S$50 per tonne of carbon dioxide, which was applied to selected energy-intensive projects and business case analyses for our Singapore operations.

Climate risk assessment is an important part of our environmental strategy and the publication of the Group's inaugural Task Force on Climate-related Financial Disclosures (TCFD) report demonstrates our commitment to provide transparency to stakeholders on how we are managing climate risk and addressing the transition to net-zero within our business. Singtel is one of a handful of progressive Singapore companies to publish a TCFD report, which includes findings from our detailed study on the physical and transition risks from different climate change scenarios in both Singapore and Australia and their financial impact on our business. You can read the report **here**.

Community impact

Community impact is a key pillar of our sustainability framework, and we have built on our efforts to do more to support our communities.

In support of our customers' interest to engage in both social and environmental actions, we built on the success of Optus' unique Donate Your Data programme that enables our customers to provide vulnerable people with mobile data access. During the year, we introduced a new Donate Your Device programme that provides vulnerable segments in Australia with devices.

We also extended Donate Your Data to Singapore through our all-digital mobile brand GOMO. We launched this in March 2022 and engaged our GOMO customers to contribute their unused data to support digitally excluded seniors in Singapore, and will expand this to the rest of our Singtel mobile customers. Donate Your Data complements our Singtel Digital Silvers programme, where our staff volunteers teach seniors how to go online safely.

Supporting our people, creating sustainable value

The pandemic has accentuated the importance of employee well-being and staying resilient. Our priority is to help our people remain healthy, both physically and mentally, at work and home. We introduced blended ways of working (B-WoW) during the year to allow more flexibility in work arrangements for our people, even in a post-pandemic world.

Our people are critical to Singtel's success, and we instil positive qualities and high ethical standards among them through our six refreshed core values. These values reflect our commitment to excellence, innovation and sustainability and serve as the foundation for how we operate our business as we harness the power of technology to enrich the lives of our customers and the broader community. We want our people to develop and grow with the company, advocating for our stakeholders as responsible corporate citizens and sustainability stewards.

Our first Singtel Group Human Rights Statement published in November 2021 reaffirms our commitment to upholding and protecting the human rights of all individuals through a culture of respect, trust and inclusion in our organisation and supply chains, and to doing no harm to any individual or community.

Keeping the momentum

The Singtel Group Sustainability Report 2022 is an opportune time to take stock of how far we have come. Our disclosures published in the report are testament to our good progress and achievements as we continue to be a responsible sustainability steward that positively impacts the diverse communities in the markets where we operate.

On behalf of the Singtel Board and Management, we thank you for your support.

Lee Theng Kiat
Chairman

Yuen Kuan Moon
Group CEO

01

Our Sustainability Approach
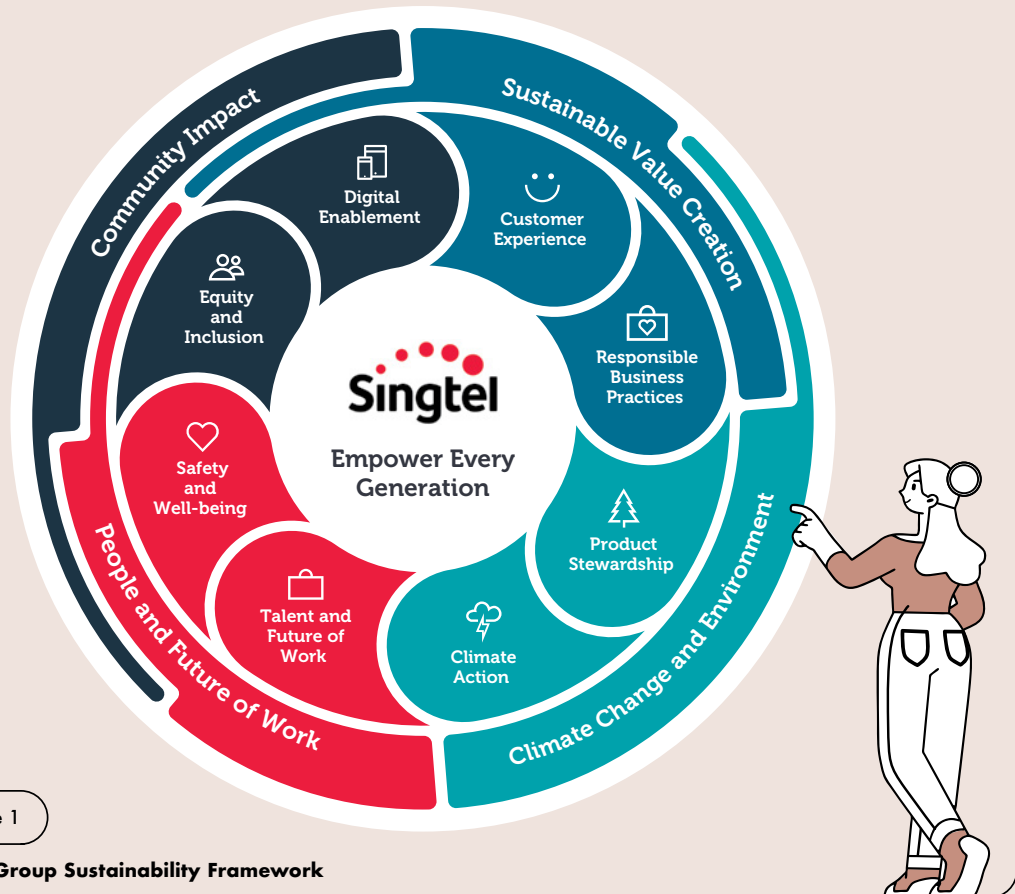
Figure 1

Singtel Group Sustainability Framework

As Asia's leading communications technology company, the Singtel Group aims to create sustainable value for all our stakeholders. We want to attract, develop and retain our people, connect and enrich the lives of our customers and community through innovation, and create a positive impact on our environment.

Under our strategic reset last year, we refreshed our sustainability framework comprising four sustainability pillars of Climate Change and Environment, People and Future of Work, Community Impact and Sustainable Value Creation to better align sustainability with our business strategies and how we engage our key stakeholders (see Figure 1).

Our Group purpose, Empower Every Generation, guides Singtel's sustainability framework and our four sustainability pillars (see Figure 2).

Underpinning this is our focus on empowering our stakeholders, including our employees, customers, communities and suppliers, to create sustainable value and an equitable and inclusive future for all. This is supported by our six corporate values: Cultivate a growth mindset; Operate with integrity; Make customers first; Maximise teamwork; Innovate with a challenger spirit; and Take ownership, which form the mnemonic COMMIT, demonstrating our commitment to excellence, innovation and sustainability.

Our Group purpose and values serve as a compass to guide our strategy, governance, programmes and performance so that we deliver long-term business growth and value creation for stakeholders while delivering purpose and care for our people and the environment.

At the workplace, we want to empower our people to create sustainable and positive impact through the work they do. These refreshed core values will guide their daily
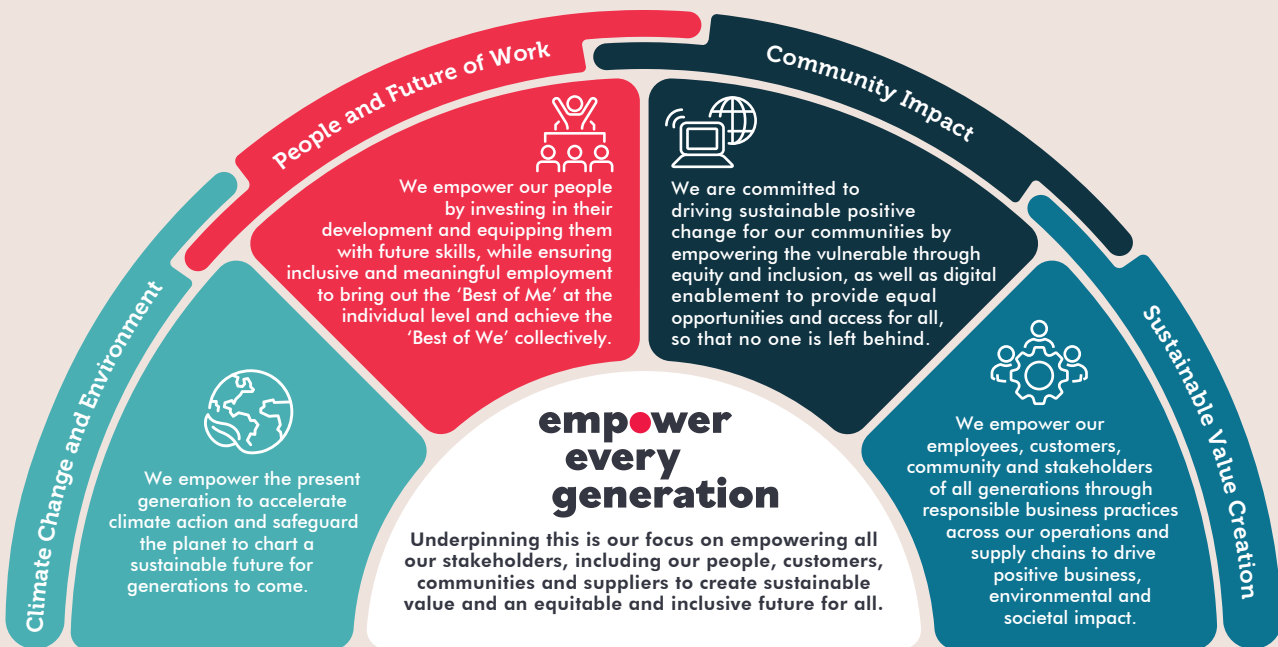
Figure 2: Singtel Group Purpose and Sustainability Framework

actions and support the development of a purpose-driven culture. For example, in alignment to our core value of operating with integrity, our people and workforce across our value chain are expected to behave responsibly and ethically. This is critical for building trust with stakeholders like customers, partners, communities and fellow colleagues. We also cultivate a growth mindset among our people by encouraging them to keep on learning so that they can perform effectively while adapting to the complexities in this ever-changing operating environment.

Our sustainability framework supports the ten principles of the United Nations Global Compact (UNGC) which Singtel has been a signatory since 2007, our priority 2030 UN Sustainable Development Goals (SDGs) and the global and local initiatives that Singtel Group is committed to. For example, we are a member of The Valuable 500 and a founding member of the Singapore Business Network on DisAbility (SBNoD) to advance the equitable inclusion of persons with disabilities.

STAKEHOLDER ENGAGEMENT AND MATERIALITY

We engage our internal and external stakeholders through regular dialogue on an extensive range of topics using various platforms and feedback mechanisms. This is on top of our regular interim and formal materiality assessments. With a deep understanding of all our stakeholders – their changing needs and interests as

well as emerging concerns – we ensure the relevance of our sustainability strategy and programmes to deliver the intended outcome and impact. For example, as Environmental, Social and Governance (ESG) considerations become increasingly important investment criteria for investors, we engage them regularly to communicate our sustainability goals, plans and progress.

These sessions help us understand their views on sustainability and how it influences their investment decisions. For example, our investors are very interested to understand what Singtel is doing to address environmental impact and climate change, data protection, sustainable supply chain management and digital inclusion for underserved communities.

Through our sustainability-linked financing, we also give investors an opportunity to participate in our sustainability journey. More details of our stakeholder engagement and expectations can be found on our Sustainability **webpage**.

We conducted our last formal stakeholder engagement and materiality assessment in 2021 across Singapore and Australia. This exercise identified a list of material topics and issues that our stakeholders are most concerned with (see Figure 3). These key topics formed our areas of focus from FY2021 to FY2025.

Figure 3: Singtel Group materiality matrix

Materiality matrix with axes "Importance to Stakeholders" (vertical: Monitor and manage, Ongoing importance, Priority) and "Significance to Singtel Group" (horizontal: Monitor and manage, Ongoing importance, Priority).

Priority (top right):
- Climate Change and Carbon
- Climate and Infrastructure Resilience
- Talent Attraction and Retention
- Talent Development and Future Skills
- Employee Safety and Well-being
- Data Privacy and Cyber Security
- Ethical and Fair Business Practices
- Innovation
- Customer Satisfaction
- Sustainable Supply Chain Management

Ongoing importance (middle):
- Anti-Bribery and Corruption
- Community Resilience and Disaster Response
- Online Safety
- Waste Management
- Good Labour Practices
- Diversity and Inclusion

Monitor and manage (lower left):
- Education and Employability
- Water Management
- Product Health and Safety

Significance to Singtel Group

Legend:
- Climate Change and Environment
- People and Future of Work
- Community Impact
- Sustainable Value Creation

Materiality methodology overview

Our materiality assessment aimed to identify and assess the ESG issues, risks and opportunities in areas that mattered most to our stakeholders and the Singtel Group. It adopted a rigorous data-driven approach that evaluated both internal and external perspectives, using extensive landscape research and in-depth stakeholder insights, and involved four phases:

1. Risk sensing

We analysed a wide range of global and industry studies on current and future sustainability trends to identify long-term sustainability success factors. This included literature guidance from internationally recognised standards and resources like the Science Based Targets Initiative (SBTi) and the GSMA Sustainability Assessment Framework.

We conducted competitive benchmarking of global telecommunication peers' sustainability goals and supported SDGs.

2. Stakeholder engagement

We obtained a detailed view of the ESG topics our stakeholders expected of the Singtel Group through direct engagement and feedback. We consulted close to 2,500 individuals from ten key stakeholder groups through online surveys and one-on-one interviews. Both internal and external stakeholders also evaluated our ESG performance and suggested areas for improvement.

3. Materiality workshop

The risk sensing and stakeholder engagement identified 19 material topics which were grouped into four main sustainability themes. These were validated at a materiality workshop with the sustainability teams at Singtel and Optus to ensure topic relevance and significance, and subsequently with the Singtel Management Committee and Board. In addition, we conducted supply chain sustainability and organisational life cycle assessments to identify direct and indirect environment and social impact as well as risks and opportunities across our business operations and value chain.

4. Material topic prioritisation

The 19 topics were plotted onto a materiality matrix based on the importance to stakeholders and significance to the Singtel Group. This gave us strategic clarity in responding to opportunities and risks, which we grouped into three clusters: Priority, Ongoing importance, Monitor and manage.
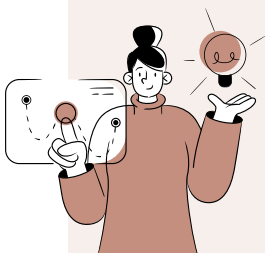
SUSTAINABILITY GOVERNANCE AT SINGTEL

Singtel Group is committed to implementing an effective governance structure to ensure that the entire business is aligned to sustainability and creating positive, long-term impact, guided by our Group purpose and sustainability framework. The various committees, including Board committees, oversee various aspects of our sustainability efforts to ensure that our actions are robust and rooted in integrity (see Figure 4).

Singtel Group complies with SGX's new requirement for Directors to undergo mandatory sustainability training. Some of our Board of Directors have attended and the rest will be attending sustainability training courses on ESG Essentials and Sustainability E-Training for Directors offered by the Singapore Institute of Directors and Institute of Singapore Chartered Accountants respectively.

Management ESG KPIs

Given that many sustainability issues cannot be addressed overnight, our Top Executives have collective and common ESG targets representing 20% of their long-term incentive plans. These targets cut across key sustainability themes like climate change and environment as measured by CDP, reputation and responsible business practices as measured by MSCI, community impact in terms of our digital inclusion and enablement targets, and talent and people including diversity and talent retention. They include specific, time-bound key performance indicators (KPIs) such as reaching 32% of female employees in management by FY2025. This is to advance the sustainability agenda and embed deeper accountability and ownership across the company.

In addition, our Management Committee members have related ESG targets for their short-term incentive plans, which comprise 10% of their annual balance scorecard performance. While they relate to common sustainability themes, the focus and weightage may vary for each executive given their different levels of influence and impact on these ESG KPIs.

The Management Committee's KPIs are also cascaded down to their business units, departments and employees, whose performance bonus and other incentives are tied to their KPIs. The Singtel Board is the highest governance body. For more information on our Board and Board Committee roles in sustainability governance, refer to our **website**.

Figure 4: Singtel Group sustainability governance structure
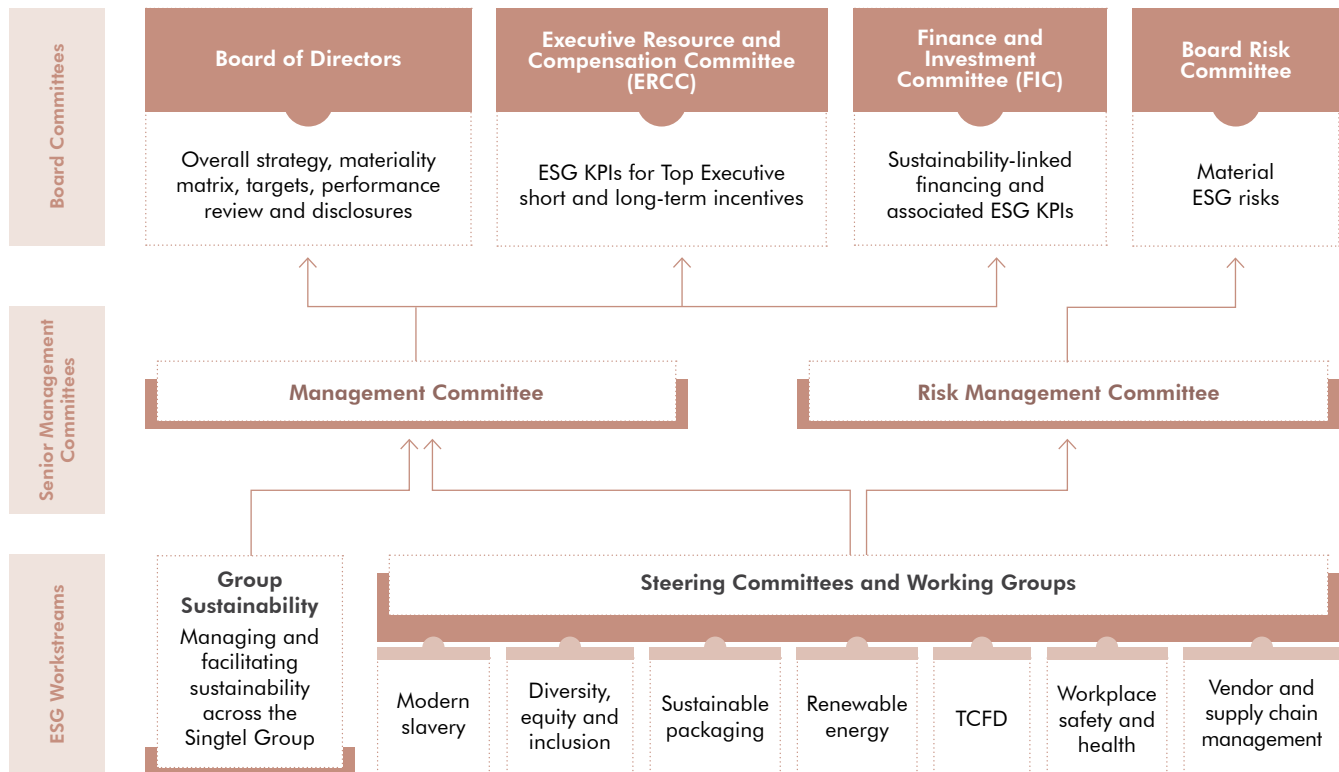
2025 SUSTAINABILITY GOALS AND PROGRESS

We have set five-year 2025 sustainability targets for these ten most material topics for the Singtel Group and we report our plans, achievements and progress towards these targets in our annual sustainability reports. We also disclose our efforts for the remaining nine material topics in the reports.

Material Topic	2025 Targets	FY2022 Progress
Climate Change and Environment		
Climate Change and Carbon	Reduce absolute Greenhouse Gas (GHG) emissions by 25% for Scope 1 and 2 by 2025, using 2015 as baseline, in line with our 2030 SBTi targets and 2050 net-zero ambitions	494,680 tCO_2e GHG emissions in FY2022 (page 25) or 3.3% reduction from 2015 (page14). Reduced emissions intensity (tCO_2e/TB) by 22% from the prior year. Maintained A- in CDP 2021.
Climate and Infrastructure Resilience	Continue to invest in network adaptation and resilience, while disclosing long-term climate change risks and mitigation in line with the TCFD framework	Total capital investment of S$2.2 billion in our networks. Completed nationwide TCFD analysis for Singapore and Australia, with a standalone TCFD report published.
People and Future of Work		
Talent Attraction and Retention	Attrition of high performers at no more than 60% of normal attrition	58.9% of normal attrition rate in FY2022.
Talent Development and Future Skills	Training investment of S$90 million from 2021 to 2025	Training investment of S$19.2 million (page 35). Cumulative S$36 million of training investment since 2021.
Employee Safety and Well-being	Zero fatality Well-being score above 80%	Zero fatality in FY2022 (page 38). Well-being score of 82% as measured in annual Your Voice Survey (page 29).
Sustainable Value Creation		
Data Privacy and Cyber Security	Uphold the highest standards of customer data privacy protection and cyber security measures in adherence to data protection laws – Personal Data Protection Act (PDPA) in Singapore and the Privacy Act and Telecommunications Act in Australia – with zero major incident	We conduct our business in strict adherence to data protection laws in Singapore and Australia. There have been minor lapses due to IT, process or human errors. We continue to educate our employees, and improve practices and processes to reduce the recurrence of data breaches (page 49-51).
Ethical and Fair Business Practices	Uphold the highest standards of responsible business practices with no major controversies that result in regulatory fines, sanctions and/or doubled monthly customer churn rate	We strive to uphold the highest standards of responsible business practices. We did not have any major controversy during the year (page 52-54).
Innovation	Continue to develop new digital business and services to meet customers' changing needs	We continue to drive and embed innovation in our consumer, enterprise and digital businesses and operations, with 5G as an enabler for our customers, community and the environment (page 56-58).
Customer Satisfaction	Continue to uplift customer experience and remain as service provider of choice	We continue to lead in customer experience and maintain our market leadership position. As of March 2022, we were leading the market with our Net Promoter Score in Singapore (page 56).
Sustainable Supply Chain Management	No major human rights incident in our supply chain	We published the Singtel Group Human Rights Statement during the year, reaffirming our commitment to upholding and protecting the human rights of all individuals, including those in our supply chain. There were no human rights incidents in FY2022 (page 54-56).

We also mapped our ten priority material topics and their relevance within our value chain, according to the impact we contributed or caused. This allowed us to visualise areas of impact that we could make within our business and supply chain. We also undertook a Sustainable Development Goals (SDGs) prioritisation exercise for Singtel Group using a weighted scoring system. The six priority SDGs (see Table 1) reflect where we can best contribute and create impact, aligned to our key focus areas and programmes.

Building a sustainable future for all requires the commitment and effort of all stakeholders in the ecosystem. SDG 17 – Partnerships for the Goals – therefore underpins our sustainability strategy as we seek to collaborate with our stakeholders to create shared value and positive impact.

Table 1: Six priority UN SDGs for Singtel Group

UN SDGs	Description	Singtel Group's Position	Examples of Singtel Group's Efforts
Goal 3	**Goal 3: Good Health and Well-Being** Ensure healthy lives and promote well-being for all at all ages	The Singtel Group strives to ensure good physical and mental health for our people in the workplace and in our community, including online safety and cyber wellness	• Launched the iCare programme to our Singapore employees to raise greater awareness of the importance of mental well-being • Continued with our Optus Digital Thumbprint programme and partnered leading organisations like DQ Institute and TOUCH on outreach to students and parents on staying safe online
Goal 8	**Goal 8: Decent Work and Economic Growth** Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	The Singtel Group is committed to developing our people and the community and creating a vibrant work environment across our global operations that enables individual, business and market success	• Formalised and published the Singtel Group Human Rights Statement, covering critical human rights topics including child rights • Partnered the Union of Telecom Employees (UTES) in Singapore and enhanced employees' remuneration and benefits packages, as well as worked closely through the Company Training Committee to accelerate reskilling of unionised employees and co-create pathways to help them transform their roles • Renegotiated the Optus Employment Partnership Agreement (EPA) with enhancements focused on diversity • A founding member of the Singapore Business Network on DisAbility and partnered Australian Network on Disability in Australia to advance equitable employment opportunities for persons with disabilities and improve staff awareness
Goal 9	**Goal 9: Industry, Innovation and Infrastructure** Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation	The Singtel Group innovates continuously to bring the best services to our customers and collaborates with change makers to build an effective and sustainable ecosystem	• Continued to support and empower impact start-ups that leverage technology to address social and environmental issues in the community through Singtel Group Future Makers, our regional social innovation accelerator and capacity building programme • Invested in our 5G network and the Optus Living Network
Goal 11	**Goal 11: Sustainable Cities and Communities** Make cities and human settlements inclusive, safe, resilient and sustainable	The Singtel Group leverages our ICT competence to develop solutions that improve quality of living and societal inclusion, and focuses on building a resilient network infrastructure	• A founding member of the Australian Business Roundtable for Disaster Resilience and Safer Communities (ABR) to build nation's climate resilience and helped to shape Australia's first National Disaster Risk Reduction Framework • Supported small and medium enterprises to transform their operations with digital solutions in order to operate with agility, efficiency and productivity
Goal 12	**Goal 12: Responsible Consumption and Production** Ensure sustainable consumption and production patterns	The Singtel Group actively monitors and improves our resource and waste practices to increase circularity in our business operations and supply chain	• Submitted our inaugural report on packaging, including plans for reducing, reusing and recycling, as part of the National Environment Agency's Mandatory Packaging Reporting requirements in Singapore • Committed to the principles of the Australian Packaging Covenant Organisation since 2007
Goal 13	**Goal 13: Climate Action** Take urgent action to combat climate change and its impacts	The Singtel Group is committed to minimising our environmental footprint in our business operations and value chain and meet our carbon reduction targets	• Played an active role on the GSMA Board and its Climate Action Committee to lead the industry in embarking on a landmark science-based sector-specific decarbonisation pathway to reduce GHG emissions and achieve net-zero emissions by 2050 • Completed nationwide TCFD analysis for Singapore and Australia, with a standalone TCFD report published

02

Climate Change and Environment
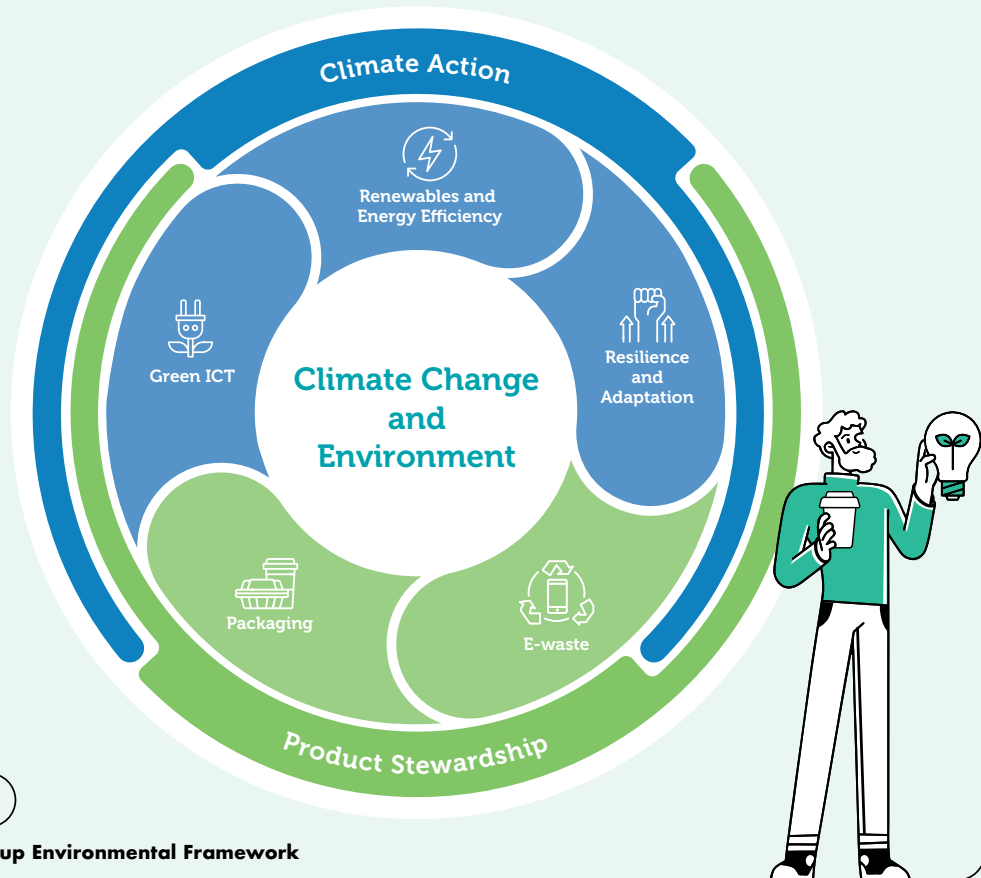
Figure 1

Singtel Group Environmental Framework

The Singtel Group is committed to minimising our environmental impact and building operational resilience to deliver long-term value to our business, stakeholders and communities. Figure 1 outlines the Singtel Group Environmental Framework. We are also guided by our Environmental Management System and Environment Policy to manage and minimise our impact. Please refer to our **website** for more information.

During the year, we also aligned our approach with our Group purpose and mapped the values and behaviours against our sustainability framework. We want to empower the present generation to accelerate climate action and safeguard the planet to chart a sustainable future for generations to come. We aim to achieve the smallest environmental

footprint and support communities adversely affected by climate-related disasters, collaborating with our partners and stakeholders in the ecosystem.

The world continues to witness the effects of climate change in the form of frequent extreme weather events like droughts, floods and heatwaves. Concerned with the reliability and resilience of our network infrastructure, our stakeholders are interested in our network adaptation measures for mitigating these risks.

This is particularly relevant in Australia which is prone to natural disasters. We are committed to ensuring that our network infrastructure remains resilient before and during a severe weather event. We also provide additional support to affected customers and communities.

About this Report Contents

Our Sustainability Approach

Climate Change & Environment

People & Future of Work

Community Impact

Sustainable Value Creation

Appendix

Maximising value creation with Singtel Group core values

Values		Climate Change and Environment
C	Cultivate a Growth Mindset	We learn, unlearn and relearn in an everchanging environment brought about by climate change, which poses increasing complexities and uncertainties.
O	Operate with Integrity	We operate sustainably and with integrity, as we have a moral obligation to meet the needs of the present generation without jeopardising the ability of future generations to meet their own needs.
M	Make Customers First	We empower our customers to engage in positive environmental actions, and build resilience into our networks and operations to keep people connected and safe during times of natural disasters.
M	Maximise Teamwork	We collaborate among our business units and work closely with partners in our ecosystem to minimise our environmental impact.
I	Innovate with a Challenger Spirit	We recognise that innovation is critical for the transition to net-zero and the importance of evaluating our business model, value proposition and operational practices to manage climate risks and opportunities through our decarbonisation and adaptation strategy.
T	Take Ownership	We are committed to minimising our environmental footprint and building operational resilience for the long-term benefit of our business, communities and customers.

For example, during the year, we responded promptly to the extensive floods that affected New South Wales and Queensland to maintain the availability of our network. Where our mobile sites were affected, we worked swiftly to restore services and deployed our portable infrastructure to boost mobile coverage at areas such as evacuation centres. We also provided additional free mobile data to customers in affected areas, set up a dedicated support hotline and contributed to flood relief efforts.

We recognise stakeholders' concern with our greenhouse gas (GHG) emissions from powering communication and connectivity through our telecommunications network and data centres. Hence we are putting a strong focus on reducing emissions through energy efficiency initiatives and are actively sourcing electricity that is backed by renewable energy sources and attributes.

We pay strong attention to how we manage our waste. For our business, the biggest waste stream is e-waste given the increased use of digital devices driven by ICT, IoT solutions and the pandemic. With heightened expectations from stakeholders on resource optimisation, companies are increasingly required to ensure product stewardship from 'cradle to cradle', that is, upstream resource to end-of-life management and/or beginning of new life with the aim of improving circularity.

The subsequent sections describe how we intend to meet these expectations and ambitions.

CLIMATE ACTION

The topic of climate change and environment is an important agenda for the Singtel Group. We have been refining our approach in tackling both risks and opportunities of climate change over the years.

Since 2017, our climate strategy and targets have been developed and aligned with internationally recognised frameworks such as Task Force on Climate-related Financial Disclosures (TCFD) and the Science-based Targets initiative (SBTi). The various studies, analyses and exercises that we have conducted have been key to guiding our strategy in managing these risks and opportunities as the global climate agenda evolves (see Figure 2 on the next page).

We recognise the importance of communicating how we manage our climate-related risks and opportunities to maintain stakeholder trust and confidence. In 2017, we endorsed the TCFD framework which aims to help financial institutions and investors understand the financial implications of climate risks on businesses. We recently completed our climate scenario analysis as part of our TCFD efforts and have published our inaugural standalone TCFD Report 2022.

In this section, we articulate our efforts to support our vision to drive long-term business environmental sustainability through our climate action plan (see Figure 3 on the next page).

Figure 2: Singtel Group climate action journey towards net-zero by 2050

FY2015
Climate change identified in Singtel Group's stakeholder engagement and materiality review

FY2016
Life Cycle Assessment (LCA) performed to advise on material environmental issues in our extended value chain

FY2017
Climate change rose in impact and importance in stakeholder and materiality assessment

FY2018
Among first companies globally to endorse the TCFD Framework

FY2018
Singtel Group's science-based emissions targets approved in October 2017, first in Asia ex-Japan

FY2020
• Only Southeast Asian company among a pioneer group of 28 global companies in July 2019 that committed to keeping global temperature increase within 1.5°C and net-zero by 2050   • Signed our first renewable energy Power Purchase Agreement (PPA) for our Singapore operations

FY2021
Completed TCFD pilot study of physical and transition climate risks of our operations in northern NSW, Australia

FY2022
• Completed our first physical and transition risks TCFD climate scenario analysis for our Singapore and Australia operations   • Published our inaugural standalone TCFD Report 2022   • Developed our full Scope 3 indirect GHG emissions inventory and baseline for our operations in Singapore and Australia   • Piloted Internal Carbon Pricing in Singapore with four projects   • Launched Singtel Group's first sustainability-linked loan, the largest Singapore-dollar denominated loan at that time

FY2030
SBTi target to reduce absolute Scope 1 and 2 GHG emissions by 42%, and Scope 3 by 30% from 2015 baseline

FY2050
Towards net-zero by 2050 in support of GSMA's pathway for the ICT and mobile industry

FY2015 ****** ****** FY2020 FY2021 FY2022 ****** FY2030 ****** FY2050

Achieved A- leadership rating for CDP 2017-2021

Achieved absolute GHG emissions reduction of 3.3% in FY2022 compared to 2015

Developed our full Scope 3 indirect GHG emissions inventory and baseline for our operations in Singapore and Australia

Internal energy efficiency initiatives to level carbon growth

Ongoing design and implementation of infrastructure adaptation and resilience, including research for public policy advocacy

Completed our first physical and transition risks TCFD climate scenario analysis for our operations in Singapore and Australia

TCFD data collection, assessment, stakeholder discussions and disclosures

Acquiring renewable energy PPA

● Actions
● Achievements
● Aspirations

Figure 3: Singtel Group climate action plan

01	02	03
Manage GHG emissions in line with an ambitious science-based target pathway towards net-zero by 2050	**Link emissions to financing to quantify carbon and drive change in behaviour**	**Address physical risks through network adaptation and advocate for climate action with our stakeholders**

Our climate action journey during the year

Given the many interdependent yet specific dimensions of climate action, we took reference from the Corporate Climate Mitigation Blueprint published by WWF and BCG (2020) to guide us in developing our climate action plan.

1. Actively managing our value chain emissions towards net-zero

We have set rigorous corporate decarbonisation goals and targets. Our sustainability efforts are driven towards achieving a climate conscious future as we recognise our role and responsibility in tackling climate change. Our SBTi targets were aligned to a well below 2°C pathway when it was approved in October 2017 (see Figure 4). In May 2022, MSCI further assessed the implied temperature rise of Singtel Group's targets as 1.59°C.

Given that it has been five years and coupled with the updated Intergovernmental Panel on Climate Change (IPCC) report information, we are working on reviewing our SBTi targets for alignment with a 1.5°C pathway, the most ambitious goal of the Paris Agreement. In addition, we will develop a roadmap for our net-zero target by 2050 which we announced in 2019.

During the year, we completed our first full Scope 3 indirect GHG emissions assessment for FY2021 (see Figure 6 on next page) and FY2022. Our top 3 categories out of the 15 categories within Scope 3 indirect GHG emissions are purchased goods and services, capital goods and investments. Collectively they comprise 94.14% of our Scope 3 indirect GHG emissions (see Figure 5).

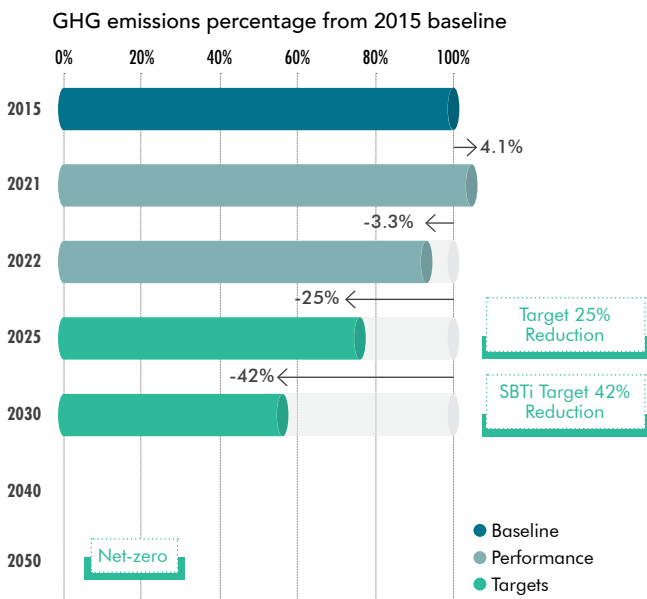**Figure 4: Singtel Group Scope 1 and Scope 2 baseline, performance and targets**

GHG emissions percentage from 2015 baseline

- Baseline
- Performance
- Targets

Figure 5: Singtel Group Scope 3 indirect GHG emissions profile FY2021

- **24.08%** Capital goods
- **9.76%** Investments
- **60.30%** Purchased goods and services
- **3.42%** Use of sold products
- **1.43%** Downstream leased assets
- **0.76%** Fuel and energy-related emissions
- **0.12%** Downstream transportation and distribution
- **0.06%** Employee commute
- **0.07%** Others
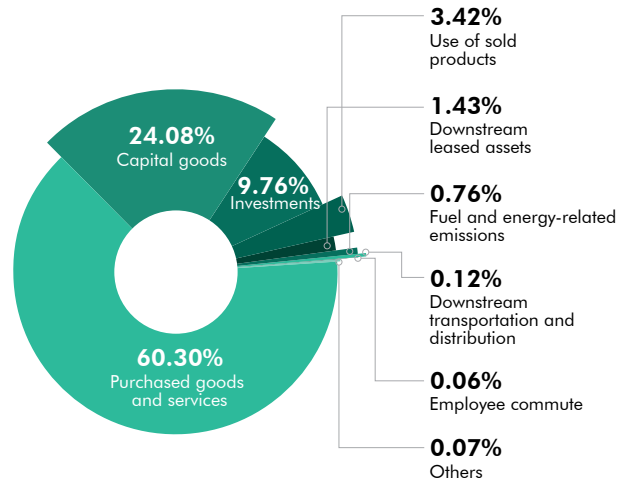
We will continue to refine our Scope 3 emissions through direct engagement with our key suppliers over the coming years.

Reduce value chain emissions in line with our SBTi 1.5°C ambition

We have developed the Singtel Group decarbonisation hierarchy to guide us in our reduction efforts. Our options and priorities for decarbonisation in order of preference are summarised in Figure 7 on page 17.

Through the various efforts outlined below, in 2022 we reduced absolute Scope 1 and Scope 2 emissions by 7.2% from 2021, and by 3.3% from our SBTi baseline of 2015. The following initiatives are undertaken.

a) Reducing Scope 1 emissions through electrification

Singtel embarked on an electrification journey during the year, as we committed to switching over 21 units of our Outside Plant Engineering fleet to electric vehicles, with the aim of converting the entire Singtel and NCS fleet of 187 vehicles progressively.

b) Improving energy efficiency

We continuously look at improving our energy use and efficiency. Several of our programmes in Singapore and Australia target energy reduction across key energy-intensive touch points, such as network infrastructure, data centres, satellite earth stations and office buildings (see Table 1 on page 16). More details on our approach can be found at our **website**.

Figure 6: Singtel Group GHG emissions inventory

CO_2 CH_4 N_2O HFCs SF_6 PFCs

Scope 1: Direct GHG emissions from our operations

Consumption of diesel from generators (corporate buildings, network stations and exchanges, and data centres)

Consumption of diesel or petrol from Singtel, NCS and Optus fleet

Consumption of refrigerant or other gases in our chillers or aircon units (corporate buildings, network stations and exchanges, and data centres)

Scope 2: Indirect GHG emissions from generation of electricity

Consumption of purchased electricity in our operations (corporate buildings, network stations and exchanges, and data centres)

Scope 3: Indirect GHG emissions from our value chain*

Cat 1: All upstream emissions of purchased goods and services by Singtel and Optus, based on key supplier spend that materially contributes to Category 1 emissions. It includes upstream transportation and distribution.

Cat 2: All upstream emissions of capital goods purchased by Singtel and Optus, based on key supplier spend that materially contributes to Category 2 emissions.

Cat 3: Emissions related to extraction, production and transportation of fuels and energy purchased and consumed by our operations

Cat 5: Emissions from third-party disposal and treatment of waste generated in our operations

Cat 6: Emissions from employees for business travel by air

Cat 7: Emissions from all modes of transport for employees between their homes and worksites

Cat 9: Emissions from transportation and distribution of sold products in vehicles and facilities not owned or controlled by Singtel Group

Cat 11: Emissions from the direct use-phase emissions of sold products over their expected lifetime

Cat 12: Emissions from the waste disposal and treatment of products sold by Singtel Group at the end of the sold products' life

Cat 13: Emissions mainly from the operations of assets that are owned by Singtel and leased to other entities that are not already included in Scope 1 or Scope 2 - tenants of our corporate buildings, network stations and exchanges, and data centres

Cat 14: Emissions from the operations of franchises - Reporting electricity consumption of Singtel Exclusive Retailers and Optus franchisees

Cat 15: Scope 1 and Scope 2 emissions based on equity ownership share of portfolio companies (reporting four Regional Associates, SingPost, NetLink NBN Trust and Intouch)

*Cat 4: Upstream transportation and distribution have been included in Cat 1 and Cat 2
Cat 8: Reported in Scope 1, 2 and Scope 3 Cat 1 and 2 emissions for any upstream leased assets
Cat 10: Not applicable as Singtel Group does not manufacture any products or sell products that require additional processing by the customer to use

Table 1: Energy saving efforts in Singapore and Australia

Programme	Nature of programme	Progress in FY2022
Replacing, overhauling, and optimising chillers and related equipment in Singapore	Over the years, we have been regularly replacing and overhauling chiller units and related Mechanical and Engineering (M&E) equipment at our exchanges and office buildings in Singapore, targeting those that have been in operation for 15 years or more. Our energy roadmap has been updated and extended until next year, and we will replace 28 units of older chillers and related M&E equipment located at our exchanges and office buildings.	**Estimated energy savings and GHG emissions avoidance:** To date, we have replaced 25 out of 28 chillers, with nine completed during the year. As part of the ongoing initiative, we target to upgrade the last batch of three chillers by the end of next year. 1,244 MWh/year (4,480 GJ/year) or 508 tCO_2e/year
Replacing Uninterruptible Power Supply (UPS) in Singapore	We replaced ten conventional-type UPS to modular units at our data centres in Singapore. This is a change from conventional UPS to Modular UPS where depending on the load, the UPS will determine the number of power modules in operation. The rest of the power modules will be in energy saving mode.	**Estimated energy savings and GHG emissions avoidance:** 767 MWh/year (2,762 GJ/year) or 313 tCO_2e/year
Converting to energy efficient mobile base stations in Singapore	We continue to upgrade our mobile networks in Singapore and convert them to energy efficient mobile base stations. We also activated power saving features in the 4G mobile base stations – Enhanced cell sleep mode and AI (Artificial Intelligence) powered MIMO (Multiple Input Multiple Output) sleep mode.	**Estimated energy savings and GHG emissions avoidance:** 99.73% in Singapore. 1,012 MWh/year (3,645 GJ/year) or 413 tCO_2e/year
HFC Decommissioning in Australia	Power down of obsolete HFC (Hybrid Fibre Coaxial) fixed network infrastructure.	**Estimated energy savings and GHG emissions avoidance:** 10,350 MWh/year (37,260 GJ/year) or 8,177 tCO_2e/year
Exchange Power System Upgrades in Australia	Replacement of existing power system with a 91% efficiency with equipment that has a 96% efficiency.	**Estimated energy savings and GHG emissions avoidance:** 131 MWh/year (473 GJ/year) or 104 tCO_2e/year
LED Upgrades (4 Exchanges) in Australia	Replacement of fluorescent tube lighting with LED.	**Estimated energy savings and GHG emissions avoidance:** 669 MWh/year (2,407 GJ/year) or 528 tCO_2e/year

We certify our business to external environmental standards where relevant. Three of our facilities obtained the Singapore BCA-IMDA Green Mark for Data Centres Platinum Certification in 2021: Choa Chu Kang Telecommunications Exchange, Kim Chuan Telecommunications Complex 2 and DC West. In addition, Kim Chuan Telecommunications Complex 1 and 2, NCS Bedok Data Centre and DC West are also certified to SS564 Green Data Centres and ISO 50001 Energy Management System.

Moving forward, we remain committed to developing our new facilities sustainably with the lowest possible carbon impact, highest possible energy efficiency as well as superior and innovative environmentally sustainable designs.

c) Increasing deployment of onsite renewable energy
We have further enhanced our renewable energy strategy during the year to inform and guide us as we progress (see Figure 8 on page 18).

New Singtel electric vehicle

About this Report Contents

Our Sustainability Approach

Climate Change & Environment

People & Future of Work

Community Impact

Sustainable Value Creation

Appendix

In line with our decarbonisation strategy, Singtel Group seeks to maximise solar deployment at our premises. Since our first installation of photovoltaic panels at our Pasir Ris Telephone Exchange in 2009, we progressively increased the use of renewable energy in our network infrastructure. In the year, our renewable energy including RECs accounted for 5.8% of our energy consumption. With the installation of a 1.65 MWp solar power system on the rooftop of our NCS Bedok Data Centre under a Power Purchase Agreement (PPA) arrangement, it has generated 2,249 MWh which accounted for 13% of the data centre's consumption during the year. The solar power system, commissioned in March 2020, was one of the largest single-roof solar-powered data centres in Southeast Asia at that time.

We completed a feasibility study on all our properties during the year to assess their solar potential. We have since awarded an Engineering, Procurement and Construct (EPC) contract to deploy more renewable energy projects at up to eight Singtel sites including NCS Hub, Bukit Timah and Seletar Satellite Earth Stations, Hougang Exchange and One Serangoon North. The total capacity of these projects when completed will potentially reach 5 MWp and is expected to generate 5.4 GWh/year of renewable energy for our Singapore operations.

Figure 7: Singtel Group decarbonisation hierarchy

Most Preferred

Stop and reduce emissions and energy demands

Improve energy efficiency

Deploy onsite renewables

Deploy offsite renewables
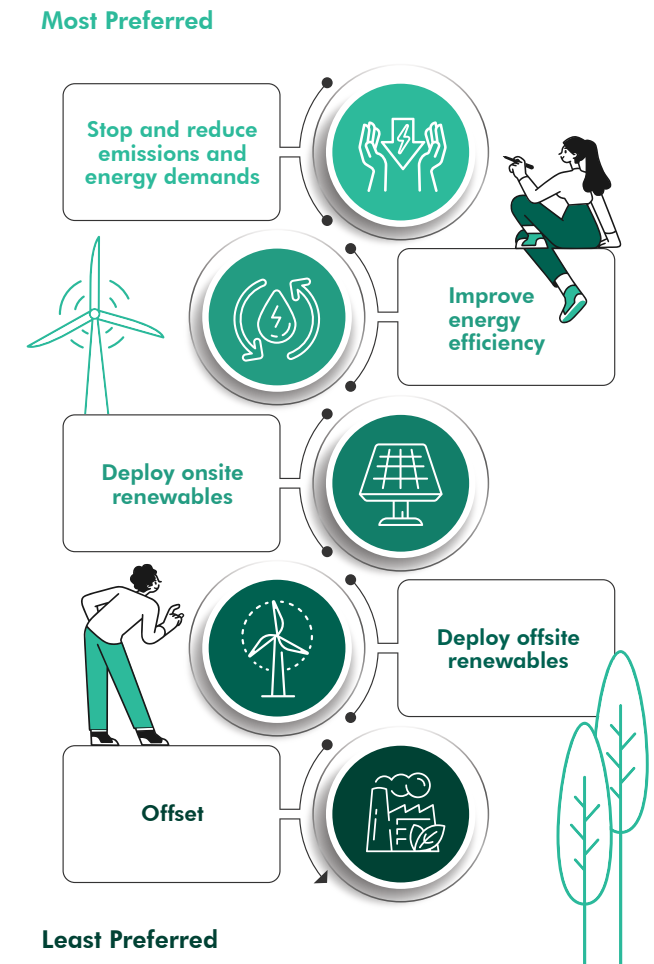
Offset

Least Preferred

4G base station power saving features
We implemented energy saving features on our 4G mobile base stations to reduce electricity usage during low traffic hours for both outdoor and inbuilding sites.
a) **Enhanced Cell Sleep Mode:** Without this feature, cells are constantly turned on at all hours. Now, these capacity cells can detect low traffic conditions and power down to save energy.
b) **AI Powered MIMO Sleep Mode:** Based on machine learning, this feature can reduce power consumption in radios by automatically reconfiguring to a smaller MIMO (4x4 MIMO to 2x2 MIMO) and SIMO (Single Input Multiple Output) (2x2 MIMO to SIMO) configuration during low traffic hours. The feature is activated round the clock.

d) Sourcing of offsite renewable energy and attributes
Given the land and roof constraints of our property and facilities, the onsite renewable deployment will be limited for our decarbonisation efforts. It is essential for Singtel to adopt offsite renewable energy PPAs as a means to achieve our emissions reduction targets and ambition. However, Singapore has limited local renewable energy supply and Australia has certain risks linked to accelerated PPAs deployment.

We are looking to develop a portfolio of renewable energy certificates (RECs) to offset our Scope 2 emissions. In 2022, we secured 13.8 GWh of local Singapore RECs per annum from 2022 until 2025 and will start to retire these certificates from next year. We bought 2,000 I-RECs to lower our Scope 2 emissions in Singapore. We are also working to secure imported renewable energy in the coming years for our Singapore operations. In Australia, we retired 42 GWh of large-scale generation certificates (LGCs) during the year.

We are currently working on a national tender for renewable energy procurement to have 100% of our electricity requirements backed by renewable energy sources by end-2025 for our Australia operations. We will proactively seek renewable energy potential in the markets where we operate to secure renewables PPAs for our operations and buy RECs as near to our operations as possible where local RECs are limited.

e) Investing in high-quality carbon offsets

After exhausting our first four options to decarbonise our Scope 1 and 2 emissions, we will look to carbon offsets as a last resort to manage our emissions that are hard to abate. While we have not acquired any carbon credits to date, we are preparing ourselves by monitoring the standards, accounting treatment, government recognition and other developments closely.

2. Linking emissions to financing to quantify carbon and drive changes

We recognise the importance of linking sustainability and finance to include carbon considerations in business decision making processes to drive change. This includes making low-emission choices for the business and making investments in climate-related projects.
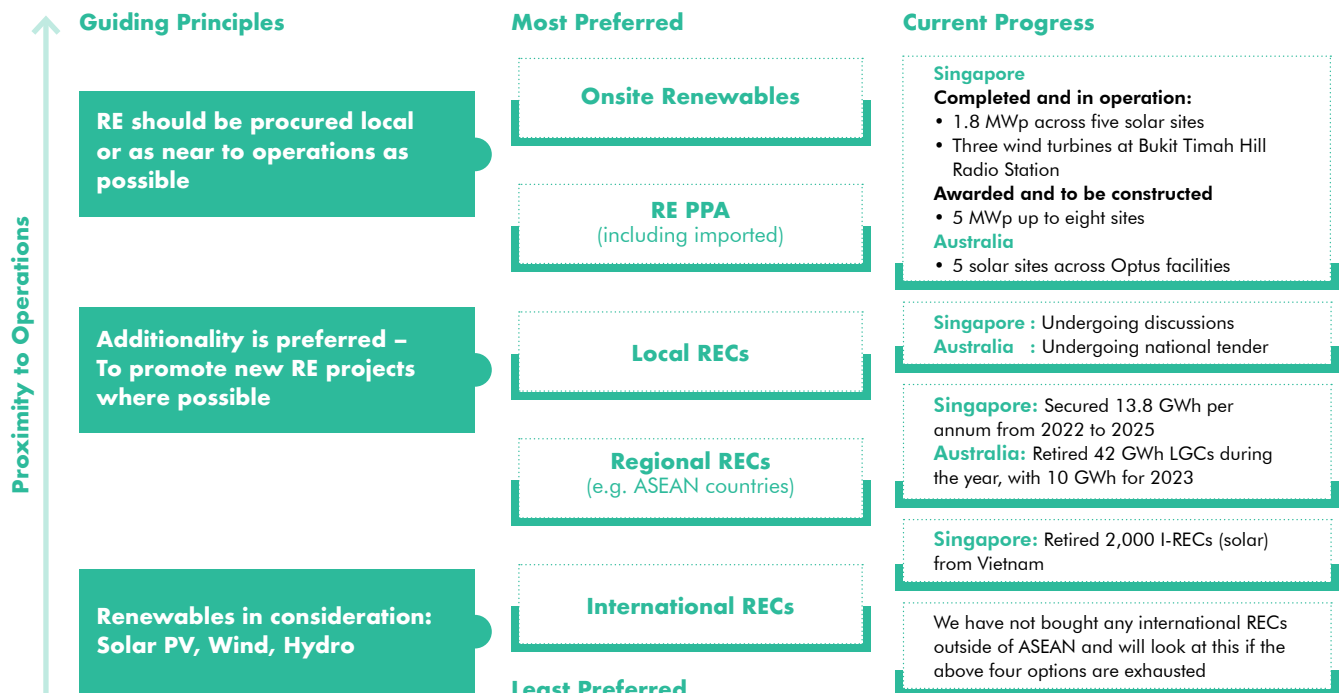
a) Sustainable finance

We are committed to linking our financing approach to our progress in achieving mid to long-term sustainability goals that will enable us to reach net-zero by 2050.

In April 2021, we launched our first sustainability-linked revolving credit facility of S$750 million, which was the largest Singapore-dollar denominated sustainability-linked loan in Singapore at that time. The launch marked Singtel Group's foray into sustainable financing under our new programme called Olives, that is linked to our sustainability targets. This three-year loan, provided by three local banks, features interest rate discounts pegged to pre-determined ESG targets in areas such as climate action and risk management, emissions management and workplace safety and health metrics.

Under Olives, we published the **Singtel Group Sustainability-Linked Bond Framework** in October 2021, which was a first for a telecommunications company in Asia Pacific. The framework outlines individual Key Performance Indicators (KPIs) and Sustainability Performance Targets (SPTs) for two different wissuers, Singtel and Optus, and allows both to issue sustainability-linked bonds (SLBs) under a single framework.

This framework affirms our commitment to net-zero emissions by 2050 and allows our investors to participate in our sustainability journey. Subsequently in November 2021, Optus priced an A$300 million seven-year fixed rate SLB, committing to reduce our Scope 1 and Scope 2 GHG emissions in Australia by 25% by 2025, compared to a 2015 baseline. This is in line with our SBTi approved 2030 targets of a 42% absolute reduction compared to the 2015 baseline.

Figure 8 : Singtel Group renewable energy strategy and approach

Guiding Principles	Most Preferred → Least Preferred	Current Progress
RE should be procured local or as near to operations as possible	**Onsite Renewables**	**Singapore** **Completed and in operation:** • 1.8 MWp across five solar sites • Three wind turbines at Bukit Timah Hill Radio Station **Awarded and to be constructed** • 5 MWp up to eight sites **Australia** • 5 solar sites across Optus facilities
	RE PPA (including imported)	
Additionality is preferred – To promote new RE projects where possible	**Local RECs**	**Singapore :** Undergoing discussions **Australia :** Undergoing national tender
	Regional RECs (e.g. ASEAN countries)	**Singapore:** Secured 13.8 GWh per annum from 2022 to 2025 **Australia:** Retired 42 GWh LGCs during the year, with 10 GWh for 2023
	International RECs	**Singapore:** Retired 2,000 I-RECs (solar) from Vietnam
Renewables in consideration: Solar PV, Wind, Hydro		We have not bought any international RECs outside of ASEAN and will look at this if the above four options are exhausted

Proximity to Operations

b) Internal carbon pricing

We conducted an internal carbon pricing (ICP) pilot for our Singapore operations where we used a shadow price of S$50 per tonne of CO_2e for energy-intensive business cases. We applied this hypothetical price for GHG emissions as a guide for business and investment decisions. With this approach, we took the first step of incorporating ICP for large capital expenditure projects that are energy intensive as a pilot, as energy consumption is a material topic for the Singtel Group.

Next year, we plan to incorporate ICP into our business processes, allowing Singtel Group to incorporate climate considerations in our decisions to incentivise investments in energy efficiency and low-carbon innovation. This will be a major step towards achieving our sustainability goal to become more resilient to regulatory climate policies and our commitment to emission reductions.

3. Address physical risks through network adaptation and advocate for climate action

Since our physical risk climate scenario analysis in 2015, we have been undertaking numerous adaptations across our Singapore and Australia operations to build resilience to natural disasters and long-term climate scenarios. We have progressively adapted our infrastructure design and

Full TCFD climate scenario assessment highlights

In 2021, we conducted a TCFD pilot in the Northern Rivers Region of New South Wales, Australia. This exercise was to assist us with identifying and narrowing down the most material physical and transition risk drivers. Drawing on the initial assessment, we performed further analysis on transition risks for insights and material financial drivers. This year, we conducted a full TCFD climate scenario analysis using three material transition levers and physical risks for both Singtel and Optus nationwide.

Physical Risk Assessment:
- >1,900 mobile sites assessed for Australia
- 82 key Singapore assets assessed, further narrowed to ten high-risk locations for financial impact analysis
- Our conclusion was that the financial impact from climate physical risks was deemed less material as the business continued to undertake proactive planning and adaptation of the infrastructure to mitigate the long-term physical effects of climate change under the different scenarios

Transition Risks:
- Key risks for Singtel are limited availability and cost of local/imported renewable energy, and market competition for low-emission ICT services like data centre
- Key risks for Optus are activism, introduction/increase of carbon taxes and volatile energy prices

Please refer to our inaugural standalone **TCFD Report 2022** for a fuller discussion and disclosure on our climate scenario analysis of physical and transition risks and opportunities.

Singtel Group TCFD Journey

Governance	Strategy	Risk Management	Metrics and Targets
Singtel Board: Oversight and approval of sustainability-materiality register, SR disclosures on company's climate change strategy, plans and performance	FY2016 formal **climate adaptation and resilience planning** exercise: Inundation risks	Process of **Life Cycle Assessment**, Climate Adaptation Mapping and SBTi	Comprehensive **disclosures** in SR leading to standalone climate risk assessment and disclosure
Risk Management and Board Risk Committee: Oversight of material ESG risks	FY2017 **SBTi targets**	**External stakeholder** and government **engagement** in Singapore and Australia: ABR, TCFD, RC100	**Carbon intensity** and **SBTi** targets established in 2017 and undergoing review for refreshed targets in FY2023
Singtel Management Committee: Appointed Group Chief People and Sustainability Officer in the MC with Group Sustainability team supporting the management	FY2021 Optus CSIRO Bushfire prediction and adaptation exercise	**Risk Register** updated with climate change. But not in Top 10 as standalone risk and comes under business interruption	Financial driver and materiality **modelling completed in FY2022**
Renewable Energy MC Sub-Committee	2°C **scenario** as base with 4°C and 6°C global temperature rise by 2050 modelling for the adaptation review		
Various **Working Groups** to address specific issues such as TCFD and renewables	Updated target to meet **1.5°C** trajectory		
	Net-zero strategy and roadmap to be developed in FY2023		

About this Report Contents

Our Sustainability Approach

Climate Change & Environment

People & Future of Work

Community Impact

Sustainable Value Creation

Appendix

standards to long-term climate scenarios like increased inundation risks, stronger cyclonic activities, rising temperature and higher bushfire frequency in Australia.

a) Collaborating with research and industry partners
The Singtel Group recognises that tackling climate change requires cross-industry partnerships to address complex issues. We collaborate with partners on innovation and technology to build resilience and capabilities against catastrophic events. We embark on research collaboration and engage subject matter experts at industry and national levels to gather intelligence and build resilience to manage climate risks and impact.

One of the major projects that we undertook in the year was the Optus 2022 Transmission Hub Resiliency project in partnership with Delta Electronics (Australia). The first stage of this project included the launch of Yes! CPX (Critical Power eXtender), a battery solution which ensures our transmission hubs can continue to operate for an extra ten to 20 hours following a failure of the main power grid. This creates an extended buffer period for power authorities to restore services or for Optus to access a site safely with a portable generator, particularly where the area has been impacted by extreme weather or natural disaster.

We formed a partnership with Redflow to deploy their battery system across 56 black spot sites under the Federal Government's Mobile Network Hardening Program (MNHP) and Strengthening Telecommunications Against Natural Disasters (STAND) programme. The batteries will increase the resilience of our network, particularly in bushfire-prone areas.

In parallel, we implemented a Phase Four upgrade of Australia's national emergency warning system to keep Australians safe by enabling access to real-time updates and emergency warnings. The system now has the capacity to reach over 500 emergency service agencies across Australia and will provide more reliable and prompt emergency messaging in communities that need it.

We actively monitor and engage in regulatory developments relating to reporting and carbon emission taxes, as well as provide annual comprehensive energy reporting to the National Green Energy Regulator (NGER). In 2020, we set up the Australian National University-Optus Bushfire Research Centre to develop a national system to detect bushfires early using an autonomous ground-based and aerial fire detection system. A constellation of satellites complements the fire detection system to spot and track fires and deploy extinguishing technologies. The programme will run until 2024.

Case study: Our ICP pilot in Singapore
During the year, we completed a pilot launch of our ICP framework on energy-intensive projects to assess its administrative feasibility and effectiveness.

One of the projects that has undergone this pilot analysis is the building of a new data centre. The proposed internal shadow carbon price was applied to the business case, using different energy consumption levels in the design for comparison. The less energy-efficient design appeared to be more economical in the original analysis. However, the inclusion of internal carbon price steered the conclusion towards the design with better power usage effectiveness (PUE) and consequently reduced the overall power consumption of the project by 7.5% over its useful life. PUE is a ratio that describes how efficiently the data centre equipment uses energy.

It was also proven that this framework has considerable potential to increase understanding, motivation and actions for reducing energy use, costs and GHG emissions at Singtel. We retrospectively applied our ICP framework on the selection of 5G network equipment. The inclusion of ICP further enhanced the decision to pursue more energy efficient equipment, which reduces overall power consumption of the equipment over its useful life by 20% while improving the total cost of ownership by 1%.

Project 1: New Data Centre (DC)	
Without ICP	Decision to go with **less energy efficient DC (PUE 1.4)** with 10% lower upfront capex investment
With ICP	Decision shift to **more energy efficient DC (PUE 1.3)** resulting in 7% reduction in utilities consumption across 20 years of useful life

Project 2: 5G Antenna Integrated Radio Equipment	
Without ICP	Decision to go with **more energy efficient equipment** despite 16% higher upfront capex investment
With ICP	Widen the cost benefit and **strengthen the business case for lower-carbon option**

We play a leading role on the GSMA Board and Climate Action Committee, helping to chart the strategic direction in tackling climate change for the ICT and mobile industry. GSMA is an industry organisation that represents the interests of over 750 mobile network operators. During the year, we participated in the development of GSMA strategy paper on a circular

economy for network equipment and shared our climate journey with fellow members at GSMA events. At the country level, we actively partner governments and national agencies to understand emerging risks, policies and regulations. In Singapore, we engage the National Climate Change Secretariat (NCCS), Ministry of Sustainability and the Environment (MSE), National Environment Agency (NEA), IMDA and Centre for Liveable Cities (CLC). We are represented in the Pro-Tem Committee for E-waste Management Standard under the Environment and Resources Standards Committee of the Singapore Standardisation Programme. We also actively participate in business roundtables to share and discuss climate risks, TCFD and SBTi.

b) Demonstrating thought leadership

We actively share our experience to support and motivate others to start their own climate journey. Some of the notable events that Singtel was represented during the year include UNFCC Climate Neutral Now Initiative - Panel on net-zero and carbon neutral roadmap, challenges and opportunities; GSMA Asia Conference; 2021 Shared Value Summit Asia Pacific - Disasters Resilience Track Voices from COP26: Why it matters to businesses in Singapore by WWF Singapore; and Sustainability Reporting for the Future Seminar by PwC Singapore and Centre for Governance and Sustainability of National University of Singapore. Our TCFD effort was also featured as a case study for the Institute of Singapore Chartered Accountants Climate Disclosure Guide - Taking First Steps Towards Climate-related Disclosures.

c) Engaging with our employees

Earth Hour is not about reducing energy or carbon, but a powerful symbol of unity and hope in collective action. We continue to collaborate with WWF Singapore and fulfilled our commitment to Earth Hour 2022. On 26 March this year, we turned off and dimmed non-essential lighting at our properties and retail stores for an hour from 8.30pm to 9.30pm. We also encouraged our employees to pledge their support by turning off their lights at home, as well as adopt environmentally conscious habits to **'Go Beyond The Hour'**.
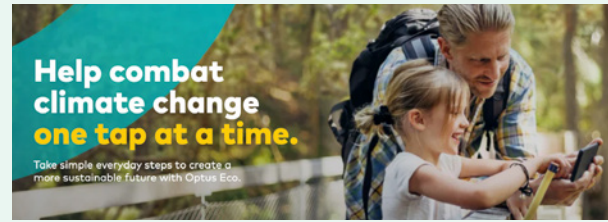
We launched Optus Eco which provides our customers in Australia with opportunities to reduce their own environmental footprint with simple and easy steps using My Optus App.

- **Reduce**
  Switch to paperless billing, recycle old device, modem or accessories through Mobile Muster, donate new or unwanted phone through Donate Your Device or connect with an Optus eSIM

- **Offset**
  Offset device and usage emissions to support a range of high quality and high integrity Australian carbon offset projects

d) Enabling customers to contribute to climate action

With a customer base of more than 15 million in Singapore and Australia, there exists huge opportunities for us to engage them to join us and play our part for the planet (see boxed-up story above).

Green ICT

We are constantly exploring smart mobile technologies to reduce energy consumption and emissions beyond our industry to benefit other sectors of the economy. Technology innovation in the areas of connectivity, low PUE data centres, cloud solutions, big data and IoT enable the development of energy efficient solutions that can be applied across industries and help advance decarbonisation efforts in other sectors. During the year, we focused on our 5G network rollout in Singapore and Australia to empower our customers by delivering greater speed, higher device capacity and ultra-low latency.

During network planning and implementation, we used network analytic tools to analyse traffic trending and roll out 5G with precision to meet performance demands at lower costs and greater energy efficiency. We implemented dynamic spectrum sharing to run 4G and 5G services simultaneously on the same frequencies to avoid the need of adding new energy-consuming hardware.

We also built a dual-mode core network to support both 4G and 5G services instead of operating two separate core networks.

4G transmissions require big cell towers to transmit longer frequency waves. 5G however is built to optimise data transmission and has leaner infrastructure, using small cell base stations with beamforming to coordinate transmissions. 5G is also a more energy-aware standard and will enable smart sleep modes more effectively as well as extend coverage using lower bands while increasing capacity and speed with carrier aggregation. Fast and effective data transmission enables the system to return to a low-load state faster with corresponding energy usage. We will activate this energy-saving feature on our network when available.

Benefits of 5G in the corporate world

Leveraging our new 5G networks, companies can increase the energy efficiency of delivering data to their customers. They can also develop innovative green technologies and help reduce the carbon footprint of their operations and customers globally.

- Our reliable network and ICT services and solutions allow corporate customers to maintain productivity while lowering emissions from reduced transportation.

- Our 5G Multi-access Edge Compute (MEC) platform enables low latency monitoring of campuses, environments and facilities through IoT applications that are connected to autonomous systems like robots and drones, leading to a reduction of emissions from reduced number of field trips taken by the operational teams while improving productivity.

- Video analytics enabled by our MEC platform can identify faulty products at the assembly line for Industry 4.0 scenarios and take them out before hitting the supply chain, thereby saving emissions from customers returning faulty products to the manufacturer who will need to ship replacement products.

- IoT applications for smart buildings can optimise space utilisation, energy and cooling efficiency based on real-time occupancy. Such IoT sensors can leverage our MEC through inbuilding 5G coverage or WiFi which can be reached from any fixed or cellular network. This multi-network capability allows existing brown field IoT deployments to optimise energy consumption of devices by shifting all data processing to the edge, therefore increasing battery life of devices and also lowering emissions from reduced field trips to replace batteries.

PRODUCT STEWARDSHIP

Our approach to product stewardship considers the impact of our products and services before they reach our stores, during our operations and after their useful life. We manage our waste resulting from Singtel and Optus branded products, and also review waste data to glean insights that help to improve the recyclability, reusability and reduction of our waste.

Effective waste management

Electronic, packaging and corporate wastes such as paper are key sources of wastes generated across our operations and value chain. We are committed to reducing, reusing and recycling wherever possible and support national waste management targets under Singapore Green Plan 2030 and Australia's Recycling and Waste Reduction Act 2020. There are global concerns around e-waste being a fast-growing category of waste, given the increasingly digital lifestyle which has been further accelerated by the pandemic. Within our operations, we have put in place an e-waste recycling process to ensure proper management of our used equipment and track the recycling rate.

Under the Extended Producer Responsibility (EPR) scheme introduced by NEA in July 2021, Singtel Group bears the responsibility for collecting and treating our products when they reach the end of life, based on our market share. In Singapore, we contribute to this new regulated e-waste management system and retired ReCYCLE, our e-waste recycling programme in partnership with SingPost launched in 2017. From January to December 2021, we put 181.6 tonnes of products to market for both our consumer and enterprise segments. From July 2021 to March 2022, we collected 2.7 tonnes of consumer e-waste and were responsible for 2.3 tonnes of all the consumer e-waste collected island-wide under the scheme.

In Australia, we have been partnering Mobile Muster since 1998 to facilitate the recycling of mobile devices and accessories via our Optus stores. During the year, we diverted 5.61 tonnes of e-waste from landfills, saving 12.45 tonnes of emissions while conserving 63.55 tonnes of mineral resources through the programme. We also have a modem recycling programme to supplement Mobile Muster for customers to recycle their old modems at any of our retail stores in Australia.

Enabling sustainable packaging

Sustainable packaging directly and indirectly contributes to our carbon footprint and environmental impact across our value chain, from resource utilisation to product packaging and management of these waste streams.

Reducing plastic waste with GOMO's half-sized SIM card

Our all-digital mobile brand GOMO launched its half-sized SIM card in December 2021, which reduced plastic waste, and introduced environmentally friendly materials to the packaging:

- Packaging Envelope (holds the backing card) –140gsm Enviro wove, 100% recyclable and FSC certified
- Backing Card (SIM card is pasted on this) – 300gsm Woodfree card, 100% recyclable and FSC certified

Comparing the dimensions between the old and new packaging, we reduced the total area of the main envelope and additional manual by approximately 30%, from 182,810 mm^2 to 126,800 mm^2.

By 31 March 2022, we saved 42.95 kg of acrylonitrile butadiene styrene plastic (ABS plastic) and polyvinyl chloride (PVC), a 7% reduction in materials for all GOMO SIM cards, full and half. Through these initiatives, we hope to nudge consumers and our retailers to be conscious of their packaging waste. We will continue to collaborate with suppliers to explore alternative materials such as recycled materials to be used in our packaging.

Old packaging (full SIM)		Total Area	182,810 mm^2

Main Envelope

285 mm x 466 mm = 132,810 mm^2 (open size)

Additional manual

Lotus card: 5 x 100 mm x 100 mm = 50,000 mm^2 (estimation as the card is irregularly shaped)

New packaging (half SIM)		Total Area	126,800 mm^2

Main Envelope

560 mm x 190 mm = 106,400 mm^2 (open size)

Backing card

170 mm x 120 mm = 20,400 mm^2

Total Reduction	30%

Under the Resource Sustainability Act, Singtel is required to report our packaging waste as part of the Mandatory Packaging Reporting. The list of regulated products and our reporting obligations are categorised into three packaging categories: primary packaging for Singtel branded products, service packaging used by all Singtel retail channels, and all packaging used for products exclusively imported for our business.

We report our packaging data and 3R (reduce, reuse and recycle) plans to NEA annually, starting from this year. We submitted our first report and 3R plans in March 2022 for calendar year 2021. During that year, the total amount of packaging used by Singtel and NCS was 147.14 tonnes, with paper being our top material (see Figure 9). We will focus on packaging reduction and increasing the use of recycled content in our packaging materials. We will also take a targeted approach to tackle each type of unique waste that we are responsible for, such as bags and SIM cards.

In Australia, we have been committed to the principles of the Australian Packaging Covenant Organisation (APCO) since 2007 to drive systemic change in the way we create, collect and recover our product packaging. For the fifth consecutive year, Optus was awarded the APCO Award

for our sustainable packaging achievements and efforts in the telecommunications sector.
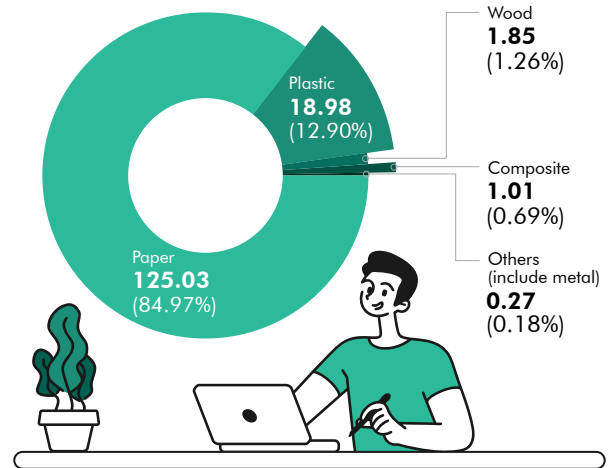
We are also committed to continuous improvement and are working hard to remove single-use plastics from packaging design and enhance the uptake of Australasian Recycling Label (ARL) to reduce recycling confusion. We have introduced a new sustainable packaging checklist for all new Optus-branded devices.

Environmental performance

During the year, there was no environmental legislation related fine or non-monetary sanction, as well as legal action against Singtel or Optus.

We publicly disclose our environmental targets and metrics aligned with the latest GRI standards and our performance data is externally assured. Our stakeholders can therefore better understand our efforts and progress in this area. We will also communicate any material driver and impact on the company's income statement, cashflows or balance sheet using the TCFD framework.

Figure 9: Singtel and NCS packaging materials by weight (tonnes)

Plastic
18.98
(12.90%)

Wood
1.85
(1.26%)

Composite
1.01
(0.69%)

Others
(include metal)
0.27
(0.18%)

Paper
125.03
(84.97%)

Solar panels on the rooftop of NCS Bedok Data Centre

About this Report Contents

Our Sustainability Approach

Climate Change & Environment

People & Future of Work

Community Impact

Sustainable Value Creation

Appendix

Environmental Performance Indicators

ENVIRONMENT	SINGTEL			OPTUS			SINGTEL GROUP		
	2022	2021	2020	2022	2021	2020	2022	2021	2020
Total Greenhouse Gas (GHG) emissions, (tonnes CO_2 equivalent)[1]	3,630,397	3,613,093	162,566	4,180,961	4,836,897	427,706	7,811,358	8,449,990	590,272
Scope 1 and Scope 2 (market-based) GHG emissions	100,427	104,403	157,391	394,253	428,458	415,072	494,680	532,861	572,463
(i) Scope 1	4,743	5,749	3,741	1,579	1,894	2,140	6,322	7,643	5,881
Fugitive emissions - refrigerants[2]	3,184	4,369	2,545	195	215	134	3,379	4,584	2,679
Fuel combustion - stationary	1,059	828	484	286	364	304	1,345	1,192	788
Fuel combustion - mobile	500	552	712	1,098	1,315	1,702	1,598	1,867	2,414
(ii) Scope 2									
Electricity (location-based)[3]	109,535	110,292	168,679	425,015	426,564	412,932	534,550	536,856	581,611
Electricity (market-based)[3]	95,684	98,654	153,650	392,674	426,564	412,932	488,358	525,218	566,582
(iii) Scope 3[4]	3,529,970	3,508,690	5,175	3,786,708	4,408,439	12,634	7,316,678	7,917,129	17,809
Category 1: Purchased goods and services	1,776,125	1,649,793	N.A.	2,397,584	3,124,287	N.A.	4,173,709	4,774,080	N.A.
Category 2: Capital goods	687,465	851,233	N.A.	1,193,179	1,055,409	N.A.	1,880,644	1,906,642	N.A.
Category 3: Fuel and energy-related emissions	18,190	18,283	N.A.	43,007	41,981	N.A.	61,197	60,264	N.A.
Category 4: Upstream transportation and distribution[5]	0	0	N.A.	0	0	N.A.	0	0	N.A.
Category 5: Waste generated in operations	712	694	N.A.	189	183	N.A.	901	877	N.A.
Category 6: Business travel[6]	337	4	3,040	581	95	4,853	918	99	7,893
Category 7: Employee commute[7]	297	441	1,731	3,011	4,517	6,643	3,308	4,958	8,374
Category 8: Upstream leased assets[8]	0	0	N.A.	0	0	N.A.	0	0	N.A.
Category 9: Downstream transportation and distribution[9]	0	0	254	5,690	9,385	1,138	5,690	9,385	1,392
Category 10: Processing of sold products[10]	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Category 11: Use of sold products	92,295	101,929	N.A.	139,941	168,718	N.A.	232,236	270,647	N.A.
Category 12: End-of-life treatment of sold products	334	376	N.A.	1,027	1,169	N.A.	1,361	1,545	N.A.
Category 13: Downstream leased assets	127,578	113,252	N.A.	0	0	N.A.	127,578	113,252	N.A.
Category 14: Franchises	211	149	150	2,499	2,695	N.A.	2,710	2,844	150
Category 15: Investments	826,426	772,536	N.A.	0	0	N.A.	826,426	772,536	N.A.
GHG emissions intensity (tCO$_2$e/S$million revenue)[11]	482	483	20	535	592	51	509	540	36
GHG emissions intensity (tCO$_2$e/TB)[12]	0.0134	0.0165	0.0325	0.0598	0.0778	0.1102	0.0351	0.0450	0.0665

1. GHG emissions are derived in accordance with the requirements of the "GHG Protocol Corporate Accounting and Reporting Standard" and "Corporate Value Chain (Scope 3) Accounting and Reporting Standard" by World Resources Institute (WRI) and World Business Council for Sustainable Development (WBCSD). The equivalent CO_2 emissions for electricity used are calculated based on the updated simple operating margin grid emission factors from the National Environment Agency, Energy Market Authority and electricity supplier emission factor in Singapore for the relevant time period and from Australian National Greenhouse Gas Account factors for grid emissions relating to the corresponding states in Australia. Scope 1 direct emissions and Scope 3 indirect emissions are calculated using: Supplier specific emissions factors, updated BEIS (Department for Business, Energy & Industrial Strategy) Greenhouse Gas reporting: conversion factors, National Greenhouse and Energy Reporting Scheme (NGERS), USEPA GHG Emission Factors (April 2022) and Singapore's Fourth Biennial Update Report. Relevant emission factors were sourced from: Life Cycle Assessment (LCA) report on Singapore NEWater, various Australian and international Life Cycle Inventory (LCI) databases (Aus LCI Version 1.31 and Australasian LCI Version 2014.09 databases), and Australian Mobile Telecommunications Association (AMTA)'s End-of-Life Management Options for Mobile Telephones in Australia were applied to consumption category of primary data to calculate Scope 3 indirect emissions. For spend based category data, emissions factors from the LCI database Exiobase (v3.3) implemented in SimaPro 9.1.1.1 were applied by economic sectors and geographic regions to calculate the Scope 3 indirect emissions.
2. Optus uses a combination of air, water and refrigerant cooling systems.
3. Restated and reclassified to Scope 3 Category 13 for Singtel Scope 2 numbers for FY2021. Market-based emissions are reported based on emission factor of electricity suppliers, onsite renewable energy and retired RECs.
4. New reporting of full 15 categories from FY2021.
5. Reported in Scope 3 Category 1 and 2 emissions.
6. The reduction in business air travel is due to travel restriction arising from the COVID-19 pandemic.

ENVIRONMENT	SINGTEL			OPTUS			SINGTEL GROUP		
	2022	**2021**	**2020**	**2022**	**2021**	**2020**	**2022**	**2021**	**2020**
Total energy use (GJ)[13]	**995,848**	999,254	1,466,802	**1,952,477**	1,909,806	1,834,722	**2,948,325**	2,909,060	3,301,524
Total energy use (MWh)[13]	**276,624**	277,571	407,445	**542,355**	530,501	509,645	**818,979**	808,072	917,090
Energy intensity (GJ/S$million revenue)[13]	**132**	134	180	**250**	234	219	**192**	186	200
Energy intensity (GJ/TB*)[13]	**0.13**	0.16	0.30	**0.30**	0.35	0.49	**0.21**	0.25	0.38
(i) Electricity use (GJ)[13]	**966,485**	971,968	1,448,584	**1,932,128**	1,885,253	1,805,476	**2,898,613**	2,857,221	3,254,060
Electricity use (MWh)[13]	**268,468**	269,991	402,384	**536,702**	523,681	501,521	**805,170**	793,672	903,905
(ii) Fuel use (GJ)	**21,058**	18,902	16,748	**19,885**	24,089	28,782	**40,943**	42,991	45,530
Fuel use (MWh)	**5,849**	5,251	4,652	**5,524**	6,691	7,995	**11,373**	11,942	12,647
(iii) Solar energy (GJ)	**8,305**	8,384	1,470	**464**	464	464	**8,769**	8,848	1,934
Solar energy (MWh)	**2,307**	2,329	408	**129**	129	129	**2,436**	2,458	537
Purchased Renewable Energy Certificates/Large-scale Generation Certificates (MWh)	**2,000**	1,000	N.A.	**42,000**	0	N.A.	**44,000**	1,000	N.A.
Potable water use (m³)[14]	**631,230**	623,588	683,847	**36,234**	47,262	57,861	**667,464**	670,850	741,708
Use of recycled water instead of potable water (m³)[15]	**280,805**	225,453	180,799	**5,885**	13,027	10,876	**286,690**	238,480	191,675
Water intensity (m³/S$million revenue)	**121**	114	106	**N.A.**	N.A.	N.A.	**62**	58	56
Total waste (tonnes)	**3,325**	4,150	7,658	**627**	771	883	**3,952**	4,921	8,541
Non-hazardous waste	**1,018**	1,047	1,567	**432**	446	690	**1,450**	1,493	2,257
Hazardous waste	**2,307**	3,103	6,091	**195**	325	193	**2,502**	3,428	6,284
Waste diverted from disposal by recovery operation (tonnes)[16]									
Non-hazardous waste: Preparation for reuse/recycle[17]	**219**	162	N.A.	**88**	129	N.A.	**307**	291	N.A.
Hazardous waste: Preparation for reuse/recycle[17]	**1,920**	2,866	N.A.	**190**	323	N.A.	**2,110**	3,189	N.A.
Waste directed to disposal by disposal operation (tonnes)[16]									
Non-hazardous waste: Incineration (with energy recovery)	**799**	885	N.A.	**0**	0	N.A.	**799**	885	N.A.
Hazardous waste: Incineration (with energy recovery)	**387**	237	N.A.	**0**	0	N.A.	**387**	237	N.A.
Non-hazardous waste: Landfill[17]	**0**	0	N.A.	**344**	317	N.A.	**344**	317	N.A.
Hazardous waste: Landfill[17]	**0**	0	N.A.	**5**	2	N.A.	**5**	2	N.A.
Customer e-waste recycling (tonnes)	**35**	47	66	**6**	3	4	**41**	50	70

*TB refers to terabyte of data transported across our network.

7. The significant reduction in employee commute is due to the implementation of our work-from-home arrangement from April 2020 to March 2022, in response to the COVID-19 pandemic. Singtel's emissions are reported with employees numbers since FY2020. Optus data updated with new survey conducted in 2019 and applies to Optus Sydney campus for FY2020. Emissions reported is actual employee commute data and applies to Optus Sydney campus since FY2021.
8. Reported in Scope 1, 2 and Scope 3 Category 1 and 2 emissions for any upstream leased assets.
9. Reported in Scope 3 Category 1 and 15 for Singtel.
10. Not applicable as Singtel Group does not manufacture any products or sell products that require additional processing by the customer to use.
11. Restated for Singtel and Singtel Group numbers for FY2021. Covers Scope 1, 2 and 3.
12. Restated for Singtel and Singtel Group numbers for FY2021. Covers Scope 1 and 2 only.
13. Restated for Singtel and Singtel Group numbers for FY2021.
14. All potable water withdrawn from municipal third-party water supplies and categorised as freshwater. Water stress areas are not applicable as the company does not contribute to the country's ability, or lack thereof, to meet the human and ecological demand for water. Covers Optus Sydney campus and Optus Melbourne office for FY2020 and FY2021. Covers all Optus corporate offices in Australian capital cities with the exception of Perth for FY2022.
15. Recycled water consists of NEWater and rainwater harvesting. NEWater is high-grade reclaimed water used mainly for operational activities such as cooling in Singapore Rainwater harvesting is installed in Optus Sydney campus.
16. New GRI standards indicators tracked from FY2021.
17. Data covers waste directly managed by Optus' contracted waste vendor.
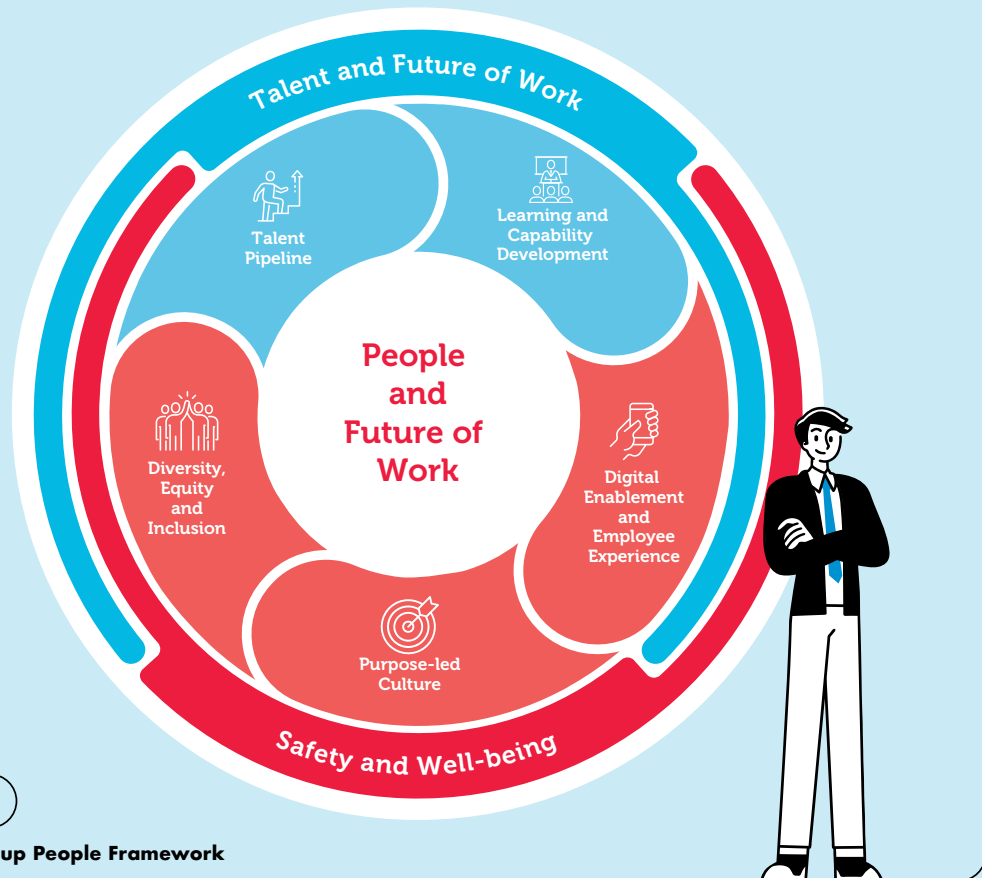
03

PEOPLE AND FUTURE OF WORK

Figure 1
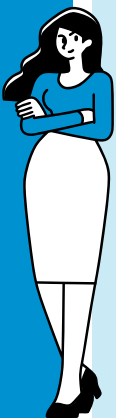
Singtel Group People Framework

The Singtel Group wants to create a highly engaged and dedicated workforce as our people are key to the Group's long-term growth and success. Our efforts are guided by our People Framework (see Figure 1) which focuses on Safety and Well-being as well as Talent and Future of Work.

We empower our people by investing in their professional and personal development, and equipping them with future skills. We also ensure inclusive employment and work environment, as well as meaningful work that allow them to grow and have a rewarding career with us.

As the world recovers from the pandemic, we will continue to focus on our employees' safety and well-being. During the year, we announced our Group purpose, Empower Every Generation, and refreshed our core values which we will integrate into every aspect of our business. It reflects our intention to bring everyone along into a more sustainable digital future, while advancing the world for our future generations through stewardship and innovation.

We drive and reinforce positive employee behaviours at work through our six refreshed core values: Cultivate a growth mindset; Operate with integrity; Make customers first; Maximise teamwork; Innovate with a challenger spirit; and Take ownership. They form the mnemonic COMMIT, demonstrating our commitment to excellence, innovation and sustainability.

Maximising value creation with Singtel Group core values

Values	People and Future of Work
C — Cultivate a Growth Mindset	We build collective capacity, leverage diverse perspectives, backgrounds and strengths of individuals while empowering employees to lead the change for a digital future.
O — Operate with Integrity	We incorporate integrity into our processes and decision making to ensure our people and workforce across our value chain behave responsibly and ethically, which is critical to building trust with our stakeholders, such as customers, fellow colleagues, partners and communities.
M — Make Customers First	We equip our people with future-ready skills to meet changing customer needs and deliver unparalleled customer experience.
M — Maximise Teamwork	We want to create a vibrant workforce, one with diverse backgrounds and experiences that thrives on great teamwork, through our diversity and inclusion policies and practices.
I — Innovate with a Challenger Spirit	We empower our diverse workforce to bring creativity and fresh perspectives to develop new ideas, promote innovation and drive performance.
T — Take Ownership	We want our employees to take ownership of their actions and decisions at work, as well as their growth through our learning and development programmes.

They are the foundation of how we operate our business as we harness the power of technology to enrich the lives of our customers and the broader community, help our people develop and grow with the company in the new economy, and live up to all our stakeholders' expectations as a responsible corporate citizen and sustainability steward. We also mapped these behaviours against our sustainability framework (see table above).

WORKFORCE SAFETY AND WELL-BEING

Promoting employee health and well-being

The pandemic has accentuated the importance of employee well-being and staying resilient. At Singtel Group, our priority is for our employees to remain healthy, both physically and mentally, at work and home. During the year, we also officially introduced blended ways of working (B-WoW) to allow more flexibility in work arrangements to cater to the work-life integration needs of our people, even in a post-pandemic world.

Throughout the year, we conducted regular employee pulse surveys and polls to explore areas of well-being that mattered most to our people. Based on their

responses, we launched the iCare programme to our Singapore employees in October 2021 to raise greater awareness of the importance of mental well-being.

A series of initiatives and programmes was organised to encourage and empower our people to look after their own mental health and take care of one another as we continue with a hybrid work arrangement.

In three months, about 4,500 employees attended weekly iCare mental, physical and financial well-being webinars that we conducted. They learnt tips from experts and heard experiences of fellow colleagues, who shared how they coped with situations, such as the loss of a loved one overseas while borders were closed.

We introduced a monthly iCare newsletter with various themes addressing concerns close to the hearts of our people, such as tackling burnout and easing them back into work at the office. We also sent fortnightly staff emails on a variety of wellness topics and featured Singtel and NCS role models who shared their personal well-being journey (see boxed-up story on the next page).

We partnered a mental healthcare company to offer a digital mental well-being app as a virtual buddy for all employees across the Singtel Group. The self-care mobile app includes a range of programmes to support employees' emotional well-being, resilience and personal development proactively. Employees can access personalised support from a behavioural health coach to build self-awareness, learn how to manage daily stress and work on personal goals.

A family-friendly work culture

Koh Wee Liang is a project manager with Group Enterprise and is happily married with three children. Before 2020 prior to COVID-19, he weighed close to 100kg, suffered from hypertension for 18 years and had pre-diabetic symptoms. Two years later, flexible work arrangements have given Wee Liang the time to kickstart his fitness journey while he collaborated with our onsite clinic doctor who created a personalised health plan targeting his chronic illnesses. This helped Wee Liang lose 30kg and stop the need for hypertension medication.

With hybrid work arrangements and Singtel's family-friendly policies, Wee Liang has been able to work from home more often and grow closer to his children. Time saved from not commuting means more quality time spent with family. He can also bring his wife, children and elderly parents for their medical appointments, tapping on the company's flexible family leave scheme. Wee Liang said that our family-friendly work culture is one of the key factors that motivates him to stay on as an employee.

Wee Liang (second from right) with his family

iCare has garnered strong support within months of its launch. Our people also expressed interest in other topics such as creating a culture of openness and learning how to deal with stress more effectively.

In our latest annual Your Voice Survey, 82% of our people felt strongly supported by the organisation and their managers in their overall well-being. Given the importance of this topic, we have introduced an additional 2025 well-being target of 84% as measured in our annual Your Voice Survey, under the material topic of employee safety and well-being (see page 9).

At the same time, we strongly encourage our people to speak to their leaders and colleagues, and use our Employee Assistance Programme (EAP) should they feel stressed especially in these challenging times. Our EAP offers services such as clinical counselling, support for financial and legal matters, and trauma management. The programme also provides medical insurance to immediate family members.

In line with building more inclusion and awareness around chronic illnesses, our annual health screening package for Operations and Support employees was enhanced to include additional tests to better detect significant conditions. iConnect, our all-in-one employee services app, was further upgraded to include clinic appointment bookings for improved experience at our onsite clinic.

We will continue to support employee resilience with a holistic well-being strategy based on five pillars: mental, physical, financial, social well-being and professional development. We will address the concerns raised by our people, such as chronic illness disease management and looking after young children or elderly parents while carving out time for self-care (see Figure 2).

In Australia, employees take part in monthly webinars on topics across six pillars of health: emotional, physical, social, vocational, financial and environmental. They also have access to Health Risk Assessments which help our people learn more about their health and lifestyle factors which can improve their well-being.

The health and well-being of our people is paramount, as we continue to create a work environment that promotes employee wellness and mindfulness, both physical and mental, so that our people can be the 'Best of Me' individually and the 'Best of We' together.

Building a workforce committed to WSH

Workplace safety and health (WSH) is our top priority. We strive to inculcate good safety and security habits and practices among our people, encouraging them to take ownership of the risks and hazards associated with their work activities and appropriate measures to prevent accidents.

We launched the WSH tool in iConnect to empower our people to report any safety hazards or concerns at the workplace by snapping a picture and providing details of what they observe. The report is routed to our WSH team for investigation and rectification before any accident occurs. Read more about our Health, Safety and Security Policy here.

To generate greater WSH awareness and educate employees, we publish quarterly bulletins on our staff portal Espresso on topics like slip, trip and fall prevention as well as fire prevention. See Table 1 for staff injury cases during the year.

We also adopted the concept of Gemba Walk, a WSH practice mainly used in the manufacturing industry. We conducted the walk for nine work sites during the year, which involved our employees, relevant third-party like
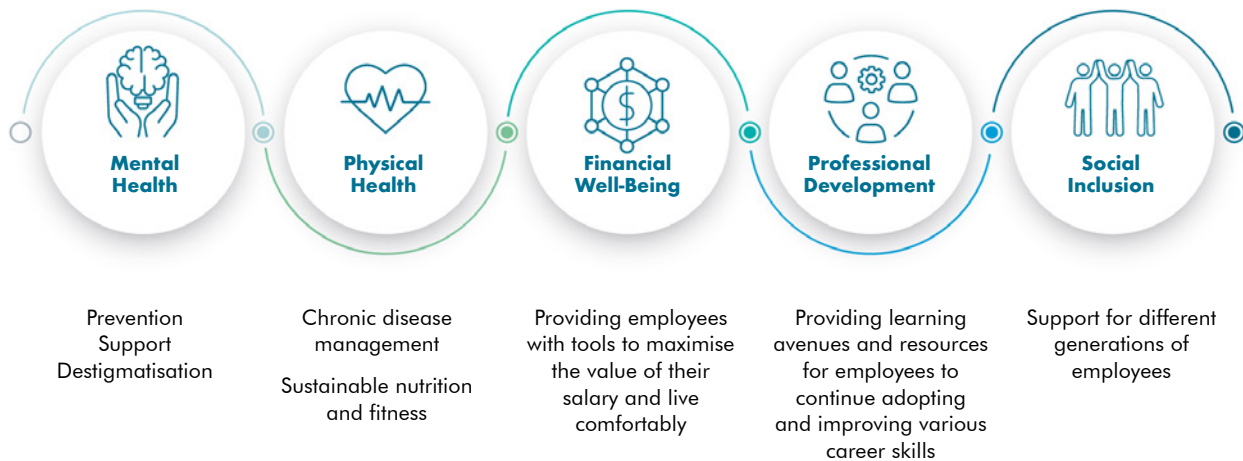
Employee well-being pillars

Mental Health	Physical Health	Financial Well-Being	Professional Development	Social Inclusion
Prevention Support Destigmatisation	Chronic disease management Sustainable nutrition and fitness	Providing employees with tools to maximise the value of their salary and live comfortably	Providing learning avenues and resources for employees to continue adopting and improving various career skills	Support for different generations of employees

Figure 2: Employee well-being pillars

facilities management personnel, and WSH team. The intent is to make observations on processes and identify safety lapses in work areas or activities, thus allowing all parties to address safety-related issues proactively and collaboratively.

Good employment practices

The Singtel Group employed 22,105 people, comprising 12,196 in Singapore, 7,268 in Australia and the rest based around the world as at 31 March 2022.

In Singapore, we abide by the Ministry of Manpower's (MOM) Employment Act and ensure that employment practices are aligned with the Tripartite Guidelines on Fair Employment Practices set out by the Tripartite Alliance for Fair and Progressive Employment Practices (TAFEP). Singtel is also a signatory of the Singapore Employers' Pledge of Fair Employment Practices.

We have fostered a very strong and collaborative partnership with the Union of Telecom Employees (UTES) in Singapore since its inception in 1982. In July 2021, Singtel renewed the Collective Agreement for Singapore-based Operations and Support employees, certified by the Industrial Arbitration Court for the next three years. In partnership with UTES, the remuneration and benefits packages were enhanced to be more competitive with the market, including a new service recognition award category for employees who have completed 50 years of service, up to three days of non-consecutive sick leave during each calendar year without a medical certificate, and up to two days of skills advancement leave for any SkillsFuture course.

As at 31 March 2022, we had 3,141 bargainable employees (26%) in Singapore covered by collective agreement. We ensure timely consultation and discussion with the union on significant operational changes and engage our employees before implementing these changes.

We also support the National Trades Union Congress (NTUC) U Care Fund with an annual donation of S$100,000. During the year, we disbursed S$21,296 to 36 schooling children of our staff under the joint Singtel-UTES Bursary Awards scheme.

Table 1: Staff injury types by number and gender

Entity	Slip, trip and fall	Hit by falling object	Laceration	Muscle Stress
Singtel	5 cases Male: 3 Female: 2	1 case Female: 1	1 case Male: 1	0 case
Optus	5 cases Male: 2 Female: 3	0 case	0 case	3 cases Male: 2 Female: 1
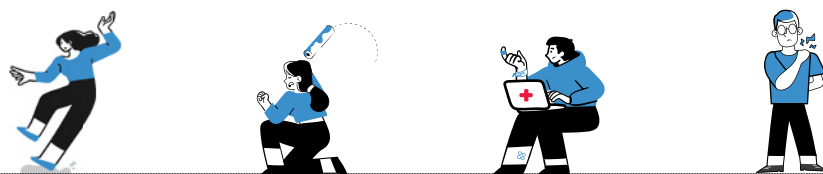
In addition, we contributed S$1 million to the NTUC Education and Training Fund over a five-year period from 2017 to 2021 to support NTUC's efforts to advance the professional development of the workforce.

In Australia, our industrial relations frameworks comply with the requirements of the Fair Work Act. In March 2022, we successfully renegotiated the Optus Employment Partnership Agreement (EPA), with 93% of employees voting in agreement with the EPA. Enhancements to the EPA focus on supporting the diverse lives of employees and account for market practices, such as recognition of kinship for our Indigenous employees for compassionate leave, and an annual Connected Day for our people to take one paid day off to connect with what matters most to them.

We treat our employees fairly and with respect and provide them with equal opportunities based on meritocracy. The Singtel Group is committed to providing employees with a work environment that is conducive, physically and psychologically safe and free from discrimination, harassment and retaliation. We take workplace grievances seriously and our Grievance Reporting Policy applies to the entire Group of companies. Every employee is expected to comply with our grievance procedures, which also apply to business relationships and activities where our people are involved.

This is communicated to all our employees, who can raise concerns and report any bias or discrimination that happens at the workplace without fear of reprisal. They can do so through our independent grievance reporting tool that is readily available on Espresso, our employee portal. We have established clear guidelines for managing grievance cases. Reported cases are handled with urgency and in confidence, thoroughly investigated and tracked through to closure. We engage all affected stakeholders in two-way dialogues and ensure proper follow-up on resolution and satisfactory closure. During the year, we logged 12 grievance cases in Singapore and 27 in Australia (see Table 2 and 3).

We offer various benefits to our employees to help them stay healthy and manage professional and personal demands. These include insurance and medical coverage, free annual health screenings, disease management programmes and flexible benefit dollars which is an annual cash payment catered to meet lifestyle needs.

We also accord our eligible employees with paid parental leave: 16 weeks maternity and two weeks paternity leave. In Australia, we have paid parental leave and support for stillbirth and pregnancy loss as well as family and domestic violence entitlements.

Our friendly family policies include flexible work schedules, telecommuting and various forms of family leave arrangements, such as childcare and family care leave. We also provide employees the opportunity to continue working at the company beyond their retirement age.

Driving a purpose-led culture

The Singtel Group is committed to organisational growth and developing our people. Our Group purpose and values underpin this and are embedded into our business strategy and work culture. We constantly reinforce the purpose and values through regular staff communication and messaging by leaders.

To drive a purpose-led culture, we ran an eight-week long *Purpose* campaign and held webinars for our employees in Singapore to deepen their understanding of their job roles and behaviours that support Singtel's purpose which is to *Empower Every Generation*.

Table 2: Number of staff grievance cases

	Singtel	Optus	Singtel Group
Received	12	27	39
Substantiated	8	9	17
Not substantiated	4	12	16
Under investigation as at 31 March 2022	0	6	6

Table 3: Breakdown of nature of substantiated cases

Nature of grievance	Singtel	Optus	Singtel Group
Supervisor management style	4	2	6
Bullying and harassment	1	7	8
Performance management	1	0	1
Employment terms and conditions	2	0	2

We also designed a programme to deepen employees' understanding of the Group purpose and core values, and equip them with practical frameworks to apply and exhibit the expected COMMIT behaviours in their work.

We target to train up to 4,000 employees in the new year. So far, over 1,000 employees have completed training. We endeavour to place purpose and our values at the core of our people practices by integrating it into our business and people processes, such as recruitment, leadership assessment and performance management. Other than equipping our employees with skills, we introduced the Group CEO Empower Awards, which recognises employees who embody the purpose and are exemplary in demonstrating COMMIT core values.

DIVERSITY, EQUITY AND INCLUSION (DEI)

DEI is core to our purpose at Singtel as we commit to Empower Every Generation through the collective experiences and collaborative capabilities of our diverse workforce (see Figure 3). We have a diverse workforce with close to 100 nationalities over four generations: Baby Boomer (1946-1964), Gen X (1965-1980), Millennials (1981-1996) and Gen Z (1997-2012). Millenials, or Gen Y, make up about half of our workforce. Comprising a wide range of experiences and voices, our people represent the markets and communities in which we operate.

We achieve equity by providing access to opportunities for everyone through fair and respectful policies and actions. We also aspire to build an inclusive culture that inspires innovation and progress where everyone belongs, and our people share a common purpose and can succeed as their best, authentic selves.

We respect the rights of individuals and do not discriminate based on their backgrounds, beliefs and abilities. During the year, we formalised and published the <u>Singtel Group Human Rights Statement</u>, covering critical human rights topics including child rights. We are committed to providing employees with a work environment that is conducive, safe and free from discrimination and harassment. We also prohibit any form of retaliation against any person for making reports in good faith concerning allegations of discrimination, harassment, violation of our <u>Code of Conduct</u> or any other allegation of improper behaviour.

As a strong advocate of fair and merit-based employment practices, we regularly review our practices to ensure no discrimination such as in our hiring process.

For example, we have reviewed our job application forms and removed questions with implied bias, such as whether candidates have a disability or medical condition that might affect their ability to carry out the job role or require work adjustments.

Across the Group, female employees account for a third of our total workforce, comprising 35% in Singapore and 32% in Australia. They represented 32% of top executives and 28% executives (previously known as middle management) in the Group. Together, we had 28% of female executives across the Group as at 31 March 2022, against our target of reaching 32% of female employees in management by FY2025. We also have 31% and 40% of female Board members and Management Committee members, with two female CEOs, who head Consumer Singapore and Optus (see Figure 4 to 6).

Through inclusive hiring practices and investments in the science, technology, engineering and math (STEM) ecosystem with the creation of the Singtel-Singapore University of Technology and Design (SUTD) Women in Tech Scholarship, we are making progress in increasing our female representation in technology roles. As at 31 March 2022, women represented 29% in technological roles at various functions like IT and Networks across the Singtel Group.

By embracing diversity, we gain a better understanding of the various needs of our customers and communities, thus forging stronger connections and delivering greater impact for them. Our efforts on DEI were recognised for the fourth consecutive year by 2022 Bloomberg Gender-Equality Index for our commitment to gender equality.

We ensure our processes for employee performance evaluation, promotion and talent identification have no inherent gender bias. Our employees also perceive DEI in the organisation very positively, with a high 81% Your Voice score in our recent employee engagement survey.

We commemorated <u>International Women's Day 2022</u> with a month-long of activities. We organised panel discussions featuring female leaders, employees and women making ripples in the community. We also curated two courses on #CURIOUS, our mobile digital learning platform, on what unconscious bias means and developing an inclusion mindset.

In Australia, we launched Employee Networks, which aim to create an inclusive culture for women, persons with various abilities and disabilities, people with different culture and heritage, LGBTQ+ individuals and veterans.
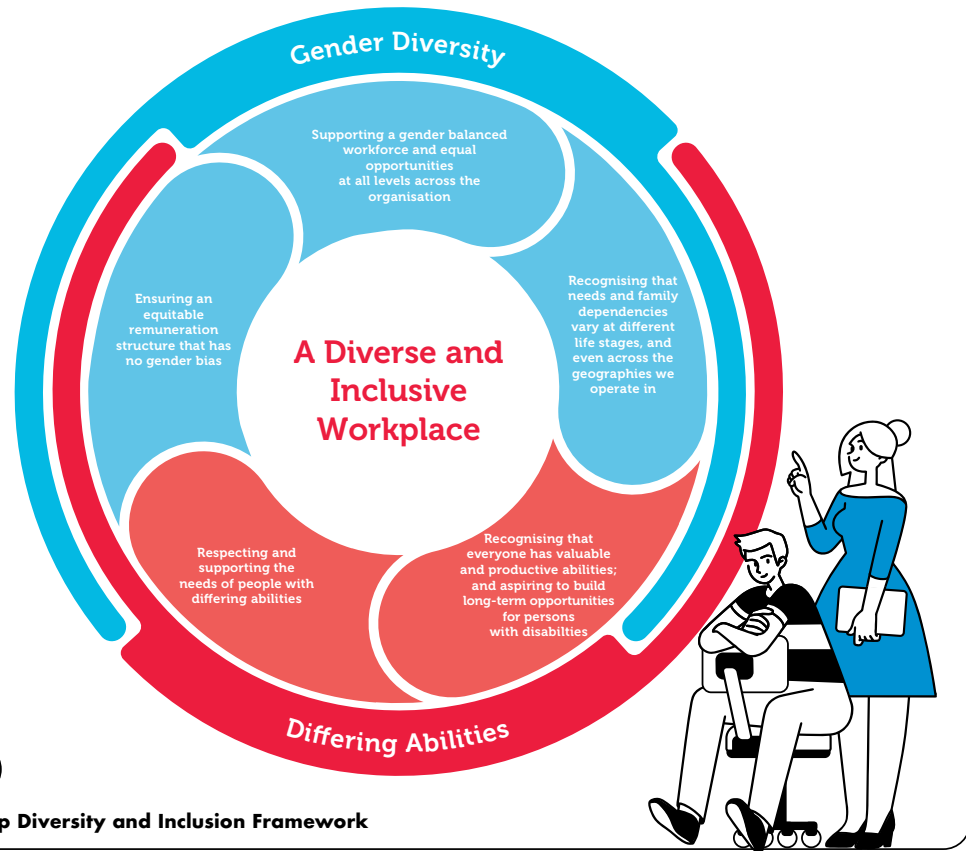
About this Report

Contents

Our Sustainability Approach

Climate Change & Environment

People & Future of Work

Community Impact

Sustainable Value Creation

Appendix

Figure 3

Singtel Group Diversity and Inclusion Framework

Each network is sponsored by a member of Optus Executive team, who ensures that recommendations are heard by the business. In line with our commitment to be a disability confident employer in Australia, our Optus Accessibility and Inclusion Action Plan 2020-2023 will continue to guide us in building an inclusive and accessible workplace for our people, customers and the communities we serve.

The DOs for a discrimination-free workplace

All managers are constantly reminded of the following key principles, which cover shortlisting and interviewing candidates and how they manage their team members after hire:

1. Recruit and select candidates on the basis of merit (such as skills, experience or ability to perform the job), regardless of age, race, nationality, gender, sexual orientation, religion, family status or disability.

2. Treat employees fairly and respectfully, and implement progressive human resource management systems.

3. Provide employees with equal opportunity to be considered for training and development based on their strengths and needs, to help them achieve their full potential.

4. Reward employees fairly based on their ability, performance, contribution and experience.

5. Abide by local labour laws.

Figure 4: Female executives in the Singtel Group

● Singtel ● Optus ● Singtel Group

	Top Executives FY2022			Top Executives FY2021	
34%	22%	32%	34%	17%	28%

	Executives FY2022			Executives FY2021	
33%	23%	28%	34%	23%	28%

About this Report

Contents

Our Sustainability Approach

Climate Change & Environment

People & Future of Work

Community Impact

Sustainable Value Creation
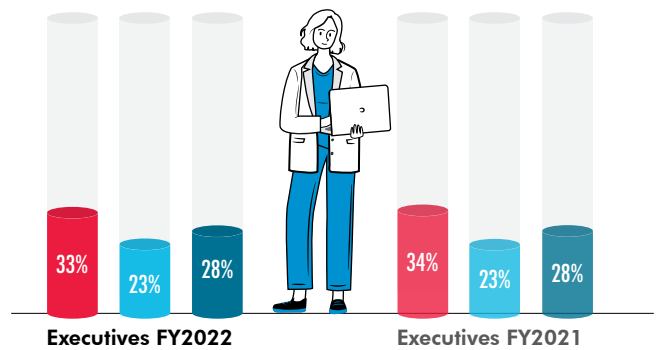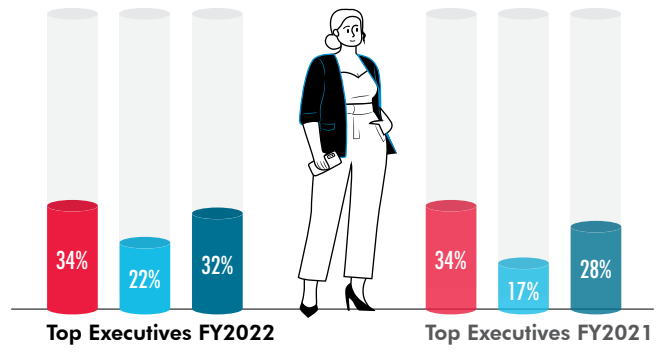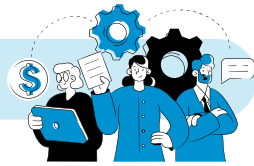
Appendix

Figure 5: New hires by gender
(Total 3,966)
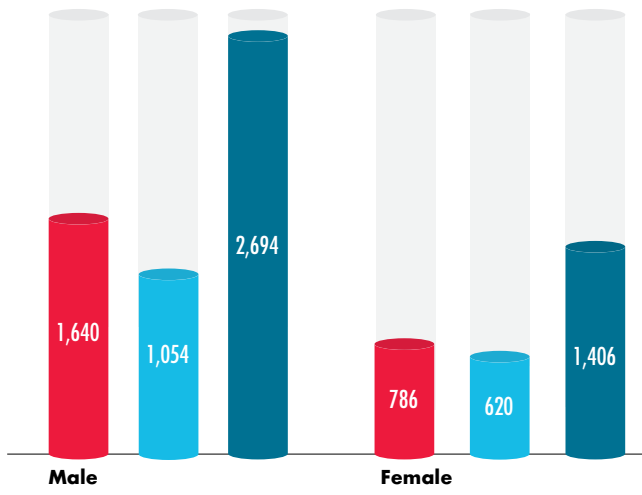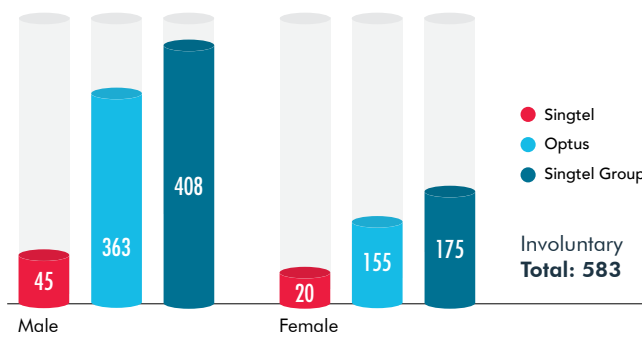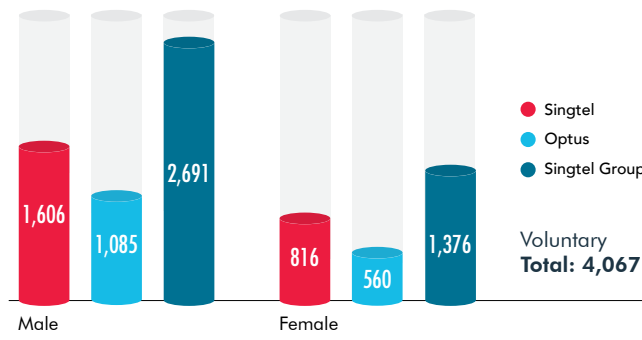
● Singtel   ● Optus   ● Singtel Group

Male: Singtel 1,640; Optus 1,054; Singtel Group 2,694
Female: Singtel 786; Optus 620; Singtel Group 1,406

Figure 6: Voluntary and involuntary turnover by gender

● Singtel
● Optus
● Singtel Group

Voluntary
Total: 4,067

Male: Singtel 1,606; Optus 1,085; Singtel Group 2,691
Female: Singtel 816; Optus 560; Singtel Group 1,376

● Singtel
● Optus
● Singtel Group

Involuntary
Total: 583

Male: Singtel 45; Optus 363; Singtel Group 408
Female: Singtel 20; Optus 155; Singtel Group 175

BUILDING A FUTURE-READY WORKFORCE

Talent attraction and retention

In the current economy living with COVID-19 and the associated Great Resignation wave faced by companies globally, it has become even more challenging to attract and retain, especially tech talent. Due to the rapid digitisation and e-commerce adoption across all sectors worldwide, companies demand technical specialists and customer service professionals to address their escalating needs for maintaining online platforms and managing customer experience.
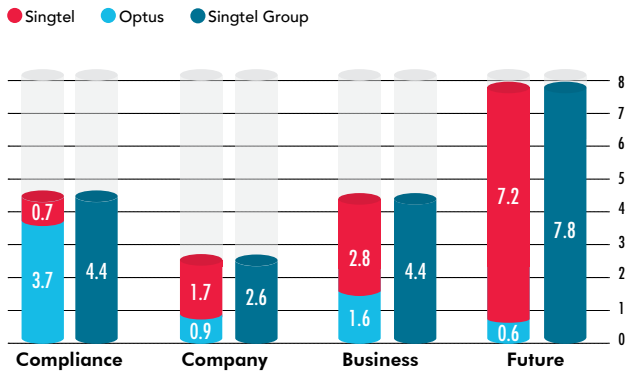
Companies therefore need to differentiate themselves to attract the right talents. We do so by building a purpose-led organisation, creating an inclusive culture, and developing meaningful and impactful careers for our employees.

The Singtel Group focuses on building our talent pipeline and employees' career progression, while investing in their long-term development. This will bolster both retention and overall development of the organisation, and help to entrench our position as employer of choice. Our young talents are nurtured under various programmes, such as internships and the Management Associate Programme (MAP). During the year, 143 students from polytechnics and universities in Singapore joined our SHINE internship programme across various business functions. We also onboarded 52 MAs who will each have at least two job rotations during their first two years, with high performers put on an accelerated career path.

We launched a people transformation programme at NCS focused on culture, skill specialisation and becoming an organisation built on learning. Based on individual preferences, performance and aptitude, our tech professionals have opportunities to move across specialisations, work in different regions and industries, and with different clients and partners to gain a wider range of experience.
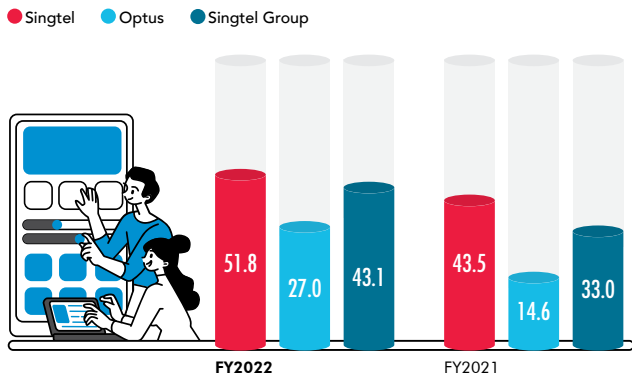
Fresh graduates who join NCS can participate in our Nucleus programme, where we provide a holistic and structured foundation to kickstart their career in technology. The programme encompasses structured training, a progressive career roadmap, job rotations, reward and benefits, career coaching and industry recognised certifications. During the year, 219 graduates joined our programme. In September 2021, we held a virtual celebration for those who completed their first Graduate Certificate as part of the National University of Singapore's Institute of Systems Science's (NUS-ISS) Master of Technology.

Figure 7: Training and development investment* breakdown by learning pillars (S$ million)

● Singtel ● Optus ● Singtel Group

	Compliance	Company	Business	Future
Singtel	0.7	1.7	2.8	7.2
Optus	3.7	0.9	1.6	0.6
Singtel Group	4.4	2.6	4.4	7.8

*Figures converted from AUD to SGD at exchange rate of A$1 = S$0.9972

Figure 8: Average training hours

● Singtel ● Optus ● Singtel Group

	FY2022			FY2021		
Singtel	51.8			43.5		
Optus		27.0			14.6	
Singtel Group			43.1			33.0

Training and development investment

Singtel
FY2022: S$12.5 million
FY2021: S$11.8 million

Optus
FY2022: A$6.7 million
FY2021: A$5.0 million

Singtel Group
FY2022: S$19.2 million
FY2021: S$16.8 million

Talent development and future skills

The shift to a digital economy means that building a vibrant and agile workforce is more important than ever. Singtel Group will continue to invest in our people – skilled employees, subject matter experts and exceptional leaders (see Figure 7 and 8). Our people development philosophy comprises four essential components: expertise, exposure, experience and engagement.

The Singtel Group's people development ecosystem is made up of three corporate academies in Singtel, NCS and Optus and we have formed partnerships with a wide range of institutes of higher learning, consulting

firms, think tanks, knowledge platforms and leadership institutes. It is critical to continuously develop and nurture our employees with skills and competencies to stay relevant. We invest heavily in our people and provide ample opportunities for their professional and personal development. We believe in cultivating a growth mindset across the Group and are committed to harnessing the power of technology to create a sustainable and inclusive future for everyone.

For our popular annual Singtel Group Learning Fiesta (SGLF), we organised a series of webinars and development sessions, including topics on sustainability, 5G, career development and core values over two months instead of one. We encouraged employees across the Singtel Group and geographies to set aside one day a week – branded as We.Learn.Day and usually on a Wednesday – for their development and learning. Apart from attending webinars, we introduced our first Learning Fiesta Challenge where employees were encouraged to keep fit and clock 200,000 steps while learning through #CURIOUS, our mobile digital learning platform with curated channels and topics.

SGLF 2021 had a 30% increase in learning places compared to the previous year and format, with more than 9,000 unique participants. To date, over 4,900 modules have also been completed and the average number of learning hours per employee per month in #CURIOUS increased 23% compared to last year.

To support our 5G network expansion plans and capabilities, we collaborated with tertiary institutions and training partners. We designed role-based training and broad-based curriculum and expanded our 5G-related learning content in our #CURIOUS library.

"I really enjoyed the flexibility the Management Associate Programme gave me in trying out different roles in Singtel."

Shruthi Iyer
Data Scientist

This also supported the goal of training 2,500 employees in 5G-related skills over two years, set by our 5G Workforce Transformation Committee (WTC) last year. Since then, more than 700 employees have undergone 5G training and another 1,020 employees have benefited from our curated 5G curriculum.

We also enhanced the way we discuss talent mobility and development. To support our talents in their day-to-day growth, we launched an improved playbook for managers describing a framework and process on how to equip talents with the right knowledge and skills to progress. We also introduced virtual coaching to pair talents with certified coaches to bridge any development gaps and unlock potential. We encourage everyone to take charge of their own learning and career development and challenge their capabilities.

During the year, we set up NCS Dojo, an immersive learning academy and platform that is anchored on business and people transformation priorities. NCS Dojo focuses on providing leadership programmes and building the company into a learning organisation where we bring people together to learn.

In Australia, we have Optus U, our micro-credential programme, where we partner leading universities to provide employees with relevant and future skills such as data analytics. Our people participate in lectures and talks by guest speakers, as well as workshops and projects delivered by our education partners La Trobe University, Macquarie University and Curtin University. During the year, 300 Optus employees graduated from the programme.

We continue to reinforce and promote a vibrant learning and innovative culture geared towards empowered and continuous learning. This will allow our employees to be deployed in a manner that meets evolving business priorities, as well as remain relevant with the right skills and knowledge in this ever-changing operating environment.

Upskilling and reskilling for a future-ready workforce

We continue to build collective capacity to lead the change for a digital future. We support the TechSkills Accelerator (TeSA), a SkillsFuture initiative by Infocomm Media Development Authority (IMDA) in partnership with agencies like Workforce Singapore (WSG) and SkillsFuture Singapore (SSG), as well as collaborate with industry partners and hiring employers.

TeSA offers various programmes to support current infocomm technology (ICT) professionals and non-ICT

Company Training Committee

In 2019, Singtel signed a Memorandum of Understanding (MOU) on the formation of a Company Training Committee (CTC) with UTES. We committed a S$45 million training investment over three years from 12 September 2019 to 11 September 2022 to boost the digital skills of our people.

The CTC is committed to supporting employees in upskilling, equipping them with adaptive technological and technical skillsets critical in enabling them to be future-ready, with a focus on:

1. **Accelerate** employees' skill acquisition with #CURIOUS
2. **Co-create** skills pathways through certifications and qualifications
3. **Transform** the roles of employees to become future-ready

Through the CTC, we achieved 17% more learning hours and a 22% increase in monthly unique learners during the year, despite the limited face-to-face classes due to the pandemic and safe management measures.

The continued conversion of physical classes to virtual-live sessions and self-paced learning via digital learning platforms like #CURIOUS has also resulted in cost savings in the past two years. We are on track to deliver on our S$45 million training investment commitment.

professionals to upgrade and acquire new skills and domain knowledge that are in demand, and to stay competitive and meet the challenges of a fast-moving digital landscape. During the year, we onboarded 225 trainees from the TeSa Mid-Career Advance programme, which provides reskilling opportunities for Singapore citizens above 40.

In addition, we actively engage our people in professional conversion. Through the Professional Conversion Accelerator programme, we successfully converted 1,201 employees into new positions for various roles, including 5G-related ones.

People Performance Indicators

PEOPLE	SINGTEL			OPTUS			SINGTEL GROUP		
	2022	2021	2020	2022	2021	2020	2022	2021	2020
Total employees by gender									
Male	**7,901**	8,003	7,842	**4,936**	5,287	5,307	**12,837**	13,290	13,149
Female	**4,295**	4,388	4,303	**2,332**	2,400	2,356	**6,627**	6,788	6,659
Total employees	**12,196**	12,391	12,145	**7,268**	7,687	7,663	**19,464**	20,078	19,808
Total employees by employment contract and gender									
Regular employees (Male)	**7,042**	6,937	6,650	**4,856**	5,172	5,236	**11,898**	12,109	11,886
Contract employees (Male)	**859**	1,066	1,192	**80**	115	71	**939**	1,181	1,263
Regular employees (Female)	**3,732**	3,726	3,743	**2,286**	2,333	2,307	**6,018**	6,059	6,050
Contract employees (Female)	**563**	662	560	**46**	67	49	**609**	729	609
Total regular employees by employment type and gender									
Full time (Male)	**7,896**	7,995	6,643	**4,420**	4,740	4,675	**12,316**	12,735	11,318
Part time (Male)	**5**	8	7	**516**	547	632	**521**	555	639
Full time (Female)	**4,281**	4,377	3,734	**1,885**	1,893	1,779	**6,166**	6,270	5,513
Part time (Female)	**14**	11	9	**447**	507	577	**461**	518	586
Casual employees[1]									
Total number of casual employees	**30**	-	-	**286**	-	-	**316**	-	-
Total man hours worked	**7,920**	-	-	**122,402**	-	-	**130,322**	-	-
Total employees by age group									
<30 years old	**18%**	19%	20%	**20%**	20%	23%	**18%**	19%	21%
30-49 years old	**61%**	62%	61%	**58%**	60%	59%	**60%**	61%	60%
≥ 50 years old	**21%**	20%	19%	**22%**	20%	18%	**21%**	20%	19%
Gender mix by employee category (% female)									
Operations and Support	**43%**	43%	41%	**39%**	40%	39%	**42%**	42%	41%
Professional	**32%**	31%	32%	**32%**	30%	29%	**32%**	31%	30%
Executives and Top Executives[2]	**33%**	34%	34%	**23%**	22%	22%	**28%**	28%	28%
- Executives	**33%**	34%	34%	**23%**	23%	22%	**28%**	28%	28%
- Top Executives	**34%**	34%	33%	**22%**	17%	10%	**32%**	28%	26%
Mean salary ratio (female:male)[3]									
Operations and Support	**0.99 : 1**	1 : 1	0.99 : 1	**1 : 0.94**	1 : 0.94	1 : 0.95	**1 : 0.97**	1 : 0.97	1 : 0.97
Professional	**0.94 : 1**	0.96 : 1	0.96 : 1	**0.93 : 1**	0.94 : 1	0.95 : 1	**0.93 : 1**	0.95 : 1	0.95 : 1
Executives	**0.95 : 1**	0.95 : 1	0.96 : 1	**1 : 1**	0.99 : 1	0.97 : 1	**0.97 : 1**	0.97 : 1	0.97 : 1
Median salary ratio (female:male)[4]									
Operations and Support	**0.98 : 1**	-	-	**1 : 0.98**	-	-	**1 : 1**	-	-
Professional	**0.91 : 1**	-	-	**0.91 : 1**	-	-	**0.91 : 1**	-	-
Executives	**0.94 : 1**	-	-	**1 : 1**	-	-	**0.97 : 1**	-	-
Mean bonus ratio (female:male)[5]									
Operations and Support	**1 : 1**	1 : 0.99	1 : 0.96	**1 : 0.81**	1 : 0.94	0.99 : 1	**1 : 0.92**	1 : 0.97	1 : 0.98
Professional	**0.94 : 1**	0.98 : 1	0.99 : 1	**0.87 : 1**	0.89 : 1	0.93 : 1	**0.91 : 1**	0.95 : 1	0.96 : 1
Executives	**1 : 0.89**	1 : 0.94	1 : 0.87	**0.96 : 1**	0.95 : 1	0.95 : 1	**1 : 0.95**	1 : 0.97	1 : 0.98
Median bonus ratio (female:male)[4]									
Operations and Support	**0.99 : 1**	-	-	**0.99 : 1**	-	-	**0.99 : 1**	-	-
Professional	**0.95 : 1**	-	-	**0.86 : 1**	-	-	**0.91 : 1**	-	-
Executives	**1 : 0.92**	-	-	**1 : 0.94**	-	-	**1 : 0.93**	-	-
New employee hires	**19.9%**	15.5%	14.1%	**23.0%**	15.2%	23.1%	**21.1%**	15.3%	17.6%
New employee hires by age group									
<30 years old	**6.6%**	6.4%	6.2%	**11.4%**	6.0%	11.5%	**8.4%**	6.2%	8.3%
30-49 years old	**11.7%**	7.9%	7.4%	**10.0%**	7.7%	10.2%	**11.1%**	7.8%	8.5%
≥ 50 years old	**1.6%**	1.2%	0.5%	**1.6%**	1.6%	1.4%	**1.6%**	1.3%	0.8%
New employee hires by gender									
Male	**13.5%**	5.0%	9.5%	**14.5%**	9.5%	15.5%	**13.8%**	10.1%	11.8%
Female	**6.4%**	10.5%	4.6%	**8.5%**	5.7%	7.6%	**7.2%**	5.2%	5.8%
Employee voluntary turnover	**19.9%**	13.2%	15.7%	**22.6%**	12.5%	15.3%	**20.9%**	12.9%	15.5%

PEOPLE	SINGTEL			OPTUS			SINGTEL GROUP		
	2022	**2021**	**2020**	**2022**	**2021**	**2020**	**2022**	**2021**	**2020**
Employee turnover by age group									
<30 years old									
Voluntary	**4.9%**	3.8%	4.0%	**9.6%**	6.0%	8.1%	**6.6%**	4.6%	5.5%
Involuntary	**0.1%**	0.04%	0.6%	**2.1%**	0.8%	2.8%	**0.8%**	0.3%	1.4%
30-49 years old									
Voluntary	**12.5%**	7.8%	9.5%	**11.1%**	5.5%	6.3%	**12.0%**	6.9%	8.3%
Involuntary	**0.3%**	0.2%	0.9%	**3.2%**	2.0%	5.3%	**1.4%**	0.9%	2.6%
≥ 50 years old									
Voluntary	**2.5%**	1.6%	2.2%	**1.9%**	1.0%	0.9%	**2.3%**	1.4%	1.7%
Involuntary	**0.2%**	0.1%	0.6%	**1.8%**	0.9%	2.5%	**0.8%**	0.4%	1.3%
Employee turnover by gender									
Male									
Voluntary	**13.2%**	9.0%	10.6%	**14.9%**	8.0%	9.4%	**13.8%**	8.6%	10.1%
Involuntary	**0.4%**	0.2%	1.4%	**5.0%**	2.5%	6.9%	**2.1%**	1.1%	3.5%
Female									
Voluntary	**6.7%**	4.2%	5.1%	**7.7%**	4.5%	5.9%	**7.1%**	4.3%	5.4%
Involuntary	**0.2%**	0.1%	0.7%	**2.1%**	1.3%	3.7%	**0.9%**	0.6%	1.8%
Total training investment ($million)	**S$12.5**	S$11.8	S$14.6	**A$6.7**	A$5.0	A$7.8	**S$19.2**	S$16.8	S$21.9
Average training hours per employee	**51.8**	43.5	40.2	**27.0**	14.6	19.6	**43.1**	33.0	32.7
Average training hours by gender									
Male	**56.3**	48.3	44.2	**25.8**	13.7	19.1	**45.1**	34.8	34.3
Female	**43.4**	34.8	33.1	**29.8**	17.0	20.9	**39.1**	29.1	29.4
Average training hours by employee category[6]									
Operations and Support	**27.2**	20.9	29.7	**34.8**	28.6	30.4	**28.7**	22.7	29.9
Professional	**62.7**	55.3	47.7	**26.8**	12.2	17.7	**49.3**	38.5	35.8
Executives and above	**50.3**	39.6	28.6	**22.2**	10.9	14.8	**35.7**	24.4	21.4
Employee health and safety[7]									
Total man hours worked (per million)	**27.0**	27.6	-	**12.3**	13.1	-	**39.3**	40.7	-
Workplace injury incidence rate (per 1,000 employees)	**0.6**	0.8	0.8	**1.1**	2.6	2.3	**0.8**	1.5	1.4
Workplace injury frequency rate (per million hours worked)	**0.3**	0.4	0.4	**0.7**	1.5	1.4	**0.4**	0.7	0.7
Workplace injury frequency rate (Male)	**0.2**	0.4	0.2	**0.5**	1.6	1.6	**0.3**	0.8	0.7
Workplace injury frequency rate (Female)	**0.3**	0.3	0.6	**1.1**	1.3	0.8	**0.5**	0.6	0.7
Workplace injury severity rate	**6.0**	10.0	7.9	**11.9**	19.0	8.9	**7.9**	12.9	8.2
Workplace injury severity rate (Male)	**0.8**	13.0	4.6	**9.1**	23.7	11.9	**3.5**	16.6	7.1
Workplace injury severity rate (Female)	**15.7**	4.5	14.1	**18.3**	8.0	1.7	**16.5**	5.5	10.6
Absenteeism rate	**0.02**	0.014	0.022	**0.02**	0.013	0.017	**0.02**	0.014	0.020
Absenteeism rate (Male)	**0.017**	0.011	0.019	**0.015**	0.012	0.014	**0.016**	0.011	0.017
Absenteeism rate (Female)	**0.029**	0.019	0.029	**0.020**	0.017	0.024	**0.026**	0.019	0.027
Total occupational disease cases	**0**	0	-	**0**	0	0	**0**	0	-
Total occupational disease cases (Male)	**0**	0	-	**0**	0	0	**0**	0	-
Total occupational disease cases (Female)	**0**	0	-	**0**	0	0	**0**	0	-
High consequence injury rate (per million hours worked)	**0**	0.04	-	**0**	0	-	**0**	0.02	-
Fatalities	**0**	0	0	**0**	0	0	**0**	0	0

1. This is the first year we are reporting on casual workers, who are mainly employed as retail sales consultants in Singapore and Australia.
2. Previously known as Middle Management and Top Management. Heads, previously included under Middle Management, are now considered as Top Executives.
3. Based on average monthly salary of regular employees.
4. This is the first year we are reporting on median salary and bonus ratios.
5. Based on average annual bonus of regular employees.
6. Singtel excludes contract staff who have a tenure of less than one year, while Optus excludes all contract staff and casual workers in their data.
7. Workplace health and safety metrics are based on the International Labour Organization (ILO) definitions, subject to country definition of lost work shifts e.g. Optus excludes weekends from medical leave when calculating these rates.

04

COMMUNITY IMPACT

Equity and Inclusion

Partners and Associates

Capability and Competence

Community Impact

Staff Engagement and Volunteerism

Product, Technology and Innovation

Community Investment

Digital Enablement

To enable the inclusion and well-being of people, and help our communities realise their potential through digital enablement
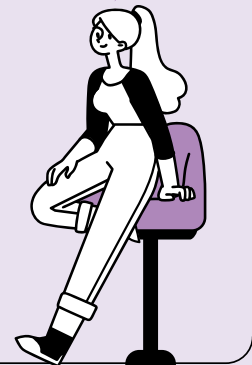
Figure 1

Singtel Group Community Impact Framework

●●●●

Aligned with our purpose, Empower Every Generation, the Singtel Group is committed to driving sustainable change by empowering communities through equity and inclusion as well as digital enablement to provide equal opportunities and access for all. So that no one is left behind.

Digital enablement is at the core of our community impact strategy (see Figure 1). We recognise that our ICT capability and competence, product technology, expertise and innovation have created positive and lasting impact on generations of people through the years. And we aim to continue to advance the world for future generations to come.

We believe that digital enablement addresses several community material topics – including online safety, digital access and inclusion, as well as fostering education and employability – identified in our materiality review and stakeholder engagement exercise.

Our focus on equity and inclusion demonstrates the company's commitment to support the vulnerable – children, youth and seniors, disadvantaged families and communities, and persons with disabilities. Our initiatives aim to uplift them with resources to thrive and build community resilience including exposure to natural disaster risks and impacts.

We are represented in global, national and industry committees such as GSMA working groups, National Council of Social Service (NCSS)

Maximising value creation with Singtel Group core values

	Values	Community Impact
C	Cultivate a Growth Mindset	We work with partners to leverage our ICT competence to digitally enable social service agencies, charitable organisations, seniors and other vulnerable segments.
O	Operate with Integrity	We support vulnerable communities with our programmes governed by our community impact framework and policies.
M	Make Customers First	We address the needs of communities and vulnerable segments through shared value and our digital enablement programmes.
M	Maximise Teamwork	We foster collaboration with diverse partners in the ecosystem to empower our communities for a better future.
I	Innovate with a Challenger Spirit	We drive social innovation to empower communities and the social service sector to use technology for social good.
T	Take Ownership	We are committed to being a responsible corporate citizen in all the markets where we operate, driving positive and sustainable change for our communities.

Strategic Thrusts steering committee, Business for Societal Impact (B4SI) steering group and the Enabling Technology Advisory Group jointly chaired by the Agency for Integrated Care (AIC) and SG Enable in Singapore. We play an active role in contributing our corporate expertise to shape digitally inclusive communities and understanding how we can positively shape our community programmes.

Together with our partners, we develop and implement programmes and staff engagement initiatives that leverage the company's collective resources of digital services, corporate competence and staff expertise to create meaningful impact in the community.

● ● ● ●

Empower Every Generation is simple yet powerful, aptly encapsulating the role we have played since our founding more than 140 years ago. It also reflects our intention to make sure we bring everyone along into a more sustainable digital future and advance the world for future generations to come with new ideas and innovations.

Yuen Kuan Moon, Singtel Group CEO

Community Impact Pillars	Objectives	Key Singtel Group Initiatives	Target Segments	2025 Target	Progress Towards 2025 Target
Digital Enablement	Bridging the digital divide through digital access and inclusion (page 41-43)	• Singtel Digital Silvers • Donate Your Data and Device • Migrant Worker Outreach	Vulnerable seniors, migrant workers and low-income families	One million digitally enabled persons and SMEs (between 2015 and 2025)	>740,000 (between 2015 and 2022)
	Online safety and well-being (page 43-44)	• Help123 • Optus Digital Thumbprint • Singtel Digital Silvers	Children, youth, parents and caregivers		
	Unlocking digital growth opportunities (page 44-45)	• Singtel Group Future Makers • SME Digitisation Initiatives	SMEs, non-governmental organisations (NGOs), social impact start-ups and Social Service Agencies (SSAs)		
Equity and Inclusion	Supporting the education of vulnerable groups (page 46-47)	• Singtel Touching Lives Fund • Race Against Cancer • ABCN and KARI Foundation	Persons with disabilities, disadvantaged communities and vulnerable youth		
	Advancing employability of disadvantaged population (page 47)	• Pathways 2 Employment • SBNoD			

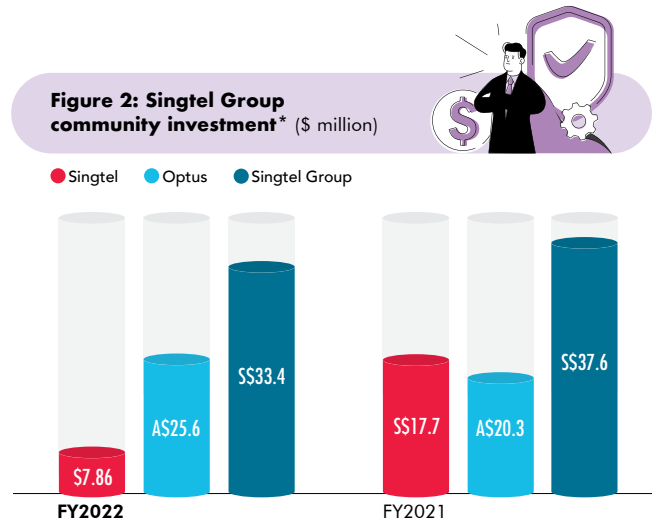**Table 1: Singtel Group community impact efforts and goals**

We are committed to digitally enabling one million persons and small and medium sized enterprises (SMEs). Our efforts are also aligned with our material topics of Online Safety and Well-Being, Community Resilience and Disaster Response, and Education and Employability (see Table 1). During the year, the Singtel Group invested S$33.4 million in our communities (see Figure 2).

BRIDGING THE DIGITAL DIVIDE

Digital access is critical for people to participate meaningfully within society today, such as fixed and mobile data and voice communication, and online commerce and banking. However, segments of the population such as seniors, low-income families and migrant workers risk getting left behind due to lack of resource, knowledge or skill.

The Singtel Group works closely with national agencies and charity partners to narrow the digital divide. We tap on our ICT strengths to support the underserved population, providing them with digital access and skills to improve their lives and livelihood.

In Singapore, our programmes are aligned with IMDA's Digital for Life movement which affirms our commitment to build a digitally inclusive society where all Singaporeans are empowered to realise their fullest potential. In Australia, our programmes Donate Your Data and Donate Your Device address the digital divide by supporting disadvantaged students, families as well

Figure 2: Singtel Group community investment * ($ million)

● Singtel   ○ Optus   ● Singtel Group

FY2022: S$7.86, A$25.6, S$33.4
FY2021: S$17.7, A$20.3, S$37.6

*Our community investment, which includes direct financial support, in-kind charitable sponsorship and staff volunteering hours, has been verified by the Business for Societal Impact (B4SI).

as individuals in crisis with data access and connectivity. These programmes are supported by our generous customers who donate their excess data and new or unwanted devices.

Enabling customers and employees to build an inclusive digital future

Optus Donate Your Data

Since 2018, we have been bridging the digital divide for disadvantaged and vulnerable young Australians through Optus' **Donate Your Data** programme. We empower our customers to donate their mobile data to those who need it most.

The connectivity provided enables disadvantaged students to continue to learn and have access to online lessons and resources especially when more learning moved online during the pandemic. Amid the pressure and isolation brought about by the pandemic, we expanded our programme to cover families and people experiencing crisis. We provide SIM plans to the homeless and those experiencing domestic violence and affected by natural disasters.

Donated data is pooled and shared with young people, their families and other Australians supported by our charity partners such as Australian Business and Community Network (ABCN), KARI Foundation and The Smith Family. During the year, we onboarded more than 10,000 participants, bringing the total number of beneficiaries to over 27,000. Since December 2019, our customers have donated over 40 million GB of data through this programme. In recognition of our programme and its meaningful impact, we received the 2021 Australian Communications Industry Awards for Innovation by a large company.

Digital Inclusion Benchmark 2021

Singtel Group's commitment to advancing digital inclusion has been recognised by the World Benchmarking Alliance's Digital Inclusion Benchmark (DIB) 2021.

DIB ranks the world's most influential 150 technology companies on their responsibility to advance a more inclusive digital society and enable the achievement of the UN SDGs. Singtel Group ranked 20th out of the 150 tech companies and the second best performing company headquartered in Southeast Asia, demonstrating strong performance in digital inclusion.

We also ranked third among all benchmarked companies in the 'Access' category, in recognition of our programmes like Donate Your Data and Singtel Digital Silvers that make digital technologies more widely available, affordable and accessible.

This affirms our commitment to cultivating a more inclusive digital society through our core business and competence.

Visit **Digital Inclusion Benchmark** for more information.
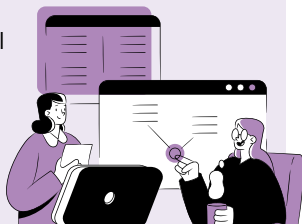
Taking collective action on domestic and family violence

As part of the Telco Together Foundation, Optus is proud to contribute to the **Domestic and Family Violence Action Plan Framework**, an industry-first framework that will improve how we support Australians experiencing domestic and family violence. Communication devices and services can be a lifeline in these situations but can also be tools for control and abuse. The framework includes a comprehensive and standardised set of guidelines to train employees of participating telcos on how to best support victims and ultimately reduce instances of domestic and family violence.

At Optus, we took our commitment a step further by expanding our Donate Your Data and Donate Your Device to include such victims who needed to re-establish safe connectivity to other trusted parties and loved ones.

Optus Donate Your Device

Through the digital inclusion roundtables that we organised, we garnered further insights from our Australian community partners. While our Donate Your Data programme was highly successful, many vulnerable people lacked devices to take advantage of the availability of free mobile data. Hence, we launched Donate Your Device during the year to encourage customers to help bridge the digital divide by donating preloved or brand new devices to people who cannot afford a device or mobile data access. Working with our charity partner Good360 Australia, customers can drop their phones at our stores, which will then be checked, cleaned, data wiped and repackaged with a new charger, ready for donation to someone in need. In addition to a donated handset, beneficiaries receive an Optus prepaid SIM loaded with data donated by our customers.

Our programme also has a positive environmental impact as we keep unused devices out of the Australia landfill by giving them a new lease of life. Mobile phones deemed unsuitable for donation are recycled through our Optus' in-store Mobile Muster programme.

Empowering seniors to go digital

In Singapore, we introduced the Singtel Digital Silvers programme in September 2020, under our digital enablement strategy and efforts, to address the challenges posed by the pandemic as many live-alone seniors in Singapore were isolated from community and social support.

We sponsor WiFi broadband connection and Singtel TV ethnic content channels (Chinese, Malay, and Indian) at the Senior Activity Centres (SACs) run by NTUC Health, Thye Hua Kwan and Fei Yue, transforming them into digital hubs. ICT has become integral to promoting active

●●●●
We are expanding our digital inclusion efforts to help seniors reap the benefits of the digital world, ensuring they are not only equipped with essential digital literacy skills but also have access to reliable connectivity.

Anna Yip, CEO, Consumer Singapore

ageing and facilitating virtual engagement especially during the pandemic. Our staff volunteers conduct weekly one-on-one sessions with seniors at SACs to help them pick up basic digital skills, such as smartphone functions like camera and voice messaging, useful apps like YouTube, surfing the internet, using digital payment and protecting themselves from online dangers. These Wednesday sessions are currently conducted at all our Singtel Shops before opening hours, as well as SACs in the afternoon.

During the year, we empowered more than 7,000 seniors with such digital knowledge under the guidance of more than 250 dedicated Singtel staff volunteers. Our survey found that more than 65% of the seniors now have more confidence using mobile phones and apps to navigate in the digital world.

In August 2021, we launched **Singtel Digital Silvers' Journey**, a series of instructional videos on digital skills produced in-house. They are made simple for seniors to follow, learn and revise independently. Each video focuses on different digital skills that are vital for everyday use in an increasingly tech-savvy world. We also collaborated with popular media personalities like Jin Jie to launch '**Jin Jie Goes Digital**'. This social media campaign aimed to raise seniors' awareness on how they could upgrade their digital skills to enhance their lives and stay connected. The campaign attracted over 200,000 views in two months and further bridged the digital divide for the silver generation in a fun and engaging manner.

Yuen Kuan Moon, Singtel Group CEO, and our staff volunteers guiding seniors on using digital devices and services at a weekly session

GOMO Donate Your Data

Encouraged by the results of our Singtel Digital Silvers Programme where seniors were able to pick up the necessary digital skills and knowledge to stay safe online, we piloted in February 2022 our **Donate Your Data** programme in Singapore with NTUC Health on our all-digital mobile brand GOMO. Launched as part of GOMO's #DataForGood campaign, the movement rallies customers to make the online space a better one and encourage better mental and digital well-being for everyone. Complementing the Singtel Digital Silvers programme, GOMO customers who are mainly youth can now play a role in digital inclusion for seniors by donating their data to vulnerable seniors at their fingertips via the GOMO mobile app.

We consolidate and credit donated data every month into the Singtel prepaid hi! cards which we sponsor for the vulnerable seniors across the 13 NTUC Health SACs. We plan to extend the programme to all our customers and scale the programme to reach 10,000 seniors and beneficiaries across more SSAs. This will also enable our customers to play their part in building an inclusive digital society and draw more people into the Digital for Life national movement.

Engaging migrant workers to stay digitally connected

There are more than one million migrant workers in Singapore. Together with the Migrant Workers' Centre (MWC) and Centre for Domestic Employees (CDE), Singtel organised regular activities to engage and uplift their spirits during the pandemic. Online events had an entertaining line-up of artiste performances and games with prizes, and saw an average 120,000 viewership. These workers also received regular information on work safety, health, mental wellness and remittance.

Workers using our hi! prepaid mobile service enjoy free ethnic content movies and TV shows from their home countries when they top up their account. We also made mobile remittance hassle-free with Dash Remit on our mobile wallet service Singtel Dash via the hi! app.

This gives our migrant worker customers a convenient, safe and digital alternative to visiting physical retail stores especially during the pandemic.

ONLINE SAFETY AND WELL-BEING

The proliferation of devices and social media has enabled people to stay in touch wherever they are, with instant access to information. But it also brought about challenges like increased instances of cyber bullying, access to inappropriate content and digital addiction to mobile devices and gaming. Increased digital learning since the pandemic also comes with more unregulated screen time and content access, thereby exacerbating online risks especially for the younger ones.

The Singtel Group recognises these unintended consequences in our industry. As a responsible corporate citizen and market leader, we play a proactive role in mitigating such risks through education and promotion of responsible digital citizenship and online safety among our customers, children and youths. Since 2015, our Digital Thumbprint programme has equipped more than 600,000 students, educators and parents in Singapore and Australia with skills and knowledge to stay safe online.

As part of our continuous improvement efforts, we assess ourselves based on internationally recognised frameworks and benchmarks such as Global Child Forum and the GSMA-UNICEF MO-CRIA: Child Rights Impact Self-Assessment Tool for Mobile Operators to keep abreast with the latest best practices in child online safety and what we as a telco can and should do in this space. We also work closely with national agencies in Singapore and the Office of the e-Safety Commissioner in Australia to ensure that our programmes meet changing needs and align with regulatory landscapes in our respective markets to keep online spaces safe, especially for the vulnerable children.

Helping families manage digital risk in Singapore

Help123 is an integrated cyber wellness and digital parenting platform by TOUCH Community Services that is supported by Singtel. First launched as a pilot supported by NCSS in 2017, Help123 has since adapted to the growing needs of parents and caregivers to focus on providing comprehensive digital resources to help them manage cyber wellness issues faced by their young ones. The full suite of Help123 services offered covers a one-stop hotline (1800 6123 123) and email, knowledge and resource, and digital parenting webinars. Since its inception, Singtel has invested over S$1 million into this platform and its offering.

Since the onset of the pandemic, we have noticed increased traffic to the Help123 website and email enquiries from parents who mostly sought help for their children's excessive device usage. TOUCH has been organising online digital parenting webinars to equip parents with the knowledge and skills to protect and keep their children safe online. During the year, we reached over 5,500 parents and children, with more than 55% feeling that the sessions were better than other similar ones they attended. We also enhanced the website by integrating a chatbot to provide real-time support for parents, catering to the 1.5 times increased website traffic compared to previous year.

We also expanded our outreach efforts and worked with like-minded partners to reach out to more parent groups. For example, we collaborated with the People's Association to increase the reach of our webinars to more parents and caregivers as well as **Quality Check!** to improve the quality of screen time for preschool children in Singapore.

Empowering young Australians to be responsible digital citizens

We are committed to empowering young people to be safe and responsible while online, so that they can embrace digital technology, maximise its benefits, and achieve their full potential. Since 2013, our **Optus Digital Thumbprint** programme in Australia has been providing young people the tools they need for positive and responsible online experiences. Our programme is endorsed by the eSafety Commissioner as a Trusted eSafety provider and offered free to primary and secondary schools.

With young children spending more time online for school and recreation, the need for online safety education has never been greater. During the year, we expanded support for primary school children with facilitator-led workshops for students aged ten to 11, and new interactive workshops for children aged eight to nine.

These gamified workshops offer students badges for correct answers and completion. The current topics are 'Staying safe on apps and games' and 'Keeping information safe online', with more in the pipeline.

The expanded programme can be delivered to all Australian states via digital platforms or in-person sessions. This ensures young Australians have free and accessible digital citizenship education throughout primary and secondary schooling years, thereby improving their digital literacy to navigate safely in the digital world. Parents are also supported through facilitator-led workshops and free online resources which help them understand online safety issues and reinforce lessons their children have learnt. During the year, we reached more than 80,000 students.

UNLOCKING DIGITAL GROWTH OPPORTUNITIES

Besides access, it is equally important that people and businesses possess the right skills and knowledge to effectively harness the benefits of digital technology. However, not all of them are equipped to do so. The media cited a survey which found that only two of five Singapore SMEs perceived their digital efforts to be successful, implying a lack of digital skills and knowledge hindering businesses' digital transformation plans. Many SSAs also identified digital transformation as their top challenge. More than half of them wanted to continue digitising their operations beyond what they had implemented due to COVID-19. With our comprehensive suite of ICT solutions, Singtel is well placed to support these SMEs and SSAs and meet their digital needs.

Catalysing social innovation

Singtel Group Future Makers, our regional social innovation and capacity building programme, supports promising social impact start-ups with innovative technology solutions that help address social and healthcare challenges faced by the vulnerable in our communities. First started in Australia then Singapore, we have since expanded our local programmes and are working with our regional associates Airtel (India), AIS (Thailand), Globe (Philippines) and Telkomsel (Indonesia) to build collective impact in the social innovation space.

Since 2016, we have invested over S$5 million to support 72 local and regional start-ups through grants, capacity building and access to our ecosystem of partners and networking opportunities. In addition, employees who are subject matter experts in areas like digital marketing, HR, legal and strategy have been involved as mentors, coaches and judges as part of our skilled volunteering

efforts to empower the start-ups. Read more about our Future Makers programme in Singapore **here** and Australia **here**.

In 2021, our **programme** sought to foster shared value opportunities with our regional associates to create impactful social and business solutions for our markets. Aligned with the SDGs, the programme showcased 20 regional start-ups that address key issues related to economic growth (SDG 8) and health and well-being (SDG 3) to impact investors, government agencies, NGOs and corporate partners. Our employees and partners across the Group also supported the start-ups through mentorships and workshops as part of their capacity building. Six start-ups subsequently secured a total grant pool of S$150,000 to support their regional shared value proposals to drive social and business impact. Moving ahead, we will work closely with high potential start-ups to catalyse shared value opportunities and help scale their solutions.

Empowering SMEs to go digital

To support SMEs in Singapore on their digitisation journey, we launched a series of SME digitisation initiatives that offers ICT service consultation and support at no charge. During the year, more than 7,000 SMEs took part in the programme, with over 500 of them receiving one-on-one guidance from our digital specialists.

We guided SMEs on adopting IT solutions that supported secure and collaborative work processes while working from home, which was a norm during the pandemic. One such company is Yeng Management Services, an audit consultancy firm, which could not physically meet their clients and had to find alternative means to engage both clients and staff due to the safe management

measures. Mr P G Wee, owner of Yeng Management Services, said that "these solutions enhanced the company's efficiency through improved knowledge sharing and strengthened staff capabilities".

Singtel Group Future Makers alumni creating shared value

As one of Singapore's leading remote rehabilitation start-ups, XCLR8 Technologies, our 2018 Singapore programme alumni and Singtel Group Future Makers 2021 regional finalist, partnered our long-time charity partner Singapore Cancer Society to co-develop a remote rehabilitation programme for cancer survivors. Through remote rehabilitation, patients are empowered to take control of their recovery and reduce the inconvenience brought about by commuting to clinics especially in their less-than-ideal physical condition.

Optus Future Maker Virtual Psychologist (2017) offers mental health and psychological counselling by text and chat with trained counsellors and psychologists. Challenged by staff experiencing anxiety during the pandemic, our Philippine associate Globe launched Hope Chat with Virtual Psychologist in the second quarter of 2021 to its 8,000 employees. It received a 97% satisfaction rate. Find out more about their work and other Singtel Group Future Makers 2021 start-ups **here**.

●●●●
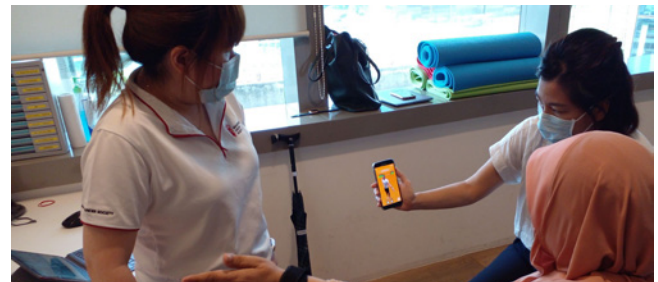
Singtel is honoured to be recognised for our support of the social enterprise sector in Singapore through Singtel Group Future Makers. Since our founding, we have strongly believed in harnessing the power of technology to empower generations of Singaporeans. We look forward to continue growing the programme with the help of our partners such as raiSE to support more social enterprises that share our vision.

Aileen Tan, Group Chief People and Sustainability Officer, Singtel

Social Enterprise Champion of the Year

In recognition of our significant contributions made in helping social enterprises build capacity in Singapore, Singtel was named Social Enterprise Champion of the Year at the biennial President's Challenge Social Enterprise Awards 2021.

Aileen Tan, Group Chief People and Sustainability Officer, receiving the award from the President of Singapore Halimah Yacob

About this Report Contents

Our Sustainability Approach

Climate Change & Environment

People & Future of Work

Community Impact

Sustainable Value Creation

Appendix

Supporting the next generation for innovative tech solutions

As part of NCS' commitment to nurturing future IT talents, we supported Splash Awards 2021, a national student tech innovation competition organised by the Singapore Computer Society to inspire innovative ICT solutions in a fun and creative way. We adopted a challenge sub-theme where a senior leader served as a judge to assess the proposed solutions. We also organised the NCS Thinkathon where over 80 tertiary students put their heads together to create innovative solutions to tackle challenges faced by our communities.

EQUITY AND INCLUSION

The Singtel Group is dedicated to advancing vulnerable segments of society, including persons with disabilities, disadvantaged youths and Indigenous Australians so that they are empowered to reach their full potential. We continue to engage our people to make positive contributions by getting involved in our community programmes through fundraising, volunteerism and sharing their knowledge and expertise.

In Singapore, our community programmes and approach are aligned with NCSS' Strategic Thrusts where every person is empowered to live with dignity in a caring and inclusive society. In recognition of our support for the sustainable progress in the development and inclusion of vulnerable groups in Singapore, Singtel was presented with the Community Chest Charity Platinum and Volunteer Partner Award 2021. We were also Singapore's sole private sector representative that received recognition at the inaugural ASEAN Outstanding Social Welfare and Development Awards which recognises organisations with noteworthy contributions in the field of social welfare and development.

In Australia, our social impact initiatives focus on improving educational outcomes and employment pathways for disadvantaged and vulnerable youth. Optus has been a founding member company of the ABCN since 2005 and a partner of KARI Foundation.

We also work with a wide range of charities and organisations through our flagship programmes like Donate Your Data, Donate Your Device and Pathways 2 Employment.

Supporting the education of vulnerable groups

Singtel Touching Lives Fund (STLF), our flagship corporate philanthropy programme, supports the education of children and youth with special needs in Singapore.

Our six beneficiary schools are APSN Chaoyang School, APSN Tanglin School, APSN Delta Senior School, Cerebral Palsy Alliance Singapore School, Eden School and MINDS Lee Kong Chian Gardens School. They collectively support more than 3,000 students annually and provide customised curriculum to equip them with the knowledge and skills to integrate into the community and live independently. STLF has raised more than S$50 million since it was set up in 2002.

We recognise that play is important for children to grow and thrive but are also mindful of their health and safety. Due to safe management measures, we were unable to organise our annual mega Singtel Carnival for all the special education (SPED) schools in the past two years. However, before the year-end school holidays, we brought mini versions of the carnival to four of our STLF beneficiary schools for the younger children. We also made drawstring bags and reusable masks sporting an artwork design by an APSN Tanglin School budding student artist Shannon Kaur, and distributed them to every student in all the SPED schools in Singapore.

We have been supporting NTUC's U Care Fund, since its establishment in 2009, to better the welfare of union members and their families.

● ● ● ●

For the last few years, it's been difficult for us to get our students to go to a carnival like this. I'd like to say a very big thank you to Singtel for bringing the carnival to us and allowing our students to expend their pent-up carnival excitement and have fun in a safe environment. Thank you for your continued contribution to the school and for serving the needs of all our students."

Gerald Vaz, Principal, MINDS Lee Kong Chian Gardens School

Aileen Tan, Group Chief People and Sustainability Officer, with the students from SPED schools at our decentralised Singtel Carnival 2021

Supporting pandemic recovery efforts

Singtel

40 staff volunteers supported Temasek Foundation's Stay Prepared Programme to assist Singapore households in collecting their free disposal surgical and N95 masks. Singtel was also among a group of corporate donors in the Singapore business community to donate 3,000 oxygen concentrators to Indonesia in July 2021. The oxygen concentrators were used by hospitals to expand their oxygen care and treatment.
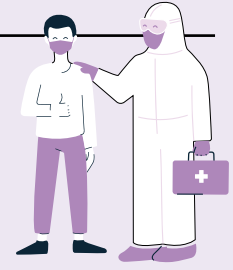
NCS

In appreciation for the tireless efforts of our healthcare workers in Singapore during the pandemic, our NCS Healthcare team visited Tan Tock Seng Hospital to distribute 400 care packs to healthcare workers, nurses and doctors.

Optus

We supported CARE Australia to raise funds to set up temporary hospitals in worst affected regions in India. Optus matched all staff donations one-for-one and provided a range of employee support for those personally impacted or have family and friends in India.

Last year, we contributed S$100,000 to various assistance programmes like discount vouchers for groceries, back-to-school vouchers, funding support for bursaries and scholarships, and family recreation packages. This brings our total contribution to S$1.02 million since 2009.

In Australia, we work closely with ABCN and KARI Foundation to support high-needs schools by providing skills and work experience to help students grow their confidence and set career goals. During the year, about 250 Optus staff mentors supported more than 2,000 students across five states. We work within state-based COVID-19 restrictions and pivoted to virtual delivery where necessary to ensure continued reach and rapport with these students. Our ongoing partnership with the KARI Foundation provides scholarships and mentoring support for Indigenous students living in low socio-economic areas, who are entering their final years of high school.

Advancing employability of disadvantaged population

As one of the founding members and current co-chair, Singtel participates actively in the **Singapore Business Network on DisAbility**. The network meets regularly to share expertise, experiences and resources to help advance the equitable inclusion of persons with disabilities in all aspects of business. We also support national disability agency SG Enable's mentorship and internship programmes for tertiary students with

disabilities, as well as career fairs and CV clinics. Through our annual Pathways 2 Employment programme in Australia, we support disadvantaged youths in their transition from school to employment and improve their future employment prospects.

This initiative provides disadvantaged and vulnerable high school students with retail and employability skills, and the confidence to find and keep a job, both within Optus and the broader retail sector. During the year, we delivered eight workshops – reaching 300 students and placing 20 students in Optus retail employment opportunities.

Engaging our people

Keeping our people actively engaged in the community is a key driver of our staff engagement and community impact strategy. We recognise our employees possess skills, networks and resources to empower vulnerable segments in the community. Employee volunteerism not only helps our communities but also contributes to the holistic development of our people in terms of empathy, perspective and character building.

During the year, we received the Community Cares Award from the Ministry of Social and Family Development, which recognised the efforts of Singtel and our staff volunteers who spent time during the pandemic to connect with vulnerable groups, checking in on their well-being. Optus was also recognised by Good Company Top 10 Best Workplaces in Australia for giving back to the community.

Fundraising

Our annual flagship STLF event, Singtel Charity Golf, returned after a skip year in 2020 due to the pandemic. Despite a much pared down affair due to safe management measures and restrictions, we raised S$700,000 for children and youth with special needs, thanks to the generosity of our business partners.

As the title sponsor of Race Against Cancer (RAC) since 2009, employees were encouraged to participate in RAC 2021 virtual race and set up their own fundraising campaign to support Singapore Cancer Society's Help the Children and Youth Programme. Singtel makes an annual S$250,000 donation to this programme, which provides support and financial assistance to children and youth who are cancer patients or whose family members are cancer patients. Our senior management teams in Singtel and NCS also took part in RAC 2021 and raised an additional S$200,000-plus.

In Australia, yes4good our online giving and volunteering platform helps our employees support causes close to their hearts through volunteering, donations and fundraising. We match staff donations and fundraising up to $300 per person per year. During the year, we conducted three fundraising campaigns and supported 288 charities through yes4good, with over A$300,000 in donations.
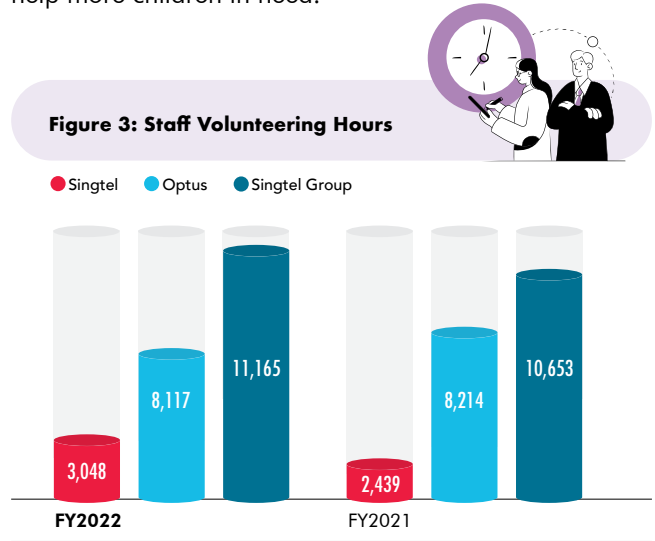
Volunteering

With the transition towards living with COVID-19, our colleagues have gradually resumed their volunteering activities abiding by safe management measures (see Figure 3). This includes conducting a mix of small groups in-person and virtual volunteering activities mainly through our Singtel Digital Silvers programme in Singapore and ABCN mentoring roles in Australia.

The Singtel Recreational Club mobilised colleagues to support coastal clean-up efforts organised by SportSG. 111 staff volunteers supported the activity to keep our beaches free from trash and safe for marine life.

In Australia, our Agile coaches came together to share their knowledge and skills, and upskilled multiple charities to help them improve their operational and communication strategies. During the year, they worked with ten charity partners to introduce agile ways of working and delivered a major project with Royal Far West, a children health charity, to build the clinical capacity of their supervision programme and ultimately help more children in need.

Figure 3: Staff Volunteering Hours

Singtel / Optus / Singtel Group

	FY2022	FY2021
Singtel	3,048	2,439
Optus	8,117	8,214
Singtel Group	11,165	10,653

VolunTeaming at Singtel Digital Silvers

In Singapore, we encourage our people to volunteer individually or as a team by offering paid volunteer leave, and encouraging business units to adopt VolunTeaming, our concept of department teambuilding with a volunteering element.

More than 40 colleagues from our Group Corporate Office participated in the Singtel Digital Silvers Programme to educate 80 seniors on digital literacy.

James Tran, Senior Director of Transformation, together with his Group Procurement colleagues, signed up for a session to connect with seniors at the MacPherson Senior Activity Centre. James was paired with Shirley, a 75-year-old grandmother who lives on her own.

James (far right) with his team at the Macpherson Senior Activity Centre guiding seniors

He advised Shirley on how to avoid scams and better connect with her friends through different apps and functions, among others. Through the experience, James was grateful for the opportunity to make a difference to the seniors. It also enabled him and his colleagues to live out Singtel's purpose to Empower Every Generation simply yet meaningfully.
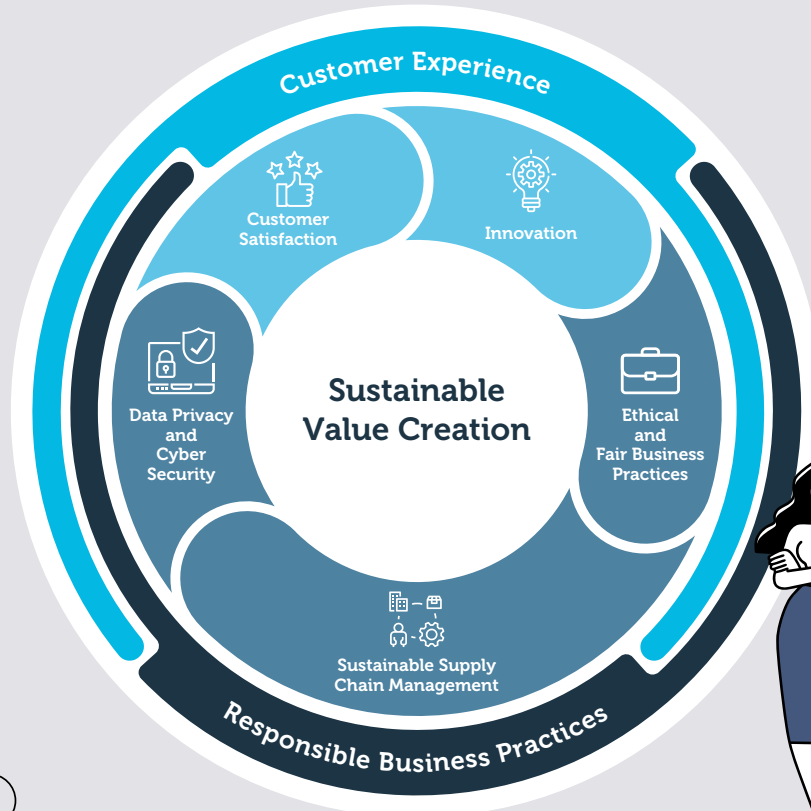
SUSTAINABLE VALUE CREATION

Figure 1

Singtel Group Sustainable Value Creation Framework

The Singtel Group is committed to being a responsible and innovative leader in the markets where we operate. We empower our employees, customers, community and stakeholders of all generations through responsible business practices across our operations and supply chains to drive positive business, environmental and societal impact (see Figure 1).

We want to help address the pressing needs of the environment and society as infocomm technology (ICT) continues to influence the way people connect, work and play. We also recognise stakeholder expectations of us to be a responsible and sustainable company. We look to our purpose to guide us in this and have mapped our value-driven behaviours against our sustainability framework.

RESPONSIBLE BUSINESS PRACTICES

We serve more than 14 million consumer and enterprise customers to meet their daily communication and connectivity needs. Stakeholder trust and confidence is important to us, and we aim to mitigate the unintended negative impact of our products and services for our stakeholders.

Data privacy and cyber security

The Singtel Group upholds the highest standards of customer data privacy and cyber security, as protecting our customer data is paramount. Singtel's Data Protection Policy and Optus' Privacy Policy provide transparency on how we collect, use, share and protect our customers' personal data.

Maximising value creation with Singtel Group core values

	Values	Sustainable Value Creation
C	**Cultivate a Growth Mindset**	We continuously look at how we can improve our business operations and service offerings while upholding responsible business practices to deliver value and positive impact.
O	**Operate with Integrity**	We embed responsible, ethical and fair business practices, such as adopting zero tolerance towards fraud, corruption and unethical behaviours, as well as upholding human rights and the highest standards of data privacy and cyber security.
M	**Make Customers First**	We are committed to delivering unparalleled customer experience with our innovative service offerings, reliable networks and quality customer care.
M	**Maximise Teamwork**	We collaborate with key stakeholders like industry players to deliver value and positive impact.
I	**Innovate with a Challenger Spirit**	We continuously innovate and push boundaries to meet changing customer needs while taking advantage of new technology capabilities like 5G.
T	**Take Ownership**	We recognise our stakeholders' expectations of us to drive greater business, environmental and societal impact and we take full ownership and accountability of our business decisions and actions.

We strictly adhere to data protection laws, such as the Personal Data Protection Act (PDPA) in Singapore and the Privacy Act and Telecommunications Act in Australia. We have safeguards in place to protect the personal data stored with us, and constantly monitor and review risks to ensure security is adequate and effective in today's rapidly evolving cyber risk landscape. We regularly conduct vulnerability assessments and security tests on our corporate information systems and network infrastructure to identify, reduce and rectify security weaknesses (see Figure 2).

We continue to educate our people and improve processes to reduce the recurrence of data breaches. Employees must complete an annual mandatory online privacy training which covers their responsibility to safeguard data. Phishing email simulation exercises are conducted regularly to improve their knowledge on phishing email identification. We periodically publish security tips to raise employees' awareness and vigilance level. Targeted training is also conducted for our customer service teams and offshore contact centres.

Figure 2: Managing customer data privacy and protection

a. Managing data governance

Our Group Chief Information Officer is also our Data Protection Officer and provides strategic oversight, implementation and direction across the Singtel Group to ensure compliance with data protection laws. He reports directly to the Board Risk Committee on risks associated with personal data and solutions to mitigate these risks.

b. Staff education and training

All employees are required to undergo annual mandatory online training and tested on their subject knowledge. We conduct data privacy and security refresher training and share data handling tips regularly through various outreach channels to strengthen our people's cyber security awareness and the importance of data privacy and protection in their daily work.

We carry out phishing email simulation exercises and training throughout the year to improve employees' knowledge on identifying phishing emails. We also regularly update the content of our phishing programme to reflect emerging and evolving phishing tactics and scams.

About this Report Contents

Our Sustainability Approach

Climate Change & Environment

People & Future of Work

Community Impact

Sustainable Value Creation

Appendix

c. Business risk assessments

We conduct data protection compliance assessments regularly to help identify and mitigate our data protection risks. We also run regular compliance checks on our business processes to ensure they adhere to the relevant data privacy and protection laws. As part of our internal controls system and governance process, all application systems are subjected to regular testing and security reviews before they go into production and their launch.

Our Internal Audit department also conducts regular audits on the IT systems and telecommunications infrastructure underpinning the Singtel Group. These audits focus on providing independent assurance on the control environment, considering cyber security, data privacy and operational risks. Management is responsible for acknowledging the identified areas of improvement and establishing mitigation plans. Internal Audit also provides control advisory reviews to support management in the assessment of controls design for new programmes and initiatives.

In addition, we have a Third-Party Service Provider Security Risk Governance Programme that assesses our third-party vendors' cyber security practices. These reviews ensure that their cyber security practices adhere to Singtel's cyber security requirements and regulations. To protect data, we limit staff access to information residing on our systems and vendor systems. There are also strict verification processes in place to prevent unauthorised information access.

d. Customer empowerment

Cyber crimes are on the rise globally. To protect our customers, we send regular scam alerts to remind customers to stay vigilant and protect themselves against scams.

We conduct our marketing activities in accordance with the Do Not Call provisions of the PDPA and the Spam Control Act in Singapore. Customers who wish to opt out of receiving promotional messages or marketing calls can contact our customer hotline at 1688 or manage their preferences via our customer portal, Singtel My Account. In Australia, we meet our obligations under the Privacy Act and Privacy Provisions of the Telecommunications Act, the Spam Act and Do Not Call Register. We continuously enhance our processes and internal controls to protect customer data.
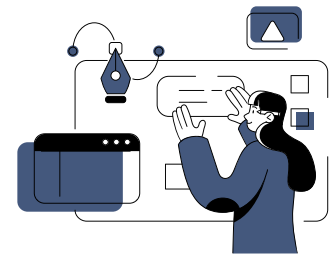
In FY2022, we recorded seven privacy incidents in Singapore, of which one was referred by the Personal Data Protection Commission (PDPC). These incidents were mainly due to human and process errors, as well as not following standard operating procedures. Employees involved have been coached and process lapses rectified.

We send regular reminders to our customer care officers on proper and careful management of customer data to prevent recurrence of such incidents. During the year, PDPC did not impose fines or non-monetary sanctions against Singtel. In May 2022, PDPC found that Singtel was not in breach of the PDPA in relation to a third-party file sharing system data incident in 2021 which we reported in SR2021.

In Australia, there were 130 customer data complaints that have been categorised as privacy incidents. Of this, four cases were referred by the Telecommunications Industry Ombudsman (TIO) and one case from the Office of the Australian Information Commissioner (OAIC). We met the threshold to notify the OAIC on one occasion and reported a Notifiable Data Breach during the year.

Ethical and fair business practices

Ethical and fair business practices are critical to building trust and loyalty with our customers. We hold ourselves to the highest standards of business conduct and this is supported by our two core values — Operate with Integrity and Make Customers First — which we expect employees to embrace and demonstrate in their work to ensure that we operate responsibly, ethically and with integrity in everything we do. We also incorporate these values into our processes and decision making.

Upholding human rights

We are committed to upholding and protecting the human rights of all individuals through a culture of trust, respect and inclusion in our company, supply chains and the markets where we operate, regardless of backgrounds, beliefs and abilities. During the year, we officially published our **Singtel Group Human Rights Statement**. As a signatory to the UN Global Compact since 2007, we conduct business in line with its Ten Principles and the UN Guiding Principles on Business and Human Rights.

We are also guided by international human rights principles set out in the International Bill of Human Rights and the International Labour Organization's (ILO) Declaration on Fundamental Principles and Rights at Work. This applies to how we operate and shape positive sustainable change for our business, employees, customers, communities and the environment.

Singtel Group is committed to providing our people with a work environment that is conducive, physically and psychologically safe and free from discrimination, harassment and retaliation. We take workplace grievances seriously and our Grievance Reporting Policy applies to the entire Group of companies.

We also remain committed to addressing modern slavery across our supply chains. In Australia, we published our second **Modern Slavery Statement** and supported the Telco Together Foundation in publishing an Industry Statement on human rights and modern slavery.

In partnership with Supply Nation, we now have access to more than 3,000 Indigenous suppliers, allowing us to explore opportunities to support Indigenous businesses across Australia. Internally, we continue to build staff awareness through modern slavery training modules, highlighting the role Optus plays in reducing modern slavery risks in our supply chains.

In view of the new Singtel Group Human Rights Statement, we revised our **Supplier Code of Conduct** (SCC) to improve the clarity of our corporate governance policies and requirements of suppliers in the areas of

human rights, business ethics and data privacy. We plan to roll out early next year an SCC e-learning module for suppliers to understand our requirements and expectations of them as we endeavour to collaborate with transparent, ethical as well as environmentally and socially responsible suppliers. These statements provide an overview of our approach to human rights, the standards we set for ourselves, and the people who work for us and on our behalf. We will review them annually to continuously improve our approach to human rights and modern slavery.

Fair marketing communications

We are committed to fair marketing practices and being clear and transparent in the way we communicate with customers, which can build trust and loyalty. To achieve this, we have incorporated a marketing code into the Singtel Code of Conduct. The marketing code sets out the requirements that Singtel organisations and representatives must follow to ensure that all marketing activities comply with various laws and guidelines such as the Singapore Code of Advertising Practice and PDPA.

There were no cases of non-compliance with regulations and voluntary codes concerning marketing communications during the year. However, the Advertising Standards Authority of Singapore (ASAS) raised four cases from customers who felt that our advertised promotions were not clear or could be misleading. We explained our position to ASAS, and were reminded to be mindful of presenting key Terms and Conditions (T&Cs) to customers in an upfront and accessible manner.

We took our customer feedback onboard and will ensure that details of future campaigns, including T&Cs, are placed clearly on our website and app. The same information will be disseminated to our customer care officers who can clarify with customers who enquire.

Anti-bribery and corruption

The Singtel Group does not tolerate fraud, corruption and unethical behaviour in any form. We manage our exposure to corruption risks through good corporate governance and applying robust internal controls. Our management of fraud risk is supported by various policies and programmes applied across the Group. Our employees, contractors and business partners are expected to comply with these policies. For example, our **Anti-Bribery and Corruption Policy**, together with the various Code of Conduct in place at all Group entities, mandates that Singtel Board members, management, employees and third parties who represent us, such as suppliers, contractors and business partners, observe our approach to bribery and corruption.

About this Report

Contents

Our Sustainability Approach

Climate Change & Environment

People & Future of Work

Community Impact

Sustainable Value Creation

Appendix

Table 1: Breakdown of nature of substantiated cases in FY2022

Types/Nature of cases	Singtel	Optus	Singtel Group
1. Breach of policy including IT security policy	6	13	19
2. Corruption	1	0	1
3. Employee fraud	2	15	17
4. Employee misconduct, undeclared conflict of interest and inappropriate behaviour	4	25	29
5. Identity theft	0	23	23

Our Whistleblower Programme, comprising an independent whistleblower hotline operated by external service providers in Singapore and Australia and supported by relevant Group policies such as the Singtel Group Investigation Policy and **Singtel Group Whistleblower Policy**, strengthens our internal control environment. Please refer to our Corporate Governance **website** for more information.

Every year, employees undergo mandatory online refresher courses on Code of Conduct, Fraud Awareness and Anti-Bribery and Corruption Policy, and are required to declare any conflict of interest. We review these courses periodically to ensure content relevance. Regular communications and case studies are also sent for staff awareness, reminder and compliance.

If an allegation of corrupt conduct is received, a specialist team will conduct an independent investigation. Should an incident involving corrupt or fraudulent conduct by an employee be substantiated, we will take appropriate disciplinary action, including termination of employment, and report the matter to the relevant law enforcement authority as necessary.

All vendors must comply with our Supplier Code of Conduct. If we establish that a vendor is involved in corrupt or fraudulent activity, we will terminate the contract and bar the vendor from future procurement activity.

During the year, we received 85 reports via our whistleblower channels regarding various allegations, including employee misconduct. We also received 119 allegations of fraud-related and similar matters via other channels, such as compliance checks and investigations by law enforcement agencies (see Table 1 and 2).

In total, 66 cases were substantiated, while another 72 were not. 59 cases remained under investigation as at 31 March 2022. In addition, we closed 33 matters received

in the prior year that were still under investigation as at 31 March 2021, of which 22 cases were substantiated. There were no investigations into matters that took place outside Singapore and Australia.

Responsible tax management

We recognise that tax contributions are important to public finances and the social programmes they fund, and the Singtel Group is committed to complying with applicable tax laws of the jurisdictions where we operate.

The Board is responsible for risk governance and assisted by the Audit Committee in the oversight of tax matters. As part of sound tax governance, we have in place a Tax Risk Management Framework which is aligned to our Group's risk management philosophy and approach. This framework formalises our tax risk management practices and guides our management and tolerance of tax risks. It sets a coordinated approach in our identification, management and mitigation of tax risks and promotes responsible tax management. The Group Chief Financial Officer, under the appointment by the Audit Committee and supported by Vice President of Group Tax, supervises the framework practices and effectiveness. For more information, please refer to our **Responsible Tax Management Statement**.

Optus is categorised as a Key Taxpayer for income tax by the Australian Tax Office and is subject to its annual Pre-lodgement Compliance Review. Optus is a signatory of the Board of Taxation's voluntary Tax Transparency Code and has been publishing Tax Transparency Reports since 2018. The latest **Optus Tax Transparency Report 2021** outlines the policy, strategy and governance for our Australian operations.

It also highlights our contribution to corporate income tax, effective tax rate and reconciliations of accounting profit to income tax expense and tax payable in Australia. In December 2021, the Group's wholly-owned subsidiary

SUSTAINABILITY REPORT 2022   54

About this Report Contents | Our Sustainability Approach | Climate Change & Environment | People & Future of Work | Community Impact | Sustainable Value Creation | Appendix

Table 2: Number of cases received in FY2022

	Singtel		Optus		Singtel Group	
	Whistleblower channels	Other channels	Whistleblower channels	Other channels	Whistleblower channels	Other channels
Received	23	14	62	105	85	119
Substantiated	4	6	20	37	24	43
Not substantiated	18	5	28	24	46	29
Under investigation	1	3	14	44	15	47

	Singtel		Optus		Singtel Group	
	Whistleblower channels	Other channels	Whistleblower channels	Other channels	Whistleblower channels	Other channels
Number of cases under investigation as at 31 March 2021	5	1	11	16	16	17
Substantiated	2	1	7	12	9	13
Not substantiated	3	0	4	4	7	4

Actions taken for corruption cases during the year:	Singtel*	Optus	Singtel Group
Number of cases where employees were dismissed or disciplined	1	0	1
Number of cases where contracts with business partners were terminated or not renewed due	1	0	1

*Same corruption case resulting in employee dismissal and vendor termination

Singapore Telecom Australia Investments Pty Ltd (STAI) received an unfavourable judgement from the Federal Court of Australia with respect to its action against the Commissioner of Taxation. The court case relates to the amended assessments from the Australian Taxation Office (ATO) received in 2016 and 2017 for STAI's acquisition financing of Optus in 2001.

The amended assessments amounted to A$393 million, of which STAI has paid A$134 million. It is estimated that STAI's holding company, Singtel Australia Investment Ltd, would be entitled to a corresponding interest withholding tax refund of approximately A$89 million. STAI lodged a court appeal on 19 April 2022.

RESPONSIBLE SUPPLY CHAIN MANAGEMENT

Sustainable supply chain management
The Singtel Group has an extensive supply chain ranging from mobile and network equipment, and infrastructure suppliers to content providers, security and managing agents.

During the year, the Singtel Group engaged 5,628 suppliers to procure products and services across our businesses. With a wide footprint spanning multiple countries and the complex nature of our supply chain, we recognise the importance of sourcing responsibly

to minimise negative impact to the environment while contributing positively to the markets we operate in. We continue to execute our sustainable supply chain strategy while adapting to an evolving business environment amid the ongoing impact of COVID-19 and the Ukraine conflict on our supply chain.

We enhanced our sustainability risk assessment framework that was developed in FY2020, based on the strategic importance of suppliers and key factors such as spend, tenure and country and category risks. The enhanced framework now has added focus on greenhouse gas emissions and renewable energy as well as data privacy. We considered the results from our supplier sustainability and life cycle assessments in FY2021. We will be implementing targeted intervention programmes based on the assessment outcome and internal risk mitigation considerations. Our objective is to support our suppliers in integrating sustainable practices into their business processes. Next year, we plan to implement a platform to automate the way we engage suppliers and build on that to include our supplier assessment, intervention and education programme, as well as improve transparency of supplier risks. We also plan to expand our assessment scope by incorporating elements of third-party validation and external risk assessment platforms.

On the climate front, we completed a baseline assessment of our Scope 3 carbon footprint, which is the aggregated indirect GHG emissions from our entire value chain and classified into 15 categories like 'Purchased goods and services' and 'Transportation and distribution' based on the Greenhouse Gas Protocol. This exercise helped us to understand the primary drivers of GHG emissions in our business operations and value chain, and prioritise carbon reduction areas.

In the area of responsible sourcing, we continue to integrate sustainability considerations in our sourcing requirements especially for critical spend areas with significant environmental impact. For example, in building and designing our new data centres, we have incorporated comprehensive end-to-end sustainability criteria in our infrastructure and technology, as well as operations and maintenance, which are benchmarked against global standards. We have also begun pilot reviews for establishing a framework in the new year to incorporate shadow carbon pricing in our sourcing evaluation and decision-making. All new suppliers are assessed against ESG criteria through our sustainability questionnaire as part of their onboarding tender process. This is applied to tenders above $200,000 across the Singtel Group. 100% of such new suppliers were assessed against the criteria during the year.

Workplace safety and health

Workplace safety and health (WSH) is our top priority and we strive to inculcate good safety habits and practices among our suppliers and contractors to ensure that all work activities are carried out safely. We engage only qualified contractors who meet our stringent safety requirements during the tender process and ensure that they maintain high WSH standards for all their activities (see Table 3).

We also maintained our ISO 45001 certification, an international ISO standard that provides the framework for organisations to improve workers' health and safety, reduce risks and create safer working conditions.

Fostering partnerships and collaboration

We collaborate with internal and external stakeholders on WSH risks and opportunities. To address fall from height risks of our contractors appointed to install 5G equipment on rooftops, we collaborated with Ericsson to test a new remote monitoring system during the year. A compact camera system was deployed at one of the work sites, with footage streamed live and recorded. This system, which can support multiple locations and users, will be deployed to more sites. Benefits of this technology solution include improvements to remote site surveillance and productivity since our WSH teams do not need to be physically present when contractors are carrying out work.

Table 3: FY2022 WSH indicators of third-party contractors[1]

Contractor safety and health	Singtel		Optus		Singtel Group	
	2022	2021	2022	2021	2022	2021
Workplace injury incidence rate (per 1,000 employees)	7.83	13.7	11.80	5.3	9.70	Not available
Workplace injury frequency rate (per million hours worked)	2.71	4.4	18.99	5.9	5.31	
Workplace injury severity rate (per million hours worked)	15.34	61.1	14.24	11.7	15.16	
High consequence injury rate	0	Not available	0	Not available	0	
Fatalities	0	0	0	0	0	

[1] Cleaners and security guards

Singtel Safe Contractor Accreditation (SCA) Scheme

We introduced SCA scheme in 2016, a set of Singtel WSH standards for contractors who perform high-risk technical or physical work to mitigate safety risks. During the year, 81 accredited contractors successfully maintained the validity of their accreditation. Those who failed were barred from future contracts with Singtel.

FY	2017	2018	2019	2020	2021	2022
Number of contractors accredited	48	62	68	98	77	81

We received continued certification of the Australian Standard for Safety Management AS4801 for our operations in Australia to meet a high standard of safety management system. We have established a Workplace Health and Safety Critical Incident Hotline to report critical incidents immediately. During the year, five incidents were reported.

CUSTOMER EXPERIENCE

Making customers first remains our top priority. We are committed to delivering unparalleled customer experience with our innovative service offerings, reliable networks and quality customer care.

Customer satisfaction

Building on our market leadership in customer experience, we innovate constantly to improve the quality of our products and services and apply new technology to enhance customer care. We were leading the market with our Net Promoter Score in Singapore as of March 2022.

We are committed to enhancing the reach, reliability and quality of our networks in Singapore and Australia. Our 5G network now covers over two-thirds of Singapore, with over 1,000 sites both indoors and outdoors. Our mobile network speed has also been named the fastest in the country by Ookla, which provides data-backed insights and analysis on mobile and fixed broadband networks.

With our customer insights drawn from constant research and customer feedback, we innovate continuously to engage customers and enhance our retail experience, operations and customer service while improving productivity.

There was no fine, non-monetary sanction or legal action regarding anti-competitive behaviour or violation

WSH team and contractors installed new remote monitoring system on a rooftop which houses our 5G equipment

of anti-trust legislation, against Singtel during the year. We did not receive any fines from either the Australian Competition and Consumer Commission (ACCC) or the Australian Communications and Media Authority (ACMA). However, ACMA issued three non-monetary sanctions: a formal warning to conduct identify verification prior to porting mobile services; a direction to comply with billing accuracy obligations under the Telecommunications Consumer Protection Code; and a remedial direction to undertake line capability testing on NBN lines.

DRIVING INNOVATION

Innovating for a digital era

The Singtel Group harnesses the latest technology to provide unparalleled service and experiences that meet the changing needs of consumers and enterprises in today's digital economy.

Together with strategic partners, we expanded our financial services portfolio and introduced a robo-advisory investment option with sustainable investing solutions. We also launched new Unified Communications services for enterprises to help them better connect with employees and customers as remote working continues during the pandemic.

Through Singtel Innov8, our corporate venture capital fund, we are making strategic investments in companies with technologies and solutions that have the potential to enhance our capabilities to deliver impactful solutions to customers. With our experience and strong industry network, Singtel Innov8 helps companies at every stage of their growth, from early product development to eventual commercialisation in the various markets. Find out more about our portfolio here.

Singapore's first underwater 5G livestream of S.E.A Aquarium at UNBOXED, Singtel's 5G-powered self-service kiosk

New services that meet customer needs

a. Home Priority
We launched Home Priority, Singapore's first customised fibre broadband service for larger homes. Customers enjoy an end-to-end solution that provides high-speed, lag-free connectivity with simple installation and quick support.

b. Customer security
To further secure customer interaction and enhance convenience, we added SingPass login as a secure method for customers to access their Singtel OnePass account and manage their services with us.

c. 5G experience
We set up 5G experience zones at selected Singtel shops, UNBOXED and UNBOXED Lite, our unmanned retail stores, that offer customers a glimpse of our 5G enhanced services and experiences aimed at driving 5G adoption. We also rolled out complimentary 5G features like augmented reality (AR) Instagram filters in partnership with WWF and a TikTok AR paint filter.

d. Integrated service
We further integrated our services to improve user accessibility and ease of use. For example, Dash Remit is now available on Singtel hi!App, allowing our prepaid customers to manage their accounts and remit funds overseas easily. Remittance is an essential financial service for the migrant workers community, and over half a million of them are our active hi!App users.

Building our 5G leadership and driving industry adoption
5G will have a profound impact on our lives, as it forms the backbone of the digital economy as well as smart cities and nations. As a key pillar of our strategic reset, the Singtel Group aims to leverage the potential of 5G to transform business models and deliver enhanced products and services on an unprecedented scale, creating positive impact for our communities.

In May 2021, we launched our 5G standalone network, offering customers early access to the most advanced 5G connectivity with twice the responsiveness, faster uploads, strengthened authentication and encryption capability. In collaboration with Ericsson, we became the first in Southeast Asia to achieve download speeds of 5.4 Gbps.

We collaborated with National Gallery Singapore to deliver cultural and art experiences leveraging our 5G standalone network. Artists now have a wider platform to share their work, thus helping to develop the arts and culture scene in Singapore.

To spur adoption and further innovation in 5G technologies, we collaborate with public and private sector partners to develop and trial solutions. Together with Government Technology Agency and Sentosa Development Corporation, we launched 5G@Sentosa.

This programme leverages our 5G network and Multi-access Edge Compute (MEC) to convert the island into

a testbed for promising public sector use cases. These include deploying fully autonomous robots for tracking of construction progress and drones for site inspection, which have the potential to enhance worker safety.

We also introduced GENIE, the first portable 5G platform in the world to enable enterprises to experience 5G capabilities and test use cases on their own premises, without the need for any equipment installation. We will continue to expand our 5G ecosystem and help enterprise customers to innovate low-latency 5G solutions on our MEC infrastructure, and drive industry adoption.

Singtel Paragon

In February this year, Singtel launched Paragon, a revolutionary platform developed in-house that enables our corporate customers to tap into our 5G network to activate network slices on demand, deploy mission critical applications on Singtel MEC, as well as access a robust ecosystem of partner applications, offering them unparalleled control and choices.

Singtel Paragon brings together IoT devices

● ● ● ●

We understand the challenges and complexities that enterprises face in managing the various networks, edge cloud applications and services with the required cyber security, resiliency and demanding service assurances required, cost-effectively. Paragon was conceived, developed and delivered to help enterprises meet these needs through a single platform.

Bill Chang, CEO, Group Enterprise

The platform empowers enterprises to securely deploy applications in a hybrid fashion across the edge at Singtel MEC and a public cloud of their choice. It significantly reduces the complexity and time needed to adopt 5G MEC and low latency applications and services – lowering the barriers to entry for enterprises, enabling faster deployment of use cases while removing considerable operational and cost overheads.

Optus Living Network

In May 2021, we introduced the <u>Optus Living Network</u>, a network that adapts to our customers' changing needs by offering them flexibility and control with on-demand network features that can be accessed and switched on anytime via the My Optus app.

- **Donate Your Data:** Allows customers to donate their mobile data to our social impact programme
- **Optus Call Translate:** Translates phone conversations between two different language speakers in real time (currently on beta trial)
- **Optus Pause:** Enables customers to take a digital breather by pausing their Optus mobile and home WiFi connections, for example, during family mealtimes
- **Optus WiFi Secure:** Actively monitors WiFi connections and protects against online threats by protecting the devices connected to customers' compatible modems
- **Optus Call Notes:** Captures calls in writing
- **Optus Eco:** Shows customers simple ways to reduce their environmental footprint and impact

Singtel and UOB Asset Management:

Singtel, in partnership with UOB Asset Management (UOBAM), launched UOB Asset Management Robo-Invest, Singapore's first robo-adviser on a mobile wallet. The robo-adviser aims to optimise and generate stable long-term portfolio returns through a hybrid investment strategy, empowering consumers with convenient access to affordable wealth management solutions using technology. It also offers a Global Impact portfolio exclusively designed to provide customers with investment opportunities in companies that integrate ESG considerations into their strategies and operations.

Unified Communications (UC) Direct Connect for Microsoft Teams:

Singtel was the first operator based in Singapore to offer UC Direct Connect service for Microsoft Teams. This collaboration helps businesses on their digitisation journey, providing an all-in-one solution and platform that supports hybrid work arrangements. The service allows them to continue to operate and stay connected with employees, customers and partners no matter where they are.

About this Report | Contents

Our Sustainability Approach

Climate Change & Environment

People & Future of Work

Community Impact

Sustainable Value Creation

Appendix

Glossary

List of Key Abbreviations	
ABCN	Australian Business and Community Network
ABR	Australian Business Roundtable for Disaster Resilience & Safer Communities
ACCC	Australian Competition & Consumer Commission
ACMA	Australian Communications and Media Authority
ASAS	Advertising Standards Authority of Singapore
AND	Australian Network on Disability
APCO	Australian Packaging Covenant Organisation
EPR	Extended Producer Responsibility
ESG	Environmental, social and governance
GHG	Greenhouse gas
GRI	Global Reporting Initiative
GSMA	Global System for Mobile Communications Association
HFC	Hybrid Fibre Coaxial
ICP	Internal carbon pricing
ICT	Infocomm Technology
IMDA	Infocomm Media Development Authority
IPCC	Intergovernmental Panel on Climate Change
MEC	Multi-access Edge Compute
MIMO	Multiple Input Multiple Output
MNHP	Mobile Network Hardening Program
NDRR	National Disaster Risk Reduction
NEA	National Environment Agency
NGO	Non-Governmental Organisation
OAIC	Office of the Australian Information Commissioner
PDPA	Personal Data Protection Act
PDPC	Personal Data Protection Commission
PPA	Power Purchase Agreement
PUE	Power usage effectiveness
REC	Renewable Energy Certificate
SASB	Sustainability Accounting Standards Board
SBNoD	Singapore Business Network on DisAbility
SBTi	Science Based Targets initiative
SLB	Sustainability-linked bond
SLL	Sustainability-linked loan
SME	Small and medium-sized enterprise
STAND	Strengthening Telecommunications Against Natural Disasters
STLF	Singtel Touching Lives Fund
TCFD	Task Force on Climate-related Financial Disclosures
UNFCC	United Nations Framework Convention on Climate Change
UNGC	United Nations Global Compact
UN SDGs	United Nations Sustainable Development Goals
UPS	Uninterruptible power supply
WSH	Workplace safety and health

Reference: Policies and Statements	
Optus Human Rights Statement	https://www.optus.com.au/content/dam/optus/documents/about-us/sustainability/governance/human-rights-statement_fa1_v2.pdf
Optus Modern Slavery Statement	https://www.optus.com.au/content/dam/optus/documents/about-us/sustainability/governance/2021-optus-modern-slavery-statement.pdf
Optus Privacy Policy	https://www.optus.com.au/about/legal/privacy
Singtel Group Human Rights Statement	https://www.singtel.com/content/dam/singtel/about-us-singtel/company/governance/singtel-group-human-rights-statement.pdf
Singtel Data Protection Policy	https://www.singtel.com/data-protection
Singtel Whistleblower Policy	https://www.singtel.com/about-us/company/corporate-governance/whistleblower-policy
Singtel Responsible Tax Management Statement	https://www.singtel.com/content/dam/singtel/corporate/responsible-tax-management.pdf
Singtel Group Anti-Bribery and Corruption Policy	https://www.singtel.com/content/dam/singtel/corporate/anti-bribery-and-corruption-policy.pdf
Singtel Group Code of Conduct	https://www.singtel.com/content/dam/singtel/corporate/Code_of_conduct.pdf
Singtel Group Environment Policy	https://www.singtel.com/about-us/sustainability/sustainability-at-singtel/environment
Singtel Group Health, Safety and Security Policy	https://www.singtel.com/about-us/sustainability/sustainability-at-singtel/people
Singtel Group Supplier Code of Conduct	https://www.singtel.com/content/dam/singtel/about-us-singtel/tender/singtel-group-supplier-code-of-conduct.pdf

Key Environmental and Social Performance Indicators

	SINGTEL			OPTUS			SINGTEL GROUP		
	2022	**2021**	**2020**	**2022**	**2021**	**2020**	**2022**	**2021**	**2020**
Environmental Performance									
Total energy use (GJ)[1]	**995,848**	999,254	1,466,802	**1,952,477**	1,909,806	1,834,722	**2,948,325**	2,909,060	3,301,524
Total Greenhouse Gas (GHG) emissions (tonnes CO$_2$ equivalent)[2]	**3,630,397**	3,613,093	162,566	**4,180,961**	4,836,897	427,706	**7,811,358**	8,449,990	590,272
Scope 1	**4,743**	5,749	3,741	**1,579**	1,894	2,140	**6,322**	7,643	5,881
Scope 2 (market-based)[2]	**95,684**	98,654	153,650	**392,674**	426,564	412,932	**488,358**	525,218	566,582
Scope 3	**3,529,970**	3,508,690	5,175	**3,786,708**	4,408,439	12,634	**7,316,678**	7,917,129	17,809
GHG emissions intensity (tCO$_2$e/TB)[3]	**0.0134**	0.0165	0.0325	**0.0598**	0.0778	0.1102	**0.0351**	0.0450	0.0665
Potable water use (m³)[4]	**631,230**	623,588	683,847	**36,234**	47,262	57,861	**667,464**	670,850	741,708
Use of recycled water instead of potable water (m³)	**280,805**	225,453	180,799	**5,885**	13,027	10,876	**286,690**	238,480	191,675
Total hazardous and non-hazardous waste (tonnes)[5]	**3,325**	4,150	7,658	**627**	771	883	**3,952**	4,921	8,541
Social Performance: People									
Total employees	**12,196**	12,391	12,145	**7,268**	7,687	7,663	**19,464**	20,078	19,808
Male	**7,901**	8,003	7,842	**4,936**	5,287	5,307	**12,837**	13,290	13,149
Female	**4,295**	4,388	4,303	**2,332**	2,400	2,356	**6,627**	6,788	6,659
New employee hires	**19.9%**	15.5%	14.1%	**23.0%**	15.2%	23.1%	**21.1%**	15.3%	17.6%
Employee voluntary turnover	**19.9%**	13.2%	15.7%	**22.6%**	12.5%	15.3%	**20.9%**	12.9%	15.5%
Mean salary ratio (female:male)[1]									
Operations and Support	**0.99 : 1**	1 : 1	0.99 : 1	**1 : 0.94**	1 : 0.94	1 : 0.95	**1 : 0.97**	1 : 0.97	1 : 0.97
Professional	**0.94 : 1**	0.96 : 1	0.96 : 1	**0.93 : 1**	0.94 : 1	0.95 : 1	**0.93 : 1**	0.95 : 1	0.95 : 1
Executives[2]	**0.95 : 1**	0.95 : 1	0.96 : 1	**1 : 1**	0.99 : 1	0.97 : 1	**0.97 : 1**	0.97 : 1	0.97 : 1
Median salary ratio (female:male)[3]									
Operations and Support	**0.98 : 1**	-	-	**1 : 0.98**	-	-	**1 : 1**	-	-
Professional	**0.91 : 1**	-	-	**0.91 : 1**	-	-	**0.91 : 1**	-	-
Executives	**0.94 : 1**	-	-	**1 : 1**	-	-	**0.97 : 1**	-	-
Mean bonus ratio (female:male)[4]									
Operations and Support	**1 : 1**	1 : 0.99	1 : 0.96	**1 : 0.81**	1 : 0.94	0.99 : 1	**1 : 0.92**	1 : 0.97	1 : 0.98
Professional	**0.94 : 1**	0.98 : 1	0.99 : 1	**0.87 : 1**	0.89 : 1	0.93 : 1	**0.91 : 1**	0.95 : 1	0.96 : 1
Executives	**1 : 0.89**	1 : 0.94	1 : 0.87	**0.96 : 1**	0.95 : 1	0.95 : 1	**1 : 0.95**	1 : 0.97	1 : 0.98
Median bonus ratio (female:male)[3]									
Operations and Support	**0.99 : 1**	-	-	**0.99 : 1**	-	-	**0.99 : 1**	-	-
Professional	**0.95 : 1**	-	-	**0.86 : 1**	-	-	**0.91 : 1**	-	-
Executives	**1 : 0.92**	-	-	**1 : 0.94**	-	-	**1 : 0.93**	-	-
Total training investment ($m)	**S$12.5**	S$11.8	S$14.6	**A$6.7**	A$5.0	A$7.8	**S$19.2**	S$16.8	S$21.9
Average training hours per employee	**51.8**	43.5	40.2	**27.0**	14.6	19.6	**43.1**	33.0	32.7
Employee health and safety[5]									
Workplace injury incidence rate (per 1,000 employees)	**0.6**	0.8	0.8	**1.1**	2.6	2.3	**0.8**	1.5	1.4
Workplace injury frequency rate (per million hours worked)	**0.3**	0.4	0.4	**0.7**	1.5	1.4	**0.4**	0.7	0.7
Total occupational disease cases	**0**	0	-	**0**	0	0	**0**	0	-
High consequence injury rate (per million hours worked)	**0**	0.04	-	**0**	0	-	**0**	0.02	-
Fatalities	**0**	0	0	**0**	0	0	**0**	0	0
Social Performance: Community									
Community investment (Sm/Am)[1]	**S$7.9**	S$17.7	S$8.6	**A$25.6**	A$20.3	A$14.7	**S$33.4**	S$37.6	S$22.3
Total volunteering hours	**3,048**	2,439	11,487	**8,117**	8,214	16,739	**11,165**	10,653	28,226
Digital enablement reach	**22,791**	18,009	54,776	**90,736**	76,667	59,189	**113,527**	94,681	113,965

Environmental
1. Restatement of Singtel and Group (FY2021).
2. Covers Scopes 1, 2 and 3 (FY2021 and FY2022 full Scope 3 15 categories). Restatement of Singtel and Group (FY2021).
3. Covers Scopes 1 and 2 only. Restatement of Singtel and Group (FY2021).
4. Covers Optus Sydney campus and Optus Melbourne office for FY2020 and FY2021. Covers all Optus corporate offices in Australian capital cities with the exception of Perth for FY2022.
5. Data covers waste directly managed by Optus' contracted waste vendor.

Community
1. Includes direct financial support, in-kind charitable sponsorship and staff volunteering hours. This has been verified by the Business for Societal Impact (B4SI).

People
1. Based on average monthly salary of regular employees.
2. Previously known as Middle Management and Top Management. Heads, previously included under Middle Management, are now considered as Top Executives.
3. This is the first year we are reporting on median salary and bonus ratios.
4. Based on average annual bonus of regular employees.
5. Workplace safety and health metrics are based on the International Labour Organization (ILO) definitions, subject to country definition of lost work shifts e.g. Optus excludes weekends from medical leave when calculating these rates.

GRI CONTENT INDEX

GENERAL DISCLOSURES		
GRI STANDARD	**DISCLOSURE**	**PAGE NUMBER**
GRI 1: Foundation 2021		Sustainability Report 2022
GRI 2: General Disclosures 2021	**The organisation and its reporting practices**	
	2-1 Organisational details	About this report, <u>Website</u>
	2-2 Entities included in the organisation's sustainability reporting	About this report
	2-3 Reporting period, frequency and contact point	About this report
	2-4 Restatements of information	About this report
	2-5 External assurance	About this report
	Activities and workers	
	2-6 Activities, value chain and other business relationships	56-57, Annual Report 2022, <u>Website</u>
	2-7 Employees	33-34, 37-38
	2-8 Workers who are not employees	37
	Governance	
	2-9 Governance structure and composition	8, Annual Report 2022, <u>Corporate Governance</u>, <u>Website</u>
	2-10 Nomination and selection of the highest governance body	Annual Report 2022, <u>Corporate Governance</u>
	2-11 Chair of the highest governance body	Annual Report 2022, <u>Corporate Governance</u>
	2-12 Role of the highest governance body in overseeing the management of impacts	8, 19, Annual Report 2022, <u>Corporate Governance</u>
	2-13 Delegation of responsibility for managing impacts	8, 19, Annual Report 2022, <u>Corporate Governance</u>
	2-14 Role of the highest governance body in sustainability reporting	8, Annual Report 2022, <u>Corporate Governance</u>
	2-15 Conflicts of interest	52-54, Annual Report 2022, <u>Corporate Governance</u>
	2-16 Communication of critical concerns	5-8, Annual Report 2022, <u>Corporate Governance</u>
	2-17 Collective knowledge of the highest governance body	8
	2-18 Evaluation of the performance of the highest governance body	Annual Report 2022, <u>Corporate Governance</u>
	2-19 Remuneration policies	Annual Report 2022, <u>Corporate Governance</u>
	2-20 Process to determine remuneration	Annual Report 2022, <u>Corporate Governance</u>
	2-21 Annual total compensation ratio	39 : 1 (Group CEO total compensation to median annual total compensation for Singtel Group, excluding GCEO)
	Strategy, policies and practices	
	2-22 Statement on sustainable development strategy	3-4
	2-23 Policy commitments	Disclosed throughout Sustainability Report 2022 across all four sustainability pillars, <u>Website</u>
	2-24 Embedding policy commitments	Disclosed throughout Sustainability Report 2022 across all four sustainability pillars
	2-25 Processes to remediate negative impacts	Disclosed throughout Sustainability Report 2022 across all four sustainability pillars
	2-26 Mechanisms for seeking advice and raising concerns	31, 52-54, <u>Website</u>
	2-27 Compliance with laws and regulations	24, 49-56
	2-28 Membership associations	6, 9-10, 20-21, 39-40, 46-47
	Stakeholder engagement	
	2-29 Approach to stakeholder engagement	5-7
	2-30 Collective bargaining agreements	30
GRI 3: Material Topics 2021	3-1 Process to determine material topics	5-7, <u>Website</u>
	3-2 List of material topics	7, 9-10

MATERIAL TOPICS				
GRI STANDARD		**DISCLOSURE**	**PAGE NUMBER**	**LEVEL OF EXTERNAL ASSURANCE**
Climate Change and Carbon				
GRI 3: Material Topics 2021	3-3	Management of material topics	12-24	
GRI 302: Energy 2016	302-1	Energy consumption within the organisation	26	Singtel Group
	302-3	Energy intensity	26	Singtel Group
	302-4	Reduction of energy consumption	16	Singtel
GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions	25	Singtel Group
	305-2	Energy indirect (Scope 2) GHG emissions	25	Singtel Group
	305-3	Other indirect (Scope 3) GHG emissions	25	Singtel Group
	305-4	GHG emissions intensity	25	Singtel Group
	305-5	Reduction of GHG emissions	16, 25	Singtel Group
Climate and Infrastructure Resilience				
GRI 3: Material Topics 2021	3-3	Management of material topics	12-24	
GRI 203: Indirect Economic Impacts 2016	203-1	Infrastructure investments and services supported	12-24	
	203-2	Significant indirect economic impacts	12-24	
GRI 2: General Disclosures 2021	2-27	Compliance with laws and regulations	24	Singtel Group
Talent Attraction and Retention				
GRI 3: Material Topics 2021	3-3	Management of material topics	30-36	
GRI 401: Employment 2016	401-1	New employee hires and employee turnover	34, 37-38	Singtel Group
Talent Development and Future Skills				
GRI 3: Material Topics 2021	3-3	Management of material topics	35-36	
GRI 404: Training and Education 2016	404-1	Average hours of training per year per employee	35, 38	Singtel Group
	404-2	Programmes for upgrading employee skills and transition assistance programmes	35-36	
Employee Safety and Well-being				
GRI 3: Material Topics 2021	3-3	Management of material topics	28-30, 55-56	
GRI 403: Occupational Health and Safety 2018	403-1	Occupational health and safety management system	28-30, 55-56	
	403-2	Hazard identification, risk assessment and incident investigation	28-30, 55-56	
	403-3	Occupational health services	28-30, 55-56	
	403-4	Worker participation, consultation and communication on occupational health and safety	28-30, 55-56	
	403-5	Worker training on occupational health and safety	28-30, 55-56	
	403-6	Promotion of worker health	28-30, 55-56	
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	28-30, 55-56	
	403-9	Work-related injuries	38, 55	Singtel Group
	403-10	Work-related ill health	38, 55	Singtel Group

About this Report Contents

Our Sustainability Approach

Climate Change & Environment

People & Future of Work

Community Impact

Sustainable Value Creation

Appendix

MATERIAL TOPICS				
GRI STANDARD		**DISCLOSURE**	**PAGE NUMBER**	**LEVEL OF EXTERNAL ASSURANCE**
Data Privacy and Cyber Security				
GRI 3: Material Topics 2021	3-3	Management of material topics	49-51	
GRI 418: Customer Privacy 2016	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	51	Singtel Group
Ethical and Fair Business Practices				
GRI 3: Material Topics 2021	3-3	Management of material topics	52-54	
GRI: 417: Marketing and Labeling 2016	417-3	Incidents of non-compliance concerning marketing communications	52	
Innovation				
GRI 3: Material Topics 2021	3-3	Management of material topics	56-58	
GRI 203: Indirect Economic Impacts 2016	203-1	Infrastructure investments and services supported	56-58	
	203-2	Significant indirect economic impacts	56-58	
Customer Satisfaction				
GRI 3: Material Topics 2021	3-3	Management of material topics	56	
GRI 2: General Disclosures 2021	2-27	Compliance with laws and regulations	56	Singtel Group
Sustainable Supply Chain Management				
GRI 3: Material Topics 2021	3-3	Management of material topics	54-55	
GRI 308: Supplier Environmental Assessment 2016	308-1	New suppliers that were screened using environmental criteria	55	Singtel Group
GRI 414: Supplier Social Assessment 2016	414-1	New suppliers that were screened using social criteria	55	Singtel Group
Anti-Bribery and Corruption				
GRI 3: Material Topics 2021	3-3	Management of material topics	52-54	
GRI 205: Anti-corruption 2016	205-3	Confirmed incidents of corruption and actions taken	53-54	
Community Resilience and Disaster Response				
GRI 3: Material Topics 2021	3-3	Management of material topics	39-48	
GRI 201: Economic performance 2016	201-1	Direct economic value generated and distributed	41	
GRI 203: Indirect Economic Impacts 2016	203-1	Infrastructure investments and services supported	39-48	
GRI 413: Local Communities 2016	413-2	Operations with significant actual and potential negative impacts on local communities	39-48	
Online Safety				
GRI 3: Material Topics 2021	3-3	Management of material topics	43-44	
GRI 413: Local Communities 2016	413-2	Operations with significant actual and potential negative impacts on local communities	43-44	

MATERIAL TOPICS				
GRI STANDARD		**DISCLOSURE**	**PAGE NUMBER**	**LEVEL OF EXTERNAL ASSURANCE**
Waste Management				
GRI 3: Material Topics 2021	3-3	Management of material topics	12, 14-15, 22-24	
GRI 306: Waste 2020	306-1	Waste generation and significant waste-related impacts	12, 14-15, 22-24	
	306-2	Management of significant waste-related impacts	12, 14-15, 22-24	
	306-3	Waste generated	26	Singtel Group
	306-4	Waste diverted from disposal	26	Singtel Group
	306-5	Waste directed to disposal	26	Singtel Group
Good Labour Practices				
GRI 3: Material Topics 2021	3-3	Management of material topics	30-31	
GRI 402: Employment 2016	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	30-31	
Diversity and Inclusion				
GRI 3: Material Topics 2021	3-3	Management of material topics	32-33	
GRI 405: Diversity and Equal Opportunity 2016	405-2	Ratio of basic salary and remuneration of women to men	37	
Education and Employability				
GRI 3: Material Topics 2021	3-3	Management of material topics	46-48	
GRI 201: Economic Performance 2016	201-1	Direct economic value generated and distributed	46-47	
GRI 413: Local Communities 2016	413-2	Operations with significant actual and potential negative impacts on local communities	46-48	
Water Management				
GRI 3: Material Topics 2021	3-3	Management of material topics	Website	
GRI 303: Water and Effluents 2018	303-1	Interactions with water as a shared resource	Website	
	303-2	Management of water discharge-related impacts	Website	
	303-3	Water withdrawal	26	Singtel Group
Product Health and Safety				
GRI 3: Material Topics 2021	3-3	Management of material topics	Website	
GRI 416: Customer Health and Safety 2016	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	51	
GRI 2: General Disclosures 2021	2-27	Compliance with laws and regulations	56	

SUSTAINABILITY ACCOUNTING STANDARDS BOARD (SASB) INDEX

SASB Activity Metrics

Topic	SASB Code	Activity Metric	Unit Measure	Remark
Telecommunication Services				
Number of wireless subscribers	TC-TL-000.A	Number of customers that contract with the entity for mobile services, which include cellular phone service and/or wireless data service	Number	14,159,000
Number of wireline subscribers	TC-TL-000.B	Number customers that contract with the entity for fixed line phone services	Number	>1 million
Number of broadband subscribers	TC-TL-000.C	Number of customers that contract with the entity for fixed line cable and internet services, which include WiFi connections	Number	1,970,000
Network traffic	TC-TL-000.D		Petabytes	14,097

SASB Accounting Metrics

Topic	SASB Code	Activity Metric	Unit Measure	Remark
Environment				
Environmental Footprint of Operations	TC-TL-130a.1	1. Total energy consumed 2. Percentage grid electricity 3. Percentage renewable	• Gigajoules (GJ) • Percentage (%)	1. 2,948,325 2. 98.3 3. 5.8 including RECs See Environmental Performance Indicators (page 26)
Social Capital				
Data Privacy	TC-TL-220a.1	Description of policies and practices relating to behavioural advertising and customer privacy	N/A	Refer to **Singtel Data Protection Policy** and **Optus Privacy Policy**
	TC-TL-220a.2	Number of customers whose information is used for secondary purposes	Number	Singtel does not have these specified metrics. Our **Data Protection Policy** describes the customer information we collect and how we use it
	TC-TL-220a.3	Total amount of monetary losses as a result of legal proceedings associated with customer privacy	Reporting currency	Refer to Sustainable Value Creation chapter (page 51)
	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 (%)	We do not disclose unless required by law
Data Security	TC-TL-230a.1	1. Number of data breaches 2. Percentage involving personally identifiable information (PII) 3. Number of customers affected	• Number • Percentage (%)	1. 7 2. 71.4 3. 5 customers affected (incidents that involved PII) Refer to Sustainable Value Creation chapter (page 51)
	TC-TL-230a.2	Description of approach to identifying and addressing data security risks, including use of third-party cyber security standards	N/A	Refer to Sustainable Value Creation chapter (page 49-51)
Product End-of-life Management	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 ton (t) • Percentage (%)	1. 2,502 2. 0 3. 84.3 4. 0.2 See Environmental Performance Indicators (page 26)

Topic	SASB Code	Activity Metric	Unit Measure	Remark
Leadership and Governance				
Competitive Behavior and Open Internet	TC-TL-520a.1	Total amount of monetary losses as a result of legal proceedings associated with anticompetitive behaviour regulations	Reporting currency	Nil Refer to Sustainable Value Creation chapter (pages 53-54)
	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)	Singtel does not have these specified metrics. We publish our 4G speed on our website, presented as a range of speed for 'Stationary' state and 'Mobility' state
	TC-TL-520a.3	Description of risks and opportunities associated with net neutrality, paid peering, zero rating, and related practices	N/A	Singtel complies with IMDA's Net Neutrality Policy Singtel does not have these specified metrics
Managing Systemic Risks from Technology Disruptions	TC-TL-550a.1	1. System average interruption frequency 2. Customer average interruption duration	• Disruptions per customer • Hours per customer	Refer to Sustainable Value Creation chapter (page 56)
	TC-TL-550a.2	Discussion of systems to provide unimpeded service during service interruptions	N/A	Refer to Climate Change and Environment chapter (pages 21-22) and Sustainable Value Creation chapter (pages 56-57)

UN GLOBAL COMPACT PRINCIPLES

Principle	Description	Page reference
Human Rights		
Principle 1	Businesses should support and respect the protection of internationally proclaimed human rights; and	32, 52, <u>Website</u>
Principle 2	Make sure that they are not complicit in human rights abuses	32, 52, <u>Website</u>
Labour		
Principle 3	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;	30
Principle 4	The elimination of all forms of forced and compulsory labour;	30-33, 52
Principle 5	The effective abolition of child labour; and	30-33, 52
Principle 6	The elimination of discrimination in respect of employment and occupation.	30-33, 46-48, 52
Environment		
Principle 7	Businesses should support a precautionary approach to environmental challenges;	3-4, 11-24, 56-58
Principle 8	Undertake initiatives to promote greater environmental responsibility; and	3-4, 11-24, 56-58
Principle 9	Encourage the development and diffusion of environmentally friendly technologies.	11-24, 56-58
Anti-Corruption		
Principle 10	Businesses should work against corruption in all its forms, including extortion and bribery.	52-54, <u>Website</u>

INDEPENDENT LIMITED ASSURANCE STATEMENT

EY
Building a better working world

Independent Limited Assurance Statement in connection with the Subject Matter included in the Sustainability Report of Singapore Telecommunications Limited ("Singtel Group") for the financial year ended 31 March 2022

Scope
We have been engaged by Singtel Group to perform a 'limited assurance engagement', as defined by International Standards on Assurance Engagements, here after referred to as the engagement, to report on the Sustainability Report of Singapore Telecommunications Limited ("Singtel") and Singtel Optus Pty Ltd ("Optus") (Collectively referred to as "Singtel Group") as set out in the Subject Matter and Criteria section (the "Subject Matter") as below as of 24 June 2022 financial year ended 31 March 2022 ("FY2022") ("the Sustainability Report").

Subject Matter and Criteria
In preparing the Subject Matter, Singtel applied the Global Reporting Initiative ("GRI") Standards ("the Criteria") as set out in the table below:

GRI Standards Disclosures
*   *Pertains to only Singtel's Sustainability Performance Data*
**   *Pertains to Singtel Group's Sustainability Performance Data*
\+ *Pertains to only Optus' Sustainability Performance Data for Large-scale generation certificates (LGCs)*

ESG Topics	GRI Topic-Specific Disclosure		"Shall" requirements under each disclosure

Climate change and carbon; Climate and infrastructure resilience; Water management (non-material)	**GRI (2016) 302-1****	Energy consumption within the organisation	a. Total fuel consumption within the organisation from non-renewable sources, in joules or multiples, and including fuel types used.
			b. Total fuel consumption within the organisation from renewable sources, in joules or multiples, and including fuel types used.
			c. In joules, watt-hours or multiples, the total:
			    i. Electricity consumption
			    ii. Heating consumption
			    iii. Cooling consumption
			    iv. Steam consumption
			d. In joules, watt-hours or multiples, the total:
			    i. Electricity sold
			    ii. Heating sold
			    iii. Cooling sold
			    iv. Steam sold
			e. Total energy consumption within the organisation, in joules or multiples.
			f. Standards, methodologies, assumptions, and/or calculation tools used.
			g. Source of the conversion factors used.
			
			2.1 When compiling the information specified in Disclosure 302-1, the reporting organisation shall:
			    2.1.1 avoid the double-counting of fuel consumption, when reporting self-generated energy consumption. If the organisation generates electricity from a non-renewable or renewable fuel source and then consumes the generated electricity, the energy consumption shall be counted once under fuel consumption;
			    2.1.2 report fuel consumption separately for non-renewable and renewable fuel sources;
			    2.1.3 only report energy consumed by entities owned or controlled by the organisation;
			    2.1.4 calculate the total energy consumption within the organisation in joules or multiples using the following formula: Total energy consumption within the organisation = Non-renewable fuel consumed + Renewable fuel consumed+ Electricity, heating, cooling, and steam purchased for consumption + Self-generated electricity, heating, cooling, and steam, which are not consumed (see clause 2.1.1) – Electricity, heating, cooling, and steam sold.

	GRI (2016) 302-3**	Energy intensity	a. Energy intensity ratio for the organisation.
			b. Organisation-specific metric (the denominator) chosen to calculate the ratio.
			c. Types of energy included in the intensity ratio; whether fuel, electricity, heating, cooling, steam, or all.
			d. Whether the ratio uses energy consumption within the organisation, outside of it, or both.
			
			2.5 When compiling the information specified in Disclosure 302-3, the reporting organisation shall:
			    2.5.1 calculate the ratio by dividing the absolute energy consumption (the numerator) by the organisation-specific metric (the denominator);
			    2.5.2 if reporting an intensity ratio both for the energy consumed within the organisation and outside of it, report these intensity ratios separately.

ESG Topics	GRI Topic-Specific Disclosure		"Shall" requirements under each disclosure
Climate change and carbon; Climate and infrastructure resilience; Water management (non-material)	**GRI (2016) 302-4***	Reduction of energy consumption	a. Amount of reductions in energy consumption achieved# as a direct result of conservation and efficiency initiatives, in joules or multiples. (#reported, by Singtel, as estimated annualised energy savings and emissions avoidance) b. Types of energy included in the reductions; whether fuel, electricity, heating, cooling, steam, or all. c. Basis for calculating reductions in energy consumption, such as base year or baseline, including the rationale for choosing it. d. Standards, methodologies, assumptions, and/or calculation tools used. 2.7 When compiling the information specified in Disclosure 302-4, the reporting organisation shall: 2.7.1 exclude reductions resulting from reduced production capacity or outsourcing; 2.7.2 describe whether energy reduction is estimated, modelled, or sourced from direct measurements. If estimation or modelling is used, the organisation shall disclose the methods used.
	GRI (2018) 303-3**	Water withdrawal	a. Total water withdrawal from all areas in megalitres, and a breakdown of this total by the following sources, if applicable: i. Surface water; ii. Groundwater; iii. Seawater; iv. Produced water; v. Third-party water. b. Total water withdrawal from all areas with water stress in megalitres, and a breakdown of this total by the following sources, if applicable: i. Surface water; ii. Groundwater; iii. Seawater; iv. Produced water; v. Third-party water, and a breakdown of this total by the withdrawal sources listed in i-iv. d. Any contextual information necessary to understand how the data have been compiled, such as any standards, methodologies, and assumptions used. 2.1 When compiling the information specified in Disclosure 303-3, the reporting organisation shall use publicly available and credible tools and methodologies for assessing water stress in an area.
	GRI (2016) 305-1**	Direct (Scope 1) GHG emissions	a. Gross direct (Scope 1) GHG emissions in metric tons of CO_2 equivalent. b. Gases included in the calculation; whether CO_2, CH_4, N_2O, HFCs, PFCs, SF_6, NF_3, or all. c. Biogenic CO_2 emissions in metric tons of CO_2 equivalent. d. Base year for the calculation, if applicable, including: i. the rationale for choosing it; ii. emissions in the base year; iii. the context for any significant changes in emissions that triggered recalculations of base year emissions. e. Source of the emission factors and the global warming potential ("GWP") rates used, or a reference to the GWP source. f. Consolidation approach for emissions; whether equity share, financial control, or operational control. g. Standards, methodologies, assumptions, and/or calculation tools used. 2.1 When compiling the information specified in Disclosure 305-1, the reporting organisation shall: 2.1.1 exclude any GHG trades from the calculation of gross direct (Scope 1) GHG emissions; 2.1.2 report biogenic emissions of CO_2 from the combustion or biodegradation of biomass separately from the gross direct (Scope 1) GHG emissions. Exclude biogenic emissions of other types of GHG (such as CH_4 and N_2O), and biogenic emissions of CO_2 that occur in the life cycle of biomass other than from combustion or biodegradation (such as GHG emissions from processing or transporting biomass).
	GRI (2016) 305-2**	Energy indirect (Scope 2) GHG emissions	a. Gross location-based energy indirect (Scope 2) GHG emissions in metric tons of CO_2 equivalent. b. If applicable, gross market-based energy indirect (Scope 2) GHG emissions in metric tons of CO_2 equivalent. c. If available, the gases included in the calculation; whether CO_2, CH_4, N_2O, HFCs, PFCs, SF_6, NF_3, or all. d. Base year for the calculation, if applicable, including: i. the rationale for choosing it; ii. emissions in the base year; iii. the context for any significant changes in emissions that triggered recalculations of base year emissions. e. Source of the emission factors and the global warming potential ("GWP") rates used, or a reference to the GWP source. f. Consolidation approach for emissions; whether equity share, financial control, or operational control. g. Standards, methodologies, assumptions, and/or calculation tools used.

About this Report Contents · Our Sustainability Approach · Climate Change & Environment · People & Future of Work · Community Impact · Sustainable Value Creation · **Appendix**

SINGAPORE TELECOMMUNICATIONS LIMITED

ESG Topics	GRI Topic-Specific Disclosure		"Shall" requirements under each disclosure
Climate change and carbon; Climate and infrastructure resilience; Water management (non-material)	**GRI (2016) 305-2****	Energy indirect (Scope 2) GHG emissions	2.3 When compiling the information specified in Disclosure 305-2, the reporting organisation shall: 2.3.1 exclude any GHG trades from the calculation of gross energy indirect (Scope 2) GHG emissions; 2.3.2 exclude other indirect (Scope 3) GHG emissions that are disclosed as specified in Disclosure 305-3; 2.3.3 account and report energy indirect (Scope 2) GHG emissions based on the location-based method, if it has operations in markets without product or supplier-specific data; 2.3.4 account and report energy indirect (Scope 2) GHG emissions based on both the location-based and market-based methods, if it has any operations in markets providing product or supplier-specific data in the form of contractual instruments.

	GRI (2016) 305-3**	Other indirect (Scope 3) GHG emissions	a. Gross other indirect (Scope 3) GHG emissions in metric tons of CO_2 equivalent.
			b. If available, the gases included in the calculation; whether CO_2, CH_4, N_2O, HFCs, PFCs, SF_6, NF_3, or all.
			c. Biogenic CO_2 emissions in metric tons of CO_2 equivalent.
			d. Other indirect (Scope 3) GHG emissions categories and activities included in the calculation.
			e. Base year for the calculation, if applicable, including:
			  i. the rationale for choosing it;
			  ii. emissions in the base year;
			  iii. the context for any significant changes in emissions that triggered recalculations of base year emissions.
			f. Source of the emission factors and the global warming potential ("GWP") rates used, or a reference to the GWP source.
			g. Standards, methodologies, assumptions, and/or calculation tools used.
			
			2.5 When compiling the information specified in Disclosure 305-3, the reporting organisation shall:
			2.5.1 exclude any GHG trades from the calculation of gross other indirect (Scope 3) GHG emissions;
			2.5.2 exclude energy indirect (Scope 2) GHG emissions from this disclosure. Energy indirect (Scope 2) GHG emissions are disclosed as specified in Disclosure 305-2;
			2.5.3 report biogenic emissions of CO_2 from the combustion or biodegradation of biomass that occur in its value chain separately from the gross other indirect (Scope 3) GHG emissions. Exclude biogenic emissions of other types of GHG (such as CH_4 and N_2O), and biogenic emissions of CO_2 that occur in the life cycle of biomass other than from combustion or biodegradation (such as GHG emissions from processing or transporting biomass).

	GRI (2016) 305-4**	GHG emissions intensity	a. GHG emissions intensity ratio for the organisation. b. Organisation-specific metric (the denominator) chosen to calculate the ratio. c. Types of GHG emissions included in the intensity ratio; whether direct (Scope 1), energy indirect (Scope 2), and/or other indirect (Scope 3). d. Gases included in the calculation; whether CO_2, CH_4, N_2O, HFCs, PFCs, SF_6, NF_3, or all. 2.7 When compiling the information specified in Disclosure 305-4, the reporting organisation shall: 2.7.1 calculate the ratio by dividing the absolute GHG emissions (the numerator) by the organisation-specific metric (the denominator); 2.7.2 if reporting an intensity ratio for other indirect (Scope 3) GHG emissions, report this intensity ratio separately from the intensity ratios for direct (Scope 1) and energy indirect (Scope 2) emissions.
	GRI (2016) 305-5*+	Reduction of GHG emissions	a. GHG emissions reduced as a direct result of reduction initiatives, in metric tons of CO_2 equivalent. b. Gases included in the calculation; whether CO_2, CH_4, N_2O, HFCs, PFCs, SF_6, NF_3, or all. c. Base year or baseline, including the rationale for choosing it. d. Scopes in which reductions took place; whether direct (Scope 1), energy indirect (Scope 2), and/or other indirect (Scope 3). e. Standards, methodologies, assumptions, and/or calculation tools used. 2.9 When compiling the information specified in Disclosure 305-5, the reporting organisation shall: 2.9.1 exclude reductions resulting from reduced production capacity or outsourcing; 2.9.2 use the inventory or project method to account for reductions; 2.9.3 calculate an initiative's total reductions of GHG emissions as the sum of its associated primary effects and any significant secondary effects; 2.9.4 if reporting two or more Scope types, report the reductions for each separately; 2.9.5 report reductions from offsets separately.
Waste management	**GRI (2020) 306-3****	Waste generated	a. Total weight of waste generated in metric tons, and a breakdown of this total by composition of the waste. b. Contextual information necessary to understand the data and how the data has been compiled. 2.1 When compiling the information specified in Disclosure 306-3-a, the reporting organisation shall: 2.1.1 exclude effluent, unless required by national legislation to be reported under total waste; 2.1.2 use 1000 kilograms as the measure for a metric ton

ESG Topics	GRI Topic-Specific Disclosure		"Shall" requirements under each disclosure

Waste management	**GRI (2020) 306-4****	Waste diverted from disposal	a. Total weight of waste diverted from disposal in metric tons, and a breakdown of this total by composition of the waste.
			b. Total weight of hazardous waste diverted from disposal in metric tons, and a breakdown of this total by the following recovery operations:
			  i. Preparation for reuse;
			  ii. Recycling;
			  iii. Other recovery operations.
			c. Total weight of non-hazardous waste diverted from disposal in metric tons, and a breakdown of this total by the following recovery operations:
			  i. Preparation for reuse;
			  ii. Recycling;
			  iii. Other recovery operations.
			d. For each recovery operation listed in Disclosures 306-4-b and 306-4-c, a breakdown of the total weight in metric tons of hazardous waste and of non-hazardous waste diverted from disposal:
			  i. onsite;
			  ii. offsite.
			e. Contextual information necessary to understand the data and how the data has been compiled.
			2.2 When compiling the information specified in Disclosure 306-4, the reporting organisation shall:
			  2.2.1 exclude effluent, unless required by national legislation to be reported under total waste;
			  2.2.2 use 1000 kilograms as the measure for a metric ton.

	GRI (2020) 306-5**	Waste directed to disposal	a. Total weight of waste directed to disposal in metric tons, and a breakdown of this total by composition of the waste.
			b. Total weight of hazardous waste directed to disposal in metric tons, and a breakdown of this total by the following disposal operations:
			  i. Incineration (with energy recovery);
			  ii. Incineration (without energy recovery);
			  iii. Landfilling;
			  iv. Other disposal operations.
			c. Total weight of non-hazardous waste directed to disposal in metric tons, and a breakdown of this total by the following disposal operations:
			  i. Incineration (with energy recovery);
			  ii. Incineration (without energy recovery);
			  iii. Landfilling;
			  iv. Other disposal operations.
			d. For each disposal operation listed in Disclosures 306-5-b and 306-5-c, a breakdown of the total weight in metric tons of hazardous waste and of non-hazardous waste directed to disposal:
			  i. onsite;
			  ii. offsite.
			e. Contextual information necessary to understand the data and how the data has been compiled.
			
			2.4 When compiling the information specified in Disclosure 306-5, the reporting organisation shall:
			  2.4.1 exclude effluent, unless required by national legislation to be reported under total waste;
			  2.4.2 use 1000 kilograms as the measure for a metric ton.

Sustainable supply chain management	**GRI (2016) 308-1****	New suppliers that were screened using environmental criteria	a. Percentage of new suppliers that were screened using environmental criteria
	GRI (2016) 414-1**	New suppliers that were screened using social criteria	a. Percentage of new suppliers that were screened using social criteria
Talent attraction and retention	**GRI (2016) 401-1****	New employee hires and employee turnover	a. Total number and rate of new employee hires during the reporting period, by age group, gender and region. b. Total number and rate of employee turnover during the reporting period, by age group, gender and region.

About this Report Contents

Our Sustainability Approach

Climate Change & Environment

People & Future of Work

Community Impact

Sustainable Value Creation

Appendix

ESG Topics	GRI Topic-Specific Disclosure		"Shall" requirements under each disclosure

Employee safety and well-being	**GRI (2018) 403-9****	Work-related injuries	a. For all employees:
			  i. The number and rate of fatalities as a result of work-related injury;
			  ii. The number and rate of high-consequence work-related injuries (excluding fatalities);
			  iii. The number and rate of recordable work-related injuries;
			  iv. The man types of work-related injury;
			  v. The number of hours worked.
			e. Whether the rates have been calculated based on 200,000 or 1,000,000 hours worked.
			g. Any contextual information necessary to understand how the data have been compiled, such as any standards, methodologies, and assumption used.
			
			2.1 When compiling the information specified in Disclosure 403-9, the reporting organisation shall:
			  2.1.1 exclude fatalities in the calculation of the number and rate of high-consequence work-related injuries;
			  2.1.2 include fatalities as a result of work-related injury in the calculation of the number and rate of recordable work-related injuries;
			  2.1.3 include injuries as a result of commuting incidents only where the transport has been organised by the organisation; 2.1.4 calculate the rates based on either 200,000 or 1,000,000 hours worked, using the following formulas:
			
			Rate of fatalities as a result of work-related injury = (Number of fatalities as a result of work-related injury / Number of hours worked) x [200,000 or 1,000,000]
			
			Rate of high-consequence work-related injuries (excluding fatalities) = (Number of high-consequence work-related injuries (excluding fatalities) / Number of hours worked) x [200,000 or 1,000,000]
			
			Rate of recordable work-related injuries = (Number of recordable work-related injuries / Number of hours worked) x [200,000 or 1,000,000]

	GRI (2018) 403-10**	Work-related ill health	a. For all employees:
			  i. The number of fatalities as a result of work-related ill health;
			  ii. The number of cases of recordable work-related ill health;
			  iii. The main types of work-related ill health.
			e. Any contextual information necessary to understand how the data have been compiled, such as any standards, methodologies, and assumption used.
			
			2.3 When compiling the information specified in Disclosure 403-9, the reporting organisation shall include fatalities as a result of work-related ill health in the calculation of the number of cases of recordable work-related ill health.

Talent development and future skills	**GRI (2016) 404-1****	Average hours of training per year per employee	a. Average hours of training that the organisation's employees have undertaken during the reporting period, by:
			  i. gender;
			  ii. employee category.

Data privacy and cyber security	**GRI (2016) 418-1****	Substantiated complaints concerning breaches of customer privacy and losses of customer data	a. Total number of substantiated complaints received concerning breaches of customer privacy, categorised by:
			  i. complaints received from outside parties and substantiated by the organisation;
			  ii. complaints from regulatory bodies.
			b. Total number of identified leaks, thefts, or losses of customer data.
			c. If the organisation has not identified any substantiated complaints, a brief statement of this fact is sufficient.
			
			2.1 When compiling the information specified in Disclosure 418-1, the reporting organisation shall indicate if a substantial number of these breaches relate to events in preceding years.

General Disclosures	**GRI (2021) 2-27****	Compliance with laws and regulations	a. Report the total number of significant instances of non-compliance with laws and regulations during the reporting period, and a breakdown of this total by:
			  i. instances for which fines were incurred;
			  ii. instances for which non-monetary sanctions were incurred;
			b. Report the total number and the monetary value of fines for instances of non-compliance with laws and regulations that were paid during the reporting period, and a breakdown of this total by:
			  i. fines for instances of non-compliance with laws and regulations that occurred in the current reporting period;
			  ii. fines for instances of non-compliance with laws and regulations that occurred in previous reporting periods;
			c. Describe the significant instances of non-compliance;
			d. Describe how it has determined significant instances of non-compliance.

Management's and Board of Director's responsibilities
The Management is responsible for selecting Criteria, and for presenting the Subject Matter in accordance with that Criteria, in all material respects. This responsibility includes establishing and maintaining internal controls, maintaining adequate records and making estimates that are relevant to the preparation of the subject matter, such that it is free from material misstatement, whether due to fraud or error.

EY's responsibilities
Our responsibility is to express a limited assurance conclusion on the Subject Matter based on the procedures we performed and evidence we obtained. We conducted our engagement in accordance with the International Standard for Assurance Engagements Other Than Audits or Reviews of Historical Financial Information ('ISAE 3000'), International Standard for Assurance Engagements on Greenhouse Gas Statements ('ISAE3410') and the terms of reference for this engagement as agreed with Singtel Group on 8 April 2022, supplemental to the principal agreement dated 1 April 2020. Those standards require that we plan and perform our engagement to obtain limited assurance about whether, in all material respects, the Subject Matter is presented in accordance with the Criteria, and to issue a report. The nature, timing, and extent of the procedures selected depend on our judgment, including an assessment of the risk of material misstatement, whether due to fraud or error. We believe that the evidence obtained is sufficient and appropriate to provide a basis for our limited assurance conclusions.

Our independence and quality control
We have maintained our independence and confirm that we have met the 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.

EY also applies Singapore Standard on Quality Control 1, Quality Control for Firms that Perform Audits and Reviews of Financial Statements, and Other Assurance and Related Services Engagements, 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.

Description of procedures performed
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. Our procedures were designed to obtain a limited level of assurance on which to base our conclusion and do not provide all the evidence that would be required to provide a reasonable level of assurance.

Although we considered the effectiveness of management's internal controls when determining the nature and extent of our procedures, our assurance engagement was not designed to provide assurance on internal controls. Our procedures did not include testing controls or performing procedures relating to checking aggregation or calculation of data within IT systems.

The GHG quantification process is subject to scientific uncertainty, which arises because of incomplete scientific knowledge about the measurement of GHGs. Additionally, GHG procedures are subject to estimation (or measurement) uncertainty resulting from the measurement and calculation processes used to quantify emissions within the bounds of existing scientific knowledge.

A limited assurance engagement consists of making enquiries, primarily of persons responsible for preparing the Subject Matter and related information, and applying analytical and other appropriate procedures.

1. Inquiries with Singtel Group's Sustainability team to
   a. Understand principal business operations,
   b. Appreciate key sustainability issues and developments,
   c. Map out information flow for sustainability reporting and the relevant controls,
   d. Identify data providers with their responsibilities, and
   e. Recognise the likelihood of possible manipulation of sustainability information and data
2. Virtual and face-to-face meetings with Singtel Group's data stakeholders and management.
3. Process walk-through of systems and processes for data aggregation and reporting, with relevant personnel to understand the quality of checks and control mechanisms, assessing and testing the controls in relation to the relevant Subject Matter in the Sustainability Report.
4. Interviews with employees and management based in Singapore (Group Sustainability, Group Procurement, Group Data Strategy, Human Resources, Energy Management, Facilities Management, Workplace Safety & Health, Regulatory & Interconnect, Mobile Networks, Supply Chain Management, Consumer Finance, Business Strategy and Marketing Intelligence and Product Development) and Australia (People and Culture, Infrastructure Services, Corporate Property, Facilities Management, Networks Supply Chain, Optus Procurement and Supply Chain as well as third parties (e.g. Australian Post) to understand key sustainability issues related to the select indicators and processes for the collection and accurate reporting of performance information.
5. Undertook analytical review procedures to support the reasonableness of the data.
6. Tested, on a sample basis, underlying source information to check accuracy of the data in relation to the relevant Subject Matter in the Sustainability Report.
7. Identified and checked assumptions supporting disclosures related to select sustainability performance disclosure.
8. Obtained third-party reports and confirmations in relation to the relevant Subject Matter in the Sustainability Report.
9. General desktop research on the relevant Subject Matter.
10. Checked that data and statements in relation to the relevant Subject Matter had been correctly transcribed from corporate systems and / or supporting evidence, into the Sustainability Report
11. Relying on Singtel Group's management representation letter on the relevant Subject Matter in the Sustainability Report.

About this Report Contents

Our Sustainability Approach

Climate Change & Environment

People & Future of Work

Community Impact

Sustainable Value Creation

Appendix

We also performed such other procedures as we considered necessary in the circumstances.

Conclusion
Based on our procedures and the evidence obtained, we are not aware of any material modifications that should be made to the Subject Matter as of 24 June 2022 for the year ended 31 March 2022, in order for it to be in accordance with the Criteria.

Restricted use
This report is intended solely for the information and use of the Management of Singtel Group and is not intended to be and should not be used by anyone other than those specified parties.

Ernst & Young LLP

Signed for Ernst & Young LLP by
Simon Yeo
Partner, Climate Change and Sustainability Services Singapore
24 June 2022