Sustainability

Report

Significant Achievements FY2016

JAN

Ranked 8th in the Corporate Knights Global 100 Most Sustainable Corporations list. Remains the only local telco on the list

MAY

Raised \$122,000 for Hair for Hope, with 122 StarHubbers and business partners shaving their heads

JUIN

JUN
Contributed \$200,000
to Central Singapore
Community Development
Council (CDC) to support
learning opportunities and
literacy for disadvantaged
children

AUG

Organised annual StarHub Open and raised \$209,700 for Metta School, MINDS Towner Garden School and Lighthouse School

OCT

Von the Sustainable
usiness category at the
016 Singapore Apex
orporate Sustainability
wards

NOV

Von "Best Sustainability eport within an Annual eport" at the 2016 Asia ustainability Reporting wards (ASRA)

About This Report

This report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards: Core option, the latest set of standards issued by the GRI Global Sustainability Standards Board which will supersede the GRI G4 Guidelines from July 2018. We have decided to be an early adopter of the GRI Standards starting with this report. The report continues to include relevant indicators from GRI's Telecommunications Sector Supplement and the G4 Media Sector Disclosures. In developing the report, we have also incorporated some of the International Integrated Reporting Council's (IIRC) Integrated Reporting principles to communicate value created by our ESG strategies, wherever possible. A GRI Content Index has been included at the end of this report indicating the disclosures' locations.

performance for the calendar year 2016.

This report covers ESG performance of all business divisions and subsidiaries which are under StarHub's financial and operational control.

Information presented in the report has been extracted from the primary internal records and documents to ensure accuracy using internationally accepted measurement data units.

Reporting Principles

As in our previous reports, we have followed the GRI principles for defining the sustainability report content and quality. We have determined the report content using the principles of stakeholder inclusiveness, sustainability context, materiality and completeness. To ensure quality of the report, we have applied the GRI principles of accuracy, balance, clarity, comparability, reliability and timeliness.

Reporting Process

StarHub's sixth annual sustainability report presents a balanced

overview of our environmental, social and governance (ESG)

StarHub's Sustainability Committee, which includes senior executives from major functions, provides the overall direction for preparing the report. The Committee's responsibilities include reviewing, assessing and determining the sustainability context, material ESG topics, report content and topic boundaries, scope and prioritisation of issues to be included in the report. The Committee also considers formal and informal feedback from a range of internal and external stakeholders received throughout the year to determine the most material topics to be covered in the report. The Committee is supported by a crossfunctional project team which gathers and verifies ESG performance data.

Our reporting cycle begins with a review of the current sustainability report to re-assess the material topics and their boundaries in the light of business environment changes, stakeholder feedback and sustainability trends.

StarHub's Corporate Sustainability and Responsibility (CSR) advocate has the responsibility for coordinating the entire reporting process.

Restatements

This report does not include any restatement of previously published data.

Sustainability Report

'I'm the one who watches

the most StarHub TV

programmes at home.

also love the fast speeds on

StarHub fibre broadband to

access my favourite apps &

follow rugby and golf games."

Ethan Koh

Young Hubber

Sustainability Report

continued

External Assurance

While the financial statements in the report are audited by independent auditors, we rely on our internal process to verify the accuracy of ESG performance data and information presented in the report.

Availability

A PDF version of the report is available for download on our website www.starhub.com. Smart device users can also download the StarHub Annual Report app to browse and experience the StarHub Annual Reports on their smart devices.

A small number of copies of this report have been printed on Forest Stewardship Council (FSC) certified sustainable paper to reduce environmental impact.

Feedback

We welcome feedback from all stakeholders. Please send questions, comments, suggestions or feedback relating to this report or our sustainability performance to StarHubCSR@StarHub.com

StarHub Value Creation Scorecard			
Strategic Area	FY 2016	FY 2015	FY 2014
Environmental			
CO ₂ e emissions (tonnes)	54,518	56,706	54,625
Carbon emission intensity per \$million revenue			
(tonnes CO ₂ e)	22.7	23.2	22.9
Energy intensity per \$million revenue (gigajoules)	183	183	183
Water consumption (cubic metres)	28,421	27,500	27,832
General waste (non-hazardous) (tonnes)	40	30	33
Internal e-waste recycled (tonnes)	379	117	385
Paper recycled (kilogrammes)	16,012	19,295	12,210
Copier paper consumption (kilogrammes)	28,340	40,065	53,230
Electricity used (million kWh)	119.9	121.7	118.8
Social			
Employees			
Permanent employees+	91%	88%	88%
Local employees (Singapore citizens)++	75%	75%	76%
New hires	283	320	346
Female employees++	42%	43%	43%
Female managers (% of Senior level)	37%	36%	35%
Female managers (% of Middle level)	36%	38%	38%
Female Heads of Department (% of HODs)	33%	33%	33%
Average training hours per employee	19	20	17
Training expenditure per employee	\$784	\$611	\$873
HR Satisfaction Survey (Employee satisfaction level			
based on survey scores)	91%	92%	92%
Employee turnover rate	12%	12%	14%
Number of reported work injuries	2	2	9
Fatal Accidents	0	0	0
+ % refers to base of total StarHub workforce ++ % refers to base of StarHub permanent employees			
Suppliers			
Share of local suppliers as % of total supplier			
payments	86%	89%	91%
Proportion of local suppliers	85.0%	82.7%	86.4%
Community			
Employee volunteerism (number of days)	124	144	214
Community investment and donations to charities			
(\$million)	0.8	1.1	1.4
Financial			
Revenue (\$million)	2,397	2,444	2,387
Net profit (\$million)	341	372	371
Dividends paid to shareholders (\$million)	346	346	345

StarHub Ltd Annual Report 2016

Sustainability Governance

At StarHub, the Board of Directors has oversight of the Group's sustainability strategy. The Board's responsibilities include providing guidance on the material environmental, social and governance (ESG) factors that impact the Group's activities.

In managing sustainability throughout the Group, the Board is assisted by the StarHub Sustainability Committee. The Sustainability Committee is headed by the CEO, and comprises senior executives of the Group representing key functions. The Sustainability Committee reviews and determines material ESG factors, develops sustainability strategy, considers stakeholder feedback and expectations, and establishes priorities, goals and targets.

StarHub's CSR advocate is responsible for developing, managing and executing CSR programmes and is supported by a cross-functional project team which has the responsibility to collect, verify, monitor and provide ESG performance data for sustainability reporting.

StarHub Core Values: ExCITe

Our approach to sustainable development of the business is guided by StarHub's four pillars of Core Values:

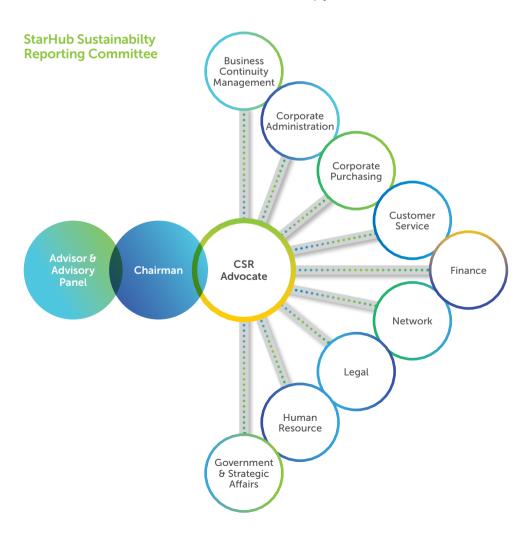
Excellence

Creativity

Integrity—social, environmental and financial

Teamwork

Our sustainability strategy to create shared value for shareholders and stakeholders is deeply rooted in our core values.



Case Study

StarHub in the TOP 8

OF THE GLOBAL 100 RANKING

StarHub's ranking in the 2016 Global 100 Most Sustainable Corporations in the World index jumped to the 8th place from the previous 24th place. StarHub, ranked for the fourth consecutive year, is the only Singaporean info-communications provider included in this prestigious index.

The Global 100 is a list of the world's 100 most sustainable corporations compiled by Corporate Knights based on an extensive data-driven sustainability assessment.

Asia Sustainability Reporting Awards

For its reporting excellence, StarHub won Best Sustainability Report within an Annual Report at the Asia Sustainability Reporting Awards (ASRA) 2016.

Singapore Apex Corporate Sustainability Awards 2016

StarHub was recognised for outstanding performance in corporate sustainability in the Sustainable Business category at the Singapore Apex Corporate Sustainability Awards, which recognise companies in Singapore for their commitment to sustainable business.

Sustainability Report

continued

Value Creation

We are focused on providing every person, every home and every business in Singapore with world-class information, communication and entertainment services. As a fully integrated info-communications company, our services enrich lives, connect people, facilitate business and empower the community.

Mobile communication, Pay TV, ultra-high speed broadband services, and data and voice services for businesses make lives better and help businesses thrive. Our communications services help people connect with family and friends, and access information when they need it. Our communications solutions help

Creating Sustainable Value for All

Strategic Areas	Value Created	Challenges	Beneficiaries
ENVIRONME	NT		
Energy efficiency	Lower environmental footprint Reduced energy cost	Cost of upgrading technologyBuilding employee and customer awareness	ShareholdersEnvironmentCommunity
Climate change mitigation	 Lower carbon footprint New business opportunities in a low carbon economy 	 Cost of upgrading technology Ensuring continued awareness among employees and customers 	ShareholdersEnvironmentCommunity
Waste minimisation	Resource efficiencyLower pollution	 Collection, segregation and tracking of all waste across business Building employee and customer awareness Cost of disposal 	ShareholdersEnvironmentCommunity
Water conservation	Saving waterEmployees' pride in saving water	Cost of retrofittingCost of water efficient fittingsCreating employee awareness	ShareholdersEnvironmentCommunity
SOCIAL			
Employee development	 Employee satisfaction Innovative problem-solving Motivated and engaged employees Higher productivity Lower turnover and reduced hiring cost 	 Competition for talent Instilling personal ownership of career planning and skills upgrading Engaging multi-generational workforce Developing leadership and mentoring skills 	ShareholdersEmployeesLocal economyCommunity
Customer service excellence	 Customer retention Customer loyalty Reduced cost of new customer acquisition Avoid expensive administrative time in solving customer problems by being proactive 	 Increasing competition Frequent training to keep pace with new products and technologies 	ShareholdersCustomers
Uninterrupted availability of services	 Trust in brand Attract and retain customers Customer satisfaction Reduced regulatory risk 	 Cost of preventive maintenance Investment in expanding infrastructure Cyber-attack threats Reliance on upstream providers 	ShareholdersCustomersLocal economy
High speed mobile and broadband connectivity	 Faster, reliable communication Convenient access to public services such as government e-services, banking, and online shopping Supporting the growth of digital economy such as e-commerce 	 Cost of network upgrade Rapid evolution of new technologies Keeping prices affordable Increasing competition 	CustomersBusinessesLocal economy
Access to telecom services for all	Inclusive growthNarrowing digital divideMore resilient and stronger communities	Cost of subsidy	 Community
Fair market practices	 Build trust through transparency Attract /retain customers and business partners Reduced regulatory risk 	 Ensuring ongoing employee training and awareness Building customer awareness 	ShareholdersCustomersLocal economy
Community development	 Goodwill of community Stronger brand equity and respect More resilient, stable and stronger communities Trusted relations with society 	Complex to determine return on investment	CommunityEmployeesShareholders
Employee volunteering	 Greater employee engagement Enhanced job satisfaction Stronger community engagement 	 Identifying high impact programmes Meeting employees' expectations for choice of programmes Cost of volunteering 	CommunityEmployeesShareholders

businesses, both small and large, run their operations efficiently. Superfast and reliable connectivity that we offer allows people to access a host of public services from their mobile phones on the go. Our Pay TV services bring world-class entertainment to everyone's home.

We operate an islandwide mobile and HFC network for delivering TV and cable broadband services. Both, part of the nation's crucial info-communications infrastructure, enable inclusive growth and support economic development.

We strongly believe that sustainable growth of our business depends on our ability to create value for our customers and society. We therefore take a balanced approach to sustainable development of our business and the communities around us. A summary of how we create value for our stakeholders is presented below.

Strategic Areas	Value Created	Challenges	Beneficiaries
ECONOMIC			
Info- communications infrastructure	State-of-the-art energy efficient mobile and cable TV infrastructure to support customers and the local economy	 Rapid technological advancements and innovation High investment cost Competitive market place 	CustomersEconomyCommunityGovernmentShareholders
Local suppliers	 Supporting local businesses' growth Creating indirect local jobs Contributing to local economic growth 	 Local suppliers may have cost disadvantage due to adverse economies of scale Capacity limitations Limited capital for expansion or modernisation 	SuppliersSuppliers' employeesSuppliers' suppliersGovernment
Supply chain sustainability assessments	Reducing social and environmental impacts and risks in supply chain	 Cost of supplier training, assessments and monitoring Limited influence on dominant suppliers 	SuppliersSuppliers' employeesCommunitiesGovernment
GOVERNANC	CE CONTRACTOR OF THE CONTRACTO		
Board diversity	Holistic guidance to the company	Recruitment of suitable directors	ShareholdersInvestorsRegulators
Risk management and internal controls	 Effective risk taking and management, aligned with the organisation's business objectives with an integrated, proactive and systematic approach in risk management Better corporate governance 	 Creating a risk-aware culture Keeping updated with the latest emerging risks and threats 	ShareholdersInvestors
Whistle blowing policy	Mitigate business risksFraud prevention	Ongoing training and awareness for existing and new employees	ShareholdersInvestors
Employee code of conduct	 Ethical conduct Conducive working environment with high level of trust and professionalism Minimise business risks 	Ongoing training and awareness for existing and new employees	Shareholders InvestorsBusiness partners
Strategic Business Continuity Management	 Robust plans to keep business operational during crisis or emergency situations such as haze, pandemic periods etc Mitigate regulatory risk 	Increase resiliency of core network infrastructure to meet stakeholders' requirements	ShareholdersInvestorsRegulatorsCustomers
Data protection	 Safety of sensitive commercial and strategic data and information Mitigate regulatory risk Increased confidence of customers, business partners and employees 	 Investment in automated systems Mitigating cyber attacks Employee training and awareness 	ShareholdersInvestors RegulatorsCustomers

External Initiatives

We support or are committed to a number of national and international economic, environmental and social principles, codes and frameworks. Some of these include:

- GRI Standards
 (our first sustainability report
 (SR 2011) followed GRI 3.1 and the
 last four sustainability reports (SR
 2012-SR 2015) were in accordance
 with the latest GRI G4 guidelines)
- The Universal Declaration of Human Rights
- International Labour Organisation's (ILO) Core Labour Standards
- UN Sustainable Development Goals
- Tripartite Alliance for Fair Employment Practices (TAFEP)
- bizSAFE Level 3 certification, the second highest level, awarded by the Workplace Safety and Health Council Singapore
- The Greenhouse Gas (GHG)
 Protocol
- The Carbon Disclosure Project (We participate through CDP Supply Chain and CDP Climate Change programmes)
- Advertising Standards Authority of Singapore (ASAS) Code
- Mobile Operators' Content Code

Sustainability Report

continued

Our Stakeholders

Stakeholder engagement is at the core of our sustainability strategy. We engage with a range of stakeholders who may be impacted by our business operations or whose opinion may influence our business. Insights from our interactions with stakeholders enrich our decision making and enable us to create value for all

We seek stakeholder feedback using both formal and informal channels. Ongoing stakeholder feedback allows us to offer the right products and services that meet our customers' needs and expectations, create a fulfilling workplace for employees, and serve the community.

How we engage with diverse stakeholders, including how we respond to the topics and concerns raised by them, is presented below.

Customers

HOW WE ENGAGE:

Customer surveys, Twitter®, Facebook® pages, advertisements, StarHub retail stores, online stores, Customer Service Hotlines.

STAKEHOLDERS' EXPECTATIONS:

Seamless, high-quality coverage, rich content, affordability, data security, prompt level of service.

- Friendly processes and policies
- Ease of use
- Hassle-free sign up
- Employees with excellent product knowledge
- Easy to understand promotional packages and mechanics

HOW WE RESPOND:

By committing ourselves to respect consumers' rights, provide clear product information, offer value for money, ensure product performance and quality, reliable service, prompt handling of complaints, and respect for privacy. Provide customers with fulfilment channels such as Retail, Online, Roadshow, Telesales and also self-help options like *My StarHub* app.

PROGRESS DURING 2016:

- We continued to simplify processes at all touch points for both sales and service transactions, launched e-appointments for existing and new customers at retail stores, created Hub Trooper experience corner at our StarHub retail stores for personalised solution sales, offered seamless customer experiences through launch of "click and collect" for mobile e-commerce sales
- Revamped the online My Account Manager for more digital self-services to be performed
- Outcomes measured in elevated NPS results for both retail and Hub Troopers
- Revamped My StarHub app with new look and feel and additional features
- Strengthened Social Media team to provide better response times to customers, better handling of queries, and greater engagement with customers

PLANS FOR 2017:

- Focus on episodic NPS to reduce customer pain points such as billing and relocation
- Strengthen the image of our partner stores to be more representative of our StarHub brand stores
- Increased engagement across our Social Channels
- Improve upon our Social Health Index rating
- More effective query management during periods of high traffic on social channels
- Add new features to My StarHub app to encourage higher use

Employees

HOW WE ENGAGE:

Through social media platforms such as StarHub Community and HubbaVoice where they can share their comments and observations on topics of interest, be it local or world events, new technology/applications etc. We also continue to engage via Intranet, emails, internal newsletter, workshops, company-sponsored sporting and social activities such as in-house games organised for employees, small group discussions, twice-yearly employee communication sessions, twice-yearly video addresses by CEO, encouragement of employees to interact more personally in and out of the office, free health snacks on the last Friday of every month.

STAKEHOLDERS' EXPECTATIONS:

A caring and conducive environment where employees are equipped and motivated to do their best work and continue to excel in personal development.

HOW WE RESPOND:

By adopting sound HR policies and practices that promote fair treatment, safe working conditions, reward and recognition for performance, teamwork and career growth, e.g. we promote work-life balance and a conducive work environment for employees through provision of nursing rooms, a well-equipped gym and encouraging employees to take part in sporting activities such as marathons, bowling, futsal, as well as giving employees early release from work on the last Friday of each quarter for them to spend meaningful family time with their loved ones. We also organised Bring-Your-Kids-to-Work Day for our employees.

PROGRESS DURING 2016:

We continued to focus on bringing out the best in our people and building a high performing work culture through the following areas:

- Revamped internal performance rating system to allow for greater differentiation of employee performance
- Equipped people managers with relevant skillsets to hold effective performance conversations with their teams
- Rolled out Leadership Development Program (5E2P) for senior managers and above to inculcate key leadership traits and encouraged leaders to walk the talk
- Sustained our Career Development efforts for employees through internal Career Fairs and actively facilitated internal transfers and job expansion
- Achieved the People Developer (PD) certification in 2016 in recognition of our efforts to develop our people for the better

PLANS FOR 2017

We are putting in place an all-empowering Human Capital Management (HCM) system to empower our employees through digitisation to achieve collaboration, productivity and innovation at work.

To create a truly employee-centric experience through:

- Spontaneous 360 Feedback tool to heighten self-awareness and development
- Transparency of shared goals to drive job clarity and accountability among employees
- Creating space and varied opportunities for learning, peer socialising and cross-functional collaboration
- Simplifying and automating processes in employee lifecycle e.g. benefits, performance management, learning and engagement

Stakeholder feedback also helps us identify, prioritise and address the most significant ESG issues. To prepare this report, we engaged key internal stakeholders to seek their views and input for reporting. Assessments that we receive from numerous sustainability analysts and ranking organisations help us improve our sustainability reporting.

Our approach is to build trusted relationships with all stakeholders through respectful conversations and upholding the highest standards of professionalism and ethics in conducting our business.

Suppliers

HOW WE ENGAGE:

Quotations, Request For Proposals, tenders, regular meetings, email correspondence, and teleconferences.

STAKEHOLDERS' EXPECTATIONS:

Compliance with terms and conditions of prevailing purchasing policies and procedures, while maintaining ethical standards; appropriate costs.

HOW WE RESPOND:

By establishing policies and practices that ensure a fair selection and procurement process, ethical business practices and respect for contractual obligations.

PROGRESS DURING 2016:

We completed the Supplier Sustainability Survey covering 73 key suppliers, more than the target of 60 suppliers.

PLANS FOR 2017:

Continue supplier sustainability survey.

Distributions/Retailers

HOW WE ENGAGE:

Regular meetings, shop visits, email correspondence.

STAKEHOLDERS' EXPECTATIONS:

Timely delivery; quality assurance; strong dealer collaboration, driving good customer experience; after-sales support.

HOW WE RESPOND:

By proactive sales planning; sales support; regular visits by Account Managers and providing Single Point of Contact for distributors/ partners for timely response.

PROGRESS DURING 2016:

- We continued to engage through quarterly and yearly performance updates, and sharing sales trends
- Enabled Partners to provide post sales transactions (SIM mapping and Set Top Box swops) for customers to integrate sales and post sales in partners' shops
- Maintained our Quarterly Partner Delight Index Score at 3.98 and above for the Mobile Pre-paid business

PLANS FOR 2017:

- Continue to support Partners with simplified processes and systems; training and selling tools
- Enhance the service offerings to be closer to that provided at StarHub shops
- Introducing Salesforce tool to further improve our channel management in the Mobile Pre-paid business

Business Partners

HOW WE ENGAGE:

Frequent discussions with telecom and content partners.

STAKEHOLDERS' EXPECTATIONS:

Partnerships for business opportunities and growth.

HOW WE RESPOND:

By engaging them to seek mutually beneficial business opportunities.

PROGRESS DURING 2016:

Rolled out more *StarHub Go*, SVOD, on demand content for viewers.

PLANS FOR 2017:

To work together with partners to combat piracy.

Investors

HOW WE ENGAGE:

Quarterly briefings, annual press conference, Investors' Day, regular meetings, discussions, emails with over 240 institutional investors, across Asia, Europe and the US.

STAKEHOLDERS' EXPECTATIONS:

Transparency, timely information on company progress and status, profitability.

HOW WE RESPOND:

By endeavouring to generate optimum return on investment, good governance, transparency and disclosure, as well as sustainable and long-term growth of business.

PROGRESS DURING 2016:

We continued a strong investor engagement in the reporting year that included 214 face-to-face investor meetings.

PLANS FOR 2017:

To maintain current levels of investor engagement, with good corporate governance, transparency and disclosure.

Sustainability Report

continued

Local Communities

HOW WE ENGAGE:

Community outreach programmes, corporate sponsorships.

STAKEHOLDERS' EXPECTATIONS:

Support from a caring corporate citizen.

HOW WE RESPOND:

By regularly reviewing community needs, partnering with Voluntary Welfare Organisations (VWO), and investing in community projects to support underprivileged youth and families.

PROGRESS DURING 2016:

For greater, more targeted impact, we have streamlined sponsorships to align with the business and our community investment focus.

PLANS FOR 2017:

To work with high-performing VWOs and/ or other organisations to effect meaningful outcomes for disadvantaged groups in the community.

Media

HOW WE ENGAGE:

Invitations to media events, regular media releases

STAKEHOLDERS' EXPECTATIONS:

Exposure and access to company developments and news, as well as breaking stories on products, services, entertainment and related content.

HOW WE RESPOND:

By providing dedicated media contacts, and offering timely and accurate information on company affairs of public interest.

PROGRESS DURING 2016:

- With 64 press releases, media engagement remained consistently strong in 2016
- Timely announcements. Well-handled communications on outages through timely updates on various channels including mainstream media and social media

PLANS FOR 2017:

To maintain the existing level of media engagement, with timely and accurate company information.

Government & Regulators

HOW WE ENGAGE:

Regular discussions with relevant agencies and departments.

STAKEHOLDERS' EXPECTATIONS:

Adherence to regulations, reporting of any service delivery issues as required by regulators, prompt resolution of issues.

HOW WE RESPOND:

By committing ourselves to comply with applicable laws, putting in place policies and procedures to ensure compliance.

PROGRESS DURING 2016:

No significant changes were implemented in the reporting year.

PLANS FOR 2017:

To maintain the current level of dialogue with adherence to regulations, as well as prompt reporting and resolution of issues.

Membership of Associations

StarHub actively engages with a number of national and international trade associations and advocacy organisations through membership and participation in committees or work groups.

For example, **Tan Tong Hai**, CEO of StarHub, is a corporate representative to Singapore Chinese Chamber of Commerce & Industry (SCCCI).

Jeannie Ong, StarHub's CSPO and Head of Sustainability, serves on the Management Committee of Global Compact Network Singapore (GCNS), and is a Director of Investor Relations Professional Association of Singapore. She is also a council member at the Singapore-Guangdong Collaboration Council and a member of Business China Singapore's Publicity sub-committee.

Kevin Lim, CCO of StarHub holds the following positions: Councillor with the Singapore infocomm Technology Federation (SiTF) where he is also advisor to the Digital Media Chapter.

Howie Lau, CMO of StarHub, is President of Singapore Computer Society.

Trade Associations

HOW WE ENGAGE:

Joining relevant trade associations.

STAKEHOLDERS' EXPECTATIONS:

Support in addressing issues facing the industry.

HOW WE RESPOND:

By contributing through active membership and participating in industry forums and dialogues, sharing knowledge and information.

PROGRESS DURING 2016:

No significant changes were implemented in the reporting year.

PLANS FOR 2017:

Association of Singapore

No major plans for enhanced engagement have been scheduled for the year 2017.

Trade Unions

HOW WE ENGAGE:

Open, timely dialogue with the union. Collaborative partnership to enhance employees' welfare and skills upgrading.

STAKEHOLDERS' EXPECTATIONS:

Access to employees for promoting membership, open and honest dialogue with management.

HOW WE RESPOND:

By maintaining open communication with the union. We have signed a Memorandum of Understanding (MOU) with Singapore Industrial and Services Employees' Union (SISEU) which allows rank and file employees to participate in recreational and social activities organised by the Union.

PROGRESS DURING 2016:

- We have extended our sponsorship of membership fees from rank and file employees to include junior executive positions
- We continue our collaborative efforts with SISEU in encouraging employees' training and skills upgrading

PLANS FOR 2017:

We will continue to work closely with SISEU to ensure our employees' skills stay relevant as we undergo business transformation, by tapping on the NTUC, WSG and e2i training programmes and grants to support upgrading of our employees' skills.

NGOs & Advocacy Groups*

HOW WE ENGAGE:

Attending conferences, meeting with interest groups, and sustainability reporting.

STAKEHOLDERS' EXPECTATIONS:

Responsible business practices, reducing environmental impacts, and disclosing information about sustainability performance.

HOW WE RESPOND:

By committing to wider sustainability programmes that seek to harmonise our economic, social and environmental goals.

PROGRESS DURING 2016:

Worked with a number of VWOs and NGOs to support programmes for communities and the environment as reported in the chapters on Our Environment and Our Community.

PLANS FOR 2017:

To work more closely with advocacy groups to integrate sustainability more broadly into the business.

* e.g. GCNS, human rights groups, WWF, etc.

A list of StarHub's membership to some of the associations and other organisations is provided here:

Membership of Associations/Organisations

American Chamber of Commerce, Singapore	Current Analysis Games Exchange Alliances	Ovum Enterprise IT knowledge Centre	Singapore Chinese Chamber of Commerce	Singapore International Chamber of Commerce	
Asia Digital Marketing	Global Compact Network	Telecommunications	& Industry	Singapore National	
Association	Singapore		Singapore Computer	Employers' Federation	
Asia Pacific Network	GSMA Development Fund	Council	Society	Singapore Press Club	
Information Centre	GSMA Wireless Intelligence	Promax Asia	Singapore Corporate	Singapore Training and	
Association of Media	Subscription	Routing Asset Database	Counsel Association	Development Association	
Owners	Institute of Advertising	Singapore Academy of Law	Singapore Hotel	Singapore Manufacturing	
Association of Small			Association	Federation	
& Medium Enterprises (ASME), Singapore	Institute of Public	Singapore Advanced Research & Education	Singapore Human Resource Institute	Singapore Retailers Association	
British Chamber of	Relations, Singapore	Network	Singapore Indian Chamber	TM Forum	
Commerce, Singapore	Investor Relations	Singapore Association	of Commerce & Industry		
Cable Television Laboratories (CableLabs)			Singapore infocomm Technology Federation	Wireless Broadband Alliance	
CASBAA	Law Society of Singapore	Administrators	Singapore Institute of		
Contact Centre	Lawnet for Legal Research	Singapore Business	Management		

Federation

Sustainability Report

continued

Our Materiality Topics

We identify material topics for reporting based on the significance of our ESG and economic impacts and the degree of influence they have on stakeholder assessments and decisions. We review our material topics every year in the light of fresh stakeholder feedback, new trends in sustainability, challenges facing the telecom and media industries, experts' views and our own business goals.

We are focused on those ESG and economic topics where we see the most potential for creating maximum value for shareholders and stakeholders. This involves managing ESG risks and opportunities across the value chain. The impacts that occur outside StarHub, such as in the value chain, are challenging to deal with as we may have little or no control on some of these. Our approach is to engage our value chain partners, wherever possible, to address the ESG impacts in their operations. For example, we engage with our key suppliers through an annual supplier sustainability assessment and share the results in this report (see *Our Marketplace* chapter).

Presented here is a summary of our material topics and their boundaries.

Environment



- Energy
- Emissions
- Effluents and Waste

Important but not material topic:

Water

For more details, go to page 98

For more details, go to
page 104

Social



Marketplace

- Customer Satisfaction
- Cyber Security
- Customer Privacy
- Procurement Practices

GRI Telecommunication Sector Indicators:

- Reliable access to telecom services
- Clarity of Charges and Tariffs
- Customer Relations

GRI G4 Media Sector Disclosures:

- Content Creation
- Content Dissemination

Other Topics:

Cyber Security

Workplace

- Employment
- Diversity and Equal Opportunity
- Training and Education
- Employee Turnover
- Occupational Health and Safety

Important but not material topic:

- · Non-discrimination
- Freedom of Association
- Child Labour
- Forced or Compulsory Labour

Community

• Local Communities

GRI Telecommunication Sector Indicators:

- Access to Telecom Products and Services/Bridging Digital Divide
- Access to Content

Economic



- Economic Performance
- Indirect Economic Impacts

GRI Telecommunication Sector Indicators:

Infrastructure

For more details, go to page 108

For more details, go to page 114

For more details, go to

Boundary of Our Material Topics

A summary of StarHub's material environmental, social and economic topics, where the impacts occur and StarHub's involvement with the impacts is presented below. Our indirect involvement indicates the impacts that occur outside StarHub such as the value chain where we may not have much control. A more detailed discussion on the material topics, including the management approach, how we evaluate the management approach, StarHub's involvement with the impacts, and the topic boundary limitations, if any, is provided in the respective chapters of this report.

0		
0		
		All
0		All
0		All
0		All
0	\sim	All
		StarHub Mobile Pte Ltd
0		All
<u> </u>	8∼	StarHub Mobile Pte Ltd
0	\sim	StarHub Cable Vision Ltd
		StarHub Cable Vision Ltd
		StarHub Cable Vision Ltd
0		StarHub Cable Vision Ltd
0		All
		6
		StarHub Mobile Pte Ltd
0	\sim	StarHub Mobile Pte Ltd
0		All
0	\sim	All
0		StarHub Mobile Pte Ltd
		0 0

Sustainability Report

continued

OUR ENVIRONMENT



How We Create Value

- Minimise energy intensity.
- 2 Reduce greenhouse gas emissions.
- 3 Conserve water.
- Reduce and recycle waste.
- Increase employee awareness about environmental issues.
- Encourage customers to minimise environmental impact.
- 7 Comply with regulations.

Performance Highlights

Energy Intensity:

183GJ

Carbon Emissions Intensity: **L.** tonnes

28,421m³ | **40**tonnes

Total e-waste recycled (including RENEW): 438 tonnes

OUR ENVIRONMENT

StarHub Ltd Annual Report 2016 99



We are focused on creating value by continuously minimising the environmental impacts of our business operations.

Our management approach is to minimise our environmental impacts even as we expand and upgrade our network infrastructure to continuously enhance customer experience. We support a precautionary approach to environmental challenges by addressing the material environmental risks and impacts in our operations.

Our environmental efforts are focused on reducing energy consumption, greenhouse gas emissions and waste management. We also try to conserve water which is a precious natural resource. Other than our operational efforts to minimise environmental impacts, we actively encourage our employees, customers and communities to participate in StarHub's environmental programmes.

We regularly review and evaluate the effectiveness of our approach by various means including stakeholder feedback and our environmental performance.

StarHub Commitment

We have refreshed the StarHub Green Policy, first launched in 2009, to address our material environmental impacts. The six commitments we have made through the Green Policy are:

- 1 We will adopt responsible and sustainable practices in our corporate activities to minimise the environmental impact of our operations. We will continually review our goals and commitment to protect the global environment as much as possible.
- We will adhere to, as much as possible, environmental recommendations by the relevant authorities and also implement in-house targets to improve our environmental performance.
- We will reduce our environmental loads by efficiently using resources, saving energy, reducing waste, encouraging material recycling and minimising emissions of greenhouse gases and ozone-depleting substances.

- **4** We will adopt environmentally friendly technologies as far as possible, when ordering and purchasing necessary resources.
- 5 We will implement education programmes to raise environmental awareness among our employees so that they recognise the essence of this Green Policy by actively addressing environmental concerns.
- 6 We will make social contributions in close partnership with local communities by disclosing environmental information and supporting environmental conservation initiatives.

This report presents several initiatives we have taken in line with our Green Policy.

Climate Change

Singapore, where our operations are mainly concentrated, is not immune to climate change. According to studies undertaken by the National Climate Change Secretariat, the annual mean temperature has increased from 26.6°C to 27.7°C from 1972 to 2014. The mean sea level in the Straits of Singapore has also risen at the rate of 1.2mm to 1.7mm per year in the period 1975 to 2009. Recent years have also witnessed an increase in rainfall. The annual average rainfall has increased from 2,192mm in 1980 to 2,727mm in 2014.

Singapore has pledged to reduce national emission intensity by 36% from 2005 levels by 2030 and to stabilise the country's emissions with the aim of peaking around 2030. We are committed to doing our part by striving to become more energy efficient and minimise our carbon footprint. We adopted energy efficient technologies when we recently upgraded our telecom infrastructure. As a result, our absolute GHG emissions have dropped 11% in 2016 compared with 2010 even as we expanded our infrastructure.

We believe the information and communications technology (ICT) industry has great potential especially in the area of developing green data centres through research and innovation. In our view, wireless and telecom technologies have an important role to play in the world's transition to a lower carbon economy.

Sustainability Report continued

OUR ENVIRONMENT



We also joined hands with ST Telemedia to jointly develop STT MediaHub, a highly specialised telecommunications, media and data centre facility which was awarded the BCA-IDA Green Mark Platinum for New Data Centres.

Our Performance

Green Building

We reduce our environmental impact by operating from certified green buildings. Our head office StarHub Green is located in a Green Mark Gold certified building. The building, certified green by the Building and Construction Authority (BCA), saves energy and water and provides healthier indoor air for our employees and visitors.

We also joined hands with ST Telemedia to jointly develop STT MediaHub, a highly specialised telecommunications, media and data centre facility which was awarded the BCA-IDA Green Mark Platinum for New Data Centres.

Energy

Our management approach is to minimise the use of fossil fuel energy. Data centres, base stations, offices and transport operations account for most of our energy use. We are focused on adopting energy-efficient technologies and saving energy through employee awareness. We have improved energy efficiency in our data centres by improvements in cabling and air-conditioning equipment. This year's electricity data includes consumption at STT MediaHub where we started moving some of the telco and media operations from July 2016.

Green Network

We have modernised our 2G and 3G networks which consume less power and added an energy-efficient 4G network resulting in a substantial reduction in energy consumption.

Solar Energy

We operate two solar-powered mobile base transceiver stations (BTS) located at our headquarters, StarHub Green and on the roof of IKEA Alexandra. The two stations annually save approximately 8,000 kWh energy or about 3,599 kg of CO₂. We have also invested in Singapore's first solar-powered BTS-enabled vehicle used to boost signal strength.

GHG Emissions

Our management approach is to progressively reduce our organisational carbon footprint by improving energy efficiency and minimising energy consumption. StarHub's greenhouse gas (GHG) emissions can be attributed to the use of electricity, diesel and petrol. Our emission intensity in 2016 was calculated to be 22.7 tCO $_2$ per million \$ in revenue, compared with 23.2 tCO $_2$ in the preceding year. Emissions from electricity represented 99% of our total carbon. Our overall GHG emission was slightly lower in 2016, mainly attributable to less use of refrigerant gases included in the Kyoto Protocol.

Ozone Depleting Fugitive Emissions

Our ozone depleting fugitive emissions, attributed to the use of refrigerant R22 in air-conditioning equipment, amounted to $143~\rm tCO_2e$ in 2016 as against $786~\rm tCO_2e$ in the prior year.

Scope 3 Emissions

Our current reporting of Scope 3 emissions or other indirect emissions includes emissions from use of electricity by our exclusive retail partners. In 2016, the Scope 3 emissions were calculated to be 187 tCO_2 , compared to 217 tCO_2 in the prior year.

Detailed Emissions Summary (CO ₂ e tonnes)			
Emission Sources	FY 2016	FY 2015	FY 2014
Scope 1			
Stationary Combustion	65	112	87
Mobile Combustion	487	568	600
Fugitive emissions (refrigerant gases)	9	1,252	494
Total Scope 1 emissions	561	1,932	1,181
Scope 2			
Purchased electricity	53,957	54,774	53,444
Total Scope 2 emissions	53,957	54,774	53,444
Total CO ₂ e emissions	54,518	56,706	54,625

Waste

Our management approach is to reduce. reuse and recycle waste wherever possible through employee awareness. Waste from our operations includes paper, packaging waste and e-waste. We recycle our e-waste through licensed waste management contractors. We also help our customers recycle their used mobile phones and cable TV set top boxes and remote controls.

REcycling Nation's Electronic Waste (RENEW)

RENEW is an award-winning initiative aimed at encouraging the public to recycle their e-waste. RENEW, our collaboration with logistics provider DHL and waste recycler TES-AMM, collects e-waste from public through collection bins placed across the island.

People can drop their unwanted electronic items such as answering machines, cables. car stereos, computer mice, CDs/ DVDs, docking stations, CD/ DVD/ VCD players, electronic toys, hard drives, keyboards, laptops, lithium-ion (Li-ion) batteries, mobile phones, modems, MP3 players, printed circuit boards, printers, remote controls, routers, set-top boxes, telephones, VCRs and wires in the designated bins. DHL helps transport the e-waste safely to TES-AMM's recycling facility.

There are now 325 bins across 274 locations. Close to 59 tonnes of e-waste collected from the public in 2016 was recycled, as against 31.7 tonnes in the preceding year.

Recycling

Figures for our paper and e-waste recycling programmes are presented in the chart.

Water

We use water only for drinking, washing, and cooling equipment. Even though water is not considered a material impact of our operations, we make efforts to conserve water as Singapore lacks natural fresh water resources. Our office building, which is certified Green Mark Gold, is installed with water efficient fittings, fixtures and flushing system. We also regularly measure, monitor and report our water consumption.

StarHub's Green Marketing Journey

Over the years, we have implemented several initiatives to reduce printed marketing material.

Invitations to our marketing events are mostly sent as e-invites. We have switched to sending e-cards during festive seasons from the conventional printed greeting cards. Electronic version of the latest issues of our newsletters to business customers are now available online on our website. Our Annual Reports are printed in limited number on FSC certified sustainably sourced paper.

Other initiatives have included:



Annual Reports and EGM Circulars available in digital format.



can opt to save paper by receiving electronic statements instead of printed bills with MyStarHub e-bill.

Complementing MyStarHub e-bill is the Mv StarHub app, available on both the iOS and Android platforms. The app allows StarHub customers to view their account details, such as billing information,

encouraging them to go paperless. StarHub also removed Business Reply Envelopes from mailed bills in 2012, an effort which saves about

15 tonnes of paper

each year.

on their mobile

devices at their

convenience,



A paperless bill payment process was introduced at our retail shops. printing out bills only for customers who request a hard copy for retention.

Introduced the **Board Portal to** replace all printed Board documents. The initiative saves an estimated 2,000 sheets of paper each year.



We also replaced our paper bags with new reusable carrier bags. The bags are labelled with the Recycling Code 5 symbol, to help recyclers identify the specific type of recycling required.

Sustainability Report

continued

OUR ENVIRONMENT

Case Study

My StarHub e-Bill

My StarHub e-bill is an initiative to encourage customers to switch from receiving printed bills to electronic statements. As of 31 December 2016, 242,740 billing accounts were on the scheme as against 154,060 accounts at the end of 2015. We have introduced paperless billing system at our retail shops, printing out bills only for customers who request a hard copy for retention. The initiative saved an estimated 1.1 million sheets of paper in 2016.

Sustainable Paper

To reduce impact on the environment, we use sustainably sourced Forest Stewardship Council (FSC) Certified office paper. Through employee awareness, we strive to reduce paper use by judicious printing. We have also implemented Managed Print Services (MPS) to optimise paper use. Our FSC paper consumption in 2016 was 28,340kg, compared with 40,065 kg in the previous year. Consequently, through the transition to MPS, the use of printer toner cartridges has also been reduced.

StarHub Customers Donate Reward Points

The StarHub Rewards Redemption for Charity programme encourages our customers to use their Rewards points to make a tax-deductible \$5 donation to World Wide Fund for Nature (WWF). In 2016, the redemption donation amounted to \$10,375.

Compliance

StarHub was not fined or sanctioned for any non-compliance with environmental laws or regulations in 2016.

Environmental advocacy

Environmental advocacy is one of the key components of our environmental programme. Our approach is to engage our employees, customers, business partners, students and other stakeholders to spread awareness of environmental issues. Some of the initiatives we undertook in 2016 are described below.

Awareness

As part of our Green Learning Journey, an ongoing in-house programme to raise environmental awareness amongst employees, trips to the NEWater Plant and Semakau Landfill were organised. Both tours centred on innovations in resource conservation and waste management in resource-scarce Singapore, along with practical tips on reducing our personal carbon footprint.

Annual School Green Awards

Continuing our 3-year title sponsorship of the Singapore Environment Council (SEC)-StarHub School Green Awards (SGA) for the second year, the SGA has reached out to more youth in raising awareness of environmental issues and challenges. The SGA is a programme aimed at nurturing values and skills within our young, enabling them to be environmentally-savvy and proactive in leading and advocating a sustainable lifestyle. To reflect current environmental challenges, a new outreach component was introduced, resulting in involvement among more than 320,000 students, residents and the wider community.

Earth Hour 2016

Non-essential lights were switched off at the headquarters at StarHub Green and our stores on 19 March 2016 for an hour. Our logo on StarHub Green was also switched off.

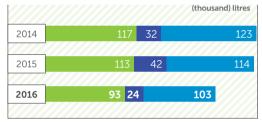
Performance Charts

Emission Intensity



■ tCO₂e emission per \$million revenue

Fuel Consumption



- Diesel (mobile combustion)
- Diesel (stationary combustion)Petrol (mobile combustion)

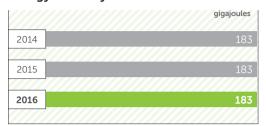
General Waste







Energy Intensity

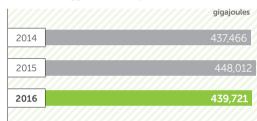


■ Energy consumption – GJ per \$million revenue

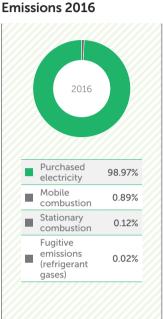
Water Consumption



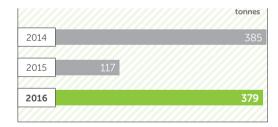
Total Energy Consumption



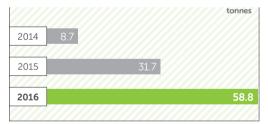
Sources of GHG



Internal E-waste Recycled



E-waste Recycled via RENEW



Sustainability Report

continued

OUR MARKETPLACE



How We Create Value

- Ensure reliable access to telecom, broadband and TV services.
- 2 Customer satisfaction through service excellence.
- **3** Cyber Security.
- 4 Protect customer privacy and personal data.
- 5 Create and disseminate content with responsibility.
- 6 Protect children against undesirable content through safeguards.
- 7 Ensure clarity of tariffs.

OUR MARKETPLACE

StarHub Ltd Annual Report 2016 105



We are focused on providing every person, every home and every business in Singapore with world-class information, communication and entertainment services.

Our management approach is to build a trusted brand through innovation, integrity and customer service excellence. Our marketplace practices are aimed at creating long-term value for our business.

Our mobile, broadband and fixed network services connect millions of customers and businesses making their lives better. Our Pay TV service delivers world-class entertainment to almost half a million households, enriching their lives. Continuously enhancing customer experience is our number one priority. Our people work round the clock to ensure that our customers enjoy uninterrupted digital communication and entertainment the way they like it.

We believe that tariff transparency, customer experience, privacy, accessibility to telecom services, responsible content and supply chain sustainability are all important issues for us to focus on.

Mobile Accessibility

As smartphones become indispensable tools for everyone to communicate, connect, shop and access a host of personal and public services, mobile accessibility has become more important than ever before. StarHub's quality and reliability of service has consistently remained above 99.9% as we have continued to strengthen our network.

Our telecom services are available in a wide range of packages to meet the needs of all sections of society. We respect human rights to the access and use of telecommunication products and services and follow the policies issued by the IMDA.

Our Business Continuity Management (BCM) programme focuses on providing, maintaining and promptly recovering our info-communication services in the event of an emergency, disaster or crisis situations including pandemic, haze and cyber attacks.

Service Disruption by Cyber Attacks

We experienced intentional and potentially malicious Distributed Denial-of-Service (DDOS) attacks on our Domain Name Servers (DNS)

on 22 October and 24 October which caused intermittent web connection issues for some of our home broadband customers.

On both occasions, we mitigated the attacks and restored service within two hours. No impact was observed on the rest of our services, and the security of our customers' information was not compromised. We kept customers informed on these matters via our hotline and social media.

StarHub Cyber Security Centre of Excellence

StarHub has committed to supporting the development of the cyber security ecosystem in Singapore.

In May 2016, we launched StarHub's Cyber Security COE. The Cyber Security COE, established by StarHub and supported by the Economic Development Board (EDB) serves as a hub for the cyber security ecosystem, bringing together the best of brains and expertise to tackle cyber threats, which are among other serious risks affecting economies globally today.

The Cyber Security COE is a broad collaboration between StarHub and a number of industry partners and Institutes of Higher Learning (IHL). Early partners include Blue Coat, Cyberbit, Fortinet, Wedge Networks and Coronet as well as Nanyang Polytechnic (NYP), Republic Polytechnic, Temasek Polytechnic and Singapore University of Technology and Design.

Together with StarHub, the partners will undertake various initiatives to strengthen Singapore's capabilities in cyber security, focusing on talent development, innovation and industry partnerships.

We have also committed to addressing the shortage of cyber security talent in Singapore by training at least 300 specialists on different cyber related capabilities and skill sets over the next five years. We have teamed up with the four IHLs and the Cyber Security Agency of Singapore (CSA) to enhance cyber security training curriculum and programmes, and to collaborate on research and development.

As a first step, StarHub and NYP have jointly established a lab on NYP campus to provide hands-on training for students of Cyber

Sustainability Report

continued

OUR MARKETPLACE

Security & Forensics. These students will subsequently have the opportunity to learn directly from experienced cyber security professionals during their internship placements at StarHub or our industry partners.

The Cyber Security COE's first commercial initiative is the first-of-its-kind Security Operations Centre at StarHub (named StarHub Security Operations Centre), whereby StarHub's core infrastructure is integrated with round-the-clock proactive cyber threat detection capabilities.

Cyber-attacks come through wired and wireless networks. As a telco, StarHub's core networks are thus a strategic location to monitor and detect potential malicious data traffic early and perform mitigation. In addition, cyber security solutions to protect industrial control systems and cloud-based cyber security solutions are being developed.

StarHub and the Cyber Security COE partners will jointly invest \$200 million over the next five years to support a sustainable cyber security ecosystem.

Content Responsibility

Protecting young users of our services from harmful content is an important issue for us. JuniorProtect Basic is a StarHub service that lets kids explore the Internet safely across devices, blocking out harmful websites and content on both mobile and PC. Targeted at StarHub's pre-defined categories as Juniors (Age 7 to 12) and Teens (Age 13 to 16), the service uses default content filters as required by the IMDA. Parents, who have subscribed to the service for their child, can also set access rules across 15 categories considered undesirable for young minds via a web portal.

Content Values

We are committed to promoting safe and responsible use of our mobile services. In line with the Voluntary Code for Self-regulation of Mobile Content in Singapore, our policies prohibit content that is objectionable on the grounds of public interest, public morality, public security, national harmony, or that is illegal under Singapore laws.

We offer services that help customers to make informed choices with respect to what kind of content their children can access. For example, our Parental Control facility offers Parental Lock and Purchase Lock features. Customers can use the Parental Lock feature to control what their children can watch. The Purchase Lock feature allows customers to prevent their children from making unauthorised channel subscription(s) or Video on Demand (VOD) purchase(s). Customers can use the Rating Level feature to block rated VOD content according to rating level set.

We continue to promote content in all national languages. We support art, culture and education by promoting TV programmes for schools, educational TV shows, news and information programmes; arts and cultural programmes; and drama and sports programmes.

We have partnered with the IMDA to produce local content for PSB. In 2016, StarHub committed to commissioning about 110 hours of original productions aimed at supporting PSB values, such as celebration of the Singapore's culture and heritage, and promotion of the Singaporean identity, through innovative storytelling.

Tariff Transparency

We are committed to transparent communication of our tariffs and charges through various marketing channels. Our price plans are prominently displayed at all retail outlets and are available on our website. Our customer service staff are provided training to clearly communicate the pricing structure and the contract terms to all customers at the time of signing contracts.

We measure and publish typical range of Internet speeds for our broadband plans on our website to maintain transparency. We have taken measures to protect our customers from 'bill shock'. Customers can use *My StarHub*

app to manage their overseas data bills and cap roaming expenses.

Customer Satisfaction

We gather feedback and insights from our customers through various channels. Insights gathered through the NPS, a customer loyalty metric, have helped us improve our customer service and systems in a targeted manner.

Since 2013, frontliners have been successfully cross-trained to handle both sales and post-sales transactions. This seamless integration, the visual revamp and enhanced customer flow within the StarHub retail stores has delighted customers. We will continue to introduce a number of enhancements to customer service.

Customers who are pressed for time can now make e-appointments prior to shop visits. In 2016, we also piloted a Click and Collect option for customers who wish to collect their devices from our shops instead of home deliveries. This 'shop online-collect offline' option has been well received. At the contact centre, we introduced quided workflows via an e-Butler tool to facilitate our staff's interactions with customers over the phone. This tool also fetched relevant information from various sources to enable our staff to resolve customers' concerns promptly during the call interaction. With our omni-channel focus, we are constantly refining the 'how' and 'when' of interacting with customers. Simple transactions can be done over a mobile application called My StarHub. The app has seen constant improvements over the years and its latest enhancement in late 2016 aims to make transactions as effortless as possible for our customers. They can pay bills, check data, book e-appointments, redeem rewards and activate roaming with just a few taps.

StarHub Ltd Annual Report 2016 107

Privacy and Data Security

We respect our customers' privacy. Our approach is to adhere to the privacy and data protection laws of Singapore and other applicable regulations and standards. We regularly review our customer privacy and data protection processes to ensure compliance. We have implemented a strict personal data protection policy and have taken the necessary measures to protect our customers' personal data. For example, we do not send promotional and marketing messages via phone calls, text messages and faxes to the customers who have opted out from receiving marketing messages through these channels. Customers can modify their consent through our StarHub web portal.

Our detailed Personal Data Protection Policy is available on the StarHub website.

Supply Chain Sustainability

Our management approach is to source responsibly and work with our suppliers to promote ethical conduct throughout the value chain. We choose vendors, suppliers and contractors fairly and require them to commit to our ethical code of conduct.

Our supply chain includes providers of products and services for our Mobile, Pay TV, Broadband and Enterprise Fixed business lines. This also covers network equipment, consumer handsets and customer premise equipment.

Our supplier relationships include dominant vendors who are among the largest corporations in the world. Several of them have publicly committed to sustainability. We recognise that our ability to influence them is somewhat limited. Our approach is to engage with them whenever possible and work together to support responsible business practices. We also engage a selected group of suppliers and business partners through a supplier sustainability survey questionnaire.

Our supply chain spend exceeded \$1.9 billion in 2016. Out of the 2,449 vendors that we purchased from, 85% were local. Local suppliers' share in our total purchase was 86%. An overview of our supply chain is illustrated below.

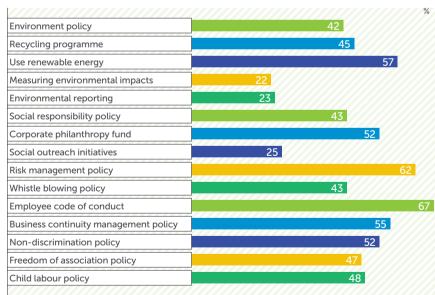
Business Unit	External	Collaterals Suppliers	Soft Content Suppliers	IT suppliers	Own Network	Customer Premise Equipment	Sales & Fulfilment Channels	End of Life
Mobile		Printers (of publicity/	Apps	Customer	2G, 3G, 4G	Mobile handsets, SIM cards, mobile accessories	Stores, Exclusive	Traded-in handsets, donated
TV		marketing materials), corporate gift vendors,	Programmes (content providers and production partners)	Relationship Manage- ment, Enterprise Planning Resource,	Hybrid Fibre Coaxial (HFC), Fibre IP	Set-top boxes	Partners, Resellers, Sales Partners, Direct Sales,	handsets, take-back of faulty/ obsolete equipment for
Broadband	Fibre	etc.		Billing Database, Storage, etc.	HFC, Fibre IP	Cable modems, routers	Retail Chain Stores, Field	recycling, recycling of surplus/old marketing/
Enterprise Fixed				e.c.	Fibre, Fibre IP, Undersea Cable	Customer premise equipment	Services	publicity material
Corporate				Intranet Office IT hardware		Expendable office supplies		

Supplier Sustainability Survey

Our annual Supplier Sustainability Survey covered our top 73 vendors and business partners in 2016. The Survey, based on a set of questions relating to important sustainability topics, aims to assess our suppliers' sustainability commitment and performance. The 2016 Survey findings are presented below.

Supplier Sustainability Survey Result

(proportion of vendors with sustainability initiatives in 2016)



Anti-corruption

We follow a zero-tolerance policy toward fraud and unethical conduct including corruption and bribery. StarHub's Employee Code of Conduct and Ethics and the Corporate Gift and Hospitality Policy cover business conduct including employees' compliance with anti-corruption and anti-bribery laws. There was no reported incident of corruption in the reporting period.

Sustainability Report continued

OUR WORKPLACE



How We Create Value

- 1 Attract, nurture and retain talent.
- Nurture a caring workplace based on fair and inclusive employment practices.
- **3** Promote teamwork as a core value.
- 4 Promote diversity and providing equal opportunity.
- Develop people through regular training and education.
- 6 Ensure health and safety at workplace.
- 7 Encourage employee volunteering.

Performance Highlights

Women in Workforce:

42%

Women Heads of Department:

33%

Local Employees: (Singaporeans)

75%

Training Hours Per Employee:

19

Training Spend Per Employee:

\$**784**

Employee Turnover:

12%

Fatal Accidents:

Employee Satisfaction Rate:

OUR WORKPLACE



We are focused on creating a high performing organisation based on respect, teamwork, inclusivity and excellence.

Our management approach is to continually invest in people so that they can deliver value to our customers and other stakeholders. Our human resource policies are aimed at developing a high-performing organisation by creating a fair, inclusive, engaging and fulfilling workplace. Our policies promote merit-based hiring and remuneration, teamwork, safe and healthy working conditions, diversity, reward and recognition for performance, people development, career growth, work-life balance, and employee volunteering. StarHub management regularly reviews HR policies and performance including hiring, diversity and equal opportunity, training, performance management and occupational health and safety.

We are proud to have achieved the People Developer (PD) certification in 2016, awarded by SPRING Singapore, in recognition of our efforts to develop our people to drive business excellence.

Our People

StarHub employed 2,965 people in 2016 with a median age of 37 years. Permanent employees, which include part-time employees, represented 90.6% of the total headcount. Employees with managerial or supervisory roles accounted for 16% of the workforce. The Customer Service Experience (30%), StarHub Integrated NW Engineering (23%), Enterprise Business Group (13%), and Information Services (11%) divisions accounted for the largest shares of the headcount.

Our Performance

Diversity and equal opportunity

Our mission is to nurture a diverse and inclusive workplace. Our policies promote diversity and meritocracy. We strive to offer equal opportunity in hiring, career advancement, promotions and remuneration strictly based on merit irrespective of gender, age, racial, ethnic or cultural background.

StarHub's Board includes one female director who holds the position of an independent director. There are four women in the 11-member strong senior management team.

We are also committed to promoting an inclusive workplace and offering employment opportunities to persons with disabilities. We employed four persons with physical disabilities in 2016.

Equal Remuneration for Men and Women

Our management approach is to offer remuneration based on merit and experience without any gender discrimination.

Ratio of base salary: Female to Male (2016)

Employee Category	Female	Male
Senior Manager & above	1.0	1.1
Middle Manager	1.0	1.1
Executive	1.0	1.0
Non-Executive	1.0	1.1

	2016	2015	2014
Female	1	1	1
Male	1.1	1.1	1.1

Employee Profile



Sustainability Report

continued

OUR WORKPLACE

Diversity at StarHub

Gender Diversity

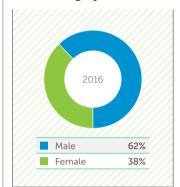


Gender Profile by Employee Category

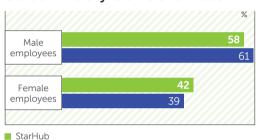


New Hiring

New Hiring by Gender

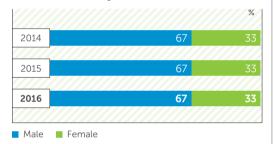


Gender Diversity: StarHub Vs Infocomm

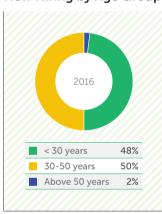


StarHub
 National Infocomm Industry (source: MOM Year Book 2016)

Gender Diversity (Department/Division/Section Heads)





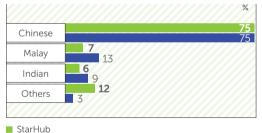


Age Diversity by Gender



Male Fernale

Ethnic Diversity

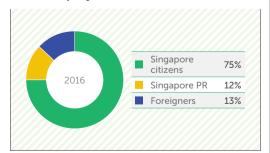


StarHub
 National Ethnic Composition
 (source: Population trends 2016, Dept of Stat, Singapore)

Age Diversity



Local Employees

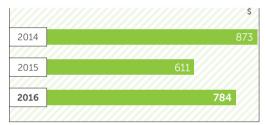


Learning and Development

Average Training Hours by Category and Gender



Training Expenditure



■ Training expenditure per employee

Learning and Development

Our management approach is to invest in people development to build a high performing organisation. Our Learning & Development Framework is focused on ensuring our employees have the appropriate learning and development opportunities to build functional and technical skills to succeed in their jobs, and the management and leadership skills to inspire and lead teams to perform.

We also collaborate with multiple government agencies such as SkillsFuture Singapore, the IMDA, and the Economic Development Board to maximise learning and funding opportunities for our employees.

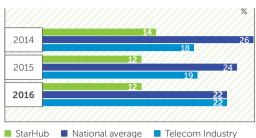
In 2016, we rolled out an enhanced development roadmap for first-time managers to provide ongoing coaching support, build a sense of community and interaction among peers and more targeted learning opportunities. We also organised several experiential micro-learning sessions on topics like coaching, management skills and change management to encourage practical application of learning after training.

We achieved PD certification in 2016 in recognition of our continued efforts to strive for improvement and business excellence by bringing out the best in our people and make StarHub a truly high performing organisation.

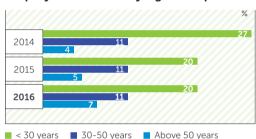
We invested \$2.1 million on training in 2016, up from \$1.7 million spent in the previous year. We received a confirmed amount of \$368,915 in training subsidy from various government agencies. In total, we provided 52,354 hours of training. Training expenditure per employee was \$784, higher than \$611 per employee in the prior year.

Employee Turnover

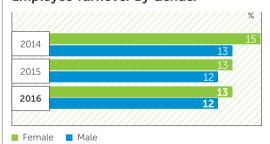
Employee Turnover



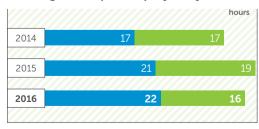
Employee Turnover By Age Group



Employee Turnover By Gender



Training Hours per Employee by Gender



■ Male ■ Female

Sustainability Report continued OUR WORKPLACE



We will continue to stay focused on the sustainability aspects that are most material for our business and for our main stakeholders.



Our performance management system covers all StarHub employees and includes periodic performance reviews and career development discussions with employees. All StarHub employees, irrespective of gender or category, received regular performance and career development reviews in 2016.

We revamped the performance rating system in 2016 to make our performance management system more robust and effective. Comprehensive training was provided to people managers to equip them with relevant skills to hold effective performance conversations with their teams. We also rolled out a new Leadership Development Programme for senior managers and above to inculcate key leadership traits. Like previous years, we continued to organise internal Career Fairs, Career Guidance workshops and Career Coaching to support employees' career development efforts.

Employee Benefits

Benefits exclusive to StarHub's permanent employees, include product benefits, comprehensive Health Screening, additional insurance coverage other than Work Injury Compensation insurance coverage, medical and dental consultation and/or treatment reimbursement, transport allowance, training, claim for professional fees for joining professional associations, Long Service Award, entry passes for places of interest, and tokens for special occasions.

StarHub employees also enjoy other benefits which include childcare leave, paternity leave and shared parental leave, eldercare leave, and access to the supplementary major medical insurance coverage to the employees' family at special rates.

Human Rights

StarHub is committed to upholding human rights in line with nationally and internationally accepted principles and labour standards such as the core labour standards advocated by the International Labour Organisation. Our policies prohibit child labour, discrimination and forced labour in our operations as well as in our supply chains.

Our own operations are mainly concentrated in Singapore. We have determined that the potential risk of child labour, forced labour, discrimination and violation of freedom of association rights in our own operations is highly unlikely given our strong HR policies and management oversight. We have limited or no control over our supply chain which includes several dominant suppliers who have their own publicly known commitment to supporting human rights. However, we engage with our key suppliers through an annual supplier sustainability survey that covers the topics of child labour, discrimination, forced labour and freedom of association (see Our Marketplace chapter for more).

MOU with Employees Union

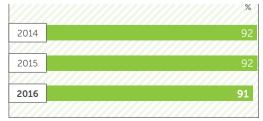
We respect our employees' right to freedom of association in accordance with local laws. In a significant move to collaborate with employees union, StarHub and the Singapore Industrial and Services Employees Union (SISEU) signed a MOU for five years in August 2016. The scope of the collaboration includes enhancing the well-being of employees and providing social, recreational, training and skills upgrading benefits.

There were no reported incidents of child labour, discrimination or forced labour in our own operations in the reporting period.

Employee Satisfaction

We assess the effectiveness of our people initiatives and policies and the overall HR support through an annual survey to measure employee satisfaction. In the 2016 Annual HR Satisfaction Survey, 91% of the participants said that the overall HR performance met or exceeded expectations.

Employee Satisfaction Survey



■ Employee satisfaction rate

Occupational Health and Safety

Our management approach is to ensure workplace health and safety by taking preventive measures based on risk assessment and creating employee awareness.

StarHub's Workplace Safety and Health Committee, represented by management and employees, periodically reviews policies, procedures and practices relating to occupational health and safety. Nominated Risk Management Champions across the organisation work closely with the Risk Assessment team to assess risks for every work activity and process carried out at the workplace. StarHub continues to be a certified bizSafe Level 3 organisation, awarded by the Workplace Safety and Health Council Singapore based on an independent audit.

In 2016, we prioritised workplace health and safety through continued investment in first aid training and certification. A number of learning conversations were also organised at our StarHub Green and Tanjong Pagar offices to spread first aid awareness. During the year, 84 employees were certified in the new Office First-aid course where these first-aiders are trained to use automated external defibrillator.

There were no fatal accidents in 2016. There were two reported cases for Work Injury Compensation. Injuries sustained included those relating to traffic accident, trips and falls at workplace, with an absenteeism payroll of \$1,188 based on 18 days of medical leave.

Safety for Field Employees

Our field employees and contractors involved in the installation, operation and maintenance of masts, base stations, laying cables and other outside work are required to adhere to strict safety procedures.

A detailed Code of Practice on WSH Risk Management, Risk Assessment, safety procedures for installation of radio equipment and a disaster recovery plan are included in our Workplace Safety and Health system.

We require the contractors undertaking work at our sites to comply with the provisions of the Workplace Safety & Health Act. We also require contractors to submit a risk assessment report for approval prior to carrying out any work on site.

Siting of masts

Our policies and practices on the siting of masts and transmission sites encourage stakeholder consultation, site sharing and measures to reduce visual impacts.

A brief summary of our sites as of end 2016 is presented below:

Type of Site	%
Stand-alone Mobile Sites	7.3
Shared Sites (Mobile-CAS)	29.1
Sites on Existing Structures	63.6

Health Education

We continued organising lunch talks and workshops throughout 2016 to raise employee awareness on health issues.

Enrichment talk topics and engagement activities organised in 2016 included Eye Care Talk, Healthy Crepes Making Workshop, Urban Gardening Workshop, Kayaking to Seletar Island, and Bring Your Kids to Work Day. In total, 2,562 participants attended these events, significantly more than 976 participants in the prior year.

Collaboration with Educational Institutions

We continued to collaborate with post-secondary educational institutions in 2016. We signed a collective three-year MOU with Institute of Technical Education, Nanyang Polytechnic, Ngee Ann Polytechnic, Republic Polytechnic, Singapore Polytechnic and Temasek Polytechnic to provide a collaborative framework for supporting the enhanced internships and Earn-and-Learn Programme in the Retail Sector under SkillsFuture, a Government initiative to provide Singaporeans with the opportunities to develop their fullest potential throughout life, regardless of their starting points.

The scope of collaboration includes offering relevant enhanced internship placements in two key functions in the organisation, jointly developing and implementing the planned training programme and assessments that are aligned with the learning outcomes, and providing on-the-job training, mentoring of interns, career guidance and explaining earnand-learn opportunities.

66

Our management approach is to invest in people development to build a high performing organisation.



Sustainability Report continued OUR COMMUNITY



How We Create Value

- Make positive contribution to local communities, focus on the underprivileged.
- 2 Bridge digital divide.
- **3** Encourage employee volunteering.
- Encourage customers to participate in community initiatives.

Performance Highlights

Community investment:

\$**844,769**

Employee volunteering:

124 days

VWOs supported:

12

Beneficiaries:

More than 35,500 disadvantaged youth and families

OUR COMMUNITY



We are focused on building long-term relationships based on trust with the community by making a positive contribution.

Our management approach is to contribute toward building a strong and resilient community. We also actively involve our employees and customers in community programmes.

We reviewed our community investment programme in 2016 and identified two areas of priority: improving employability and life skills, and supporting connectivity needs for disadvantaged youth and families. In addition, we contributed to a number of other community causes. In total, our investment in community development programmes amounted to \$844,769. We partnered with 12 VWOs in various initiatives, enhancing employability and critical life skills.

Community Chest Awards

StarHub's fundraising efforts were recognised at the annual ComChest Awards in September 2016 with a Corporate Gold (for our donation of \$213,850 for StarHub Open 2015) and a Special Events Silver (for StarHub Rewards Redemption Programme 2015). We also received a token of appreciation from President's Challenge for our in-kind sponsorship of airtime worth \$400,000.

Employee Volunteering

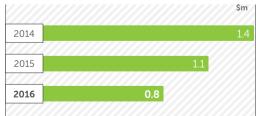
We encourage our employees to participate in community and environmental initiatives through volunteering. We provide up to two working days of paid leave a year to our employees for volunteering. Several StarHub employees volunteer for a number of social and environmental causes each year. Our employees volunteered 124 man-days in 2016.

StarHub Community Investment 2016

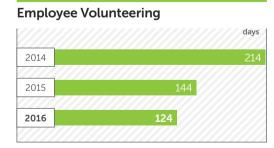
Together with employees, customers and business partners, we supported several community initiatives throughout the year. Our key community investment programmes in 2016 are described below.

624 children benefitted from the Nurture 2.0 programme, a volunteer programme that tutors underprivileged children in Central Singapore District in English and Mathematics with financial support from StarHub. Nurture 2.0, a weekly volunteer-driven programme for children aged seven to 12 run by the Central Singapore CDC, received \$200,000 from the StarHub Sparks Fund, our corporate philanthropic vehicle. Working closely with the Central Singapore CDC, we have refined and introduced several non-academic modules such as creativity through IT, crafts and robotics to complement the academic curriculum. StarHub employees continued to volunteer at the Nurture 2.0 initiative in





Amount disbursed from StarHub Sparks Fund



Sustainability Report continued OUR COMMUNITY



We continued our support for the Children's Cancer Foundation's annual Hair for Hope event for the fifth consecutive year.

2016. A group of 35 staff volunteers acted as mentors and took 202 Nurture beneficiaries for a day-long interactive learning experience to KidZania, an indoor theme park in Sentosa, where the children learnt about various vocations and basic financial literacy.

People with special needs and/or disabilities have been identified as one of the most vulnerable groups in Singapore. To support this group, StarHub donated \$209,700 from the StarHub Sparks Fund through the annual StarHub Open, a golf event for corporate clients, joined by StarHub management with quest appearances by TVB artistes.

Funds went towards Metta School, MINDS
Towner Garden School and Lighthouse
School, to equip special needs students
with the knowledge and skills necessary
for independent functioning. This
includes training of functional academic,
independence, vocational and life skills to
maximise their potential towards independent
living and integration into the community.

Our two-year sponsorship of \$300,000 of SPD's Infocomm Accessibility Centre Certificate in Office Skills (ICOS) from 2015 to 2017, an office skills training programme that enables people with disabilities to find open, gainful employment in administrative positions has reaped positive outcomes. In 2016, over 70 persons were trained. Out of these, 19 found open employment.

We continued our support for the Children's Cancer Foundation's annual Hair for Hope event for the fifth consecutive year. To raise awareness of childhood cancer, StarHub pledged \$1,000 for every person who shaved his/her head at the satellite event held at our main office in StarHub Green. A record 122 shavees including employees, partners and customers went bald in support of children with cancer, raising a total of \$122,000 from the StarHub Sparks Fund.

Beneficiaries of StarHub's Community Outreach Programmes in 2016

\$200,000 funding of Nurture 2.0.

\$209,700 to three special needs schools: Metta School, MINDS Towner Garden School and Lighthouse School through the StarHub Open.

\$122,000 for Hair for Hope in total donations to Children's Cancer Foundation.

\$50,000 to Entrepreneurs with Disability to support disadvantaged/deaf entrepreneurs in starting their own enterprises.

\$150,000 for SPD's ICOS, final tranche of a 2-year commitment from 2015.

\$10,000 to Football with a Heart Fundraiser.

\$47,860 for MINDS Towner Garden School, Care Corner Counselling Centre, and WWF through Rewards Redemption.

\$16,420 donated to Daughters of Tomorrow, helping single or disadvantaged mothers get employability skills, in conjunction with the National Day campaign.

Media Spots for Social Campaigns

Our in-kind donations in the form of TV commercial spots for social and environmental campaigns amounted to \$1.44 million in 2016. The campaigns included WWF's Earth Hour 2016, Children Cancer Foundation's Hair for Hope 2016, Make a Wish Foundation's Santa Run for Wishes 2016 and President's Challenge.



StarHubbers bringing children from the Nurture programme to KidZania, to learn about various vocations.

StarHub CEO presenting a cheque to ComChest for funds raised through the StarHub Open.



Sustainability Report

continued

ECONOMIC PERFORMANCE



How We Create Value

- Create sustainable economic value for shareholders as well as stakeholders.
- 2 Make a positive indirect impact on local economy and communities.
- Support local suppliers.
- 4 Invest in infrastructure.

Performance Highlights

Net Profit:

\$**341**m

Direct Jobs:

2,965

Local Suppliers:

2,090

Local Suppliers' Share in Total Supplier Payments:

86%

ECONOMIC PERFORMANCE

119

We are focused on creating longterm value for shareholders and stakeholders by pursuing sustainable business growth strategies.

Our management approach is to create value for our shareholders and stakeholders by ensuring sustainable growth of our business. We are focused on adopting strategies that maximise shareholder returns while creating environmental, social and economic value for our stakeholders. We regularly review our management approach in view of the business goals, stakeholder expectations and the actual performance to evaluate effectiveness.

Our shareholders have enjoyed consistent and healthy dividends over the years.

Indirect Economic Impacts

Our management approach is to support projects, initiatives, services and infrastructure which allows us to pursue sustainable business growth and at the same time make a positive difference to the society where we operate.

StarHub plays a critical role in augmenting Singapore's national infocomm infrastructure by regularly investing in the upgrade of our mobile, wireless communications and cable TV infrastructure. As we upgrade our networks, we strive to adopt energy-efficient technologies to reduce the impact on the environment and contribute to climate change mitigation efforts.

Our modern infocomm infrastructure and technologies enable people to connect and businesses to run their operations using our fast and reliable networks.

StarHub continues to create and support high quality direct jobs benefitting the local economy and the communities. Our significant purchase from local suppliers supports indirect jobs and helps in the development of local businesses.

Our other contributions to the local economy include tax payments, payment of wages, and community investments

StarHub provided 2,965 direct jobs across the Group as of end-December 2016. Our operating expenditure, including employee costs, exceeded \$2 billion in 2016. We paid \$281 million in wages, adding further value to the local economy.

Supporting Local Suppliers

We indirectly contribute to the local economic development through our purchases. In 2016, our vendor payments exceeded \$1.9 billion. In 2016, the share of local suppliers was 86% of the total purchases. Local suppliers constitute 85% of our vendor base.

Our significant purchase from local suppliers supports local jobs and businesses and creates tax opportunities for the government. Read more about our Supply Chain Sustainability in the chapter on *Our Marketplace* chapter.

Infrastructure Development

We regularly invest in upgrading the mobile, broadband and cable TV infrastructure. A major portion of our \$367 million CAPEX was used for infrastructural investments and 4G spectrum licences in 2016.

Research and Development

We regularly invest in research and development projects and forge cross-industry collaborations that promise new technological breakthroughs, reinvigorate our infrastructure, enhance productivity for customers and empower the community. These projects include enhancing mobile network evolution technologies and speed, strengthening complementary capabilities for data business services, the development of opportunities in the Internet of Things and cyber security. StarHub launched the Cyber Security COE in 2016 and together with the COE partners, will jointly invest \$\$200 million over the next five years to support a sustainable cyber security ecosystem. More information on the COE is available in the section under Our Marketplace.

Financial Assistance from the Government

We received \$368,915 in subsidy for employee training in 2016 under various schemes run by the IMDA, SkillsFuture Singapore, and Employment and Employability Institute (e2i).

Financial Performance

A summarised version of our economic performance is presented below in line with the GRI Standards. The figures have been extracted from the Audited Annual Report approved by the Board of Directors for the respective financial years. To learn more about StarHub's financial performance, please refer to the Group Financial Review and Financial Statements sections of this report.

Summary of StarHub's Economic Performance (\$m)

Economic Performance Indicators	FY 2016	FY 2015	FY 2014
Operating revenue	2,397	2,444	2,387
Net profit	341	372	371
Operating costs (including staff costs)	2,004	2,049	1,957
Staff costs	281	271	275
Dividends paid to shareholders	346	346	345

Sustainability Report continued

GRI Content Index

'In accordance' – Core

GRI Standard	Disclosure	Page Number(s) and/or URL(s)
GRI 101: Foundation 2		
(GRI 101 does not incl	GENERAL DISCLOSURES	
GRI 102:	Organisational Profile	
General Disclosures 2016	102-1 Name of the organisation	StarHub Ltd
2010	102-2 Activities, brands, products, and services	3
	102-3 Location of headquarters	Singapore
	102-4 Location of operations	Mainly Singapore
	102-5 Ownership and legal form	204-205
	102-6 Markets served	3, 5
	102-7 Scale of the organisation	3-5
	102-8 Information on employees and other workers	108-112
	102-9 Supply chain	107
	102-10 Significant changes to the organisation and its supply chain	None
	102-11 Precautionary Principle or approach	96, 99
	102-12 External initiatives	91
	102-13 Membership of associations	95
	Strategy	
	102-14 Statement from senior decision maker	15-17
	102-15 Key impacts, risks, and opportunities	90-91
	Ethics and Integrity	
	102-16 Values, principles, standards, and norms of behaviour	69-70, 89
	Governance	
	102-18 Governance structure	54-78
	Stakeholder Engagement	
	102-40 List of stakeholder groups	92-93
	102-41 Collective bargaining agreements	112
	102-42 Identifying and selecting stakeholders	92
	102-43 Approach to stakeholder engagement	92-93
	102-44 Key topics and concerns raised	92-93
	Reporting Practice	
	102-45 Entities included in the consolidated financial statements	177
	102-46 Defining report content and topic Boundaries	87, 97
	102-47 List of material topics	96
	102-48 Restatements of information	87
	102-49 Changes in reporting	87
	102-50 Reporting period	87
	102-51 Date of most recent report	87
	102-52 Reporting cycle	87
	102-53 Contact point for questions regarding the report	88
	102-54 Claims of reporting in accordance with the GRI Standards	87
	102-55 GRI content index	120-123
	102-56 External assurance	88

GRI Standard	Disclosure	Page Number(s) and/or URL(s)
	MATERIAL TOPICS	
	Economic Performance	
GRI 103:	103-1 Explanation of the material topic and its Boundaries	91, 97
Management Approach 2016	103-2 The management approach and its components	118-119
• •	103-3 Evaluation of the management approach	119
GRI 201:	201-1 Direct economic value generated and distributed	119
Economic Performance 2016	201-4 Financial assistance received from government	119
	Indirect Economic Impacts	
GRI 103:	103-1 Explanation of the material topic and its Boundaries	97, 119
Management Approach 2016	103-2 The management approach and its components	119
	103-3 Evaluation of the management approach	119
GRI 203: Indirect Economic Impacts 2016	203-2 Significant indirect economic impacts	119
	Procurement Practices	
GRI 103:	103-1 Explanation of the material topic and its Boundaries	96, 97
Management Approach 2016	103-2 The management approach and its components	91, 107, 119
	103-3 Evaluation of the management approach	107, 119
GRI 204: Procurement Practices 2016	204-1 Proportion of spending on local suppliers	107, 119
	Anti-corruption Anti-corruption	
GRI 103:	103-1 Explanation of the material topic and its Boundaries	107
Management Approach 2016	103-2 The management approach and its components	107
PP	103-3 Evaluation of the management approach	107
GRI 205:	205-2 Communication and training about anti-corruption policies and procedures	107
Anti-Corruption 2016	205-3 Confirmed incidents of corruption and actions taken	107
	Energy	
GRI 103: Management	103-1 Explanation of the material topic and its Boundaries	90, 96-97
Approach 2016	103-2 The management approach and its components	98-100
	103-3 Evaluation of the management approach	98-100
GRI 302 : Energy 2016	302-1 Energy consumption within the organisation	100, 102-103
Literary Local	302-2 Energy consumption outside of the organisation	100
	302-3 Energy intensity	103
CDI 107.	Emissions 107.1 Evaluation of the material topic and its Boundaries	00 06 07
GRI 103: Management	103-1 Explanation of the material topic and its Boundaries 103-2 The management approach and its components	90, 96-97 98-100
Approach 2016	103-2 The management approach and its components 103-3 Evaluation of the management approach	98-100
GRI 305:	305-1 Direct (Scope 1) GHG emissions	100
Emissions 2016	305-2 Energy indirect (Scope 2) GHG emissions	100
	305-3 Other indirect (Scope 3) GHG emissions	100
	305-4 GHG emissions intensity	102
	305-6 Emissions of ozone-depleting substances (ODS)	100
	Effluents and Waste	100
GRI 103:	103-1 Explanation of the material topic and its Boundaries	90, 96-97
Management	103-2 The management approach and its components	101
Approach 2010	103-3 Evaluation of the management approach	101

Sustainability Report continued

GRI Standard	Disclosure	Page Number(s) and/or URL(s)
GRI 306: Effluents and Waste 2016	306-2 Waste by type and disposal method	102-103
	Environmental Compliance	
GRI 103:	103-1 Explanation of the material topic and its Boundaries	99
Management Approach 2016	103-2 The management approach and its components	99
	103-3 Evaluation of the management approach	99
GRI 307: Environmental Compliance 2016	GRI 307-1 Non-compliance with environmental laws and regulations	102
	Employment	
GRI 103:	103-1 Explanation of the material topic and its Boundaries	90, 96-97
Management Approach 2016	103-2 The management approach and its components	109
	103-3 Evaluation of the management approach	109
GRI 401:	401-1 New employee hires and employee turnover	110-111
Employment 2016	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	112
	Occupational Health & Safety	
GRI 103: Management	103-1 Explanation of the material topic and its Boundaries	96-97
Approach 2016	103-2 The management approach and its components	113
	103-3 Evaluation of the management approach	113
GRI 403: Occupational Health	403-1 Workers representation in formal joint management—worker health and safety committees	113
and Safety 2016	403-2 Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	113
	Training and Education	
GRI 103: Management	103-1 Explanation of the material topic and its Boundaries	90, 96-97
Approach 2016	103-2 The management approach and its components	111
	103-3 Evaluation of the management approach	111
GRI 404: Training and	404-1 Average hours of training per year per employee	111
Educations 2016	404-2 Programs for upgrading employee skills and transition assistance programs	111
	404-3 Percentage of employees receiving regular performance and career development reviews	112
	Diversity and Equal Opportunity	
GRI 103: Management	103-1 Explanation of the material topic and its Boundaries	96-97, 109
Approach 2016	103-2 The management approach and its components	109
	103-3 Evaluation of the management approach	109
GRI 405: Diversity and Equal	405-1 Diversity of governance bodies and employees	110
Opportunity 2016	405-2 Ratio of basic salary and remuneration of women to men	109
	Non-discrimination	
GRI 103:	103-1 Explanation of the material topic and its Boundaries	96-97, 112
Management Approach 2016	103-2 The management approach and its components	112
	103-3 Evaluation of the management approach	112
GRI 406: Non-discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	107, 112
	Freedom of Association and Collective Bargaining	
GRI 103:	103-1 Explanation of the material topic and its Boundaries	96-97
Management Approach 2016	103-2 The management approach and its components	95, 112
	103-3 Evaluation of the management approach	112
GRI 407: Freedom of Association and Collective Bargaining	407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	107, 112

CRI 105: Management Approach 2016 GRI 108: Management Approach 2016 GRI 408: GRI 408: GRI 408: GRI 408: GRI 408: 103-1 Explanation of the material topic and its Boundaries Forced or Computsory Labour GRI 408: GRI 408: GRI 408: GRI 105: 105-1 Explanation of the material topic and its Boundaries Forced or Computsory Labour GRI 103: GRI 408: GRI 408: GRI 408: GRI 408: GRI 408: 105-1 Explanation of the material topic and its Boundaries Management Approach 2016 105-3 Evaluation of the material topic and its Boundaries Approach 2016 105-3 Evaluation of the material topic and its Boundaries GRI 409: GRI	GRI	Standard	Disclosure	Page Number(s) and/or URL(s)	
Management Approach 2016 103-2 The management approach and its components 112 Approach 2016 103-5 Evaluation of the management approach 112 Approach 2016 203-6 Very Evaluation of the management approach 112 Approach 2016 203-10 Perations and suppliers at significant risk for incidents of child labour 207, 112 GRI 103:			Child Labour		
Approach 2016 GRI 408: GRI 408: GRI 103: 409-1 Operations and suppliers at significant risk for incidents of child labour GRI 103: 409-1 Operations and suppliers at significant risk for incidents of child labour GRI 103: 103-1 Explanation of the material topic and its Boundaries Approach 2016 GRI 103: 103-2 The management approach and its components 112 Approach 2016 GRI 103: 409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labour Forced or Compulsory Labour 2016 GRI 103: 409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labour 112 Constitution of the management approach and its components 115 GRI 413: 403-1 Explanation of the material topic and its Boundaries Approach 2016 GRI 413: 413-1 Operations with local community engagement, impact assessments, and development programs 2016 GRI 413: 413-1 Operations with local community engagement, impact assessments, and development programs Customer Privacy GRI 103: 413-1 Department approach and its components 103-1 Explanation of the material topic and its Boundaries Management A016 Approach 2016 GRI 418: 413-1 Uperations with local community engagement, impact assessments, and development programs Customer Privacy GRI 418: 413-1 Uperations of the management approach and its components 103-1 Explanation of the management approach and its components 105-107 Approach 2016 GRI 418: 418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data 105, 107 GRI 418: 418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data 105, 107 GRI 418: 418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data 105, 107 GRI 418: 418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer and maintenance of mass, base stations, laying cables and other outside plant. GRI 418: 418-418-418-418-418-418-418-418-418-418-	GRI 103:		103-1 Explanation of the material topic and its Boundaries	96-97	
103-3 Evaluation of the management approach CRI 408- 408-1 Operations and suppliers at significant risk for incidents of child labour 107-112 GRI 103- 103-1 Explanation of the material topic and its Boundaries 96-97 Management Approach 2016 103-2 The management approach and its components 103-2 Evaluation of the management approach 103-2 Evaluation of the management approach and its components 103-3 Evaluation of the management approach 103-5 Evaluation of the management approach 103-5 Evaluation of the management approach 103-6 Evaluation of the material topic and its Boundaries GRI 103:			103-2 The management approach and its components	112	
Carl 103	прргоссі	112010	103-3 Evaluation of the management approach	112	
103-1 Explanation of the material topic and its Boundaries 96-97				107, 112	
Management Approach 2016 103-2 The management approach and its components 112 Approach 2016 103-3 Evaluation of the management approach 112 Forced or Compulsory Labour 2016 209-1 Operations and suppliers at significant risk for incidents of forced or compulsory labour 2016 209-1 Operations and suppliers at significant risk for incidents of forced or compulsory labour 2016 209-1 Operations and suppliers at significant risk for incidents of forced or compulsory labour 2016 209-1 Department of the material topic and its Boundaries 96-97 Management 2016 103-2 The management approach and its components 115-103-3 Evaluation of the management approach 115-117 Local Communities 2016 2016 2016 2016 2016 2016 2016 2016			Forced or Compulsory Labour		
Approach 2016 RI 409: Forced or Compulsory Labour 2016 CRI 409: Forced or Compulsory 2016 CRI 403: 103-3 Explanation of the material topic and its Boundaries Management Approach 2016 RI 103: Approach 2016 CRI 103: CRI 113: CRI 114: CRI 103: CRI			103-1 Explanation of the material topic and its Boundaries	96-97	
GRI 103: GRI 103: GRI 103: GRI 103: GRI 103: Communities I 103-1 Explanation of the material topic and its Boundaries Papproach 2016 I 103-2 The management approach and its Components I 105-3 Sevaluation of the material topic and its Boundaries I 105-2 The management approach and its components I 105-3 Sevaluation of the management approach I 105-107 RI 103: CRI 103: CRI 103: CRI 103: CRI 103-1 Explanation of the material topic and its Boundaries I 103-1 Explanation of the material topic and its Boundaries I 103-2 The management approach and its components I 105-107 Approach 2016 I 103-3 Evaluation of the management approach and its components I 105-107 GRI 108: Customer Privacy I 103-3 Evaluation of the management approach I 105-107 GRI 118: Customer Privacy I 103-3 Evaluation of the management approach I 105-107 GRI 118: Customer Privacy I 103-3 Evaluation of the management approach I 105-107 GRI 118: Customer Privacy I 103-3 Evaluation of the management approach I 105-107 GRI 118: Customer Privacy I 103-3 Evaluation of the management approach I 105-107 GRI 118: Customer Privacy I 103-3 Evaluation of the management approach I 105-107 GRI 118: Customer Privacy I 103-3 Evaluation of the management approach I 105-107 GRI 118: Customer Privacy I 103-5 Evaluation of the management approach I 105-107 GRI 118: Customer Privacy I 103-5 Evaluation of the management approach I 105-107 GRI 118: Customer Privacy I 103-6 Evaluation of the management approach I 105-107 GRI 118: Customer Privacy I 103-6 Evaluation of the management approach I 105-107 GRI 118: Customer Privacy I 103-7 Evaluation of the management approach I 105-107 GRI 118: Customer Privacy I 103-6 Evaluation of the management approach I 105-107 GRI 118: Customer Privacy I 103-6 Evaluation of the management approach I 105-107 GRI 118: Customer Privacy I					
Local Communities			3 11		
GRI 103:	Forced o	r Compulsory	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labour	112	
Management Approach 2016 103-2 The management approach and its components 115 103-3 Evaluation of the management approach 115 103-3 Evaluation of the management approach 115 115 2016			Local Communities		
Approach 2016 103-2 Evaluation of the management approach 115 115 105-2 Evaluation of the management approach 115 115 117 115 115			103-1 Explanation of the material topic and its Boundaries	96-97	
103-3 Evaluation of the management approach 2016 Customer Privacy GRI 103: 103-1 Explanation of the material topic and its Boundaries 30-97 403-9 The management approach and its Economic Privacy GRI 103: 103-1 Explanation of the material topic and its Boundaries 30-97 403-9 The management approach and its components 30-97 403-9 Evaluation of the management approach 105-3 Evaluation of the management approach 105-3 Evaluation of the management approach 105-3 Evaluation of the management approach 105-107 408-108-108-108-108-108-108-108-108-108-1			103-2 The management approach and its components	115	
Customer Privacy GRI 103:	7.66.00.0		103-3 Evaluation of the management approach	115	
GRI 103: 103-1 Explanation of the material topic and its Boundaries 96-97 Management Approach 2016 103-2 The management approach and its components 105, 107 Approach 2016 103-2 The management approach and its components 105, 107 GRI 418: Customer Privacy 418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data 105, 107 For a customer Privacy 418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data 105, 107 For a customer Privacy 418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data 105, 107 For a customer Privacy 418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data 105, 107 For a customer Privacy 418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data 105, 107 For a customer Privacy 418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data 105, 107 For a customer Privacy 418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data 105, 107 For a customer Privacy 418-1 Substantiated complaints concerning breaches of customer privacy and losses and use of elecommunications products and services and explanation of business models applied products and service and lose of evaluations products and services and explanation of business models applied privacy and lack of education, income, disabilities, and age. Include an explanation of business models applied privacy and lack of education, income, disabilities, and age. Include an explanation of business models applied privacy and lack of education, income, disabilities, and age. Include an explanation of business models appli	Local Co			115-117	
Management Approach 2016 103-2 The management approach and its components 105, 107 107-35 Evaluation of the management approach 105-3 Evaluation of the management approach 105, 107 10			Customer Privacy		
Approach 2016 103-3 Evaluation of the management approach 105, 107 GRI 418: Customer Privacy 418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data 105, 107 GRI 418: Customer Privacy 418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data 105, 107 Fractices to ensure Health and safety of field personnel involved in the installation, operation and maintenance of masts, base stations, laying cables and other outside plant 107 Policies and practices on the siting of masts and transmission sites including stakeholder consultation, site sharing and initiatives to reduce visual impacts 113 Froviding Access 113 Policies and practices to enable the deployment of telecommunications infrastructure and access to telecommunications products and services in remote and low population density areas 105 PA2 Policies and practices to overcome barriers for access and use of telecommunication products and services including: language, culture, illiteracy, and lack of education, income, disabilities, and age. Include an explanation of business models applied 105 PA3 Policies and practices to ensure availability and reliability of telecommunications products and services and 105 quantify the level of availability of telecommunications products and services in areas where the organisation 105 operates 105 PA4 Quantify the level of availability of telecommunication products and services in emergency situations and for disaster relief 105 PA5 Policies and practices to manage human rights issues relating to access and use of telecommunications products and services 105 GRI MEDIA SECTOR SPECIFIC INDICATORS 106 Froduct Responsibility 106 Methodology for assessing and monitoring adherence to content creation values 106 Actions taken to improve adherence to content creation values, and results obtained 106 Actions taken to improve performance in relation to content dissemination issues (accessibility and protection of 106			103-1 Explanation of the material topic and its Boundaries	96-97	
103-3 Evaluation of the management approach 418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data 105, 107 Customer Privacy GRI TELECOMMUNICATION SECTOR SPECIFIC INDICATORS Health and Safety 103 Practices to ensure Health and safety of field personnel involved in the installation, operation and maintenance of masts, base stations, laying cables and other outside plant 107 Policies and practices on the siting of masts and transmission sites including stakeholder consultation, site sharing and initiatives to reduce visual impacts 118 Providing Access PA1 Policies and practices to enable the deployment of telecommunications infrastructure and access to telecommunications products and services in remote and low population density areas PA2 Policies and practices to overcome barriers for access and use of telecommunication products and services including: language, culture, illiteracy, and lack of education, income, disabilities, and age. Include an explanation of business models applied PA3 Policies and practices to ensure availability and reliability of telecommunications products and services and quantify, where possible, time periods and locations of down time PA4 Quantify the level of availability of telecommunication products and services in areas where the organisation operates PA5 Policies and practices to manage human rights issues relating to access and use of telecommunications and for disaster relief PA7 Policies and practices to manage human rights issues relating to access and use of telecommunications GRI MEDIA SECTOR SPECIFIC INDICATORS Product Responsibility M2 Methodology for assessing and monitoring adherence to content creation values M4 Actions taken to improve adherence to content creation values, and results obtained M4 Actions taken to improve performance in relation to content dissemination issues (accessibility and protection of			103-2 The management approach and its components	105, 107	
IOS	прргоссі	112010	103-3 Evaluation of the management approach	105, 107	
Health and Safety			418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	105, 107	
Practices to ensure Health and safety of field personnel involved in the installation, operation and maintenance of masts, base stations, laying cables and other outside plant Policies and practices on the siting of masts and transmission sites including stakeholder consultation, site sharing and initiatives to reduce visual impacts Providing Access PA1 Policies and practices to enable the deployment of telecommunications infrastructure and access to telecommunications products and services in remote and low population density areas PA2 Policies and practices to overcome barriers for access and use of telecommunication products and services including: language, culture, illiteracy, and lack of education, income, disabilities, and age. Include an explanation of business models applied PA3 Policies and practices to ensure availability and reliability of telecommunications products and services and quantify, where possible, time periods and locations of down time PA4 Quantify the level of availability of telecommunications products and services in areas where the organisation operates PA6 Programmes to provide and maintain telecommunication products and services in emergency situations and for disaster relief PA7 Policies and practices to manage human rights issues relating to access and use of telecommunications and for disaster relief PA7 Policies and practices to manage human rights issues relating to access and use of telecommunications PA8 Product Responsibility M2 Methodology for assessing and monitoring adherence to content creation values M3 Actions taken to improve adherence to content creation values, and results obtained M4 Actions taken to improve performance in relation to content dissemination issues (accessibility and protection of 106			GRI TELECOMMUNICATION SECTOR SPECIFIC INDICATORS		
masts, base stations, laying cables and other outside plant Policies and practices on the siting of masts and transmission sites including stakeholder consultation, site sharing and initiatives to reduce visual impacts Number and percentage of stand-alone sites, shared sites and sites on existing structures Providing Access PA1 Policies and practices to enable the deployment of telecommunications infrastructure and access to telecommunications products and services in remote and low population density areas PA2 Policies and practices to overcome barriers for access and use of telecommunication products and services including; language, culture, illiteracy, and lack of education, income, disabilities, and age. Include an explanation of business models applied PA3 Policies and practices to ensure availability and reliability of telecommunications products and services and quantify, where possible, time periods and locations of down time PA4 Quantify the level of availability of telecommunications products and services in areas where the organisation operates PA6 Programmes to provide and maintain telecommunication products and services in emergency situations and for disaster relief PA7 Policies and practices to manage human rights issues relating to access and use of telecommunications products and services PA10 Initiatives to ensure clarity of charges and tariffs CRI MEDIA SECTOR SPECIFIC INDICATORS Product Responsibility M2 Methodology for assessing and monitoring adherence to content creation values Actions taken to improve adherence to content creation values, and results obtained Actions taken to improve performance in relation to content dissemination issues (accessibility and protection of			Health and Safety		
and initiative's to reduce visual impacts Number and percentage of stand-alone sites, shared sites and sites on existing structures Providing Access	103			113	
PRA1 Policies and practices to enable the deployment of telecommunications infrastructure and access to telecommunications products and services in remote and low population density areas PA2 Policies and practices to overcome barriers for access and use of telecommunication products and services including: language, culture, illiteracy, and lack of education, income, disabilities, and age. Include an explanation of business models applied PA3 Policies and practices to ensure availability and reliability of telecommunications products and services and quantify, where possible, time periods and locations of down time PA4 Quantify the level of availability of telecommunications products and services in areas where the organisation operates PA6 Programmes to provide and maintain telecommunication products and services in emergency situations and for disaster relief PA7 Policies and practices to manage human rights issues relating to access and use of telecommunications products and services PA10 Initiatives to ensure clarity of charges and tariffs GRI MEDIA SECTOR SPECIFIC INDICATORS Product Responsibility M2 Methodology for assessing and monitoring adherence to content creation values M3 Actions taken to improve adherence to content dissemination issues (accessibility and protection of 106	107			113	
PA1 Policies and practices to enable the deployment of telecommunications infrastructure and access to telecommunications products and services in remote and low population density areas PA2 Policies and practices to overcome barriers for access and use of telecommunication products and services including: language, culture, illiteracy, and lack of education, income, disabilities, and age. Include an explanation of business models applied PA3 Policies and practices to ensure availability and reliability of telecommunications products and services and quantify, where possible, time periods and locations of down time PA4 Quantify the level of availability of telecommunications products and services in areas where the organisation operates PA6 Programmes to provide and maintain telecommunication products and services in emergency situations and for disaster relief PA7 Policies and practices to manage human rights issues relating to access and use of telecommunications products and services PA10 Initiatives to ensure clarity of charges and tariffs CRI MEDIA SECTOR SPECIFIC INDICATORS Product Responsibility M2 Methodology for assessing and monitoring adherence to content creation values Actions taken to improve adherence to content creation values, and results obtained M4 Actions taken to improve performance in relation to content dissemination issues (accessibility and protection of	1O8	Number and	percentage of stand-alone sites, shared sites and sites on existing structures	113	
telecommunications products and services in remote and low population density areas PA2 Policies and practices to overcome barriers for access and use of telecommunication products and services including: language, culture, illiteracy, and lack of education, income, disabilities, and age. Include an explanation of business models applied PA3 Policies and practices to ensure availability and reliability of telecommunications products and services and quantify, where possible, time periods and locations of down time PA4 Quantify the level of availability of telecommunications products and services in areas where the organisation operates PA6 Programmes to provide and maintain telecommunication products and services in emergency situations and for disaster relief PA7 Policies and practices to manage human rights issues relating to access and use of telecommunications products and services PA10 Initiatives to ensure clarity of charges and tariffs 106 GRI MEDIA SECTOR SPECIFIC INDICATORS Product Responsibility M2 Methodology for assessing and monitoring adherence to content creation values Actions taken to improve adherence to content creation values, and results obtained M4 Actions taken to improve performance in relation to content dissemination issues (accessibility and protection of			Providing Access		
including: language, culture, illiteracy, and lack of education, income, disabilities, and age. Include an explanation of business models applied PA3 Policies and practices to ensure availability and reliability of telecommunications products and services and quantify, where possible, time periods and locations of down time PA4 Quantify the level of availability of telecommunications products and services in areas where the organisation operates PA6 Programmes to provide and maintain telecommunication products and services in emergency situations and for disaster relief PA7 Policies and practices to manage human rights issues relating to access and use of telecommunications products and services PA10 Initiatives to ensure clarity of charges and tariffs CRI MEDIA SECTOR SPECIFIC INDICATORS Product Responsibility M2 Methodology for assessing and monitoring adherence to content creation values M3 Actions taken to improve adherence to content dissemination issues (accessibility and protection of 106 M4 Actions taken to improve performance in relation to content dissemination issues (accessibility and protection of 106	PA1			105	
quantify, where possible, time periods and locations of down time PA4 Quantify the level of availability of telecommunications products and services in areas where the organisation operates PA6 Programmes to provide and maintain telecommunication products and services in emergency situations and for disaster relief PA7 Policies and practices to manage human rights issues relating to access and use of telecommunications products and services PA10 Initiatives to ensure clarity of charges and tariffs 106 GRI MEDIA SECTOR SPECIFIC INDICATORS Product Responsibility M2 Methodology for assessing and monitoring adherence to content creation values 106 M3 Actions taken to improve adherence to content creation values, and results obtained 106 M4 Actions taken to improve performance in relation to content dissemination issues (accessibility and protection of 106	PA2	including: lar	nguage, culture, illiteracy, and lack of education, income, disabilities, and age. Include an	105	
PA6 Programmes to provide and maintain telecommunication products and services in emergency situations and for disaster relief PA7 Policies and practices to manage human rights issues relating to access and use of telecommunications products and services PA10 Initiatives to ensure clarity of charges and tariffs CRI MEDIA SECTOR SPECIFIC INDICATORS Product Responsibility M2 Methodology for assessing and monitoring adherence to content creation values M3 Actions taken to improve adherence to content dissemination issues (accessibility and protection of 106 M4 Actions taken to improve performance in relation to content dissemination issues (accessibility and protection of 106	PA3			105	
disaster relief PA7 Policies and practices to manage human rights issues relating to access and use of telecommunications products and services PA10 Initiatives to ensure clarity of charges and tariffs CRI MEDIA SECTOR SPECIFIC INDICATORS Product Responsibility M2 Methodology for assessing and monitoring adherence to content creation values M3 Actions taken to improve adherence to content dissemination issues (accessibility and protection of 106 M4 Actions taken to improve performance in relation to content dissemination issues (accessibility and protection of 106	PA4		level of availability of telecommunications products and services in areas where the organisation	105	
products and services PA10 Initiatives to ensure clarity of charges and tariffs GRI MEDIA SECTOR SPECIFIC INDICATORS Product Responsibility M2 Methodology for assessing and monitoring adherence to content creation values M3 Actions taken to improve adherence to content creation values, and results obtained M4 Actions taken to improve performance in relation to content dissemination issues (accessibility and protection of 106	PA6			105	
Product Responsibility M2 Methodology for assessing and monitoring adherence to content creation values 106 M3 Actions taken to improve adherence to content creation values, and results obtained 106 M4 Actions taken to improve performance in relation to content dissemination issues (accessibility and protection of 106	PA7			105	
Product Responsibility M2 Methodology for assessing and monitoring adherence to content creation values 106 M3 Actions taken to improve adherence to content creation values, and results obtained 106 M4 Actions taken to improve performance in relation to content dissemination issues (accessibility and protection of 106	PA10	Initiatives to ensure clarity of charges and tariffs		106	
M2Methodology for assessing and monitoring adherence to content creation values106M3Actions taken to improve adherence to content creation values, and results obtained106M4Actions taken to improve performance in relation to content dissemination issues (accessibility and protection of106			GRI MEDIA SECTOR SPECIFIC INDICATORS		
M3 Actions taken to improve adherence to content creation values, and results obtained M4 Actions taken to improve performance in relation to content dissemination issues (accessibility and protection of 106			Product Responsibility		
M4 Actions taken to improve performance in relation to content dissemination issues (accessibility and protection of 106	M2	Methodology	y for assessing and monitoring adherence to content creation values	106	
Actions taken to improve performance in relation to content dissemination issues (accessibility and protection of vulnerable audiences and informed decision making) and results obtained	M3				
	M4	Actions taken to improve performance in relation to content dissemination issues (accessibility and protection of vulnerable audiences and informed decision making) and results obtained			

Group Financial Review

1.1 Revenue

		Year ended 31 December				
	2016 2016 2015 2015 li		Incr/(Decr)			
	\$m	%	\$m	%	\$m	%
					(0 = 0)	(0.0)
Mobile revenue	1,214.6	50.7	1,239.8	50.7	(25.2)	(2.0)
Pay TV revenue	377.8	15.8	391.0	16.0	(13.2)	(3.4)
Broadband revenue	216.8	9.0	200.3	8.2	16.5	8.2
Enterprise Fixed revenue	400.0	16.7	384.9	15.8	15.1	3.9
Total service revenue	2,209.2	92.2	2,216.0	90.7	(6.8)	(0.3)
Sales of equipment	187.5	7.8	228.3	9.3	(40.8)	(17.9)
Total	2,396.7	100.0	2,444.3	100.0	(47.6)	(1.9)

The Group's total revenue of \$2,396.7 million was \$47.6 million or 1.9% lower year-on-year (YoY), attributed to lower revenues from sales of equipment and services.

Compared to 2015, mobile service revenue was lower by 2.0% due to lower usage revenue from voice services, IDD and roaming services from both post-paid and pre-paid services, partly mitigated by higher subscription revenue from a larger customer base.

Pay TV service revenue was lower by 3.4% YoY, primarily due to a decrease in the customer base.

Broadband service revenue was higher by 8.2% when compared to 2015. The higher revenue was driven by an increase in the mix of customers taking fibre plans, resulting in higher average revenue per user (ARPU) of \$37 in 2016, up from \$34 in 2015.

YoY, enterprise fixed service revenue was higher by 3.9%, primarily due to growth in data \upDelta internet services.

Revenue from sales of equipment decreased 17.9% YoY primarily due to lower volume of handsets sold.

1.2 Operating Expenses

	Year ended 31 December			
	2016 2015 Incr/(Decr) \$m \$m \$m			r)
				%
Cost of sales	974.6	1,053.1	(78.5)	(7.5)
Other operating expenses	1,029.2	995.5	33.7	3.4
Total	2,003.8	2,048.6	(44.8)	(2.2)

Total operating expenses were 2.2% lower YoY at \$2,003.8 million, attributed to lower cost of sales (primarily cost of equipment and traffic expenses), offset by higher other operating expenses.

As a percentage of revenue, total operating expenses were at 83.6% when compared to 83.8% in 2015.

A breakdown of total operating expenses is as follows:

(i) Cost of Sales

		Year ended 31 December			
	2016 2015 Incr/(Decr)	2016 2015 Ir		cr)	
	\$m \$m \$i		\$m	\$m %	
Cost of equipment sold	447.8	487.1	(39.3)	(8.1)	
Cost of services	409.5	415.8	(6.3)	(1.5)	
Traffic expenses	117.3	150.2	(32.9)	(21.9)	
Total	974.6	1,053.1	(78.5)	(7.5)	

Cost of equipment decreased 8.1% YoY with fewer handsets sold.

Cost of services in 2016 included some reversals of accruals not required. Excluding these reversals, cost of services were 1.1% higher YoY, mainly due to higher enterprise fixed costs, coupled with increase in installation costs driven by higher take-up of fibre broadband plans. This was partly mitigated by lower TV programming and production costs.

Traffic expenses were lower by 21.9% YoY due to lower domestic and international traffic volume.

StarHub Ltd Annual Report 2016

(ii) Other Operating Expenses

		Year ended 31 December			
	2016 2015 Incr/(Dec			ecr)	
	\$m	\$m	\$m	%	
Staff costs	281.4	270.7	10.7	4.0	
Operating leases	116.1	121.7	(5.6)	(4.6)	
Marketing and promotions	133.7	144.6	(10.9)	(7.5)	
Allowance for doubtful receivables	21.0	18.4	2.6	14.5	
Repair and maintenance	96.9	86.0	10.9	12.6	
Other expenses	115.1	82.7	32.4	39.0	
Subtotal	764.2	724.1	40.1	5.5	
Depreciation and amortisation (net of asset grants)	265.0	271.4	(6.4)	(2.4)	
Total	1,029.2	995.5	33.7	3.4	

The Group's other operating expenses were higher by 3.4% when compared to 2015. As a percentage of revenue, other operating expenses were at 42.9%, up from 40.7% in 2015.

Analysis of major variances in other operating expenses is provided below:

Staff costs

The higher staff costs were due to annual increments and provision for restructuring costs, mitigated by reversal of staff costs accruals not required.

Operating leases

The higher operating leases in 2015 were mainly due to the catch up of property tax on our network offices. Excluding this catch up in 2015 and reversal of accruals not required in 2016, operating leases were 1.2% higher YoY mainly due to commencement of new office's rental.

Marketing and promotions

Compared to 2015, the lower marketing and promotions expenses in 2016 were primarily due to the lower acquisition and re-contract costs driven by lower sales volume and reclassification of certain expenses to cost of sales.

Allowance for doubtful receivables

The higher allowance for doubtful receivables was due to an increase in provision rate with effect from 4Q2016 after the review of the outstanding accounts receivables profile.

Repair and maintenance

Compared to 2015, the higher repair and maintenance expenses in 2016 were mainly due to the provision for submarine cable repair costs for cable cuts in the first half of 2016 and higher maintenance costs driven by expanded network and systems infrastructure.

Other expenses

YoY, the higher other expenses were due to higher licence fees (\$11.7m), foreign exchange losses (\$7.3m), professional and outsourcing fees (\$5.0m) and lower gain on disposal of fixed assets (\$3.2m).

Depreciation and amortisation

The lower depreciation and amortisation expenses were mainly due to property, plant and equipment and intangible assets fully depreciated and amortised respectively, offset by new additions of CAPEX.

Group Financial Review

continued

1.3 Profitability

	Year ended 31 December					
	2016 2015		2016 2015 In-	Incr/(De	ncr/(Decr)	
	\$m	\$m	\$m	%		
Total revenue	2,396.7	2,444.3	(47.6)	(1.9)		
Operating expenses	(2,003.8)	(2,048.6)	(44.8)	(2.2)		
Other income	32.2	45.6	(13.4)	(29.2)		
Profit from operations	425.1	441.3	(16.2)	(3.6)		
Finance income	3.5	2.0	1.5	73.3		
Finance expenses	(26.2)	(17.8)	8.4	46.7		
	402.4	425.5	(23.1)	(5.4)		
Non-operating income	9.5	15.0	(5.5)	(37.1)		
Share of loss of associate (net of tax)	(1.6)	(0.3)	1.3	nm		
Profit before taxation	410.3	440.2	(29.9)	(6.8)		
Taxation	(68.9)	(67.9)	1.0	1.5		
Profit for the year	341.4	372.3	(30.9)	(8.3)		
EBITDA	690.1	712.7	(22.6)	(3.2)		
Service revenue	2,209.2	2,216.0	(6.8)	(0.3)		
EBITDA as a % of service revenue	31.2%	32.2%	-1% pts			

nm – not meaningful

Profit from operations was 3.6% lower YoY at \$425.1 million due mainly to lower service revenue and income grant as all rollout grant has been fully amortised and recognised in the income statement.

2016 EBITDA was lower by 3.2% when compared to 2015. As a percentage of service revenue, EBITDA margin was 31.2% in 2016 compared to 32.2% in 2015.

The higher finance income YoY was due to higher cash and cash equivalent balances, while higher finance expenses were attributed to increase in interest expenses following the issue of the \$300.0 million medium term notes in 2Q2016, coupled with higher interest rate.

For 2016, the non-operating income of \$9.5 million was due to the fair value gain on initial recognition from an investment

in mm2 Asia Ltd. In 2015, the non-operating income of \$15.0 million was due to the deconsolidation of one of its subsidiaries, SHINE Systems Assets Pte. Ltd.

Compared to 2015, the share of loss from associate was higher at \$1.6 million in 2016.

2016 profit before taxation decreased \$29.9 million YoY, largely due to lower profits from operations (\$16.2 million) and non-operating income (\$5.5 million), coupled with higher net interest expenses (\$6.9 million) and share of loss from associate (\$1.3 million).

Taxation in 2015 included catch up for prior periods' tax losses benefits. Excluding this adjustment, taxation for 2016 was lower by 10.3% due to lower profits before taxation.

StarHub Ltd Annual Report 2016 127

1.4 Liquidity and Resources

	Year ended 31 December		
	2016	2015	
	\$m	\$m	
Profit before taxation	410.3	440.2	
Non-cash items & net finance expenses adjustments	257.8	233.7	
Changes in operating assets and liabilities	(63.7)	(36.7)	
Income tax paid	(53.7)	(92.7)	
Net cash from operating activities	550.7	544.5	
Net cash used in investing activities	(389.3)	(300.3)	
Net cash used in financing activities	(49.6)	(335.3)	
Net change in cash and cash equivalents	111.8	(91.1)	
Exchange difference on cash and cash equivalents	_	0.3	
Cash and cash equivalents at beginning of the year	173.4	264.2	
Cash and cash equivalents at end of the year	285.2	173.4	
Free Cash Flow (1)	184.0	215.7	

⁽¹⁾ Free Cash Flow refers to net cash from operating activities less purchase of property, plant and equipment and intangible assets in the cash flow statement.

YoY, the Group's net cash from operating activities was \$6.2 million higher due to lower tax paid offset by higher requirements from working capital and lower cash flows from operations.

The negative changes in working capital of \$63.7 million was attributed to lower net balances due to related parties, higher trade receivables, other receivables, deposits and prepayments. This was mitigated by higher trade and other payables.

Net cash used in investing activities increased by \$89.0 million YoY, due to higher CAPEX payments and loans disbursed to associate of \$8.7 million in 2016 as compared to a repayment of loan from associate of \$36.9 million in 2015. In addition, 2016 cash outflow also included the investment in mm2 Asia Ltd of \$18.0 million compared to \$12.0 million additional capital injected in associate in 2015.

The Group's CAPEX payments in 2016 totalled \$366.7 million. Excluding the \$80 million spectrum paid in 3Q2016, the CAPEX payments in 2016 were 12.0% of total revenue.

Free cash flow was \$31.7 million lower at \$184.0 million as a result of higher CAPEX payments.

Net cash used in financing activities were lower at \$49.6 million in 2016 as compared to \$335.3 million in 2015. The lower cash outlay was due to the proceeds received from the issue of \$300.0 million medium term notes offset by purchase of treasury shares in 2016.

The resulting net cash generated was a surplus of \$111.8 million. As a result, cash and cash equivalents balance was higher at \$285.2 million, up from \$173.4 million in 2015.

Group Financial Review

continued

1.5 Financial Position

	As at 31 December		
	2016	2015	
	\$m	\$m	
Non-current assets	1,455.3	1,305.6	
Current assets	741.0	603.8	
Less: Current liabilities	855.5	1,027.9	
Less: Non-current liabilities	1,145.9	693.9	
Net assets	194.9	187.6	
Shareholders' equity	194.9	187.6	

Compared to 2015, the Group's non-current assets of \$1,455.3 million as of 31 December 2016 were higher by \$149.7 million. The increase was mainly due to higher net book values for fixed assets which included the addition of 4G spectrum rights in 3Q2016, and higher non-current balance due from related parties resulting from the loan disbursement to associate. In addition, the investment in mm2 Asia Ltd with a fair value of \$40.0 million recorded as of 31 December 2016 also contributed to the higher non-current assets.

Total current assets of \$741.0 million as of 31 December 2016 were \$137.2 million higher YoY, primarily due to higher cash and cash equivalents which was up by \$111.8 million when compared to 31 December 2015.

Total current liabilities as of 31 December 2016 were \$172.4 million lower at \$855.5 million when compared to a year ago. The decrease was due to the reclassification of bank borrowings from current liabilities to non-current liabilities as a result of extension of bank borrowings. Balance due to related parties was also lower by \$55.4 million upon the finalisation of outstanding claims and timing in settlement of payables.

Against 31 December 2015, total non-current liabilities were \$452.0 million higher at \$1,145.9 million. The increase was largely due to the \$300.0 million medium term notes issued in 2Q2016 and reclassification of bank borrowings from current liabilities.

The Group's shareholders' equity increased by \$7.3 million to \$194.9 million as of 31 December 2016. The increase was primarily due to higher share capital of \$6.2 million and favourable changes in fair value of available-for-sale investments of \$12.5 million, offset by the purchase of treasury shares of \$12.3 million.

Gearing

The Group's unsecured borrowings of \$987.5 million as of 31 December 2016 were \$300.0 million higher when compared to a year ago. The increase was due to the \$300.0 million 3.55% fixed rate 10-year medium term notes issued in June 2016, with maturity due in 2026.

Against 31 December 2015, net debt was \$188.2 million higher at \$702.3 million as of 31 December 2016, attributed to higher borrowings mitigated by an increase in ending cash balances. As a ratio of the full year EBITDA, the Group's net debt was higher at 1.02 times as of 31 December 2016, up from 0.72 times as of 31 December 2015.