

Smart CSR Leads Smart City



Chunghwa Telecom
2015 Corporate Social Responsibility Report



G4-28,G4-31,G4-33

Editorial Policy

Welcome to the Chunghwa Telecom eighth Corporate Social Responsibility (CSR) Report. This report is published in both Chinese and English on a dedicated CSR website. We hope to integrate the advantages of both paper-based and internet-based reports to let those who care about us gain a better understanding of our CSR-related efforts and performances in 2015.

CSR website: <http://www.cht.com.tw/csr/download.html> 



Reporting Period

This report discloses the company's CSR management policies, key issues, countermeasures, initiatives and results between January 1 and December 31, 2015. However, to ensure complete coverage, parts of the Report include descriptions of initiatives and results outside the stated period.



Scope and Coverage

The report covers Chunghwa Telecom and the Chunghwa Telecom Foundation. Combined, they are referred to as "Chunghwa Telecom." Data covered by the report includes financial (Chunghwa Telecom and its subsidiaries), environmental, and social performances. In addition, the materiality as identified in the report involved the subsidiaries and is also disclosed to present a full picture of Chunghwa Telecom in the performance of CSR and the result along its value chain.



References

Issuing Organization	Item
The Global Reporting Initiative(GRI)	G4 Comprehensive
The Global Reporting Initiative(GRI)	G3.1 Telecommunications Sector Supplement
International Integrated Reporting Council(IIRC)	International < Integrated Reporting > Framework



Assurance

Contents and data of this report have been reviewed and assessed by SGS Taiwan Ltd. based on the G4 "Comprehensive" option. This report complies with all requirements of G4 Comprehensive, AA1000 AS (2008) Type 2 High Assurance Standard, and Integrated Reporting (IR) Framework.



Feedback

If you have any feedback to share, please do not hesitate to contact us through:

CSR Division, Public Affairs Department, Chunghwa Telecom

Tseng, Chih-Ming

Address: 21-3, Sec. 1, Hsinyi Road, Taipei, Taiwan 100

Telephone: +886-2-23444000

E-mail: chtcsr@cht.com.tw



GRI indicator



Chunghwa Telecom own indicator



More information

CONTENT

Editorial Policy	01
Message from the Chairman	04
Note to Material Issue in 2015	08
United Nations Sustainable	10



Responsible Governance

CSR Management	32
Proper Control of Operation Risk	36
Highest Moral Standard	39



Supply Chain Management

Overview of Supplier CSR Management in 2015	42
Industry-leading Supply Chain CSR Management	42
Mutual Benefit with Business Partners	43



Lead the Development of a Smart City

Sustainable Products and Services	45
4G Leads Smart City	46
Sustainability in Innovative R&D	50

Response to Critical Issues in 2015	12	Telecom Value Chain and Key Performance	20
Corporate Overview	14	Integrated Reporting	22
Create Shareholder Value	16	Value Creation Factors and Future Prospects	24
2015 CSR Milestones	18	Risks, Opportunities and Mid/Long-term Strategies	26



Marketing Service

Brand Management	57
Comprehensive Network of Physical Channels	58
Proper Management of Personal Information	59
Refined Services	60
Ensure Service Quality	62
Enhanced Disaster Response and Total Communication Coverage	66
Alleviate Public Concerns in Electromagnetic Radiation	68
Telecom Service and Promotion	69



Employee Care

Protect Employee Rights	71
Human Resource Structure	72
Employee Training and Development	75
Occupational Health and Safety	78
Establishing Happy Corporation	81



Green Enterprise

Environmental Sustainability Management	85
Green Initiative in Full Swing	88
Risk and Opportunity for Climate Change	89
Power Management	91
Water Resources Management	93
Waste Management	94
Targeting on Green Enterprise	95
Environmental Education Mingled with Operation Activities	97



Social Harmony

Digital Inclusion	100
Social Investment Management	101
Digital Good Neighbors, New Cloud Vision	102
Youth Training Scheme	103
Create Digital Opportunity	105
Preferential Subsidies for the Disadvantaged Groups	110

Table of the Key Associations Joined by Chunghwa Telecom	111
Assurance Statement	112
GRI Index	114

Message from the Chairman ^{G4-1}



Chunghwa Telecom's Operating results were exceptionally fruitful in 2015. Our precision construction/marketing strategies combined with the effort of all our employees had delivered record-high consolidated revenues totaling NT\$231.8 billion and an EPS of NT\$5.52 that marked the best performance in four years. By the end of 2015, Chunghwa Telecom had accumulated more than 4.4 million 4G customers and acquired license to maximum bandwidth of 2x30MHz at 2600MHz FDD, making it the first local carrier to utilize the 3CA technology (combining 900, 1800 and 2600 MHz bands) to exceed the 300Mbps bottleneck of 4G telecommunication.

Although optic fiber and 4G technologies have presented us with abundant opportunities, they are known to be associated with challenges such as increasing infrastructure and maintenance requirements, and OTT (over-the-top) applications that are threatening the Company's existing services. We have been actively exploring transformations and innovations outside of our core business, such as cloud computing, Internet of things (IoT) and data security services that would require the use of our broadband resources, R&D capacity, and big data analysis. By continually innovating and expanding across industry boundaries, we aim to sustain growth in terms of revenue, profit, and business opportunity for new services over the next 3 to 5 years.

We recognize the extent of impact our operations have on the environment and society, and how they affect us in reciprocity. To ensure sustainability, Chunghwa Telecom developed its own CSR system as early as 2006, and has been selected as a composition of DJSI - World and DJSI - Emerging Markets for three consecutive years, making it one of the world's 9 most sustainable telecommunication carriers.

Apart from actively participating in local and international sustainability assessments, we have also aligned ourselves with international trends for the disclosure of non-financial information in 2015, and adopted IIRC's Integrated Reporting Framework for the very first time during the preparation of our 9th CSR report.

In this year's report, we not only disclosed material issues but also began focusing on the values and impacts we produce over the course of business operation. By presenting a combination of financial and non-financial data, we hope to give stakeholders a better understanding of various capital committed by Chunghwa Telecom and its ability to create value through business activities.

In terms of corporate governance, Chunghwa Telecom adopts the value of "transparency, integrity and stability" as its commitment towards sustainability. For 10 straight years, we have maintained the best possible rating in TWSE / TPEX information disclosure evaluation, while our exceptional business performance has won ourselves a long-term credit rating of "AA" from S&P and a long-term/short-term credit rating of "twAAA/twA-1+" from Taiwan Ratings. For two consecutive years, we rank in the top 5% of TWSE's corporate governance evaluation. In addition to refining our services and complying with government regulations, we have escalated supplier management practices by introducing "tender bond waiver" as a means to reward top-performing suppliers in southern Taiwan. A set of "Procurement Grievance Procedures" has also been implemented to give suppliers the means to raise complaints, and thereby improve the openness and transparency of procurement practices.

With respect to environmental protection, Chunghwa Telecom has envisioned itself as a "green enterprise and pioneer in low-carbon economy," and is committed to enhancing the greenness of the society through its ICT services. Technology brings infinite possibilities, but excessive carbon emission and depletion of energy sources have also put mankind in a struggle for future survival. According to the SMARTer2030 report recently published by Global e-Sustainability Initiative (GeSI): "ICT sector's emissions footprint is expected to decrease to 1.97% of global emissions by 2030, compared to 2.3% in 2020...and has the potential to enable a 20% reduction of global CO₂e emissions by 2030." Driven by our green mission, Chunghwa Telecom has made several "the first achievement in industry," including: the first carrier to be certified for GHG inventory on Scopes 1, 2 & 3, the first to sponsor construction of Youbike station, the first to

implement ISO50001, and construction of the first Rated-4 IDC in Greater China Region.

Chunghwa Telecom will continue leading the ICT industry to create green values and promote greenness in consumption, service and business activities for the sustainability of our environment.

With respect to social inclusion, Chunghwa Telecom has adopted the goal of "narrowing the digital divide and creating digital opportunities" to guide its social efforts. We are committed to eliminating the digital divide by making telecommunication services available in all corners of Taiwan including remote areas and offshore islands. As Internet access becomes widely available, knowledge and information can be exchanged at a much faster rate and hence create opportunities. In 2015, Typhoon Soudelor caused significant damages throughout the nation, including telecommunication services. In response to the disaster, we mobilized 4,752 employees and was able to restore communication at impacted locations within the shortest time possible. "Digital Community" is one of our long-running projects. It has been expanded to 76 service locations to date, providing a strong network of hardware and software resources upon which Chunghwa Telecom Foundation is able to launch a series of "Click Taiwan" campaigns that connect Chunghwa Telecom more closely with local residents.

As we progress into the era of IoT, digital convergence and smart services, Chunghwa Telecom will carry on its integrity values and aim to become "the most valuable and trustworthy telecommunication company" by relying on its professional technologies and visions. In the meantime, the Company will also respond to industry upgrades and intensified competition by incorporating its sustainable culture into three action strategies, namely: corporate governance, environmental protection, and social inclusion, and emerge as the leader of sustainability for the industry and the society!

Chairman of the Board Directors





Determining Materials and Stakeholders

It is our intention to provide all stakeholders concerned with the future of the telecommunication industry and Chunghwa Telecom, with a more comprehensive understanding of how Chunghwa Telecom has exerted its industry influence on CSR issues. This purpose has driven us to improve the quality of our actions and disclosures.

Process for Determining Materials Issues

Step.1

CSR Secretariat is responsible for collecting the materials to support the meeting of sustainability report including international guidelines, sustainability rating survey, international benchmark, etc.



Step.2

Based on internal consideration, industry status, industry chain practice, and the recommendations of stakeholders, we asked CSR members to confirm the potential impact of the material issues within and outside the organization, in other words, the positive, negative, or potential impact on the economy, environment, and society, and later invite key parties within and outside the organization to conduct discussion and disclosure of the impact.



Step.3

We assemble an assessment team consisting of members from relative departments to identify the material issues matrix on the ground of internal and external information.

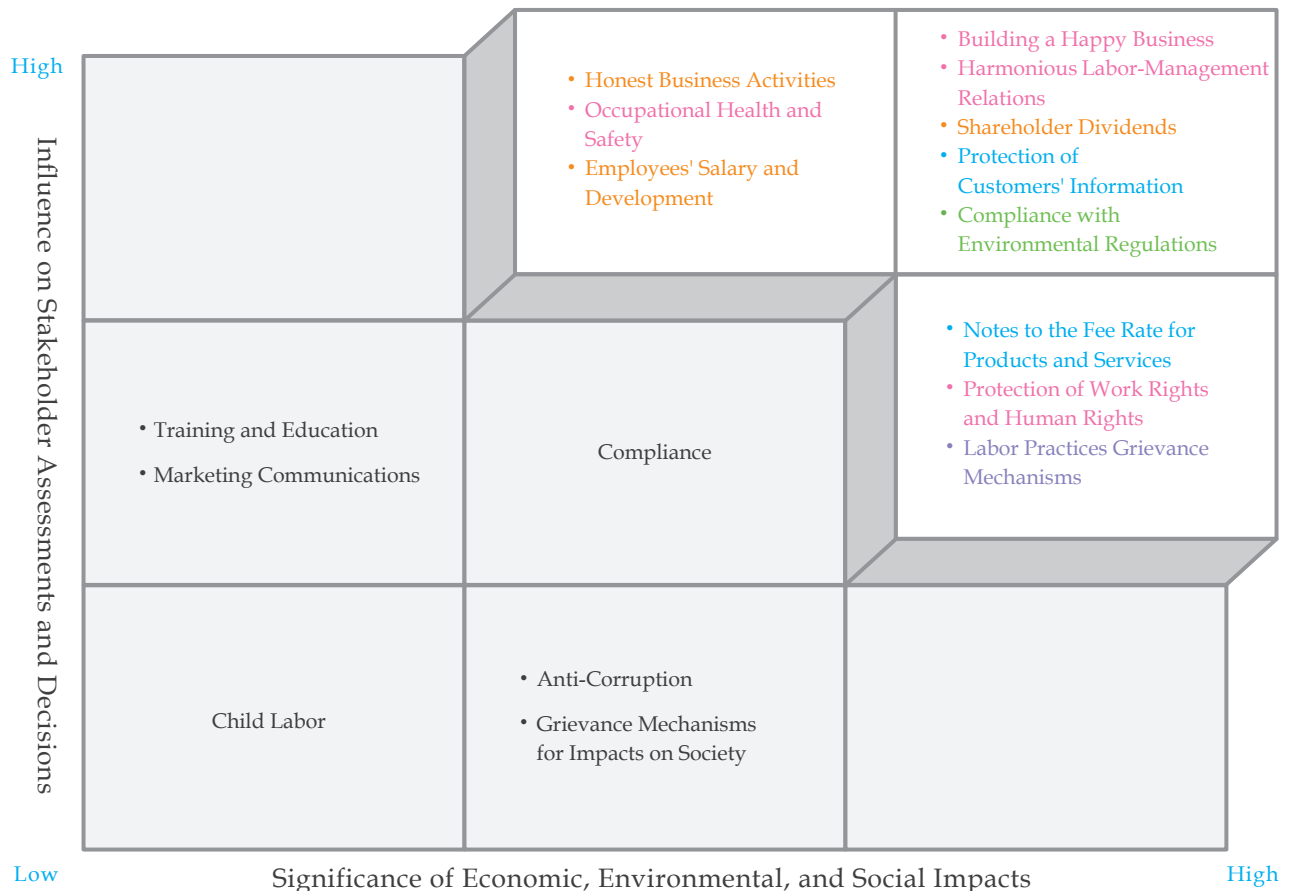
Boundaries of Material Issues



GRI G4 Aspect	Material Issues	CHT	Honghua (Subsidiary)	Customer	Supplier	Competitor	Community	Shareholder / Investor
Economic (EC)	Shareholder Dividends	✖						✖
	Honest Business Activities	✖			✖		✖	
	Employees' Salary and Development	✖	✖					
Product Responsibility (PR)	Notes to the Fee Rate for Products and Services	✖	✖	✖		✖	✖	
	Protection of Customers' Information	✖	✖	✖				
Labor Practices and Decent Work (LA)	Building a Happy Business	✖						
	Harmonious Labor-Management Relations	✖	✖					
	Occupational Health and Safety	✖	✖					
	Labor Practices Grievance Mechanisms	✖	✖					
Human Rights (HR)	Protection of Work Rights and Human Rights	✖	✖					
Environmental (EN)	Compliance with Environmental Regulations	✖			✖		✖	

✖ have impact.

2015 Material Issue Matrix



Note: The materiality threshold has been set at 2.6 and above for both the X-axis and the Y-axis (maximum: 3).

Coexistence with Stakeholders

Identification of key stakeholders and issues is the main focus of implementing CSR. By preparing the conference of CSR reports, we invite members from all departments to exchange the issues relate to current key stakeholders and their concerns, upon reaching mutual understanding, the result is incorporated into a table which in turn is regarded as the important reference for preparing the disclosure in the report.

In the process of promoting CSR activities or information disclosure, we consult the opinion and recommendation of the internal and external stakeholders, relevant important mechanism including:

- CSR report "consultation meeting with external professionals."
- Invite external professionals to "CSR Conference" and host relevant forums on the irregular basis.
- Host "Supplier CSR Interchange Meeting" on the annual basis.
- Pioneering "CSR video" to record the implementation of CSR actions on the regular basis, and collect internal and external feedback for further improvement.
- Designate specialist for CRS and foundation.

Chunghwa Telecom Stakeholder engagement guideline: <http://goo.gl/zYhhM8>

Note to Material Issue in 2015

G4-24~G4-27



Meaning to
Chunghwa
Telecom

As shareholders/investors are the holders of Chunghwa Telecom, we must be accountable to them.

Employees are critical in sustainable development and they are the driving force for sustained growth.

Only when customers prefer the products and services of Chunghwa Telecom could we have value for existence.

The huge product and service chain of Chunghwa Telecom relies on the stable support of the suppliers.

Communication
Channel

Stockholder hotline,
IR Website, Results call,
Roadshow

E-mail, Telephone calls,
Online forum,
Labor-employer meeting

Service hotline,
Customer Service center

E-mail, Hotline,
CSR Supplier Social Event

Communication
Frequency

Immediately

Immediately

Immediately

4~5 times per month

Material Aspect

01

03

06

07

08

09

10

04

05

02

11

Sustainability Category	Issues and Implications for Chunghwa Telecom	UN SDG*	GRI G4 Aspect	DMA
Economic (EC)	1. Shareholder Dividends Dividend is the key to maintaining shareholder and investor confidence in Chunghwa Telecom, and is a vital consideration for the long run holding of Chunghwa Telecom shares.	Goal #8: Decent work and economic growth Goal #11: Sustainable cities and communities Goal #12: Responsible consumption and production	Economic Performance	p.16
	2. Honest Business Activities Chunghwa Telecom conducts business activities to the highest ethical standard. In addition to complying with regulations, the Company requires all its employees to adhere to a higher moral standard in their business conducts.		Anti-Corruption Compliance -Society Grievance Mechanisms for Impacts on Society Compliance -Product Responsibility Compliance-Environmental	p.39 p.40 p.68 p.85
	3. Employees' Salary and Development The Company recognizes employees as capital as well as their most important partners and is dedicated to creating a comprehensive welfare system that helps employees realize their full potentials.		Employment Market Presence	p.73
Product Responsibility (PR)	4. Notes to the Fee Rate for Products and Services We provide our customers with the most accurate and correct product and service information to enable them to quickly find the solutions they need. This good service also helps the Company maintain its professional image.	Goal #9: Industry, innovation and infrastructure Goal #17: Partnerships for the goals	Marketing Communications Product and Service Labeling	p.39 p.58
	5. Protection of Customers' Information We utilize a broad variety of processes and systems to enhance the protection of consumers' data to eliminate leakage and unauthorized access to information systems and data by unauthorized persons.		Customer Privacy Marketing Communications	p.42 p.43

Note: "UN SDGs" are the Sustainable Development Goals of United Nations, more introductions please refer to p.10-11.



We wish to feed back to society with its professional standing in telecommunication and create a better future.

E-mail, Hotline,
Stakeholder conference

Immediately



They are good friends and teachers for us in sustainable development.

E-mail, Hotline,
Meeting,
Press release

Immediately



Our products and services and related marketing behaviors are subject to audits by the competent authority.

Official document,
Meeting, e-mail,
Telephone calls, Visit

Immediately



We wish to engage in fair competition in the industry for a healthy development of the industry.

Official document,
Meeting

1~2 times per month



Sustainability Category	Issues and Implications for Chunghwa Telecom	UN SDG*	GRI G4 Aspect	DMA
Labor Practices and Decent Work (LA)	6. Building a Happy Business Our "sustainability" goal has also prompted us to implement welfare systems that are superior to those required by Law. We have taken action to give employees comfortable working conditions and a share of our fruitful results.	Goal #3: Good health and well-being Goal #8: Decent work and economic growth	Employment	p.73
	7. Harmonious Labor-Management Relations Employees are the key to sustainability; a harmonious labor-management relationship favors business growth.		Labor/Management Relations	p.72
	8. Occupational Health and Safety In addition to compliance with all regulations, we have introduced an occupational health and safety management system that has helped in the creation of a quality workplace.		Occupational Health and Safety	p.78
	9. Labor Practices Grievance Mechanisms We pay careful attention to communication with our employees and the assurance of all their legal rights. There are several channels through which an employee might assert their rights or give voice to concerns or grievances.		Human Rights Grievance Mechanisms	p.40 p.74
Human Rights (HR)	10. Protection of Work Rights and Human Rights We respect all our employees and prohibit discrimination on the grounds of gender, age, ethnicity, religion, or any other. Chunghwa Telecom is the only telecommunications carrier in Taiwan to have established, and signed a collective bargaining agreement, with a union. This initiative not only complies with local laws and international human rights conventions, but also demonstrates our commitment to the protection of employee rights and interests.	Goal #5: Gender equality Goal #10: Reduced inequalities	Training and Education Market Presence Child Labor	p.31 p.73 p.75
Environmental (EN)	11. Compliance with Environmental Regulations We have envisioned ourselves as becoming a green, sustainable business. We strive not only to comply with environmental regulations, but to contribute to the greenness of the ICT industry and society as a whole.	Goal #7: Affordable and clean energy Goal #12: Responsible consumption and production Goal #13: Climate action	Compliance -Environmental	p.85

United Nations Sustainable Development Goals

Although Taiwan is not a member of the United Nations, Chunghwa Telecom has nevertheless chosen to respond to the 2030 Sustainable Development Goals (SDGs) outlined by the UN in 2015, given its stature as a responsible industry leader. The following table associates Chunghwa Telecom's current practices with the SDGs, and is intended to give stakeholders a clear perception of our efforts and contribution towards CSR and world sustainability goals.

Material Issue	SDGs
<ul style="list-style-type: none"> Shareholder Dividends Honest Business Activities Employees' Salary and Development 	<p>Goal #8</p> <ul style="list-style-type: none"> Achieve higher levels of productivity through diversity, technological upgrade and innovation. Achieve equal pay for equal work and productive employment across the entire population, including young adults and disabled persons, by 2030. <p>Goal #11</p> <ul style="list-style-type: none"> Enhance inclusiveness, tolerance and sustainability by 2030, and achieve nationwide participation in urban planning and management in a way that is both participatory and inclusive. Reduce the level of average adverse environmental impact per person in urban areas by 2030. Facilitate positive linkage between urban, suburban and rural areas in social, economic and environmental aspects. <p>Goal #12</p> <ul style="list-style-type: none"> Encourage businesses to adopt sustainable strategies and include sustainability information into their reporting cycles. Implement sustainable procurement procedures in line with national policies and priorities. Devise and implement policies to monitor how sustainability affects employment, local culture, local products, and tourism.
<ul style="list-style-type: none"> Notes to the Fee Rate for Products and Services Protection of Customers' Information 	<p>Goal #9</p> <ul style="list-style-type: none"> Establish economic, social and environmental connections between remote areas and the outside world. Upgrade infrastructure, improve resource efficiency, and adopt more environmental protection technologies and processes by 2030. Launch fully affordable and available Internet services in least developed countries by 2020. <p>Goal #17</p> <ul style="list-style-type: none"> Enhance global sustainability partnership; gather and share knowledge, specialties, technologies and financial resources to support developing nations in reaching their sustainable goals. Apply experience, resources and strategies to encourage and facilitate effective cooperation between state, private sector, citizens and the society.
<ul style="list-style-type: none"> Building a Happy Business Harmonious Labor-Management Relations Occupational Health and Safety Labor Practices Grievance Mechanisms 	<p>Goal #3</p> <ul style="list-style-type: none"> Promote physical and mental health through prevention and treatment measures by 2030. Ensure availability of health services, including information and education about child birth by 2030. Achieve nationwide health protection, including access to insurance coverage, quality and affordable drugs and vaccine. Escalate early alerts and enhance management capability for national and global health risks. <p>Goal #8</p> <ul style="list-style-type: none"> Eliminate forced labor, child labor and any form of illegal employment by 2025.
<ul style="list-style-type: none"> Protection of Work Rights and Human Rights 	<p>Goal #5</p> <ul style="list-style-type: none"> Elimination of discrimination against women. Assure women's right to political, economic, and public decisions of all levels, and provide them with equal opportunity to all levels of leadership. Enhance women's abilities through ICT applications. Promote gender equality and raise women's power through state policies and laws. <p>Goal #10</p> <ul style="list-style-type: none"> Achieve social, economic and political inclusion by 2030, regardless of participants' age, gender, disability, race, ethnicity, nationality, religion, economic or other status. Progressively maintain and increase income of the bottom 40% population, while ensuring that the rate of increase is above national average before 2030. Assure equal opportunities and reduce inequalities through proper laws, policies and actions.
<ul style="list-style-type: none"> Compliance with Environmental Regulations 	<p>Goal #7</p> <ul style="list-style-type: none"> Collaborate with global institutions on the acquisition of clean energy sources and related technologies before 2030, including infrastructure investments relating to renewable energy. <p>Goal #12</p> <ul style="list-style-type: none"> Achieve sustainable management and use of natural resources by 2030. Develop chemical and waste management practices in accordance with international rules by 2020, while significantly reduce chances of emission and negative impacts. Reduce the volume of waste produced by 2030 through means such as prevention, reduction, recycling and reuse. <p>Goal #13</p> <ul style="list-style-type: none"> Enhance a nation's ability to recover from and adapt to natural disasters and climate risks. Raise awareness and tighten control over climate risks; enhance early alert measures and improve responsiveness on an individual and organizational level.

Note: As far as Chunghwa Telecom is concerned, the terms “state,” “nation” and “country” mentioned in UN SDGs refers only to Taiwan; as for the term “population,” the focus is primarily on our own permanent employees.

Chunghwa Telecom's Contribution to SDG		Chapter Page
  	<ul style="list-style-type: none"> • The creation of Chunghwa Telecom Laboratories to encourage innovation and business ventures and make the industry more diverse. • The implementation of robust compensation, welfare and union systems to ensure equality between men and women. • The development of smart city solutions to enhance analysis and the management of economic, environmental, and social information within city. • Regular publication of CSR report and innovative communication channels • Full-scale green procurement. • The construction of Chunghwa Telecom resorts throughout the country to encourage experience of local culture and natural environment. 	Responsible Governance p.28 Employee Care p.70
 	<ul style="list-style-type: none"> • Chunghwa Telecom is the most active local carrier making services available and affordable to the public. The company has invested the largest amount of resources to date. • The Company offers discounts to the socially disadvantaged and to disaster victims. • The Company has implemented communication and collaborative channels that are transparent and consistent with stakeholders' needs; it is actively involved in industry associations and new development projects. • The Company is the first telecommunications carrier to begin "supplier CSR management" and regular meetings are held for this purpose. 	Marketing Service p.56
 	<ul style="list-style-type: none"> • The Company has robust and comprehensive systems in place to check and manage employees' health as well as prevent communicable diseases. • The Company has a robust human resource policy and an international management system in place to prevent all forms of forced labor. 	Employee Care p.70
 	<ul style="list-style-type: none"> • Chunghwa Telecom is the only telecommunication carrier in Taiwan that has a “labor union” to look after employees’ interests. • The Company values and enforces gender equality laws; it protects and promotes women's right to fair employment and promotion. • The Company has a robust compensation and welfare scheme in place to keep employees' salaries above local regulatory requirements. 	Employee Care p.70
  	<ul style="list-style-type: none"> • The Company has launched a 5-year sustainability program along with many environmental actions to fulfill its goal as a green enterprise. • The Company has been active in the reduction and reuse of energy and resources; new infrastructures are being constructed to broaden the use of renewable energy and reduce greenhouse gas emission. • The Company is constantly introducing new solutions to mitigate disasters and minimize climate risks to its data centers. 	Green Enterprise p.84

Response to Critical Issues in 2015

Issue #1: The Dilemma of Coverage of the Base Station

Service providers are compelled to provide good quality voice transmission and fast mobile connection to the Internet. However, some citizens still have concern about electromagnetic wave. As such, people tend to request for the removal of base stations already installed as “electromagnetic waves will jeopardize our health” even though the landlord have agreed with the installation.

The right cognition about electromagnetic wave should be:

- 1 The electromagnetic wave emitted from the base station is non-ionizing radiation and the electromagnetic particle entails very low energy. It will not give out heat or cause damage to the cell molecules of organism. As such, it will not affect the health of human beings.
- 2 The measurement of the electromagnetic wave in the environment is in conformity to the standard of the International Commission on Non-ionizing Radiation Protection (ICNIRP)”, which must be lower than $0.45 \mu\text{W}/\text{cm}^2$ at 900MHz and must be lower than $0.9 \mu\text{W}/\text{cm}^2$ at 1,800MHz. Due to the habit of using mobile phones, the public has been exposed to the radio frequency of the mobile phones, which is a thousand times more than the waves emitted from a base station.

As described above, the electromagnetic waves generated by base stations are not as damaging as rumored. There are many professional websites, local and abroad, that support this claim. However, any resident who has concerns regarding base stations near their home can request a complimentary measurement of the strength of the nearby electro- magnetic waves by calling 0800-580-010.

*Electromagnetic wave: <http://www.emfsite.org.tw/>



Issue #2: Vector-borne Disease at Manholes

Following the outbreak of dengue fever in April 2015, the government conducted a series of thorough inspections on culverts and manholes, and found Chunghwa Telecom's manholes likely to breed mosquitoes due to dysfunctional drainage. Following the inspections made by the Environmental Protection Bureau, Chunghwa Telecom immediately participated in local governments' prevention measures, and devoted itself to assisting local health authorities in the extermination of vectors.

Actions

- 1
 - Sealing the openings on manhole covers.
 - Assigning employees to clear drainage and water build-up when spraying pesticides at more severely affected locations.

Progress

- 2
 - Kaohsiung City: sealants were applied to 172,431 manhole covers, while 37,438 manholes were completely buried under ground; overall, a total of 209,869 manholes had been treated for vectors.
 - Tainan City: sealants were applied to 68,024 manhole covers in more severely affected areas.
 - Pingtung City: 2,535 manhole covers at Yongcheng Village were sealed and sterilized.

The health authority had acknowledged the prevention efforts taken by Chunghwa Telecom, and reminded businesses of their duties to control vectors and maintain cleanliness of the environment.

Issue #3: Personnel Management at Subsidiaries

Honghwa International Corp. (Honghwa) is a subsidiary of Chunghwa Telecom and provides the frontline manpower needed at the Chunghwa Telecom service outlets, customer service hotlines, and customer service network. Honghwa also operates as a human resource contractor for other businesses, but does not use the same human resource and welfare system as Chunghwa Telecom.

However, to comply with the Chunghwa Telecom CSR philosophy, the service agreement specifically requires the contractor to treat its employees in compliance with the Labor Standards Act, the Occupational Safety and Health Act, and the Gender Equality in Employment act. In addition, penalties may be imposed for the purpose of protecting the interests of the workers. In light of this requirement, Honghwa has also created its own union and holds regular discussions to negotiate employment terms that provide employees with proper protection and benefits as well as a secure labor-management relationship.

- 1
 - The Temporary Labor Act is expected to be implemented in the near future, which will limit the use of temporary labor to no more than 3% (or 10%) of total employee base. Chunghwa Telecom has responded to this new change in advance, as the Human Resource Division held meetings with the marketing, network, and customer service teams to discuss feasible solutions.
- 2
 - By the end of 2015, Chunghwa Telecom used no outsourced labor except HongHwa to operate frontline functions such as customer service hotline, customer service network, and service outlets.



Corporate Overview

G4-4~G4-8

Chunghwa Telecom is the largest integrated telecommunication carrier in Taiwan. Our head office is located at 21-3 Hsinyi Road, Section 1, Taipei. In August 2005, we became a privatized company as the ownership by the government was reduced to less than 50%, and the management system officially transformed from a state-owned enterprise to a privately-owned enterprise.

Our main business consists of three major areas: fixed, mobile, and data communications, providing voice services, private circuits, internet, broadband internet, smart network, virtual network, e-commerce, corporate customer integration ICT services, and various value-added services. We use the best network and service quality as the backing to create intelligent communication environments and exciting yet convenient digital lives for our users. Chunghwa Telecom is also an important business partner of other international telecommunication carriers. We have been actively involved in different "corporate social responsibility" conducts in recent years, and have won the appraisal of many domestic and international professional organizations over and over again.

*Three Telecom Laws: <http://goo.gl/678ya>

*The main business of the branched and invests: <http://goo.gl/Vl3NS1> (p.109~121)





We Will



Enhance the Operational Efficiency of Corporations.



Create a Gateway to an Enjoyable Digital Life for People.



Facilitate Industry Scale to Expand in a Good Way with Our Contribution.



Allow Investors to Enjoy Business Profit while Receiving Compliment from Consumers.



Creating Shareholder Value ^{G4-9}

Chunghwa Telecom generated consolidated revenues totaling NT\$231.8 billion in 2015, up 2.3% from 2014 and represented a 100.3% accomplishment rate given the current year's financial forecast. Due to increasing popularity of smart mobile devices, the Company experienced growing revenues from value-adding services, sales, and data subscriptions that covered the decline of voice service. Net income attributable to parent company amounted to NT\$42.81 billion while EPS reached NT\$5.52, representing the best performance in the last 4 years and a full-year accomplishment rate of 114.2%. In 2015, Chunghwa Telecom's tax expenses were equivalent to an effective tax rate of 15.73%; difference from the 17% statutory tax rate was mainly attributed to the following: according to Article 4 of Income Tax Act, net dividends or net earnings recognized from local invested businesses are exempted from income tax; and tax privileges from investment credits granted under Article 6 of Statute for Upgrading Industries and Article 10 of Statute for Industrial Innovation.

Tax Policy: http://www.cht.com.tw/csr/upload/files/Tax_Policy.pdf

Business Performance

unit: NT\$ million

Total employees in parent and subsidiaries	32,734	person
Paid-up capital	77,574	
Revenue	231,795	
Operating cost	148,126	
Operating expense	33,202	
Employee salaries and benefits	47,324	(Included in operating cost and expense)
Dividends paid to shareholders	37,673	
Taxes	7,178	
Expenses of social investment/ donation	910	(Included in operating cost and expense)
Retained economic value	5,616	

Product and Services

Mobile Subscriber



Customer population
11.18 million

Annual growth rate at
0.5%

4G LTE



Customer population
4.43 million

Annual growth rate at
232.6%

Mobile Internet



Customer population
5.97 million

Annual growth rate at
15.7%

FTTx



Customer population
3.36 million

Annual growth rate at
7.6%

100Mbps



Customer population
1.05 million

Annual growth rate at
21.5%

HiNet/Broadband



Customer population
3.77 million

Market Share in
the first place

Household Market



Performance

Business Model



- Domestic fixed network service
- Domestic leased line service
- Internet and value adding service
- MOD(IPTV) service
- International fixed network service

- Launched broadband Internet services at 500Mbps and 1Gbps speed
- MOD's monthly movie and drama package launched with success

Personal Market



Performance



- Mobile communication service
- Wi-Fi service
- International fixed network service

- 4G subscribers reached 4.43 million accounts that surpassed all peers
- Revenues from value-added mobile services increased by 13.8%
- Hami e-book App was downloaded 5 million times, while Hami+ music App accumulated 1.2 million members and launched a new Mobile payment services

Corporate Market



Performance



- Integrated service
- Data security service
- Mobile service
- Data service
- International service
- Diversified integrated payment and collection service

- Innovative Internet services (ITS, iEN, IVS etc.) delivered yearly revenue growth of 76.5%
- Data security and cloud computing services achieved yearly revenue growth of 23%
- Attained No. 1 overall rating across four major products in the cloud computing category of the government's Cooperative Supply Contractor rating

Other Accounts **1.3%**

International Fixed Communication

6.7%

Traffic volume: 1,346 million
Market Share: 57.8%

Domestic Fixed Communication **31.3%**

	Customer population	Market Share
Local Network	11.17 million	94.0%
Long-distance Network	2,889 million (Traffic volume)	82.2%
Broadband Subscriber	4.5 million	75.8%
MOD	1.3 million	20.4%

Internet **11.1%**

Customer population: 4.2 million
Market Share: 68.3%

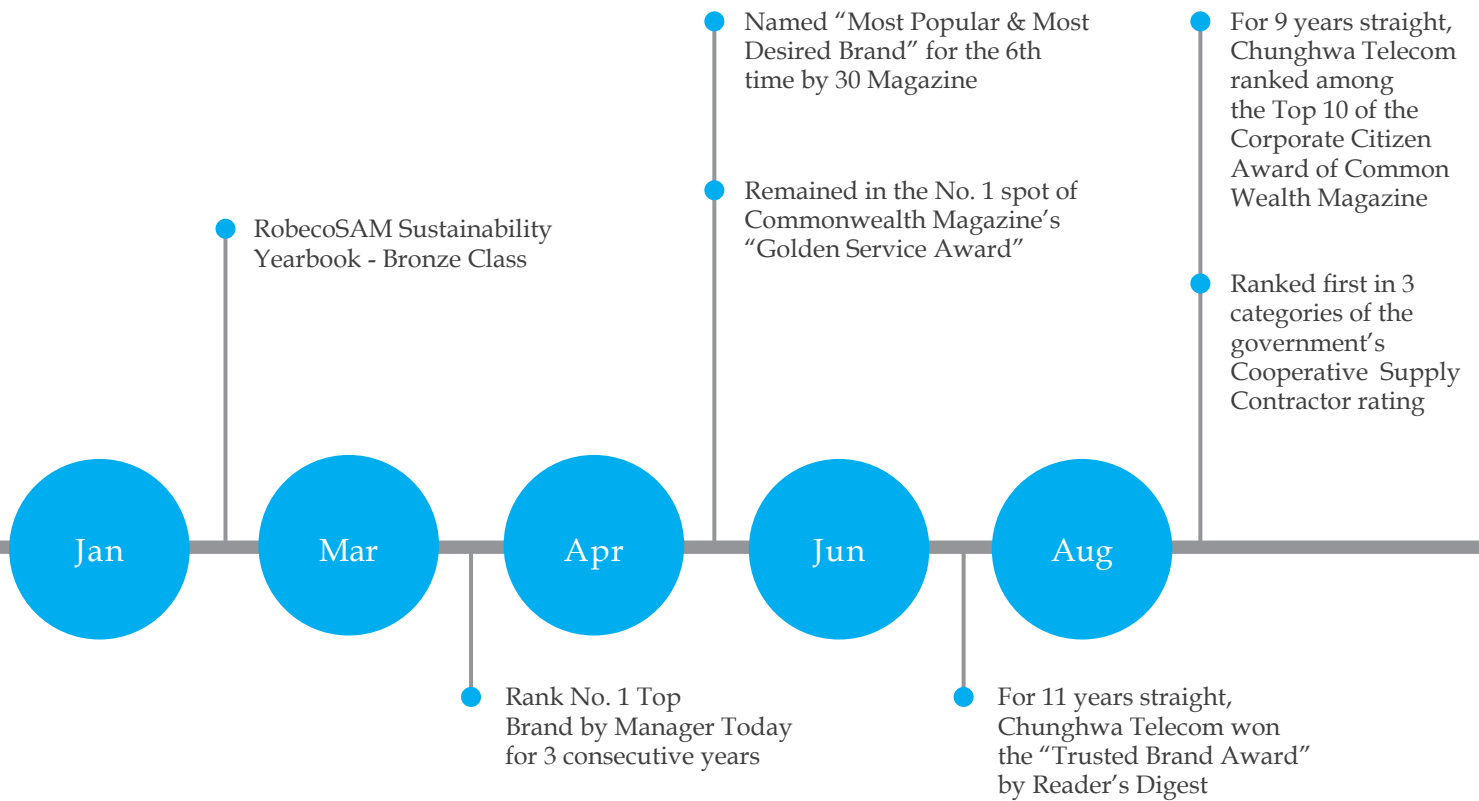
Mobile Communication **49.6%**

Customer population: 11.18 million
Market Share: 38.1%

Contribution of Business



CSR Milestones in 2015



2015 Corporate Citizen Award of Common Wealth Magazine





- 2015 Global Views - Five-Star Service Awards
- Chunghwa Telecom's 4G commercial- "Pacing" and 4G micro film- "Mandy's Story" won "YouTube Taiwan Most Successful Commercial Film" in 2015 third quarter
- Platinum Award for 3 consecutive years in The Asset Corporate Award
- Chunghwa Telecom Laboratories won the "17th Technology Management Award"
- The highest honor in Taiwan Corporate Sustainability Awards

Sep

Oct

Nov

Dec

- Selected for Dow Jones Sustainability Indices - World Index and Emerging Market Index
- National winner (Taiwan) of the 2015-2016 "World Branding Awards"
- "2015 Asia Pacific Best Practices Awards -Taiwan Mobile Service Provider of the Year" from Frost&Sullivan

- Obtained long-term credit rating of "AA" from S&P and a long-term/short-term credit rating of "twAAA/twA-1+" from Taiwan Ratings
- Business Today's "Best Brand Award" for 8 consecutive years
- Chunghwa Telecom's northern branch was named National Model Workplace and ranked first in Taipei City's Best Workplace Ranking
- Gold Award in "2015 Innovative Products" of Information Technology Month
- Obtained the latest ISO/IEC20000-1:2011 certification, which signified upgrade in information security

MEMBER OF

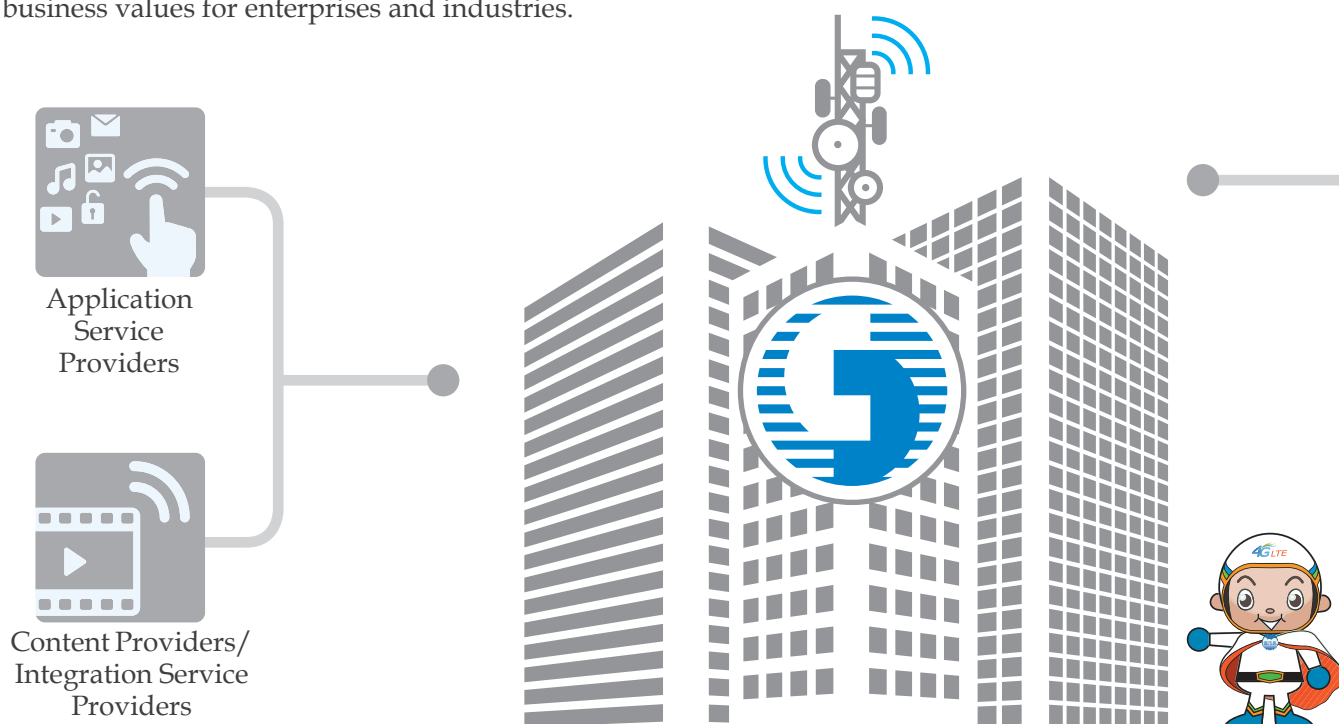
Dow Jones Sustainability Indices

In Collaboration with RobecoSAM 

Telecom Value Chain and Key Performance G4-12





The telecommunications industry is a high capital expenditure technology industry with intensive technologies, and under the rapid transformation of the industry, the industry value chain of Chunghwa Telecom has expanded because of it. In addition to traditional telecom service businesses, we must also respond to the challenges and impacts from emerging fields including the cost for the creating and maintaining of explosively growing data, cloud big data, content industry and video services (OTT).

Because of this, Chunghwa Telecom will continue to invest in innovative research and development, and combine the hardware and software development capabilities of the upper stream, midstream and downstream industry chains to provide differentiated products and eICT services, and integrate the power of distributors to expand the market and develop digital convergence industries, creating greater business values for enterprises and industries.







EC

Key Performance of Economic

	2014	2015	Explanation
 Consolidated Revenue unit: NT\$ million	226,609	231,795	👍 Record-high revenues
 Complaints per Million Users unit: case	182	186	👍 Despite the increase, the Company still ranked behind all other carriers, for which we shall continually review and improve
 Customer Service Satisfaction unit: 10 point scale	7.3	7.6	👍 Increased 0.3% from 2014
 Employee Satisfaction unit: 100 point scale	78	80	👍 Increased 2% from 2014

EN

Key Performance of Environment

	2014
 Power Usage unit: million kWh	1,422
 Carbon Emission unit: 10 thousand t-CO ₂ e	83.92
 Water Usage unit: kiloliter	2,567
 Waste Volume unit: ton	9,142



SO

Key Performance of Society

2015	Explanation
1,421	Reduction targets achieved even as business grew.
83.47	Reduction targets achieved even as business grew.
2,475	Successful water conservation efforts
3,838	Revised statistical method; see P.94 for details

	2014	2015	Explanation
Social Investment unit: NT\$ thousand	1,471,596	910,230	Revised statistical method; see P.101 for details
Employee Turnover Rate unit: %	4.3	2.2	Reduced 2.1% compared to 2014
Total Training Expense unit: NT\$ thousand	679,171	572,351	The Company has switched to a precision training model, hence the lesser expense
Digital Good Neighbor unit: location	72	76	Expanded social inclusion efforts

Integrated Reporting

In order to give stakeholders a clearer picture of how Chunghwa Telecom creates value, we have incorporated a concept of “Integrated Reporting” into this year’s CSR report and disclosed our commitment and management through the Integrated Reporting Framework.

Capital and Value Creation

We have identified six categories of capital that would affect Chunghwa Telecom’s value-creating abilities. We have also explained the types of resources/relationships we need to commit in order to continually create values, as well as outcome of our efforts.

Capital Input	Impact on Value Creation	Resource Allocated to Sustain Value Creation
 Financial Capital <ul style="list-style-type: none"> • Share capital • Capital expenditure 	<ul style="list-style-type: none"> • Assures eligibility to licensing (e.g. 4G bands) • Provides sufficient financial resources to support value creation efforts • Effective execution of commercial activities • Generates and allocates other forms of capital. • Including distribution of shareholders’ equity, investments, and capital expenditure 	<ul style="list-style-type: none"> • Contribution of tax revenues to the government • Support development of network infrastructures • Improve quality of telecommunication services
 Human Capital <ul style="list-style-type: none"> • Salary and welfare expenses • Training expenses 	<ul style="list-style-type: none"> • Employees’ knowledge and skills in the telecommunication field are key to corporate sustainability • Human capital represents one of our major operational driving forces 	<ul style="list-style-type: none"> • Introduce compensation and incentive schemes to attract and retain talents • Encourage high value-adding services and innovations • Talent training and development programs
 Intellectual Capital <ul style="list-style-type: none"> • R&D expense • Marketing expense 	<ul style="list-style-type: none"> • Licensing, laboratory and R&D expense; acquisition and development of industry technologies • Invest and maintain Chunghwa Telecom’s brand 	<ul style="list-style-type: none"> • Continually invest in R&D, construction and services; maintain service quality and customers’ satisfaction • Invest into the R&D of new technologies and involve in the setting of new protocols
 Production Capital <ul style="list-style-type: none"> • Infrastructure 	<ul style="list-style-type: none"> • Allocate financial to develop and maintain infrastructure facilities (e.g. data centers) • Operation of Internet Data Center (IDC); installation of wireless facilities and development of software and applications 	<ul style="list-style-type: none"> • Continually construct, maintain and operate network equipment • Exercise procurement control and acquire network equipment that are more cost/energy effective • Consolidate idle spaces; recycle and dispose obsolete equipment
 Social Capital <ul style="list-style-type: none"> • Amount of social investment 	<ul style="list-style-type: none"> • Ongoing communication with government/supervisory authorities helps ensure the legitimacy of the Company’s operations and competition • Positive feedbacks from consumers and the general public help build Chunghwa Telecom’s brand credibility, and minimize financial capital outlays 	<ul style="list-style-type: none"> • Communicate with stakeholders to understand their concerns and legitimacy of the Company’s operations • Commit effort into social engagement and social inclusion; exert influence through core activities to narrow the digital divide
 Natural Capital <ul style="list-style-type: none"> • Procurement of green energy • Cleaning expense • Green purchase • Investment in energy /carbon reduction measures 	<ul style="list-style-type: none"> • We need natural capital such as infrastructures, raw materials and energy sources to operate and allocate human capital • Use of energy-saving actions and solutions can effectively reduce consumption of natural capital 	<ul style="list-style-type: none"> • By procuring environmental friendly products, we are able to minimize consumption of natural resources and raise energy efficiency • Through the use of carbon management actions, we are able to manage energy consumption and apply renewable energy solutions to a greater extent

Financial Statements: <http://goo.gl/Vl3NS1>(p.124~265)

Economic

Earnings per share (EPS)	NT\$5.52, best in 4 years
Consolidated operating revenues	NT\$231.8 billion, a historical high
Information transparency	Rated A++ and ranked among the top 10 in information disclosure assessment for 10 consecutive years. Also ranked among the top 5% in TWSE's first corporate governance evaluation.
Dow Jones Sustainability Index	Member of DJSI - World and DJSI - Emerging Markets for the third time
Market share in 4G service	4.43 million customers, representing industry's highest market share at 38.2%

Output of Sustainability Performance



Society Employee

Employee salary and welfare	NT\$47,324 million
Percentage of female managers	25.16%
Average salary adjustment	Salary adjustment averaged 2.5% in 2015, the highest of which was 5.5%
Employee turnover rate	2.2%; down from the previous year by 2.1%
Average training hours per person	47 hrs
Total training expense	NT\$572,351 thousand
Corporate volunteer service hours	36,049 hrs
Occupational accident per thousand people	0.66 for males / 1.7 for females (3.09 nationwide)
Diversity	795 employees with disability (mandatory quota: 217); 45 employees of indigenous background

Society Customers and Community





















Care for disadvantaged telecom users	A total of 10,698 users were covered, with subsidies amounting to NT\$35,192,000
Availability of telecommunication service	The Company's 12Mbps broadband service achieved 95% coverage
Wi-Fi hotspots	55,000 public Wi-Fi hotspots
Consumer satisfaction	7.58 (10 point scale)
Satisfaction towards customer service hotline	4.6 (5 point scale)
No. of students receiving long-distance tuition aid	A total of 4,651 students had benefited from the service between December 2009 and January 2016
Voice-based personal assistance App for the visually impaired	10,676 downloads by the end of 2015
Social Investment	910,230,000
Youth Training Scheme	306 attendees at the end of 2015
Digital Good Neighbor location	There were 76 Digital Good Neighbor locations at the end of 2015

Environmental

Power usage	The Company used 1,421 million kWh of power in 2015; its power-saving efforts have saved a cumulative 2.83 trillion kWh of power
Purchase of green electricity	The Company purchased 2 million KWh of green electricity, which made it the nation's fifth largest purchaser
Amount of green purchase	NT\$1,525 million, representing 6.55% of total purchase
Revenues from green product	NT\$5,350 million
Carbon emission	834,745.37 t-CO ₂ e
Water usage	2,475 kiloliter
Green server	LEED Gold-rated data center
Waste volume	3,838 tons
Support for green transportation	The Company was the first to sponsor a Youbike station; it has invested a sum of NT\$1.85 million to date

Value Creation Factors and Future Prospects

To give stakeholders a better understanding of the competitive environment and pressure we face in regards to sustainability, we have assembled six sub-units within the CSR Committee in 2015 and entrusted them with the mission of identifying the key factors to value creation within Chunghwa Telecom. Their findings helped us clarify our current management approach and explain performance and future prospects of our value creation efforts in this report.

Chapter	Key Factors to Creating Value	How We Manage
 Responsible Governance	 Corporate governance organization and system	<ul style="list-style-type: none"> • Develop a comprehensive and professional governance framework/system to ensure compliance with laws and commercial ethics, and thereby create values • Use of CSR Committee to support board's sustainability management
 Supply Chain Management	 Supplier CSR training  Collaborate with suppliers on CSR initiatives	<ul style="list-style-type: none"> • Learn CSR progress of supply chain partners • Conduct second-party audits to verify the quality of CSR execution • Organize supplier conferences on an ongoing basis
 Lead the Development of a Smart City	 R&D and innovation ability	<ul style="list-style-type: none"> • Continue R&D efforts in innovative and visionary technologies • Expand construction of smart infrastructures • Observe, record, and integrate city cultures and characteristics
 Marketing Service	 Subsidies for the socially disadvantaged (low-income households and persons with disabilities)  Renewable energy-powered based stations at remote locations  Standardization and development of 5G technology	<ul style="list-style-type: none"> • Secure existing businesses while explore new businesses (e.g. cloud computing and big data) • Invest with precision; plan capital expenditures effectively for the purpose of maintaining technological and business competitiveness. • Develop and refine technologies such as LTE / 4G and aim to expand market share • Plan for investments in next-generation technologies (e.g. 5G) • Enhance customer service quality and privacy • Ensure legitimacy of marketing, advertising and promotional activities; maintain high information transparency
 Employee Care	 Issues concerning disruption of knowledge transfer  Occupational safety and challenges	<ul style="list-style-type: none"> • Invest into the development of skills that are needed to venture into new markets and new opportunities • Utilize the Company's diverse product and service range to establish image of professionalism and service • Build a happy business by constantly reviewing and improving the compensation and welfare systems
 Green Enterprise	 Power usage survey and management at IDCs  Associated future IDC power usage with the Company's renewable energy strategy	<ul style="list-style-type: none"> • Enforce environmental sustainability actions within the organization • Analyze and execute energy efficiency measures to reduce energy wastage • Develop green products and related technologies
 Social Harmony	 Youth Training Scheme  Digital Good Neighbor	<ul style="list-style-type: none"> • Promote "infrastructure constructions" • Provide "product or service donations" at the proper timing • Continue "research, development and innovation" to assist persons with disability, the socially disadvantaged, and people living in remote areas • Mobilize "corporate volunteers" to engage with local communities • Train the "young generation" to become pioneers of new digital opportunities

Each key factors will be fully explained in the eight chapters that follow, with details about our input and performance in 2015.

Future Prospects	Performances
<ul style="list-style-type: none"> • Develop a more robust CSR culture and risk management system; uphold integrity to stakeholders' expectations • Maintain political neutrality; prevent capital, personnel, facilities and other resources from being used for political purpose 	<ul style="list-style-type: none"> • Chunghwa Telecom has been listed as one of companies in the top 5% in the 2015 Corporate Governance Evaluation for 2 consecutive years. • Chunghwa Telecom has been selected as component stocks in DJSI--World Index and DJSI--Emerging Markets Index for 3 years in a row. 📖 P.33
<ul style="list-style-type: none"> • Explore synergy within the distribution network; collaborate with partners on new products and services • Lead supply chain partners to understanding the essence of CSR and guide their execution 	<p>The first ever telecommunication provider in Taiwan has persisted in implementing supplier management plan.</p> 📖 P.42
<ul style="list-style-type: none"> • Develop "featured, innovative, inclusive, and broad" smart lifestyle applications in line with urban development and management 	<p>Accomplish the demonstration cases of Smart City in 15 counties in Taiwan.</p> 📖 P.46~47
<ul style="list-style-type: none"> • Consolidate customer service resource; respond to and satisfy customers' needs in a timely and accurate manner • Connect with social networks and groups in response to emerging businesses; generate promotional effects through new media • Aim to become a service-driven ICT company • Execute a sustainable, forward-looking growth strategy • Focused resources (precision management); target on emerging businesses 	<ul style="list-style-type: none"> • Honored with numerous awards for innovation and marketing service at home and abroad. • Offer favorable subsidies to disadvantaged groups. 📖 P.18~19,110 <p>Operate 4G on 2,600 MHz spectrum bands using 3-carrier aggregation (3CA) technology, advancing CHT's 4G services.</p> 📖 P.4~5
<ul style="list-style-type: none"> • Develop a safe and healthy work environment; direct attention to employees' health and safety • Value employees' right of association; maintain open communication and pay attention to opinions and responses 	<p>The only telecommunication service provider in Taiwan that has established a labor union, placing great attention to labor-management communication.</p> 📖 P.72
<ul style="list-style-type: none"> • Review and revise environmental sustainability plans every 5 years • Launch action plans with themes such as energy conservation, carbon reduction, care for nature, and green/smart building 	<p>Research and develop environmentally-friendly green products and generate substantial energy-saving performances.</p> 📖 P.48,97
<ul style="list-style-type: none"> • Utilize the Company's ICT expertise to create values for the society and improve people's lifestyle quality • Devote effort to "narrowing the digital divide" and "creating digital opportunities" 	<p>Attend to the fundamental right to a means of communication for all people and create the value of social integration to further make all people enjoy the convenience and opportunity technology brings.</p> 📖 P.99,108~109

Risks, Opportunities and Mid/Long-term Strategies

The six CSR sub-units have also clarified the risks and opportunities associated with each of the key value creation factors, and proposed mid-term as well as long-term plans in response to current and future challenges.

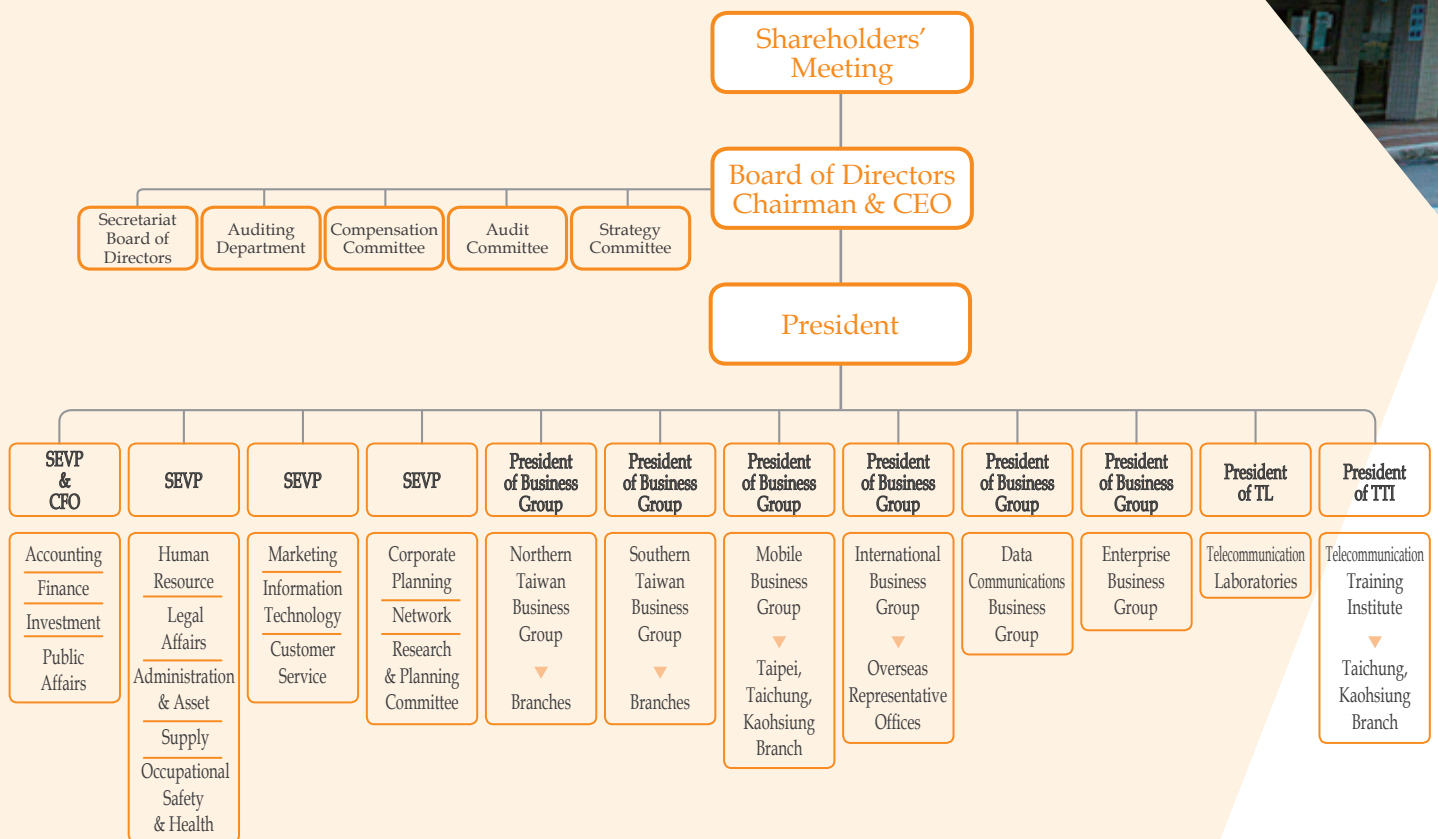
Key Factors to Creating Value	Risks	Opportunities
🔗 Standardization and development of 5G technology	<ul style="list-style-type: none"> 5G technology will bring bandwidth to everywhere and everything, and would require substantial costs to license radio bands and construct the needed infrastructures. This investment may yield poor return if the billing model is not adjusted properly 	<ul style="list-style-type: none"> Chunghwa Telecom already possesses the competitive advantage and is actively deploying resources to capture opportunities first-hand
🔗 Supplier CSR training	<ul style="list-style-type: none"> Due to rising CSR awareness, industry leaders have been assigned the responsibility to guide the entire supply chain towards fulfilling CSR. Failure to do so would compromise the leader's brand image and reputation 	<ul style="list-style-type: none"> The Company has the potential to lead or influence CSR development across the telecommunication supply chain Reduce suppliers' risk exposure to environmental or human right-related issues, thereby minimize possible incidents and disputes
🔗 Collaborate with suppliers on CSR initiatives	<ul style="list-style-type: none"> In addition to controlling and auditing suppliers' behaviors, the Company also needs to collaborate with suppliers on new CSR initiatives for broader and more profound effects. Failure to do so would compromise future opportunities or affect social relations 	<ul style="list-style-type: none"> By collaborating with suppliers on CSR initiatives, we are able to exchange creativity and establish good faith that would further strengthen our business relationships By engaging supply chain partners of different industries and specialties, we are able to raise our social image and brand value
🔗 Subsidies for the socially disadvantaged (low-income households and persons with disabilities)	<ul style="list-style-type: none"> Broadband subsidies for the socially disadvantaged (low-income households and persons with disabilities) would result in loss of revenues 	<ul style="list-style-type: none"> Long-term subsidy to the socially disadvantaged not only assures them of their basic right to communication, but also helps raise corporate image
🔗 Renewable energy-powered based stations at remote locations	<ul style="list-style-type: none"> Disclosing the location of base station may result in protests by local residents, and eventually force the Company to remove its infrastructure 	<ul style="list-style-type: none"> Reduce energy usage and minimize greenhouse gas emission Raise the Company's image as an energy-saving, carbon-reducing and environmental friendly business
🔗 Disruption of knowledge transfer	<ul style="list-style-type: none"> A vast number of employees are retiring at the same time, and would affect the transfer of knowledge 	<ul style="list-style-type: none"> Understand shortage of manpower within Chunghwa Telecom, and accelerate talents cultivation
🔗 Occupational safety and challenges	<ul style="list-style-type: none"> Occupational safety is an extensive topic. It can be difficult to identify, assess and control all factors in the work environment As employees age, their physical abilities deteriorate which puts them in risk of work accidents and diseases 	<ul style="list-style-type: none"> Technologies advance; health and safety officers are required to keep up with new materials and equipment used in the workplace Develop suitable health and safety practices for each business unit to eliminate work accidents while promote employees' health
🔗 Power usage survey and management at IDCs 🔗 Associated future IDC power usage with the Company's renewable energy strategy	<ul style="list-style-type: none"> Unstable power supply: renewable energy sources have yet to be proven stable over the long term External stakeholders have grown concerned towards Chunghwa Telecom's ability to operate major IDC facilities using renewable power sources 	<ul style="list-style-type: none"> Effective control of power consumption at IDC helps reduce energy costs and greenhouse gas emission Use of renewable energy sources in IDC applications helps promote a low-carbon city and improve the nation's power generation technologies
🔗 Youth Training Scheme	<ul style="list-style-type: none"> An increasing number of NGOs and NPOs have been encouraging college students to perform volunteer services within and outside the country. However, these activities are mostly targeted at accomplishing the mission of the respective organization, which doesn't fit for the purpose of fit Taiwan 	<ul style="list-style-type: none"> Arouse young people's interest to return home and care for their home land; inspire civic consciousness and encourage them to participate in the action through images Inspires the younger generation to develop their capacity and involve in public/social issues
🔗 Digital Good Neighbor	<ul style="list-style-type: none"> Social issues (e.g. declining industrial activities, aging population, grand parenting, and flipped education) can not be resolved simply by donating ICT resources, but require prolonged support 	<ul style="list-style-type: none"> Extend and enhance digital content applications through digital inclusion campaigns, which helps bring digital lifestyle to remote locations More opportunities to contact and explore distinctive communities, and enhance corporate image by providing the proper assistance

Possible Challenges	Mid/Long-term Plans
<ul style="list-style-type: none"> • Technical standards and band allocation of the 5G technology have yet to be defined; it is difficult to estimate product development timeline at this point 	<ul style="list-style-type: none"> • Engage with international organizations to grasp the direction of technological trends, while at the same time acquire the necessary bands and make network improvements to prepare for new businesses
<ul style="list-style-type: none"> • Suppliers vary in size, talent, and awareness; they can not be trained using the same approach • Some suppliers are engaged for one-time deals; the costs invested may not yield the expected results • Supplier CSR takes a long time to develop; a fixed amount of costs and expenses need to be budgeted on a yearly basis 	<ul style="list-style-type: none"> • Invite supply chain partners to participate in various courses organized at the Telecommunication Training Institute • Investigate and maintain records of suppliers that account for significant transaction values or are influential to the environment and society. Perform one-on-one CSR communication and training
<ul style="list-style-type: none"> • Without long-term relationship, there would be no mutually beneficial grounds to engage suppliers in sustainability initiatives, which reduces the Company's efforts to one-time events and hence contributes little to the shaping of corporate value • It takes long-term engagement, working relationship and trust to explore common grounds and find the right CSR initiatives that can be communicated and executed with suppliers 	<ul style="list-style-type: none"> • Invite concerned or willing supply chain partners to participate in the Company's new CSR initiatives or actions • Record and review performance on a yearly basis to find the best method of collaboration with suppliers
<ul style="list-style-type: none"> • Many persons with disability have been considered as high-income earners; providing subsidies to them may give rise to concern of fairness 	<ul style="list-style-type: none"> • Refine the existing subsidy plan to direct broadband privileges toward the socially disadvantaged
<ul style="list-style-type: none"> • Renewable energy-powered base stations are costly to construct; these investments may produce very little yield because of the low power generation efficiency • Infrastructures are more difficult to construct and maintain in remote areas 	<ul style="list-style-type: none"> • In the future, the Company will focus on raising power generation efficiency while paying attention to government policies; new infrastructures will be constructed on a yearly basis at carefully chosen locations
<ul style="list-style-type: none"> • The complexity of business activities and technologies involved makes data quite difficult to gather • Personnel expenses are already high, leaving little room for further recruitment 	<ul style="list-style-type: none"> • Conduct job role survey across all six business segments • Build up reserve talents to support the Company's development • Apply specialized management for talents in the new technology field
<ul style="list-style-type: none"> • Raising employees' safety awareness and implementing safety practices will be a challenging task in the Company's occupational health and safety management system • The Company will incorporate occupational health and safety management as part of its corporate culture 	<ul style="list-style-type: none"> • Apply "audit and penalty" as a short-term measure, and "inspection, awareness promotion and counseling" as a long-term solution • Develop health inspection and health promotion measures for people in the high risk group
<ul style="list-style-type: none"> • Renewable energy sources such as solar and wind power are still less efficient and costly • These facilities take up larger space and incur additional construction costs. It is difficult to find suitable locations in urban area 	<ul style="list-style-type: none"> • The Company will continue focusing on renewable power technologies while paying attention to government policies • Survey and analyze power requirement of IDCs; introduce renewable energy system at the right timing
<ul style="list-style-type: none"> • Safety and level of interaction/communication at service locations • Explore ways to differentiate our actions and enhance brand awareness 	<ul style="list-style-type: none"> • Use "Click Taiwan-Youth Training Institute" to inspire more youths • Introduce "Click Taiwan - General Education" to keep younger generations involved
<ul style="list-style-type: none"> • Outcomes of the campaign can not be replicated and quantified • The outcome takes several attempts to accumulate and can not be achieved immediately. The campaign requires persistence and support 	<ul style="list-style-type: none"> • Review and plan anew at various service locations • Conduct survey to determine actual requirements at various service locations; introduce courses and contents other than digital learning



G4-9

Responsible Governance





Members of the Board of Directors: <http://goo.gl/Vl3NS1> (p.16-19)

Education of the Board of Directors: <http://goo.gl/Vl3NS1> (p.65-66)

Chunghwa Telecom Board of Directors is the highest governance body, with the Chairman also acting as the Chief Executive Officer. The Board of Directors is responsible for appointing and nominating high level managers, as well as formulating company corporate social responsibility, corporate citizenship, and sustainable development strategies. The Board has 13 directors that include 5 independent directors. To date, there are 4 female directors amongst 13 directors. Director's period of office is three years (June 25, 2013~June 24, 2016), to ensure the governance's independence and stakeholders' perspectives, 5 independent directors are included while an Auditing Committee is designated to replace the supervisor.

Chunghwa Telecom's independent director and external director provide expertise based on their respective area of practice and professionalism, to assist the Board of Directors in making decisions as to benefit the company and the shareholders. To prevent financial losses from third party litigation for directors and supervisors, we have purchased indemnity insurance for Directors and Supervisors.



Audit Committee

Consisting of 5 independent directors, their main duty is the selection or dismissal of CPA, determine CPA's compensation, review and discuss quarterly/ semiyearly/ annual financial report, review internal control system and revise as well as review the appropriateness of internal control statement.



Compensation Committee

Consisting of 3 independent directors, responsible for evaluation of performance of directors and managers, and determine the appropriate wage compensation policies, systems, standards and structures.



Strategy Committee

Consisting of 5-7 board members, who are responsible for budgeting, increase/decrease of capital, increase/decrease of reinvestment and withdrawal of investment, acquire or surrender licenses, restructuring, mid-long term development plan and other important issues. A review meeting is convened and submits resolution to the Board of Directors for final approval.

Avoidance of the Conflict of Interest

Chunghwa Telecom's director is responsible for the election of Chief Executive Officer and Directors, in that, a nomination system is adopted based on relevant provisions and articles of Securities & Exchange Act, which candidates are nominated by directors and shareholders with qualified shareholding, and director's nomination and review is conducted accordingly. We have adopted the following control measures to prevent conflict of interests.

- Directors and all signed Consent to Act as Director, announced that they follow the Section 23 of Company Act.
- All directors signed Statement to show that they clearly knew the content of Section 206 of Company Act.
- Section 17 of Rules of procedure of board of director clearly defines the things that directors should recuse himself with.

Thanks to the directors' high ethical standards and self-discipline, in the operation of comprehensive mechanism, no conflict of interest has occurred since the Board of Directors is established. The Board has resolved to approve total of 50 articles of "Code of Corporate Governance for Chunghwa Telecom", while all departments are required to implement the Code of Conduct, the secretariat also evaluates on a regular basis.

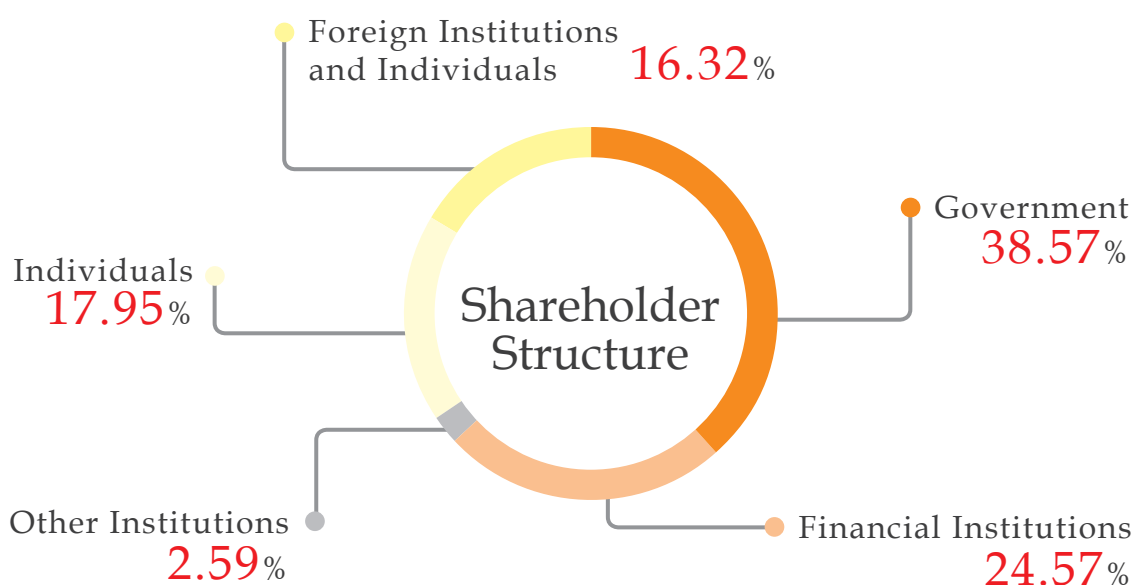
Code of Corporate Governance: <http://www.cht.com.tw/aboutus/cog.html> 

Encourage Shareholders to Participate in Corporate Governance

For the past two years, Chunghwa Telecom has conducted changes and revisions on a number of systems and measures based on a corporate governance mindset, including e-voting, voting by poll and disclosing the meeting resolutions on the Company's website; with diversified voting channels, shareholders are able to exercise their rights in an efficient manner and corporate governance effectiveness is then enhanced.



Shareholder Structure of Chunghwa Telecom



Date of data: July 19, 2015 (the most recent book closure date)



Support to Global CSR Initiatives and Guidelines ^{G4-15}

We willingly comply with principles of The UN Global Compact in terms of human rights, we respect and uphold all basic rights recognized in the world, and refrain from any disregard or neglect of such rights. In terms of employment practices, we protect workers' freedom of association, while recognize and support their rights to negotiate with the employer. We are dedicated to eliminating all forms of illegal labor and discrimination.

Chunghwa Telecom's Telecommunication Training Institute organizes human rights-related courses on a yearly basis and whenever there is a change in labor regulations and policies. Four courses totaling 18 hours were organized in 2015; 129 employees had participated in these courses.

*Chunghwa Telecom Human Rights Policy: <http://goo.gl/ynRkOm> 

Chunghwa Telecom supports the following international human rights conventions:

- UN Declaration of Human Rights, ILO Convention on the elimination of all forms of discrimination and prohibition against forced labor and child labor
- UN International Covenant on Civil and Political Rights and International Covenant on Economic, Social, and Cultural Rights; we are dedicated to promoting human rights awareness and assuring respect and fair treatment to all stakeholders.
- UN Guiding Principles on Business and Human Rights, for which a human rights due diligence investigation is being conducted accordingly.

Compliance with International Telecommunication Rules and Human Rights Obligations

Chunghwa Telecom is a participant of World Conference on International Telecommunications, a panel that outlines the "International Radio Regulation" and lays down the common principles for the freedom of communication. The conference has been introducing new rules such as: transparency of global roaming charges and competition, support of telecommunication in developing nations, telecommunication services for persons with disabilities, and people's freedom of speech over telecommunication network.

We have made our commitment to comply with the above rules and will enforce the advocated principles through real action.

Tax Policy: http://www.cht.com.tw/en/csr/upload/content/Tax_Policy.pdf 

CSR Management

We launched the implementation of sustainability management mechanism since 2006, and established “CSR Committee” to stipulate sustainable policies, using top-down approach to achieve our sustainable actions.

Chunghwa Telecom’s sustainable development strategy is utilizing corporation’s unique resources and competence to implement sustainable actions from six groups, focus on such as “Create society coexistence, Digital inclusion, Green ICT product and service, Green brand management and Energy conservation and carbon reduction.”



Chunghwa Telecom’s CSR Vision

Corporate Mission

Innovation
Excellence
Gratefulness
Reliability

Social Contribution

Shorten digital difference
Implement environmental protection
Caring for the vulnerable

Team Culture

Trust
Responsibility
Share
Growth

Customer Relations

Care initiative
Penetration

Sustainable Operation Target

1. Facilitate Positive Business Evolution through Action, Broadband, Value-added and ICT Integration Service
2. Develop Emerging Service Opportunity Such as Cloud and IoT (Internet of Things), Work with Partners to Generate Best Strategies
3. Continue to Strengthen the Application of Internet Facility and Information Technology to Support Business Transformation and Growth
4. Strengthen Resource Utilization and Management Mechanism to Improve the Efficiency of Resources
5. Develop Overseas ICT Market to Explore New Opportunities
6. Sharpen the Unique Advantage of the Subsidiaries to Enhance the Company’s Competitiveness
7. Infuse Telecom Expertise Into Corporate Social Responsibility Issues to Implement the Commitment of Corporate Citizenship



SMART-I Management Mechanism

The distinctive Strategy-Management-Action-Response-Target (SMART) CSR management mechanism of Chunghwa Telecom shows its response to GRI G4 version in the systematization in management and the compilation and disclosure of facts in corporate social responsibility. New Indicators were introduced to the 2014 version, which substantively presented in the chapters and sections corresponding to relevant GRI index. This is our commitment to international standards.



At the end of every year, we activate a review mechanism through feedback, external surveys, and internal evaluations, and re-evaluate short, mid, and long term targets while determining the improvement and supplement of relevant strategies, managements, measures, responses, and target; in addition, we also incorporate the recommendations and responses of the external stakeholders. We believe, the strategic management of CSR will facilitate the sustainable operation of promoting CSR.

World's Top 9 and Taiwan's Only Carrier to be Selected for Two DJSI Indices

In 2015, Chunghwa Telecom once again became the only Taiwanese telecommunication carrier to be select as a composition of both DJSI (Dow Jones Sustainability Index) - World and DJSI - Emerging Markets. It ranks among BT (UK), PT (Portugal), and SK (South Korea) as world's 9 most sustainable carriers.

A total of 12 Taiwanese companies were selected for DJSI-Emerging Markets and 8 were selected for DJSI-World in 2015. Chunghwa Telecom's attention to economic, environmental and social aspects and its ability to deliver business performance have won investors' recognition from all over the world.

MEMBER OF
Dow Jones
Sustainability Indices
 In Collaboration with RobecoSAM 

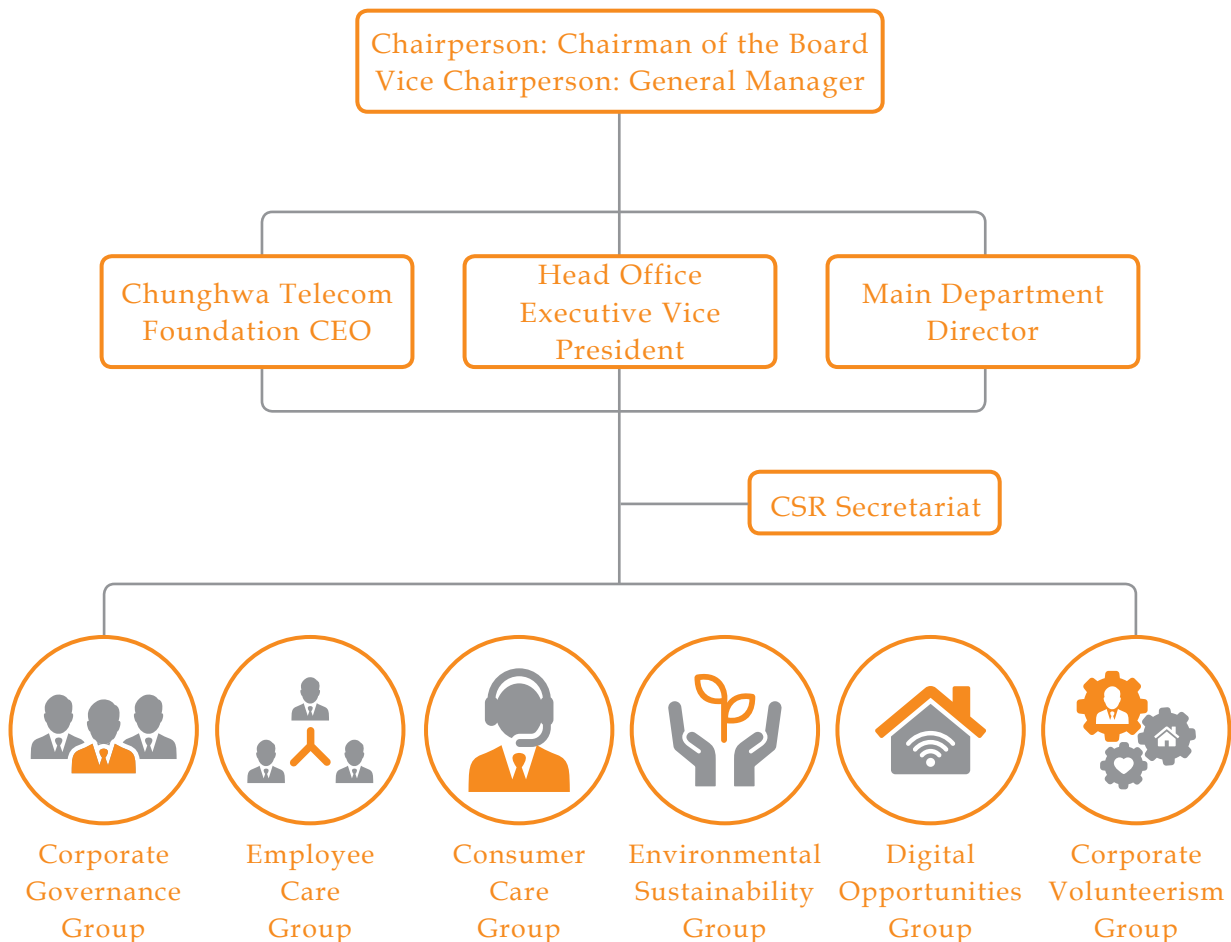
About Dow Jones Sustainability Index: <http://www.sustainability-indices.com/>

CSR Committee Management Mechanism

We established "CSR Committee" in 2007, for expanding our core functions of sustainable benefits, implementing CSR vision as a stating, and devoting to the industry and society for the sustainable development.

Representative	Chairman of the Board of Directors Tsai Lih-Shyng General Manager Shih Mu-Piao
Mechanism	Policy approved by the Board of Directors; CSR Committee is responsible for coordinating and supervising the progress, and periodic reports of the important issues and the results of communicating to stakeholders to the Board; the Board is responsible for the annual final performance assessment .
Execution	<ul style="list-style-type: none"> • CSR Secretariat is responsible for planning and actions. • Public Affair is responsible for budgeting, educational training, and management of follow-ups and awards measures. • Branches and affiliates are responsible for promotion and implementation of the related projects.
Meeting Frequency	Quarterly
Report Approval	Submit to president for final approval after reviewed by the managements (Vice President).


CSR Committee Organizational Chart





Internalization of Corporate Social Responsibility

To ensure that all employees understand the spirit of CSR, we have established a diversity of channels for communications and education of related topics. This is integrated with a performance evaluation that helps to translate the concept of CSR into action and is practiced in routine operation.

Channel	Item	Content
 Communication within Senior Management	Senior Management Meeting	Key CSR issues will be discussed in the senior management meeting every year.
 Employee Forum	Chunghwa Telecom Online Forum	We have an intra-site for employees to share opinion and give suggestion to the company.
 Training	Environmental Training	We provide at least 4 hours training annually and by hosting ecological tour.
	CSR Training	Every year we will provide basic CSR training around departments, and invite consultant for further courses.
	New Employee Training	<ul style="list-style-type: none"> We have 3 days pre-service training, including personnel system, working guidelines, labor relation and etc. We will send employees to attend specific labor right training courses outside.
	e-Learning	We put relevant courses and information on our e-Learning system to let employees learn and download freely.
 Performance Assessment	Administration Management Assessment	We set energy reduction targets and link with performance bonuses.
	Online Test on CoC	All our employees are required to take the "Chunghwa Telecom Code of Business Conduct and CoC Test" each year
	Reporting Mechanism	Once employee is found to violate corporate regulations, it will affect his/her performance bonuses.
 Others	CSR Report Workshop	Internal training on the new trend of preparing reports at any time.
	Dedicated CSR Multimedia Webpage	To fit stakeholders' communication habits nowadays, we set a dedicated CSR multimedia webpage to be one of our communication ways with our stakeholders.



G4-2,G4-14

Proper Control of Operation Risk

Chunghwa Telecom places great emphasis on business risk management as a means of ensuring stability against impacts from the external environment and internal operations. It has “Risk Management Policy” in place to guide employees’ actions. The board of directors outlines the Company’s risk management policies, framework and culture. Secretariat assists the board in the implementation of risk management practices throughout the Company.

The Audit Division audits risk practices and reports findings back to the board. On February 1, 2016, the Company established its Risk Management Committee consisting of the President as the convener and senior managers as members of the committee. The committee supervises risk management throughout the organization, and is responsible for prioritizing the identified risks, formulating response strategies to key risk issues, and reporting to the board of directors at times deemed necessary.

Chunghwa Telecom’s risk management practices involve ongoing analysis of operational goals, accuracy of financial reports, and impacts of high-risk events. These findings are constantly reviewed to ensure that all business risks can be identified and controlled, and thereby maintain business operations while protecting stakeholders’ interests. We also have an enterprise risk management (ERM) system in place to control risks associated with our businesses. Risk managers have been assigned in all departments to monitor risk targets and risk events, and report findings on a monthly basis. Risk managers are also involved in the review and adjustment of risk measures, assessment of risk impacts, and execution of systematic records, management, and follow-up tracking.

We use a “risk map” for assessing regulatory risks, network maintenance risks, market competition risks, and financial risks. For every major concern identified in our operations, we conduct intensive sensitivity analysis and stress-testing to decide whether we should take steps to accept, transfer, mitigate or avoid the associated risks, thereby minimize our possible losses. Risk management expenditure comprises of three main categories: insurance premium, risk control costs, and risk administration expenses; details of which are expected to be disclosed in 2017.

The Scope of Chunghwa Telecom Risk Management Regulations



Action Program in Response to Climate Change

In order to manage risks caused by climate change, we completed the “Chunghwa Telecom Environmental Protection Energy Conservation & Carbon Reduction Strategic Action,” and formulated priorities, improvement of disaster resilience; ensure clear communications, and the safety of overall communications network.

Reinforcement of Flood Resistance Plan at the Data Center

- Installation of water gate and flood prevention devices.
- Introduction of underwater pumps in basement levels for rapid displacement of water trapped in the basement.
- The ventilation opening of underground oil tank moved further up above ground level and introduction of valve to the inlet of oil refuel to prevent flooding of the underground oil tank.
- Establish relevant prevention measures in vent line, entry of underground tunnel, entry of high-tension cable, lanes, etc.

Improvement Plans for Telecom Equipment

- Move basement equipment: Move diesel generators and AC distribution equipment to the 1st floor and install DC equipment to above 2nd floor.
- Prepare mobile generators and pumps.
- Enhance generator configurations in remote equipment room and increase oil storage tank capacity.
- Amplify batter capacity: When natural disaster struck and caused power outage, backup battery can be maintained up to 72 hours (3 hours in normal facility) to support the remote areas, when necessary, SMR capacity can be enlarged.



Go All Out: Emergency Repair after Typhoon Soudelor

On August 8, 2015, Typhoon Soudelor brought heavy rain and wind to Taiwan, causing massive disaster especially in remote, mountainous locations such as Wulai, Sanxia, and Yilan. Wulai, in particular, suffered a total power failure and severance of 2 fiber cables owned by Chunghwa Telecom. This damage disabled all communication and isolated Wulai from the outside world.

Chunghwa Telecom mobilized 4,752 employees into an emergency repair that took place day and night at the risk of land slide. Their efforts were motivated by one simple purpose: to restore communication as soon as possible so that residents can begin rebuilding their homes.

The Wulai Repair Record

August 8	August 9	August 10
<p>Our efforts</p> <p>Route#1: By car and on foot, the rescuers carried communication equipment into Wulai and supported communication of rescue command centers along the way.</p> <p>Route#2: Rescuers were transported using helicopters to high mountain grounds, where satellite base stations were established to provide communication for more densely populated areas.</p>	<ul style="list-style-type: none"> • Communication equipment, power generators and fuel were carried on foot into Zhongzhi Village, Wulai, to establish the first means of communication. • Rode helicopters to high grounds in Wulai Restored communication on Xiluo side for densely populated areas such as Wulai old town. 	<ul style="list-style-type: none"> • Rode helicopters to restore communication at even more remote locations in Wulai. Rescuers were equipped with emergency equipment to maintain communication between the location of disaster and the rescue command center. • Rescuers and residents were given mobile phones to assure communication and to aid in their reconstruction efforts.



Pay Attention to Digital Convergence Development

Chunghwa Telecom's business operations are closely connected to changes in government policies and regulations. In this respect, we maintain constant communication with government agencies and authorities to keep ourselves informed of the direction of the latest policies and regulations. Amongst all upcoming changes, the one that concerns the competitiveness of the ICT industry the most would be the "Digital Convergence Plan."

The "Digital Convergence Plan" was first approved by the Executive Yuan in 2010, and was scheduled to undergo a two-stage legislative process. National Communication Commission (NCC) passed its a "comprehensive draft legislative framework on converging digital telecommunication transmissions" on October 14, 2015 that propose five pieces of legislation – the Telecommunication Business Act, Regulations Governing the Service of Cable Multi-Channel Platform, the Radio and Television Enterprises and Channel Enterprises Administration Act, Regulations Governing Telecommunication Infrastructures and Resources, and the Electronic Telecommunication Act – to constitute a legal framework for converging digital telecommunication transmissions. Such proposal had already passed Executive Yuan's review in May 2016, and were submitted for ratification at the Legislative Yuan.

However, since the new administration was inaugurated, these draft regulations were withdrawn by the Executive Yuan along with other proposals that had yet to progress into Legislative Yuan's review process. We will continue paying attention to new changes in regulation, and contribute its opinions where appropriate.



Involvement in Next-generation Telecom Technology

“As the leader of mobile communication service in Taiwan, Chunghwa Telecom has been active in the development of 5G technology and is currently a member of NGMN. Our status as an NGMN member provides us with knowledge to the development of 5G standards around the world, which we hope to make use of in order to introduce more advanced mobile communication services to local consumers. It is also our intention to engage the local telecommunication industry with the rest of the world in the early stages of 5G technology, so that we may play a vital part in the upcoming future.”

— — Lih-Shyng Tsai, Chairman of Chunghwa Telecom

In an attempt to gain an early insight into next-generation telecommunication technologies, Chunghwa Telecom has not only committed significant resources into R&D and actively involved itself in setting the new standards (under 3GPP), but also explored means to strengthen connections with local and foreign industry participants. In 2015, Chunghwa Telecom joined Taiwan Association of Information and Communication Standards (TAICS) and Next Generation Mobile Networks Alliance (NGMN) ; both of which are significant to the development of 5G technology.

Chunghwa Telecom is the only Taiwanese carrier to join NGMN, which now has 28 members from around the world. Chunghwa Telecom has one representative on the NGMN board to bridge Taiwan’s 5G development with the rest of the world.

In December 2015, Chunghwa Telecom joined the Ministry of Economic Affairs (MOEA) to host a NGMN Conference for the very first time in Taiwan, during which participants were gathered to discuss and explore 5G requirements. Later in February 2016, Chunghwa Telecom participated in NGMN’s 2016 Mobile World Congress held in Spain to discuss work plan and short-term goals. This level of engagement has helped raised influence and visibility of Taiwan’s telecommunication industry in the world.

*NGMN: <https://www.ngmn.org/>

*TAICS: <http://www.taics.org.tw/>



Intensive Competition of the 4G Market

The introduction of 4G technology has enabled carriers to exceed existing bandwidth and speed limitations and deliver faster Internet services. This, in turn, gave rise to broader applications and presented both risks and opportunities to Chunghwa Telecom.

Chunghwa Telecom had accumulated 4.43 million 4G customers by the end of 2015. In an attempt to keep up with the rapidly changing and increasingly competitive environment, the Company has committed significant resources into innovative research and development (totaling NT\$3.6 billion in 2015; representing 1.6% of overall revenues) to improve customers’ mobile broadband experience and digital lifestyle by continually exploiting bandwidths of the 4G technology.

Risks

There are five carriers offering 4G services in Taiwan, making it a highly competitive business. Competition in 4G mobile will only intensify and pose a threat to Chunghwa Telecom’s operations in the future.

Opportunities

Smart city and Internet of things (e.g. Internet of vehicles, remote education, hospital monitoring, smart home, smart energy, etc.) are two prominent trends. Combined with big data applications, they open up new products and services for Chunghwa Telecom.

Target

Introduce the 2600MHz band and increase customer base to 6.4 million. Explore innovative and value-adding applications to enhance mobile Internet usage.



Highest Moral Standard

G4-56~G4-58

To establish a corporate culture of ethical management, we have established the “Code of Ethics of Chunghwa Telecom Co., Ltd.”, “Ethical Corporate Management Best Practice Principle”, and “Procedures for Ethical Management and Guidelines for Conduct”. These are formulated as the basic guideline for employees’ ethical standard while engaging commercial activities so as to have all employees perform business activities at the highest moral standard.

In addition to adding the training program of new employee, all employees are required to login to the web to review and take the test every year, we also have a reporting hotline to encourage employees to voice their opinions in a safe and confidential manner. Other than those who were not available during the testing period, all other employees have participated in the test in 2015.

Corruption Prevention

Chunghwa Telecom has “Employee Appraisal Guidelines” and “Employee Reward/Disciplinary Standards” in place to evaluate employees’ performance. Rewards and disciplines are issued according to these rules whenever employees exhibit conducts that deserve them.

Information such as grievance hotline has been made available at Chunghwa Telecom’s intranet/employee portal. The Company accepted and closed 50 cases of complaint in 2015; 2 of which were found to have violated the confidentiality policy, while 8 were associated with violation against the code of conduct. All complaints were investigated and handled according to Chunghwa Telecom’s internal policies and principles, and taught as case studies to strengthen employees’ respect towards rules, discipline, corporate image, and shareholders’ interests.

*Chunghwa Telecom internal policy: <http://www.cht.com.tw/aboutus/companyrules.html>

Internal Audit System

We have an internal audit unit that reports directly to the board of directors. The audit unit conducts internal audits strictly in accordance with policies in the utmost objectivity. It assists the board of directors and managers by constantly reviewing the effectiveness of internal control systems and operating efficiency.

*Organization and functioning of Chunghwa Telecom’s internal audit unit: <http://goo.gl/46A4jy>

Transparent Disclosure

Chunghwa Telecom adopts a corporate governance practice that emphasizes on integrity, accountability, and trustworthiness. We are committed to reducing information asymmetry between the management and external stakeholders, and utilize a variety of means such as corporate website, Market Observation Post System, annual report, CSR report, press conference and investor seminar to facilitate transparent communication with stakeholders. Furthermore, measures have been taken to ensure the timeliness, quality, balance, and credibility of information disclosed.

Since information disclosure assessment was first launched by Securities & Futures Institute in 2004, Chunghwa Telecom has been rated A++ and ranked among the top 10 in every year. Also in 2015, the Company ranked among the top 5% in TWSE’s first corporate governance evaluation. These two achievements are a testament to the efforts we have devoted in information disclosure!

Strengthen Business Management

To improve the quality of business marketing and consumers’ trust, we have formulated the “Business Marketing Standards” to ensure the execution of business in line with the requirement of competent authority, while including compliance status into the evaluation of higher management’s performance.

Owing to the control measures in place, the Company received only one penalty totaling NT\$800,000 due to violation against the Fair Trade Act in 2015. Background and subsequent improvements relating to the violation are explained below:

1. The business division posted an advertisement featuring a “comparison of TV subscription charges using 100M+ broadband.” Content of this advertisement was reported for suspected violation against the Fair Trade Act, which the Fair Trade Commission later investigated and concluded that the advertisement did indeed misrepresent competitors’ Internet and TV services, to the extent capable of producing false impressions.
2. An order of correction was issued by the Fair Trade Commission, which Chunghwa Telecom took seriously by ceasing all exposure of the advertisement immediately, and assigning relevant units to review all advertisement contents while educate employees on the Fair Trade Act and proper business/marketing practices.



Supply Chain Management



Strategy

Exert influence to promote suppliers to support Chunghwa Telecom's corporate social responsibilities



Management

- Instituted "Code of Corporate Social Responsibility for Suppliers of Chunghwa Telecom Co., Ltd."
- Instituted "Chunghwa Telecom Co., Ltd. Procurement Grievance Procedures"



Action

- Organize "Supplier CSR Interchange Meeting" annually
- Conduct "Supplier CSR Survey"
- Random on-site audits and inspections
- The Company engages 3rd-party institutions to audit 10 major suppliers annually



Response

2015 Chunghwa Telecom Supplier CSR Interchange Meeting



Target

Engage supply chain partners in actions that promote a sustainable business environment.



Indicator

CHT Audited **10** major suppliers

CHT Performed **218** audits on **77** civil engineering/cable contractors





We value our relationship with suppliers for offering quality products and services to consumers. Chunghwa Telecom's suppliers can be divided into three categories: property, labour and engineering. We make enormous purchases from an extensive number of suppliers, from networking equipment, data equipment, cables, marketing design, to waste disposal services.

This means that we possess great influence to convince suppliers into supporting our social responsibilities. Chunghwa Telecom utilizes four approaches, namely: contractual terms, questionnaire surveys, Supplier CSR Interchange Meeting, and on-site audits, to raise suppliers' awareness and understanding towards CSR, as well as the commitments we have made in supply chain management. For suppliers that have just begun to familiarize with the CSR concept, we choose to encourage their participation while at the same time provide them with the proper education and assistance; over time, we hope to engage all suppliers in a win-win relationship.

"Code of Corporate Social Responsibility for Suppliers of Chunghwa Telecom Co., Ltd." clearly outlines the Company's expectations in terms of "business, ethics, labor, environment, safety and health." The guidelines apply to all suppliers that provide products or services to Chunghwa Telecom or its subsidiaries or joint ventures, and extends to other participants of the supply chain that the supplier is directly or indirectly related to. We hope that suppliers may commit to our values and take more proactive steps toward maintaining a sustainable business relationship.

*Online supplier management platform: <https://scm.cht.com.tw/outboard/>

Overview of Supplier CSR Management in 2015

Supplier CSR investigation

- 98% of suppliers have not been fined or given administrative penalties due to violation
- 37% of suppliers have adopted green procurement practices
- 14% of suppliers publicly disclosed CSR information
- 8% of suppliers meet with employees' representative at least once a year
- 7% of suppliers have executed greenhouse gas survey

CSR audit

10 major suppliers were chosen to undergo "CSR audits." These audits were carried out in the form of "background analysis" and "on-site inspection" to ensure the most comprehensive supply chain management.

Auditing of civil engineering/cable contractors

218 audits were conducted on 77 contractors. At the end of 2015, 52 suppliers were found to have committed violations and had a total of 92 violation points on record. They were fined for a sum of NT\$1,470,000.

Safety and health on-site inspections

Northern Taiwan Business Group, Southern Taiwan Business Group and Mobile Business Group all have health and safety officers assigned to inspect suppliers on-site at least 3 times a week. A total of 6,937 inspections were conducted on 683 suppliers in 2015. Any defects discovered were notified to the relevant departments and followed up for improvements.

2015 Chunghwa Telecom Supplier CSR Interchange Meeting

Chunghwa Telecom continued to organize "Supplier CSR interchange Meeting" in 2015, during which President Mu-Piao Shih played host to 79 representatives from 48 suppliers.

For this year's conference, the Company invited Production Equipment Procurement Division Director Handy Ko from TSMC (another Taiwanese company selected for DJSI - World) and Director of Sustainable Department Stephen Pao from "SGS-Taiwan" to share their experience and practices in supply chain management.

During the conference, the Company openly commended 5 "Suppliers with Best CSR Performance" in an attempt to inspire good CSR conduct that would contribute to the sustainability of the entire supply chain.

At the end of the conference, Vice President Ming-Kang Cheng of Chunghwa Telecom's Supply Division engaged guests in talks of the Company's supplier CSR practices, which inspired new ideas and knowledge about CSR practices in other industries.

Industry-leading Supply Chain CSR Management

2008

Published "Suppliers' environment and human right guidelines" which asked suppliers to follow labor and environment regulations.

2010

Invited critical suppliers to reply "Basic Status Survey on CSR for suppliers" and held first "CSR Supplier Social Event" to learn the CSR condition of suppliers.

2009

Formulated "Basic Status Survey on CSR for suppliers" and formally started supply chain CSR management under CSR committee's approval.

2011

- Instituted the "Code of Corporate Social Responsibility for Suppliers of Chunghwa Telecom Co., Ltd."
- Began to regular hold "CSR Supplier Social Event Supplier CSR Interchange Meeting" annually and publish the analysis result of suppliers' CSR condition.



Mutual Benefit with Business Partners

Chunghwa Telecom share our own resources with suppliers to help them develop R&D capabilities and future technologies. We also devote ourselves in the creation of a friendly, innovative environment.

We engage suppliers in R&D projects and reward their contributions, and make arrangements to transfer acquired technology licenses in a fair manner. In terms of hardware, we continue to support development of telecom facilities and testing environment; in terms of software, we utilize open platforms to share our benefits with suppliers.

Rewarding top-performing suppliers

To reward top-performing suppliers, Chunghwa Telecom conducted a trial in southern Taiwan, offering qualified suppliers the privilege of "tender bond waiver when submitting tenders, and reduction of performance bond to 5% the value of contract won." This was one of the Company's attempts to exert our influence as an industry leader and bring more attention to corporate social responsibilities.

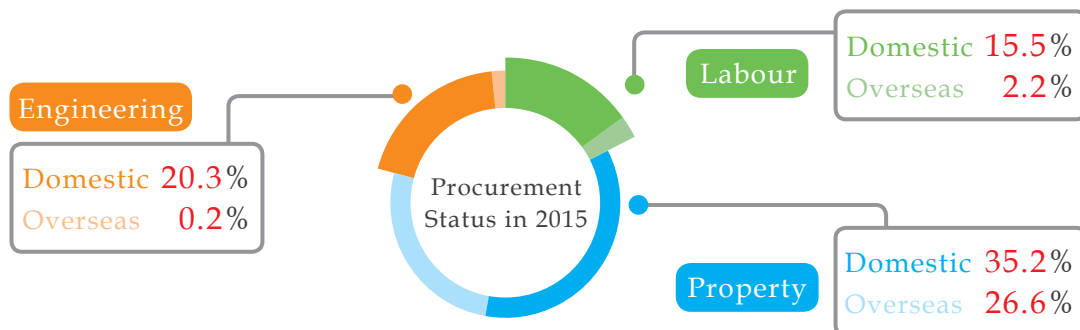
Training of professional skills

As we hope to maintain a mutually beneficial relationship with supply chain partners, our Telecommunication Training Institute has been providing suppliers with relevant training and certification courses to satisfy their requirements. Some of the popular courses include: cabling contractor certification, telecom line construction quality assurance certification, and fiber optic contractor training. In 2015, the institute organized 49 classes and trained 1,151 workers; 616 of whom had obtained certification.

The Firefly Program

In an attempt to support the government's industrial development policies, Chunghwa Telecom has partnered with SME Credit Guarantee Fund for the launch of "Firefly Credit Guarantee Program." Any top-performing suppliers recommended by Chunghwa Telecom are eligible to apply for credit guarantee under this program. Our involvement has assisted small and medium sized suppliers to obtain the funding they need, and encouraged them to devote efforts into innovation and R&D that would further enhance their competitiveness.

By the end of 2015, the Company had recommended 20 suppliers for the program, of which 17 were able to obtain funding totaling NT\$278 million.



Note: Overseas suppliers include foreign corporations, branch offices in Taiwan and agents.

2012

Require suppliers with purchase amounts of more than NT\$5 million to fill in the "Supply CSR Status Questionnaire".

2013

- Be the first telecom service provider to implement "Supply chain CSR audit and assistance".
- Stipulated "Chunghwa Telecom's Operating Guidelines for Qualifying Material Suppliers" to manage the implementation of suppliers' ethical business practice.

2014

Commission SGS, a third-party inspection institution, to launch the "suppliers CSR second party audit" on 10 key suppliers.

2015

- Continually engaged SGS Taiwan, a third-party inspection institution, to conduct "supplier audits" on 10 key suppliers, and thereby promote corporate social responsibilities within Taiwan's telecommunication service industry.
- Established "Chunghwa Telecom Co., Ltd. Procurement Grievance Procedures" to give suppliers the means to raise complaints regarding Chunghwa Telecom's purchasing activities, and hence create an open, transparent purchasing environment.



Lead the Development of a Smart City

Strategy

Continue the investment in R&D, the introduction of advanced technologies and the joint ventures with the government and academic circle.

Management

Establish the quality improvement task force, quality assurance center, and business process task force for introducing ISO R&D quality system for integration with the development of competence, project management and system operation.

Action

Continue to present innovative products and create a smart city, including ITS smart transportation and smart home.

Response

Please refer to page 52-53 "Review and Prospects"

Target

Short-term Continue to pool momentum for research and development and launch new products for the creation of a smart city.
Long-term 2015~2018 earn 600,000 paid accounts for 4G smart city service, assist governments to create smart city.

Indicator

CHT 3.6 billion in R&D investment
CHT 1,488 talent in R&D
CHT 1,417 patents



Sustainable Products and Services

Changes in the global environment and climate have given rise to the idea of low-carbon economy and green consumption. Sustainable products and services will gradually become the mainstream in consumers' purchases, which we believe will be made possible once smart city and related applications become available.

Business opportunity*

- 1 million paying users in 4G smart city; potential to contribute NT\$70 billion of GDP
- NT\$40 billion of business value to be created from 4G access
- Smart city has the potential to create NT\$30 billion in business opportunities, and increase the value of 4G services to NT\$1.56 trillion by 2017

Advantages of Chunghwa Telecom

- Complete network infrastructure and the ability to integrate hardware, software, and technologies such as 4G and cloud computing
- Nationwide operations that enable the Company to develop "distinctive and innovative" smart city services

Featured projects in 2015

- We collaborated with the Industrial Development Bureau and local government bodies in the launch of 4G smart city project
- We spent NT\$312 million to develop three custom-tailored smart city applications for Taipei City: "accessibility service," "culture/creativity/tourism service," and "smart shopping service." The ultimate goal is to build Taipei into a friendly, cultured smart city favored by tourists

Note: Estimated based on statistics of the smart city project published by the MOEA.

4G Leads Smart City

4G Smart City has been supported by 15 counties and cities spreading across Keelung City, Taipei City, New Taipei City, Taoyuan City, Hsinchu County and City, Miaoli County, Taichung City, Chiayi County and City, Kaohsiung City, Taitung County, Yilan County, Penghu County, and Kinmen County, and also 2 specific areas, including Taiwan Taoyuan International Airport and Taoyuan Metro.

Intelligent Video Surveillance (IVS)



Intelligent Energy Service



Electronic Invoices service



Enterprise Cloud



Virtualization Platform



Mobile Payment Service



Intelligent Transportation System



Data Security Service



eHome

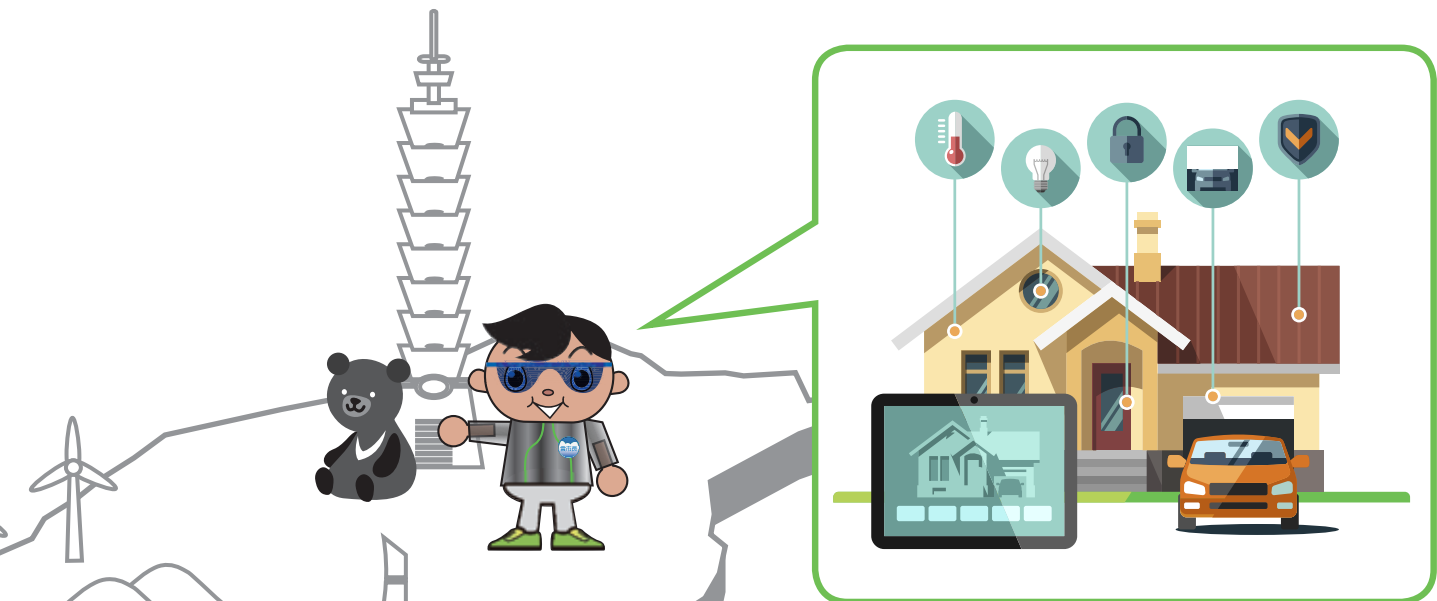


CHT utilizes 4G technology to link the mobile life and to create a LOHAS city with a thorough network of Cultural and Creative, touring and shopping, and entertainment AV.

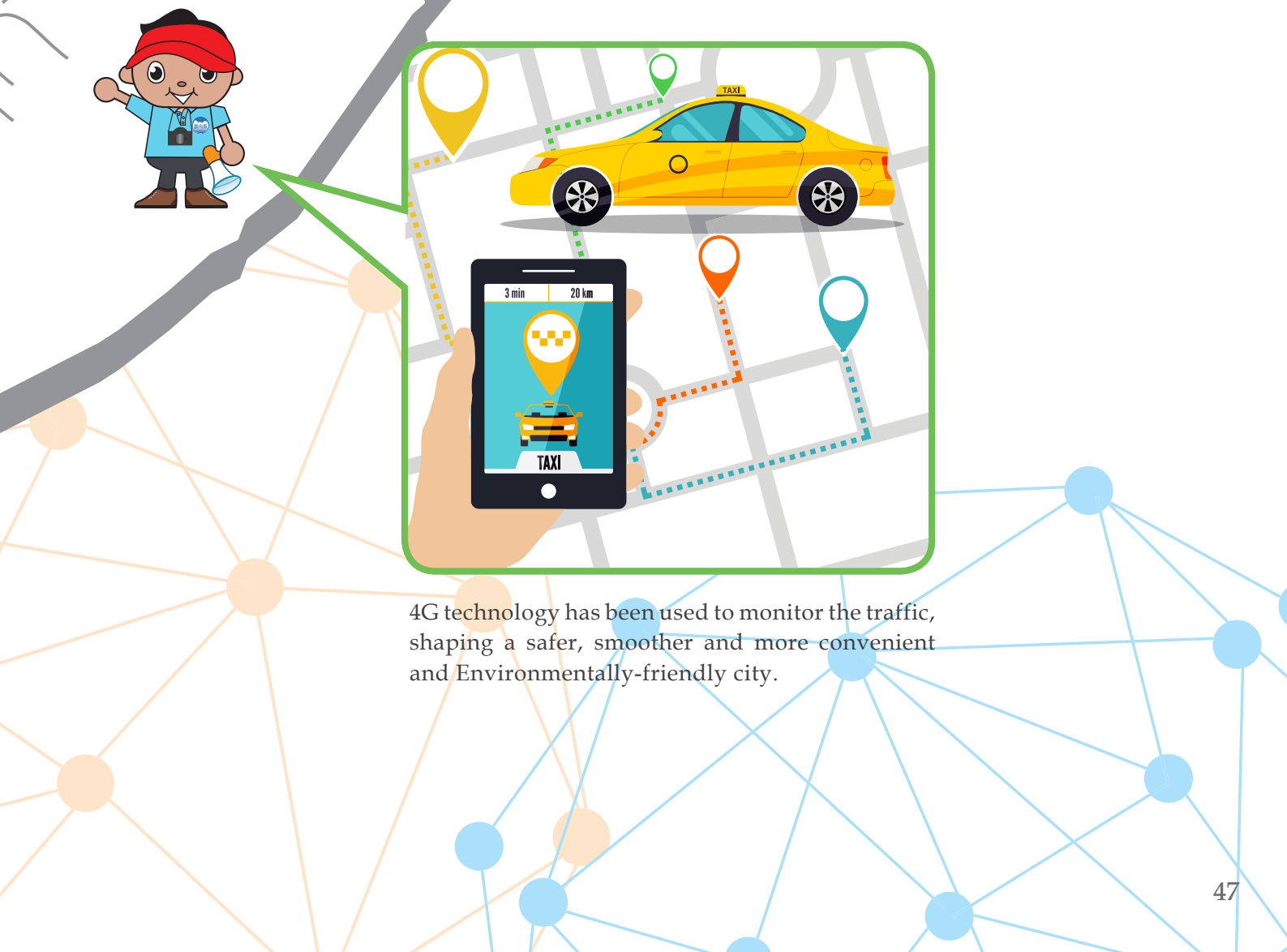




CHT creates a 4G smart city of convenience, LOHAS and friendliness to lead a new era of smart life.



CHT builds a bridge of friendliness, making a Smart City convenient and happiness both to individuals and family.



4G technology has been used to monitor the traffic, shaping a safer, smoother and more convenient and Environmentally-friendly city.

Chunghwa Telecom remains devoted in green innovation, and strives to accomplish our goals through green consumption, green service, and green activities. We hope to apply our advantages in environmental protection and energy conservation onto existing products and services, as we view business and environmental sustainability our competitive focus and opportunity. In 2015, there was NT\$5,350.2 million revenues from green products, which accounted for 2% of total revenues.

Intelligent Energy Network Service (iEN)

The iEN service features three energy focuses: clean energy, energy management, and professional service, and six water focuses: "segment planning," "water management," "water quality monitoring," "effluent recycling," "desalination of seawater," and "agricultural return flow." A smart energy office and a water resource management office have been created to serve as an open platform for product solutions across industries. The smart energy office features a professional team of consultants to offer total energy conservation services from construction, marketing, to lifestyle applications. Its mission is to optimize energy management in ways that improve system efficiency and reduce operating costs.

We hope to increase the capacity of our renewable energy supply and improve the efficiency of which energy is used, so that we can become less dependent of conventional energy sources. Since the initial launch, the service has been widely adopted by hospitals, schools, government institutions, fish farms and mass retailers. This service has won multiple awards for Chunghwa Telecom, including two consecutive Best Energy Technology Service Provider from the Bureau of Energy, MOEA.

In Hsinchu City, for example, the iEN service was incorporated into Hsinchu City Government's "LED Street Lamp Replacement Project", where an IoT structure was developed and combined with map system to facilitate remote management and service call for street lamps. The combination of IoT infrastructure and energy-saving technology also has the potential for other smart applications including control of campus air conditioning, hot water supply, lighting, and street lamp upgrade.

<http://ien.com.tw/Info/> 

Fleet Management Express

This service incorporates the use of several advance technologies including smart in-car units, GIS, and smart transport system. It is well-integrated with customer service platforms used by taxi fleets to deliver functionalities such as fleet management, dispatch, customer service, safety monitoring, statistical report, emergency aid etc. The system captures GPS data transmitted from in-car units installed in taxis to give the taxi company a comprehensive view on the whereabouts, speed and direction of current vehicles. In addition to assuring passengers a safe journey to their destination, the system is also effective in reducing the vacancy rate, which makes it a multi-win solution for the Company, the taxi fleet, the driver and passenger.

The "Smart Taxi Dispatch Solution" offers the following advantages to a taxi fleet:

- More efficient dispatch: The time taken to process taxi bookings has been reduced from an average of 46 seconds to 20 seconds.
- Increased passenger load and shortened waiting time: With a 28% increase in daily taxi bookings, the percentage of vacant taxis on the street was effectively reduced, allowing drivers to work 20% lesser time.
- Lower fuel consumption and carbon emission: By using GPS to pinpoint and dispatch vehicles, taxi drivers are no longer required to drive around looking for customers, which saves fuel consumption by approximately 17%.
- SMS service through the "TAXI App": The "TAXI App" not only allows consumers to call taxis using their smartphones or tablets, it can also be configured to send text messages to relatives as soon as picked up.

<http://210.61.251.143> 



Participation in “Taiwan Intelligent Aerotropolis Association”

To assist in the government’s “Taoyuan Aerotropolis Project,” Chunghwa Telecom has taken the initiative to call local and foreign industry leaders of the same ecosystem into meeting, and was able to develop a consensus in just 2 month’s time while recruit nearly 70 businesses to form Taiwan Intelligent Aerotropolis Association (TIAA). Having envisioned “Forge a city of smart logistics and of industrial advance technologies” the TIAA exists to offer insightful advices to the development of Taoyuan Aerotropolis.

TIAA was officially founded on December 10, 2013 with Chunghwa Telecom Chairman taking the first chair. This association is a good demonstration of Chunghwa Telecom’s influence in building an “aerotropolis” and a “smart city”. Its involvement has contributed favorably to the Company’s image of a visionary and innovator.

On December 18, 2015, TIAA joined Taoyuan City Government in the organization of “Exhibition and Conference for Aerotropolis/Smart City Applications.”

The exhibition featured three main themes, namely: smart government, smart industry, and smart living; it demonstrated 13 successful innovations and applications that were made possible through a combination of 4G broadband, Internet of Things (IoT), and cloud computing. Participants were invited to experience personally the new smart applications and how they contribute towards a smart city.



Taiwan Intelligent Aerotropolis Association (TIAA): <http://www.tiaa.com.tw/>

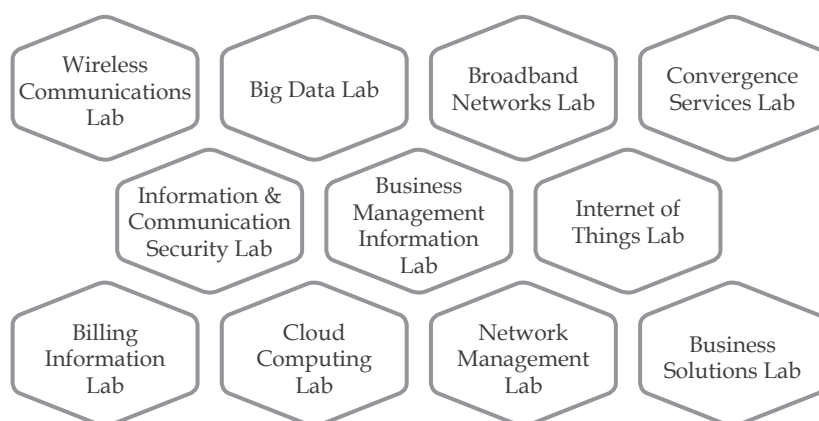
Sustainability in Innovative R&D

As the leader in telecommunication, we understand that research, development and innovation are what drive the growth of a business. To maintain our current advantage, we have adopted a visionary and creative culture that focuses on interacting, sharing, and creating mutual benefits with industry participants.

A dedicated research institution Chunghwa Telecom Laboratories commits substantial resources into research and development works. In addition to developing technologies needed by Chunghwa Telecom, the laboratory also plays an important role in the nurturing of new businesses.

The laboratory focuses its research efforts on innovative services, core technologies, and visionary applications. It strives to explore convenient and useful services from consumers' perspective, and formulate solutions through intricate coordination. Its ultimate purpose is to find ways to "simplify tasks for consumers and let Chunghwa Telecom deal with complexities."

CHT-TL Talent Summary



Quick View of Chunghwa Telecom Laboratories

- More than 1,488 employees (nearly 6.4% of total employees in CHT), 92% are R&D personnel. The laboratory plans to hire 30 additional permanent staff in 2016.
- R&D expenses totaling NT\$3.6 billion were spent in 2015, which accounted for 1.6% of consolidated operating revenues.
- In 2015, the laboratory added 162 new product/service patents to a total of 1,417 (1,294 were registered locally and 123 were registered abroad). 769 of these patents are currently in force (706 registered locally and 63 registered abroad).

Revenues from Innovative Businesses

In 2005, We spun off a division from the laboratory to create "Chunghwa Precision Test Tech Co., Ltd." By 2015, the entity has delivered excellent performance with full year revenues reaching NT\$1.725 billion and after-tax profit doubled to an EPS of NT\$14.77. It is currently the most profitable new business under Chunghwa Telecom, and will be listed on Taipei Exchange (TPEX) towards the end of March 2016.



In addition, we also expect to spin off another division from the laboratory to create a new optoelectronics company in 2016. This company will be producing military night vision goggles and industrial cameras, as near infrared-based products for various applications such as testing of agricultural produce, and facial recognition. The extensive applications of near infrared have already won purchase orders around the world for the new entity.



Credentials of the CHT Laboratories



Ministry of Economic Affairs

Won 3 gold, 2 silver and 4 bronze from Taipei International Invention Show & Technomart



IT Month Committee

Received "Gold Award" in 2015 Innovative Products for EyeQuila APT solution



Industrial Development Bureau, MOEA

Ranked third and received Award for Excellence in the 2015 Industry Information Application Challenge



Intelligent Transportation Society of Taiwan

Won the 2015 Smart Transportation Thesis Award from Intelligent Transportation Society of Taiwan



The Chinese Institute of Electrical Engineering

Dr. Huang-Tien Lin of Wireless Communication Lab and Dr. Meng-Chun Weng of Internet of Things Lab were presented with "Outstanding Electrical Engineer Award" and "Outstanding Young Electrical Engineer Award," respectively, by The Chinese Institute of Electrical Engineering



Chinese Society for Management Of Technology

The Wireless Communication Lab won the "17th Technology Management Award" organized by Chinese Society for Management Of Technology



Cloud Computing Association in Taiwan

The EyeQuila APT solution won third place in the 2015 Cloud Innovation Competition

CHT Laboratories' Talent Overview



PH.D.

95

people

6.39%

8

people

0.54%

Master

963

people

64.72%

310

people

20.83%

Bachelor

28

people

1.88%

20

people

1.34%

Others

32

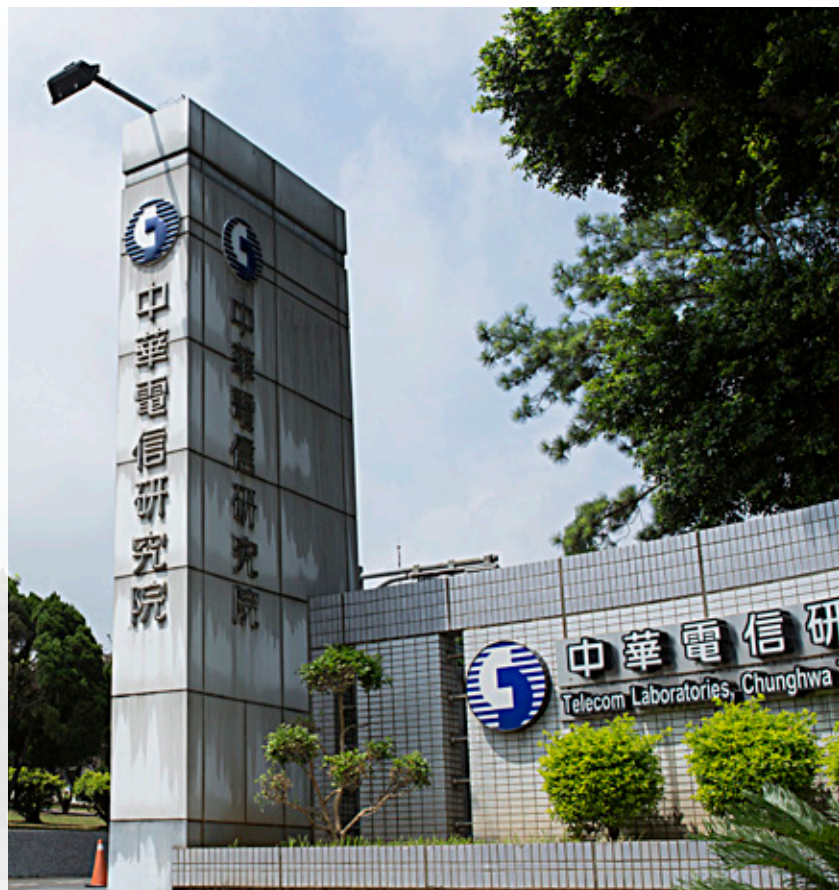
people

2.15%

32

people

2.15%



Encourage Internal Innovation

For nurturing the corporate culture of innovation, we have established the “Chunghwa Telecom Creative Network” as a means to inspire employees’ creativity. If a proposal passes validation and is successfully launched into the market, the proposer may even be entitled to receive rewards up to NT\$30 million depending on how the product performs.

Cross-industry Collaboration and Incentives for Innovation

- Solution for paperless medical history: worked closely with Shuang Ho Hospital, Wanfang Hospital, and Taipei Medical University Hospital to produce 8 categories and 34 types of new medical charts.
- Hami+ and Springhouse Entertainment Tech: Hami+’s digital book store is being run by Springhouse Entertainment Tech, and Chunghwa Telecom offers its assistance in the development of value-adding features for Hami+. The App provides personalized article recommendations based on reading preferences of each Hami+ member, and offers text-to-speech feature to satisfy members’ reading needs under different scenarios.
- The Company collaborated with NTT West on a number of topics including: FutureNetwork, Wi-Fi network maintenance, Cloud computing, data security, IoT and Server-based infrastructure Management. This engagement helped Chunghwa Telecom learn more about the Hikari Collaboration Model that is currently being adopted by Japanese peer NTT for new businesses, which enables the Company to prepare ahead for potential business opportunities.
- The Company joined National Chiao Tung University to participate in the Industry-Academia Collaboration of SDN Technology organized by Ministry of Science and Technology. This collaboration reduces the time and cost taken to develop SDN technology, the results produced also have the potential to enhance network planning and construction, and create new value-adding services to the benefit of both the local telecommunication industry and the academia.

SDN Technology and Applications

- SDN (Software Defined Network) technology has been adopted as the supporting foundation to provide Wi-Fi QoE (Quality of Experience) and CDN (Content Delivery Network) QoE parameter measurement with scalability and elasticity, which could greatly reduce monitoring complexities and operating costs.
- Accompanied National Center for High-Performance Computing to exhibit SDX Topology Exchange in Super Computing 2015 held at Austin, Texas, USA; bringing global visibility to both the Company and the nation.

Defense Solution Against APT

- Developed technologies such as ICAO document, ECC algorithm, virtual smart card, multi-card functionality, and citizen card for use with government administration, banking, and commercial applications.
- The Company’s EyeQuila APT big data solution won the Gold Award in 2015 Innovative Products and third place in the 2015 Cloud Innovation Competition.
- Received government subsidy for 4G Smart City Application, where a TSM system is used to transmit citizen card, electronic card, and credit card information over-the-air (OTA) to user’s smartphone.



2015
in
Review

2016
in
Prospects

- Begin Wi-Fi Gateway virtualization, which enables greater flexibility without the need to purchase hardware in advance, and hence shortens the time of installation.
 - Benefit in terms of economic aspect: reduce hardware equipment.
 - Benefits in terms of social aspect: improve user experience, satisfies consumers’ needs and society’s expectations.
 - Benefits in terms of environmental aspect: increase resource efficiency and reduce greenhouse gas emission.
- Continue enhancement of EyeQuila system features in particular regards to APT defense and information security forensics. Build APT defenses based on the intelligence system that extends all the way from Log, gateway to terminal.
 - Invest into the development and application of NFC technology. Research the next-generation Easy Hami Wallet to give non-NFC cellphone users the chance to enjoy the convenience of digital wallets as do NFC cellphone users.



Smart Environment Solutions

- In support of the government's initiative to conserve energy, reduce carbon and eliminate mercury lamps, the Company developed a LED lamp management system that combines GIS to enable useful features such as lamp monitoring, malfunction reporting, power usage monitoring, and App for service calls.
- Developed a water resource management system that provides quantitative analysis, quality detection, and leakage assessment. Developed energy management system for the electronic industry.
- Devised monitoring solution for an array of air compressors that adjusts the number of units in operation depending on the factory's air intake requirements. Helped reduce units that operated at low load or inefficient speed, and saved energy for customers.



- Continually invest into water resource management. Complete functional modules such as effluent monitoring, DMA segment measurement etc. Provide customers with solutions that help them comply with effluents regulations.
- Support the government's initiative towards cloud-based healthcare by developing paperless medical history. Continually standardize personal health records (PHR) to enable better filing, security, management, sharing and exchange.
- Assist healthcare institutions in sharing, exchanging and consolidating personal records for better quality healthcare.

B4G/5G Technology

- Chunghwa Telecom was the telecommunication company that standardized technical specifications for tri-band carrier aggregation (B3+B3+B8 and B3+B7+B8) at 3GPP during the time when 4G bands were licensed in Taiwan.



- Chunghwa Telecom is currently a member of 3GPP and NGMN, both of which are vital to the development of 5G technology. The Company continues to devote resources into the research of mobile communication technologies, including technologies before 5G such as 4G/B4G. Meanwhile, small cells are being constructed in areas of high signal demand and locations that are not easily covered by conventional infrastructures. The Company will be introducing 5G services at the proper timing to realize the government's vision of "A smart nation inspired by mobile broadband, a life without borders, and information without delay."

Innovative Application Challenge - Nurturing Creative minds

Chunghwa Telecom's innovative application challenge has been run for nearly 10 years. We provide an open platform and invite passionate students and working adults to turn creative ideas into useful Apps, micro films and children's e-books. Through this competition, we have established communication between creators and business users, and gave them the opportunity to observe, learn and inspire one another and take creativity to a whole new level.

Hami Apps Development Challenge

- 1 More than 10,000 students have participated and more than 1,000 mobile applications have been completed since the challenge first began. The competition received 200 entries in 2015; 135 of which were considered valid (shelved) and received 100,000 download during the year. Hami software store current has a customer base of 1.45 million.

MOD Micro Film Competition

- 2 Amongst all micro film competitions in Taiwan, MOD receives the highest number of entries and offers the largest regards. The 2015 campus division had attracted the attention of Taipei Film Commission and Micro Movie Association; both of which had proposed to share resources and collaborate in the event.

FunPark - Creative Storytelling

- 3 "FunPark" is the nation's first digital creative platform for children's publications. It is where students are inspired to create stories, and the winning pieces are published into personalized interactive digital illustration Apps with the help of a professional editing team.
A total of 1,183 schools had participated in the program in 2015, and nearly 60 campus tours were organized to reach more than 100,000 students, teachers and parents. The winning pieces were viewed more than 80,000 times, and the addition of "FunPark" had contributed to a 10% revenue increase.





Build Corporate Cloud

Chunghwa Telecom's cloud computing infrastructure is created based on the framework of "4 centers, 1 platform and 1 marketplace." The 4 centers refer to the R&D Center, the Testing Center, the Operating Center and the Experience Center, whereas the rest comprises of a cloud creativity platform and a cloud marketplace. We hope to utilize our advantage in software and hardware integration to help transform and grow the local industry.

In 2015, Chunghwa Telecom participated in New Taipei City Government's "3rd Generation Corporate Cloud" project to help local businesses embrace the enormous opportunities presented in the cloud computing era. By the end of 2015, the Company had completed 5,496 counseling sessions on the use of enterprise cloud service. We currently offer three cloud services: data security, cloud database, and cloud server to deliver data protection, storage, backup, and server hosting at the enterprise level. Through this effort, we hope to make New Taipei City the most advanced cloud city in Taiwan.

The "Cloud Valley" Project

Chunghwa Telecom has been working closely with Cloud Computing Association in Taiwan for a project named "Cloud Valley" since 2013. With the support of technology, guidance and funding from the association's prominent members, Cloud Valley has been vested the hope of discovering future talents/entrepreneurs in Taiwan's cloud computing industry, and becoming the model industry cluster.

In 2015, Division Chief Jao of Chunghwa Telecom's Data Communications business Group was assigned to counsel two new businesses (NOC Internet Technologies and Magen king) for the finalist competition in Cloud Valley, which they both delivered extraordinary performance.





Marketing Service



Strategy

Diversity of channels for services to provide consumers multilateral, high quality, and efficient services.



Management

- Formation of a professional technical service team
- Accreditation of the SGS Qualicert service certification
- Establishment of designated internal consultants and supervisors to advocate refined service supervision
- Setup a vibrant service zone



Action

- Establish the system of self-inspection, audit, and supervision for service quality
- Accreditation of a personal information management system



Response

The dilemma of coverage of the base stations



Target

Makes personalized high quality products and services available to customers at Chunghwa Telecom.



Indicator

- GRI** Average consumer's satisfaction: 7.58 out of 10.
- CHT** The complaints per million users: 186 cases





Brand Management

Chunghwa Telecom has long been maintaining a brand image of stability, innovation and consumer-centric values by packaging our professional, convenient, and diverse ICT services with marketing creativity. In a crowded and competitive industry, Chunghwa Telecom managed to stand out among others and win consumers' preference and market share by maintaining our stature as the "industry leader" and devotee of the best digital lifestyle.

Chunghwa Telecom adopts a centralized brand management approach that caters for the individuality of each brand. The President is responsible for offering guidance for the creation, management and alteration of brands; these decisions are communicated with branch managers for execution in line with the group's brand strategy. Branch managers may customize the brand to a certain extent to suit their locality.

Brand Policy

Centralized strategy that accommodates the development of individual brands.

Brand Management

The head office outlines, controls and adjusts brand strategies throughout the Company, while individual branches execute them accordingly.

Brand Structure

Centralized brand structure while catering for individuality of each brand.

Comprehensive Network of Physical Channels

Chunghwa Telecom values consumers' voices. Our marketing activities involve more than just conveying technical features of the products and services we offer, but are guided by stringent service standards established from consumers' point of view. With a diverse range of service channels at disposal, the Company provides consumers with the most comprehensive, quality and efficient services.

We have been constantly adjusting our service locations to accommodate the concentrating urban population. With 734 service outlets nationwide in 2015, we continually expand our service centers to provide customers with more convenient and useful services.

We provide manual of products and services informing product characteristics and application, consider the negative overusing effect to consumers, and place friendly reminder in marketing. In addition, Chunghwa Telecom has instituted the "Channel Sale Support Items Management Guideline" and the "Channel Sale Support Items Management Implementation Procedures" to make the display of sale support items and operation management at all service and business locations consistent, and allow for a positive service environment for the consumers. These are vital for maintaining the professional superior image and service quality of Chunghwa Telecom. In 2015, no violation of health and safety and product labeling was reported.

Quantity of Products and Services

Approximately 3,422 unit

Customer Service Kiosk

There is customer service kiosk system in our intranet. Designated personnel review information and upload to the station for the inquiry of all service centers.

Consumer Hotline

Provide complete information on the features of products and services, and related special offers.





Proper Management of Personal Information

Chunghwa Telecom duly observes the Personal Information Protection Act in the collection, processing, and use of personal information and guarantees the security of customer information through strictly designed management system. In 2015, there were 32 cases of complaints on alleged information leaking. This was an improvement by 27% as compared with 44 cases in 2014. Complaints of this type approximately accounted for only 0.0001% of our customer service hotline. Cases of complaints were filed via all available channels, none of which had been proven to violate the relevant regulations .

Organization	There is the "Personal Information Protection Team" under the " IT Strategy Committee"
Policies and Procedures	<ul style="list-style-type: none"> The Personal Information Protection Policy, Management Regulations, personal data safety training and awareness plan, personal data process analysis and inventory plan, and risk assessment plan. Introduced the "Notice of the Collection of Personal Information of the Consumers Clause" and the "Notice of Confirmation of the Application and Processing of Personal Information of the Consumers" in response to the promulgation of the Personal Information Protection Act, which enables customers to inquire, browse, and copy personal information, halt the use of marketing news, terminate the contract and delete the function of personal information protection.
Management System	<ul style="list-style-type: none"> The Company has obtained ISO 27001 certification for information security system, and was the first Taiwanese mobile carrier to be validated by NCC for "ISO 27001 - International Information Security Management System" and "NCC ISO 27011 - Telecommunication Supplements". Chunghwa Telecom's mobile service hotline first passed BS10012 certification in 2013. By 2015, 100% of customer service hotlines had obtained BS10012 certification, making the Company an exemplar in the protection of personal information.
Personnel Control Mechanism	<ul style="list-style-type: none"> Consumers' basic profiles are classified as "highly confidential" ; data are locked in dedicated cabinets. All employees are required to sign a "Confidentiality Agreement" and line managers are held jointly responsible for any breaches committed by their subordinates. If an outsourced service involves business secrets, the contractor and its workers would also be required to sign the confidentiality agreement. Employees who access customers' personal information over the computer system will have inquiry history stored on file and audited by the manager on a regular basis.
Customer Service Control Mechanism	<ul style="list-style-type: none"> Risk: The customer service personnel carry portable storage devices to store the information of the consumers in the workplace. Response: The Company has instituted the "Regulation Governing the Carrying and Use of Data Storage Devices at Customer Service Processing and Operation Centers" and made it a part of the training and education at the operation center. And we established ISO9001 Suspected Leakage Handling Procedures to report and handle all privacy complaints.

Upgrade and Transform Physical Channels

We have launched the transformation and upgrading plan for the stores so as to refine our service quality and allow consumers to receive quick and convenient service. Related measures are:

- Develop more business locations for bolstering our service network: by the end of December 2015, we have established 167 service centers, 467 stores, and 267 franchised stores, which made up the total of 734 service stations.
- Set "district consultant" who is responsible for coaching retail store management and marketing performance, to enhance the management efficiency of the store operations.
- Establish the system of self-inspection, audit, and supervision for service quality: all stores must conduct self-inspection and business offices will conduct random inspection and audits of the stores so as to upgrade over-the-counter service quality.

Refined Services

Chunghwa Telecom is dedicated to refining and improving service quality. It ranked first in the telecommunication industry during Global Views Magazine's "2015 Five Star Service Award." Meanwhile, Chunghwa Telecom' customer service personnel - Ms. Yu-Chen Lai was named "Customer Service Officer of the Year" by Global Views Magazine for being attentive to customers' needs and treating customers as family.

We constantly challenge and exceed our limits solely for the purpose of bringing customers more efficient, convenient, and refined services. We treat customers with respect and welcome them like family; we constantly improve our professional capabilities in the telecommunication field, and have internal consultants and counselors in place to oversee service improvement throughout the nation. We value every moment of our engagement with consumers, and strive to deliver service in the utmost "sincerity, genuineness, attentiveness, patience and caring."

Customer Service Locations / Size

The Company has 15 customer service centers and 3,900 customer service personnel deployed nationwide.

Multi-channel Services

- Live Web Chat Service
- Web Call Center
- Mobile Customer Service
- Internet Communities "Chunghwa Telecom Dr.Q"
- Customer Service App
- SMS customer service

Training and Outcome

Year	Total Participants	Total Training (Hours)	Average Training Hours (Hours)
2013	9,690	216,431	22.3
2014	9,834	213,650	21.7
2015	7,838	166,960	21.3

Refined Customer Service Training

Chunghwa Telecom is devoted to delivering refined service while placing customers in the utmost priority. To inspire passion among customer service staff, the Company invited Ms. Hui-Er Chen to conduct a "Customer Service Charisma Workshop" in 2015. In order to engage a larger number of participants, the workshop was held physically in Banqiao, Taichung and Kaohsiung, and at the same time broadcast online for remote access. A total of 365 people had completed the training.





Commendation for Best Customer Service Officer

To inspire passion and professionalism among customer service officers to constantly exceed consumers' expectations and build Chunghwa Telecom's outstanding service reputation, we reward customer service officers who receive praises from customers annually, and accept these credits as part of their performance appraisal. Candidates are given prizes and commendations depending on the level of excellence they have achieved. Meanwhile, a "Service Excellence" section has been created on the intranet to publish cases of excellent service for officers to share, learn and download.

The Right Customer Service Officer

Ms. Hsieh's cellphone had been giving her small troubles daily; she grew even more frustrated when she learned that even the authorized service agency could not solve her problem. Ms. Hsieh approached Chunghwa Telecom for help and she was immediately assigned to customer service officer Wen-Li Luo. The customer service officer tended closely to Ms. Hsieh's problems for half a month and was finally able to identify the root cause. After conveying this issue to the cellphone engineer, Ms. Hsieh's problems were finally resolved.

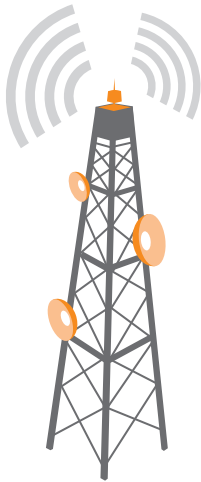
Ms. Hsieh was overwhelmed with relief knowing that her phone was working properly, and said to the customer service officer: "Thank you! After all this trouble, I finally found the right person, just when I was about to give up. Only you were able to solve my problem, and I am very happy!"

Later, Ms. Hsieh gave an extensive complement for the customer service officer at Chunghwa Telecom's web page, hoping to encourage and recognize the efforts made by this "right customer service officer." In response, customer service officer Wen-Li Luo replied that Ms. Hsieh was about the same age as her mother, which naturally caused her to treat the customer as family, as all customer service officers are expected to do. Being able to solve Ms. Hsieh's problems and receive compliment for it has been a pleasantly memorable experience to her.

Ensure Service Quality

Chunghwa Telecom makes ceaseless effort to expand the volume and upgrade the quality of our 4G mobile communication system. We introduced advanced technologies, which echoed with the 1800/900MHz base stations. This arrangement allows for the coverage of service from points, lines, and to planes for even more extensive and better quality mobile broadband network service.

In view of upcoming demands for digital convergence and new digital lifestyles, Chunghwa Telecom has launched high-speed fiber services at 300Mbps to satisfy users' need for high-speed applications. With this service, Taiwan has formally progressed from the megabit era to the gigabit era.



Broadband Internet Infrastructure Progress

Year of construction:
2012 ~ 2016

Amount invested:
NT\$100 billion



The infrastructure met the goals of the government's "Digital Convergence Program," which is to achieve "7.2 million optic fiber users and 11 million wireless broadband users by 2015."





Expand Wireless Hotspots

By the end of 2015, we have installed more than 55,000 public Wi-Fi hotspots, giving users access to stable, high-bandwidth and densely covered Wi-Fi service.

In the meantime, we have also supported the government's initiative in promoting free wireless Internet services on a nationwide scale. With the availability of a reasonable Wi-Fi rental package, a robust user authentication platform and a nationwide maintenance/monitoring system, we have helped the government deploy free Wi-Fi hotspots all over the country. In terms of social engagement, we have been working with local county/city governments to install hotspots and enable Internet access during festive occasions, such as the 215 hotspots installed for New Year's Eve event and the 257 hotspots installed for Taichung Lantern Festival. Overall, the Company had spent more than NT\$8.55 million in this regard.

Wi-Fi Hotspots in Taipei Metro

To satisfy the public's expectation for available communication, Chunghwa Telecom has signed a lease agreement with Taipei Rapid Transit Corporation to install Wi-Fi hotspots at Taipei Metro stations on top of the public pay phones that are already in place. These hotspots have provided a boost to Internet connection quality for the benefit of commuters and tourists.

Currently, there are 826 public pay phones and 282 Wi-Fi hotspots deployed throughout 117 stations of Taipei Metro system. In 2015, the Wi-Fi hotspots were used by 25 million people and logged in 45 million times, which was an extraordinary achievement.



Ensure Customer Satisfaction

To ensure that consumers' need is satisfied, we conduct customer satisfaction survey for Chunghwa Telecom service center, customer service hotline and installation & repair service every year so that we can provide the best possible service and continuous improvement on our services. In addition to regular consumer satisfaction survey conducted by third party, we also accept NCC's service quality survey on telecom carriers on the regular basis. The results show that our performance is significantly better than the standard requested by NCC.

Item	Target	Performance
Landline Connection Rate	≥ 95.6%	98.32%
Interruption Rate of Mobile Phone Communication	≤ 3%	2G: 0.79% 3G: 0.28%
Packet loss % in Data Transmission	≤ 3%	0.0166%



*Measured in 2015.01.01-12.31

Consumer Satisfaction Survey

We conduct a broad variety of satisfaction surveys to identify consumers' most concerned issues and expectations, and use these findings to guide our future improvements.

After each survey, consumers' opinions and suggestions are conveyed promptly to product or business personnel (including risk management and public relations departments) using the consumer feedback system. Furthermore, consumers' opinions are brought to the attention of the head of product and customer service departments, and discussed in monthly meetings to ensure that consumers' expectations are met.

2015 Consumer Satisfaction Survey Results

Consumer category	Survey method	Survey result
 Customer Satisfaction Survey	<ul style="list-style-type: none"> Dialing out manually from our call centers Automated surveys Mail out questionnaires (Entrust Chunghwa University) 	4.60 (out of the full score of 5 marks) 4.60 (out of the full score of 5 marks) 7.78 (out of the full score of 10 marks)
 <ul style="list-style-type: none"> Large Enterprise Small and Medium Enterprise Average Consumer 	Designate external market survey company to conduct consumer satisfaction survey	9.35 8.17 (out of the full score of 10 marks) 7.58

Regarding to the items belonging to the fourth quadrant (high importance and low performance) according to the results of annual satisfaction survey, we will request relevant functional units to conduct further analysis and propose concrete improving measures annually. Also, there will be a follow-up keeping track of the condition of corrective actions next quarter.



Customer Service Hotline KPI

Chunghwa Telecom was the first (in 2011) telecommunication carrier to have call center certified for “ISO 10002:2004 - Customer Complaint Management System.” The Company sees customer’s complaint as an opportunity to make ongoing improvements. We have imposed rules to resolve customers’ dissatisfaction, complaints and opinions within 3 working days, and hence ensure continuous improvement of service quality.

Apart from the customer service hotline, consumers may also use the corporate website or the general line (02-23446789) to raise complaints directly to assistants of the senior executives. To further enhance consumers’ satisfaction, we have collaborated with external institutions to develop a detection system for potential customer complaints while at the same time taking step to improve on the complaints raised. Owing to our effective control, the NCC’s 2015 “Telecommunication Consumer Complaint Monitoring Report” showed Chunghwa Telecom exhibiting the lowest complaint rate among peers.



KPI	2013	2014	2015
Customer Service Response within 20 Seconds	78.4 %	74.0 %	78.5 %
Service Satisfaction (5 marks for full score)	4.59	4.60	4.61

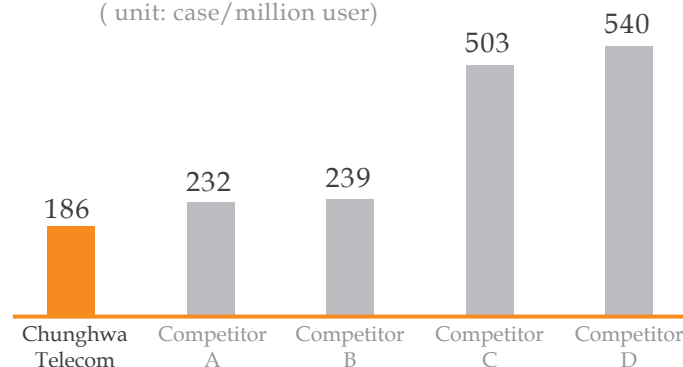
Lowest Average Cases of Customer Complaints

According to data on mobile communication customer complaints compiled by the NCC in 2015, which is based on the complaint per every millions of users, Chunghwa Telecom is the service provider with the least complaints!

In the future, we will further improve our service quality by simplifying our complaint process for consumers’ convenience, so that all consumers’ needs can be addressed in a professional and timely manner.

Complaint Per Every Millions of User

(unit: case/million user)



Enhance Disaster Response and Communication Coverage

With experiences learned from past disaster relief, we have established multi-route transmission, backup routing with wireless sensor and higher capacity (good for 72 hours) backup battery in remote areas, so that the remote areas will not be isolated from communication with the outside world due to power outages caused by natural disaster.

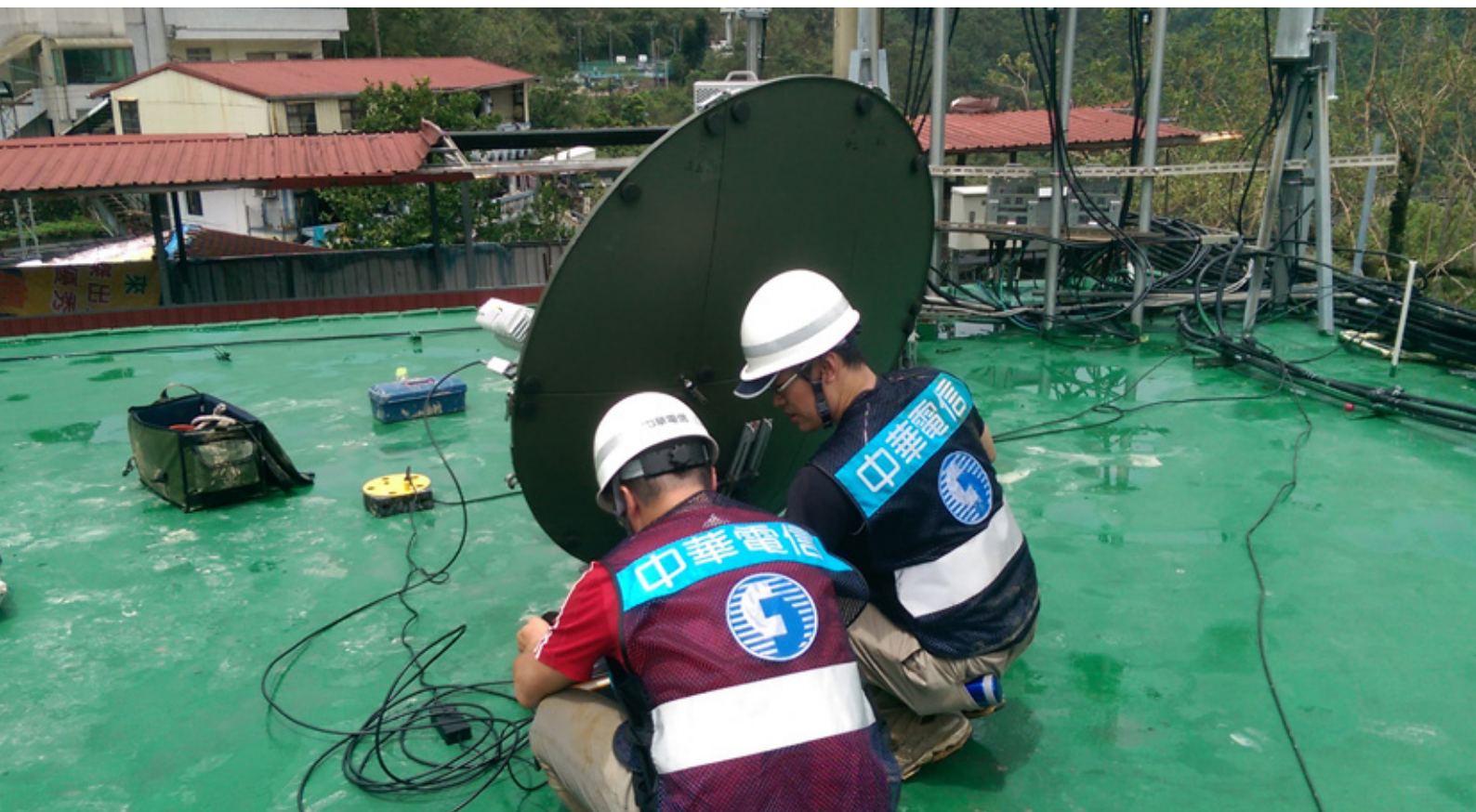
Response Measures | We conduct annual rehearsals on a broad number of situations from coordinating network resources and equipment to emergency repairs. Our base stations have been deployed in a diversified manner and are covered by robust backup plans so that failure of circuitry, power or equipment at any base station would not disrupt another base station nearby.

Occurrence of Disaster | If communication is severed in the unfortunate event of a natural disaster, we would take contingency measures (such as microwave radio, satellite transmission, movable base station etc.) depending on the actual circumstances to maintain communication between the disaster location and the outside world

Special Case | Areas that are enclosed and accessible only through one road, such as Suhua Highway, are covered using multiple base stations so that even if one station were to be damaged due to natural disaster, other paired stations may still function and keep the area covered with signals. This arrangement has served its purpose in major accidents happened in the last two years, and kept the disaster area connected at all times.

Renewable Energy-Powered Based Stations at Remote Locations

Chunghwa Telecom has installed solar energy modules with 1~2kW rated capacity for 10 base stations located at remote areas including Yilan, Hsinchu, Shoushan (Keelung) and New Taipei City. These solar modules provide base stations with clean, carbon-less energy under normal circumstances, and can be used to power emergency communication if primary power is disrupted due to natural disaster.





Disaster Reporting and Upgraded Safety

Sought to minimize the impact of disasters through prompt information communication services, Chunghwa Telecom's "Emergency Response SMS System" sent out more than 210,000 SMS alerts in 2015. Its role in disaster prevention and notification is outstanding.

Additionally, we have assisted the Directorate General of Highways by sending SMS messages to warn nearby pedestrians and vehicles of possible or occurred collapse, landslide, snow buildup, and road accident. This service has been well-received by government authorities and the public.

Civil Safety Drill #1

The Company assisted New Taipei City Government in organizing "Civil Safety Drill #1," during which more than 16,000 SMS messages were sent in the drill location. Furthermore, there are hundreds of areas that have been identified as prone to the risk of flood and landslide (e.g. downstream of dam and lowlands), and if an alert event occurs, the Company will distribute SMS to warn residents of nearby area to take precautions early.

Nuclear Safety Drill #21 - 2015

The Company assisted Atomic Energy Council, Executive Yuan in organizing "Nuclear Safety Drill #21," and supported regular drills held by Taiwan Power Company.

Compensation and Discounts for Disaster Victims

The arrival of Typhoon Soudelor in 2015 caused disruptions of land line telephone, Internet connection and MOD services to our customers. We then followed the terms of our business policy and service agreement and took the initiative to reduce subscription charges in protection of consumers' interests. A sum of NT\$1,916,000 had been spent to compensate 5,133 pieces of equipment that were damaged during the disaster.

Furthermore, the Company has also been providing the following discounts for victims of Wulai as a means to relieve their financial burden:

- For fixed line network, leased lines, broadband connections, HiNet subscriptions, and MOD services, monthly subscriptions were reduced or waived entirely according to terms and conditions until services were restored, while billing and overdue disconnection were postponed accordingly.
- Fee waivers for victims who applied for relocation of land line telephone, broadband (ADSL and fiber network), HiNet or MOD, or modification of call forwarding or voice mail services.
- Disaster victims may replace phone units, broadband modems and set top boxes they have rented from Chunghwa Telecom at no charge.

Alleviate Public Concerns in Electromagnetic Radiation

Research conducted by international organizations including WHO have found no conclusive scientific evidence regarding the harmful effect of electromagnetic waves on human health. However, to eliminate customers' doubts, Chunghwa Telecom ensures strict compliance with the authority's safety standards when constructing telecom infrastructures.

All mobile communication products purchased by us have a Specific Absorption Rate that complies with NCC's limits. In addition, we donate NT\$500,000 per year to Taiwan Electromagnetic Industry-Academia Consortium to study the effect of electromagnetic wave on health and safety.

In 2015, Chunghwa Telecom was incurred NT\$7.8 million of fines and administrative penalties on 20 counts of violation associated with base stations. These violations had occurred as we sought to address consumers' demand for "good reception" and concern towards "base station health impacts." Given the scarcity of suitable base station locations, the Company will strive to comply with regulations by taking precautions at different stages of installation.

Communication and Assessment Phase

- Assess factors such as the size and concentration of population, radio coverage, and number of customer complaints, capacity of existing base stations nearby, and local residents' tolerance towards a new base station. Once consent has been obtained from the building management board or local residents, the Company may proceed to rent land and space for the construction of base station.



Installation Phase

- Information of the proposed base station is submitted to NCC for review; installation may begin only if the proposal passes review.



Pre-operation Phase

- Conduct emergency phone tests. Aim to pass NCC's base station assessment tests that have been developed based on the standards developed by International Commission on Non-ionizing Radiation Protection (ICNIRP). Conduct routing tests to verify the functionality and coverage of the tested equipment.
- All our base stations have been tested to exhibit power density that complies with standards.



Reduction of environmental impact

- To prevent antennas from promising visual appearance, the Company will coordinate with other carriers to make coherent and integrated base station designs that conform to the overall environment. Doing so would minimize environmental impacts and facilitate more effective use of limited space.
- The Company had completed visual improvements on 60% of base station antennas in accordance with "Regulations for Administration of Base Stations of Mobile Communications Network Businesses."
- The Legislative Yuan passed the "Recognize performance credit for offering of state-owned building or land in base station constructions." This new policy will improve communication quality.

Advocate the Accurate Understanding of Electromagnetic Wave

- The Company joined NCC and 19 county/city governments nationwide to host 19 seminars on the topic of electromagnetic wave. 269 complimentary electromagnetic wave measurements have been completed to date; all results are compliant with government regulations.
- Local government bodies were issued promotional materials and pamphlets on the knowledge of electromagnetic wave, which could be distributed to the public during various activities to promote proper understanding.
- In 2015, a series of training seminars were organized for frontline engineers stationed in North district branch to enhance communication skills when confronted by protesters. Meanwhile, the Company continues to promote proper knowledge of electromagnetic wave using short videos.



Telecom Service and Promotion

Fraud Prevention

In 2007, Chunghwa Telecom assisted the government to establish the 165 Anti-Fraud Consultation Hotline to support the police authorities to fight fraud and to protect the property of the public.

Resources Committed	<ul style="list-style-type: none"> There are an average of 9 customer service personnel that joined the service every month for working with the Criminal Investigation Policy Bureau in concerted effort in front-line duties . "Disconnection Service Fraud Prevention System" offers the information on suspected telephone gimmick for cheating customer and timely settlement of the problem. An average of 3 customer service personnel participated in the program monthly.
Prevention of Fraud	<ul style="list-style-type: none"> A two-way, SMS-based authentication system was introduced for small-sum payments since 2013. In 2014, a scam alert was added in all SMS authentication messages.
Progress	<ul style="list-style-type: none"> The hotline received 208,099 calls, and 16,320 cases of fraud were referred to the authority. The Company assisted Criminal Investigation Bureau, National Policy Agency in disconnecting 730 phone numbers, and successfully stopped 905 scams.

Digital and You – Reduce Negative Impacts

Eliminating adverse impacts of telecommunication is the only way to give consumers' the peace of mind when using our services. We have constantly been taking steps to minimize negative impacts of the Internet, including: "safe surf" that promotes proper Internet usage, and "Internet time management" and "Content guard" services designed to protect children's health. In addition to relying on our own influence, we have also been sponsoring other entities in the promotion of Internet safety. In 2015, the Company sponsored NT\$50,000 to Taiwan Indigenous Cultural Industry Development Association for the publication of Internet safety commercials.

Junk Mail By using a HiNet mailbox, customers can enjoy free webmail service. Through a simple setup, users can decide whether questionable e-mail will be automatically deleted in the future. Also, we continue to monitor formulation of regulatory obligations of the "Regulatory Regulations on Commercial Spam Electronic Mail."	Adult Content Provides K12 mailbox forced isolation, HiNet Adult content gatekeeper, and mobile internet adult content security guard keep children and teenager far away from harmful websites.
	Usage Time Control "HiNet Online Time Management Service" and mobile phone "3G Talk without Worry" programs, give parents effective control on mobile phone and online status.

Types of Base Stations Installed by CHT

System	Independent Station	Shared Station
4G	9.0%	91%
3G	6.8%	93.2%
2G	30.5%	69.5%

Note: Installed on existing buildings.



Employee Care



Strategy

Our commitment to “peace of mind for employees” involves respecting every employee without discrimination for any differences such as gender, age, ethnicity, or religion. We care for employees’ health, safety, right of association and opinions, and continue to enhance communication with them.



Management

Ensure all employees enter into a formal “employment agreement,” duly observes the Labor Standards Act and other applicable laws, and calls for labor-management meetings at regular intervals.



Action

- Established Telecommunication Training Institute to be designated for employee training.
- Advocacy of Happiness in Working at CHT.



Response

Personnel management at subsidiaries



Target

Support good people and allows all employees to share the results of operations to realize happiness.



Indicator

- GRI** The basic salary offered by Chunghwa Telecom is **1.4** times the minimum wage in Taiwan.
- GRI** Employee satisfaction survey on “Employee Happiness” with overall scoring of **80** marks.
- GRI** Per Capital Training Hours: **47** hours





Protect Employee Rights

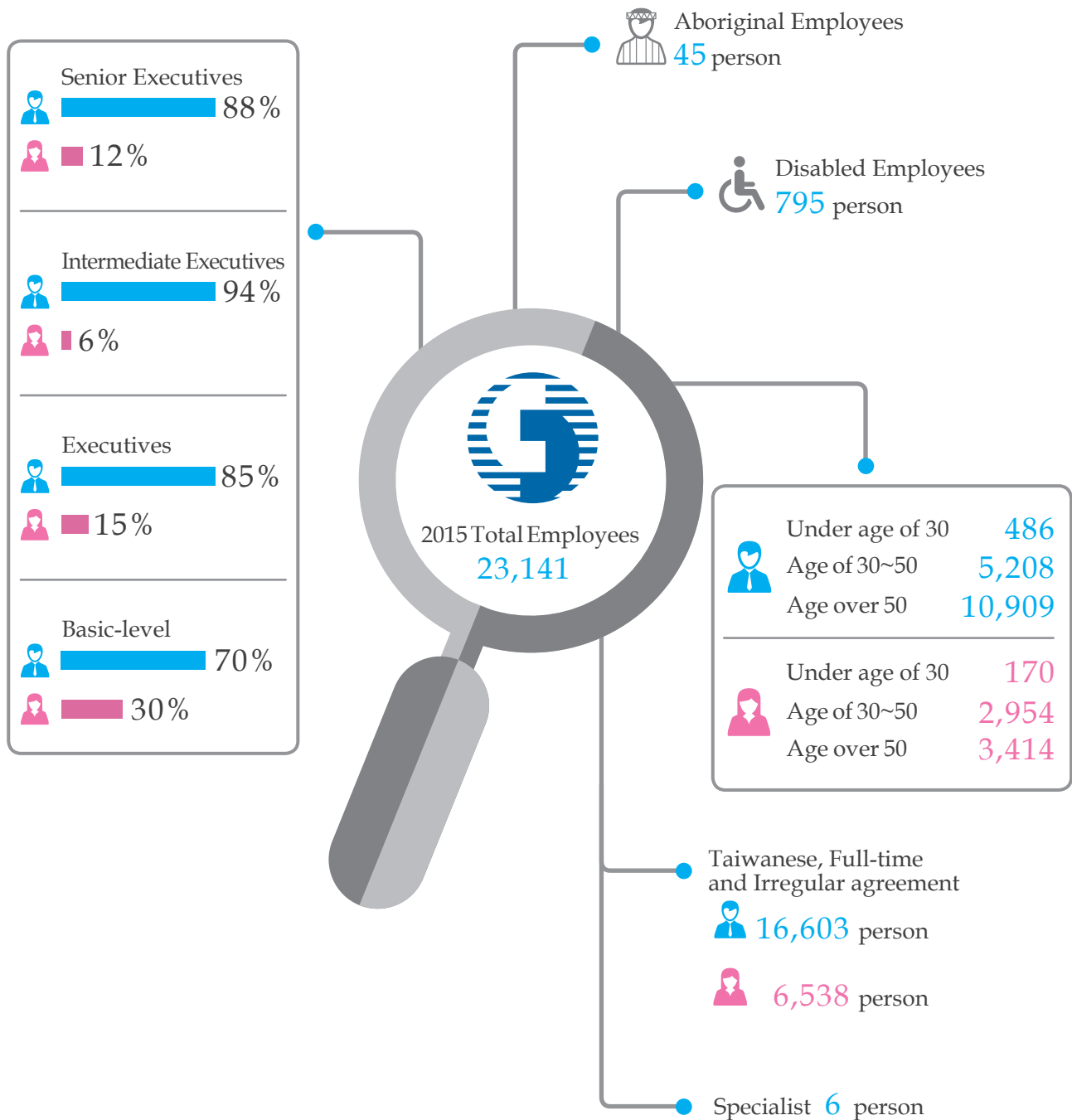
Chunghwa Telecom treats employees as the most important business partner. In addition to implementing a fair compensation/welfare system and assuring employees' basic work rights/human rights, the Company has also been active in the creation of a safe work environment.

For best protection of employees' work rights, Chunghwa Telecom signs "employment contracts" with individual employees and notifies them of changes in the terms of employment in accordance with Labor Standards Act. Furthermore, we exploit various communication channels including seminars and labor-management meetings to maintain a harmonious and mutually beneficial working relation.

A Competitive Compensation System

We have a "Compensation Committee" in place to ensure competitive compensation for the best talents. In addition, the Company has a transparent system of sharing business performance with its employees. Compensations for the executive management have been standardized with details publicly disclosed in annual reports. The Company offers equal compensation for entry-level employees of the same grade. Those who possess relevant skills and work experience may have compensation evaluated based on educational background, career experience, expertise, and professional certification. Under no circumstances will compensation be determined based on gender or racial differences.

Our employees averaged a 2.5% salary adjustment in 2015, while the highest adjustment was made at 5.5%. Given the fact that entry-level employees were relatively young and prone to higher financial burdens, our salary adjustments were primarily focused towards entry-level employees, and those with lesser monthly salaries were entitled to higher percentage increase.



The Only Taiwanese Carrier with Union Establishment

Chunghwa Telecom is the only telecommunication carrier in Taiwan with union establishment; it has also signed a collective bargaining agreement with the union. This agreement covers an extensive range of issues from redundancy, reward, discipline, promotion, to health and safety.

This initiative not only complies with local laws and international human rights conventions, but is also a show of our commitment to protect employees' interests. In addition to the union established by Chunghwa Telecom, employees have also assembled 8 other unions under the organization. In 2015, 99.86% of employees had attained union membership. A director seat has also been reserved for workers' representative, so that employees can more freely express their opinions.



New Recruit and Turnover Number in 2015



New recruits number **164** person
0.7% of the total employees

Under age of 30

71 person 43.29%

Age of 30~50

93 person 56.71%

Age over 50

0 person



114 person
69.51%



50 person
30.49%



Total turnover number **508** person
2.2% of the total employees



Under age of 30

24 4.72%
person



6 1.18%
person

Age of 30~50

28 5.32%
person

25 4.92%
person

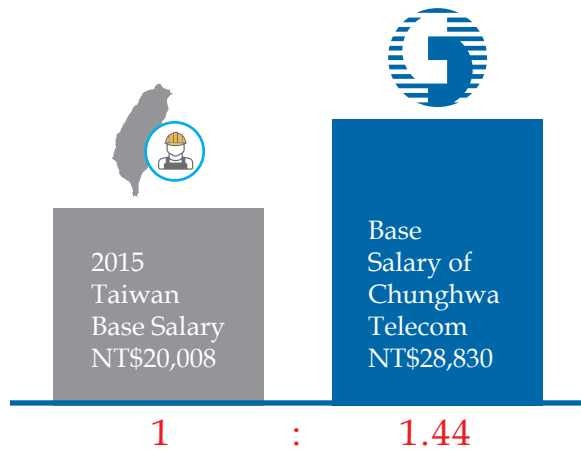
Age over 50

316 62.40%
person

109 21.46%
person

Competitive Compensation of Chunghwa Telecom

G4-54



Average salaries of Chunghwa Telecom



NT\$ **71,062**



NT\$ **65,426**

Ratio of pay raise

2.5 %

The Top Salary

5.67

:

The Median Salary

1

Human Resource Structure of Honghua Subsidiary

宏華國際



Under age of 30

922

1,691

Age of 30~50

1,095

1,347

Age over 50

15

32



Taiwanese

2,032

3,070



Disabled Employees

26

16



Aboriginal Employees

5

4



Full-time

2,032

3,070

Gender Equality and Diversity

Chunghwa Telecom values human rights and gender equality at work. In 2015, female staff accounted for 28.25% of total staff, while female managers accounted for 25.16% of total managers. To conform with the essence of Act of Gender Equality in Employment, the Company has outlined its sexual harassment prevention policy and established a "Complaint Investigation Committee" that specializes in handling employees' complaints regarding work-related discrimination and improper behavior. The investigation committee has 5 members, with 3 female members. Owing to our effective control, no incident of discrimination was reported in 2015.

With regards to the diversity of manpower, we have been hiring persons with disability above the quota specified in Article 38 of People with Disabilities Rights Protection Act. In 2015, the number of persons with disability hired by the Company was more than 3.66 times the statutory quota (statutory quota: 217; actual hire: 795). As for the 45 indigenous employees onboard in 2015, we have fully respected their cultures and therefore no violation of work rights or human rights was reported during the year.

Open Communication and Complaint Channels


We have open communication channels in place to make sure that employees' needs and suggestions are heard. Any violation or misconduct discovered at work can be reported to the relevant department using the channels provided. Chunghwa Telecom received no internal complaint regarding human rights issues in 2015.

We hold regular labor-management meetings to maintain active communication between employees and the employer. Employees and the employer each assign 9 representatives and takes turns to chair the meeting. The Chairman and President of Chunghwa Telecom constantly engage union chairman, directors and supervisors in communication via meetings and telephone. The chairman of Chunghwa Telecom Workers' Union is entitled to participate in disciplinary review meetings, performance appraisal meetings, and business report meetings to make sure that workers are kept up to date on news of the Company.

In 2015, the Company held 6 nationwide labor-management meetings and 1 special conference, during which employees and the employer had reached consensus on many issues. Furthermore, the Company held 5 coordination meetings to discuss terms of employment, including amendments to the work accident guidelines.



Employee Grievance Channels

- CHT intranet portal: <http://eip.cht.com.tw> 
- Accountable department: Human Resource Division, Head Office (Room 503, No. 21-3, Section 1, Xinyi Road, Taipei City 100)
- Grievance hotline (post on Employee zone): 0800-080998
- Grievance fax line: (02) 2357-0007
- Email: chthr@cht.com.tw



Employee Training and Development

We adopt a business focus of “core competitiveness, professionalism, efficiency, and service” and seek to develop innovative talents through a combination of internal and external training.

We have a comprehensive training system to assist employees’ development in all dimensions. The system incorporates “needs analysis” and “in-depth planning” before a program begins, and follows up with performance assessment and review after a program ends. This systematic approach enhances employees’ professional skills and work efficiency, and enables the Company to make better coordination of human resources.

Dedicated Training Units

In order to sustain competitive advantage, Chunghwa Telecom has founded a “Telecommunication Training Institute” that specializes in training technical as well as managerial talents in the telecommunication field. Furthermore, a “Talent Development Team” has been convened by the President to conduct regular reviews on the planning and outcome of the Company’s training efforts, thereby making sure that the training programs are practical and closely aligned with operational policies.

The Institute currently offers 870 professional training courses in 19 categories including networking and marketing. It also has managerial courses available to enhance employees’ technical as well as managerial capabilities. Professional training totaled 35,856 persons in 2015, while managerial courses received a total of 2,354 persons.



Talent Development Strategies of the Telecommunication Training Institute

The Institute has been entrusted with the mission of supporting the Company’s business strategies and visions. Its human resource development strategies were formulated based on Chunghwa Telecom’s business focus and talent requirements in 2016~2018.

- Alignment of training and business development: formulate training solutions in congruency with the Company’s strategic goals and plans.
- Nurturing of managerial talents: recent survey has indicated significant number of retirements in senior positions over the next 5 years. It is imperative for mid-level managers to develop the skills needed to accomplish more complex tasks. Senior reserve talents are required to undergo a stringent training process. There should be an assessment system after the training program to develop a talent base for future reference.
- Professional training: focus on developing work skills and certifications needed to support the Company’s growth, and embodies a broad range of training courses on managerial as well as technical skills.
- Digital and diverse learning: through the use of interactive, mixed and social learning approaches, we enable employees to develop knowledge online at their own convenience. Furthermore, other learning aids such as social networks and on-site experts are being utilized to enhance employees’ learning progress.

Results

- Training and certification of corporate customer managers have resulted in sales growth**
 - Between 2012 and 2015, 771 people had participated in the training and 668 people (87%) were certified.
 - Compared to 2011, employees who had passed certification exhibited approximately an NT\$3 billion increase in revenue contributions in 2014.
- Growth in average revenue per employee**
 - 78 people had enrolled for “SME Sales Training Course”.
 - Revenue contributions averaged NT\$460,000 per enrolled employee in 2015, up NT\$250,000 from 2014.

Diversified Learning Channels

To meet organizational needs, personal interest and personality traits of employees, Telecommunication Training Institute provides a diversity of channels for learning, to help employees develop their professional skills in depth and refine their management skills. These help to bring about growth and proper career development of employees.

Employees can receive training at the Telecommunication Training Institute during regular hours and in the evening or on holidays. Telecommunication Training Institute can also dispatch tutors to relevant business units for organizing training. We offers diversified learning channels: class teaching, distance education, digital learning, holiday course, evening classes, tutor, take programs externally, and digital library.

New Employee Training

The orientation is intended to provide new recruits with a general understanding of the organization's visions, ideals, values and culture that would help them adapt at a faster rate. In 2014, we established "New Recruit Counseling Guidelines for Chunghwa Telecom and Subordinate Institutions" and introduced a counselor system along with digital learning tools to help shorten employee's learning curve.



Recruitment and Development of New-Generation Talents

According to an internal manpower survey, Chunghwa Telecom will encounter a retirement wave of senior managers in five years. The following measures have been developed in response to the retirement wave and to resolve possible disruption in the transfer of knowledge:

- Engage HongHwa where necessary to fill in shortfalls of frontline staff.
- Recruit additional talent for the R&D of new information, ICT and 4G technologies and to support business growth. Recruitment needs are to be approved on a case-by-case basis.
- Nurturing of next-generation talents: the Company outlines talent-training programs on a yearly basis. It provides employees with professional and diverse training options, and certifies their skill development.
- Emerging businesses: new ICT technologies are being integrated with knowledge in different fields, the Company will focus on training professional talents that have the ability to adapt and apply knowledge across different fields of expertise from cloud computing, big data, product packaging, to actual practice.

Fair Assessment Mechanism

Chunghwa Telecom has instituted the "Employees Performance Evaluation Guidelines" which are applicable to all employees so as to evaluate the performance of employees and develop the corporate culture where employees, customers, shareholders, and the Company are winners. For a particular employee who is underperforming, the Company will give supervision to guide their corrective action and keep track on the correction until improvement is made under appropriate procedures.

Chunghwa Telecom conducts performance appraisal in three different levels: entry-level staff, entry and mid-level managers, and senior managers. A performance appraisal involves a series of face-to-face discussions between employee and line manager at the beginning of year to set personal goals, and at mid-year and year-end to evaluate employee's contribution to the Company's performance. During these sessions, managers would also discuss with employees about career plans and suggest courses that are relevant to their future careers. Performance bonus and employee remuneration are tied to employees' individual performances.



Nurturing of Professional Talents

Chunghwa Telecom is dedicated to providing employees with a diverse learning environment. In 2015, Chunghwa Telecom incurred more than NT\$500 million in training expenses and trained employees for a total of 1.07 million hours. Meanwhile, we encourage employees to commit to life-long learning, offering as much as NT\$30,000 of education subsidy per semester. 776 people had applied subsidies and their efforts were compensated by the Company for NT\$11.45 million.

Investment in Education and Training	2013	2014	2015
Total Training Expense (NT\$ million)	748	679	572
Per Capital Training (NT\$)	30,877	28,857	24,733
Total Training Hours (hours)	1,413,923	1,129,809	1,078,140
Per Capital Training Hours (hours)	58	48	47

Note: We adopted a precision training policy in 2015 and engaged internal instructors to teach many of our courses. As a result, the amount of budgeted training expenses had decreased while the number of total and average training hours remained unchanged from 2014.

Academic Talent Training

We have been cooperating with 4 major universities (NTU, NCTU, NTHU, and NCU) to offer summer internship for 12 candidates. All interns are properly compensated and offered comprehensive training courses. Furthermore, in an attempt to develop overseas telecommunication talents, the “Chunghwa Telecom Southeast Asian Scholarship” program has been introduced to offer scholarship for top students of Southeast Asian origin or residency. Candidates of the scholarship program may even have the chance to participate in R&D projects or be assigned to work as interns at various branches.

Work Happiness Survey

Since 2011, we have been engaging outside 3rd parties to conduct annual “Chunghwa Telecom Work Happiness Survey” on an anonymous basis. These surveys are designed to measure employees’ satisfaction towards the work environment, welfare and compensation. It serves as a means of learning employees’ opinions and understanding how they feel and what they expect about work.

Since the surveys began, the Company has received increasing level of satisfaction and response year after year. In the future, we will continue to respond and communicate on employees’ opinions, and provide suitable training to further enhance employees’ satisfaction and happiness.

Employees’ Satisfaction

(100 point scale)



Occupational Health and Safety

Chunghwa Telecom was the first telecommunication service provider in Taiwan to adopt Occupational Health and Safety Management System (OHSAS 18000). By the end of 2015, the Company already had 27 business groups and branches that passed international certification.

We actively participate in the government's initiatives to promote healthy workplace. 7 divisions within the Company have received awards under the "National Workplace Safety and Health Campaign" organized by Occupational Safety and Health Administration, Ministry of Labor. The Northern Taiwan Business Group, in particular, ranked first in Taipei City's Most Healthy Workplaces, and received the National Exemplary Healthy Workplace Award from Health Promotion Administration, Ministry of Health and Welfare.

We adopt systematic management to ensure employees' health and safety. In addition to identifying hazards and assessing risks associated with telecom operations, the Company has also applied restrictions and enhanced risk control for high-risk tasks, while taking effective precautions to prevent occupational hazards. In addition to complying with safety and health regulations, the Company has also been active in the improvement of current work environment and taking actions in regards to safety and health facilities.

Follow the Safety and Health Regulations and Enforce Self-Management.

Implement Hazard Identification and Enforce Risk Control.

Strengthen both Mental and Physical Health Services.

Encourage Participation through Open Communication and Available Consultation.

Continue on Equipment Improvement, Create Quality Work Place.

Conduct Labor Safety Training Programs to Raise Safety Awareness.







Dedicated Occupational Safety and Health Management Unit

We have a dedicated “Labor safety and health department” responsible for planning and implementation of labor safety and health matters, meanwhile, “Labor safety and health committee” is established and meets quarterly to deliberate, coordinate and make suggestions on the issues of labor safety and health.

“Labor safety and health committee” consists of 26 members, including representatives from each department units and labor union as well as technician and medical personnel, etc. Among which, 9 members are from labor union accounted for 35% of all members. 4 meetings were held in 2015 with 11 proposals presented by the labor representatives of which 5 related to the issue of the improvement of safety and health facilities, 2 related to refinement of safety and health management, 1 related to food hygiene, and 3 related to employee benefits.

		
Number of Disabilities	11	7
Frequency of Disabling	0.33	0.54
Severity of Disabling Injuries	13	12
Occupational Injuries Rate per 1,000 Workers	0.66	1.70

Hiring of Full-Time Physicians and Nurses

In order to provide immediate medical assistance, we hired 12 full-time nurses and contracted 10 physicians in 2015 specifically to tend to workers’ health. These personnel were assigned to perform service at Xinyi, Aiguo, Linsen, Guoguang, and Da’an branches.

























For employees involved in hi-rise work activities, the Company has deployed six i-med systems at local customer centers to perform blood pressure measurement and monitor employees’ health before work, and hence minimize chances of occupational hazard.

Reducing Occupational Hazards

Chunghwa Telecom's "Work Accident Guidelines" contain detailed procedures for assessing occupational illness. Employees who are suspected to have suffered from occupational illness are assisted to apply for verification at the local municipal/county/city authority, in accordance with Act for Protecting Worker of Occupational Accidents.

The Company encountered 18 cases of occupational hazard in 2015; 2 of which had occurred during work while 16 had occurred when commuting. We manage risks at the source, making sure that construction risks are within control as early as the design stage. The line construction management system has been added with remarks to highlight high-risk operations along with risk assessment information. The system was launched in March 2015, giving workers the effective means to identify risks and take precautions.

All high-risk operations are subject to approval. Workers are also required to take site pictures with handheld devices and upload them to the monitoring system, so that precautionary measures can be identified and taken to prevent falls, oxygen deficiency etc. To promote employee's awareness and skills on safety and health, we organized 200 training sessions and received 8,381 enrollments in 2015.

	2013	2014	2015
Injury rate (IR)	 0.09  0.26 Total 0.14	 0.07  0.18 Total 0.11	 0.07  0.11 Total 0.08
Occupational diseases rate (ODR)	 0  0 Total 0	 0  0 Total 0	 0  0 Total 0
Lost day rate (LDR)	 2.71  7.65 Total 4.12	 2.46  2.80 Total 2.56	 2.68  2.47 Total 2.62
Absentee rate (AR)	 0.20  0.41 Total 0.26	 0.22  0.49 Total 0.30	 0.28  0.59 Total 0.37
* Injury rate (IR) = Total number of injuries x 200,000/ Number of hours worked by all employees			
* Occupational Diseases Rate (ODR)= (Number of Occupational Diseases / Total work hours) x 200,000			
* Lost day rate (LDR) = Total loss of work days * 200,000/ Total work hours			
* Absentee rate (AR) = Total number of missed (absentee) days/ Total number of workforce days			

Occupational Hazard/Safety Competition










The Company has established a set of "Work Safety Competition Guidelines" as an encouragement to complying with work safety and preventing accidents. Under the guidelines, accidents may include: traffic accidents occurred while commuting, for which an occupational injury leave of one day or above has been taken; injury, death or damage of property suffered by employee or others while performing duty or caused by Chunghwa Telecom's facilities; and damage caused to Chunghwa Telecom's property while performing duty.

All employees each year are reviewed by the occupational safety unit of the respective institution. Once the assessment results have been approved by the Occupational Safety Committee, employees will be rewarded for the level of safety they have exhibited, according to the terms of the work safety competition.



Establishing Happy Corporation

Chunghwa Telecom has set its goals to maintaining “sustainable business operations.” It has a comprehensive set of incentives and training systems to develop and retain talents. “Peace of mind” is the commitment we offer to our employees, and we refrain from making lay-offs and salary reductions so that employees can fully devote themselves to raising work performance. In addition to statutory welfares, we offer additional welfares such as employee shareholding trust incentives, unpaid childcare leave subsidies, and privatization bonuses for its employees.

Item	Activities and Sessions	Participant/ Benefited	Contribution/ Supplement \$
 Child Birth Subsidy	Company continue to provide subsidy to full term after 6 months unpaid leave is matured (up to 1.5 years)	104 person	NT\$ 7,210 thousand
 Sports Activity	Regional activities including 8 roads running, 153 hiking, 158 ball activities and 205 other activities (such as employee year-end dinner and travel, etc.)	86,355 person	NT\$ 17,278 thousand
 Stock Ownership Trust	Improve employee welfare, enhance employee coherence, share company's achievement and establish employee stock ownership committee so that employees' life quality is guaranteed after retirement or resignation	20,290 person	NT\$ 2,000 /person per month on average
 Dependent Education Subsidy	Twice a year (2 semesters)	22,459 person	NT\$ 268,758 thousand
 Wedding Subsidy	Wedding subsidy is available for employees got married lawfully	278 person	NT\$ 695 thousand
 Childbirth Subsidy	Childbirth subsidy is available for childbirth of employees or employees' spouse	520 person	NT\$ 1,300 thousand
 Funeral Subsidy	Funeral subsidy is available for the death of employees' parents, adopted parents, step parents, spouse and children	875 person	NT\$ 4,375 thousand
 Group wedding	Funeral subsidy is available for the death of employees' parents, adopted parents, step parents, spouse and children	50 couples	NT\$ 2,300 thousand
 Recreational space	Includes integrated stadium, swimming pool, tennis court, badminton court, basketball court, table tennis court, multi-functional event space, karaoke room, and employee dormitory	Totaling 13,103 square meters	

Employee Health Care

Chunghwa Telecom considers employees health as company's fortune, providing a safe and healthy workplace is the basic requirement of corporate social responsibility. In 2015, our spending on employee health care is NT\$82,453 thousand, accounted for 0.04% of the Company's revenue. Our contribution in relation to employee health including:

Health Examination of Employees and Dependents	The Company offers better care than what the laws require. Employees are given a broad variety of health checkup packages to choose from, depending on their age, risk factors etc. A total of 22,923 (98.82%) employees had taken their health checkup during the year. Employees' family members are also entitled to health checkup at the same rate, and a total of 3,700 people had participated during the year.
Response to Workers' Special Behaviors	The Telecommunication Training Institute held 10 conference sessions to discuss "Common Special Behaviors at Workplace and Proper Responses" and 7 conference sessions to discuss "Workers' Special Behaviors and Proper Responses."
Employee Assistance Program (EAP)	<ul style="list-style-type: none"> As one of the large corporation to introduce Employee Assistance Program (EAP), Chunghwa Telecom has started to promote since 2007. The EAP comprises mainly of 5 consultation sessions a year, in which outside experts are hired to help employees resolve legal, medical, family, workplace, and stress troubles. Since 2013, the Company has hired a case manager to provide services on-site, and created an e-Service platform for related matters. The case manager made 28 visits and completed a total of 600 service sessions during the year.
Employee Health Service	<p>The physicians visited the plant 9 times a month and each employee can have 30 minutes for each appointment. The healthcare personnel use the "Employee Health Management System" for the analysis and evaluation of the health examination record of employees. Where necessary, consultation will be arranged between the physicians and the employees for proper guiding of health and healthcare. Related expenses is amounted to NT\$4 million.</p> <p>Head count of medical consultation with physicians (30 minutes/ per person): 600 person Frequency of physician on-site service: 120 person Persians/times of consultation: 1601 person</p>
Employee Health Promotion	<ul style="list-style-type: none"> We have organized 137 health seminars with a total of 9,244 employees participated; 22 sports competitions with 830 employees participated. 124 intellectual trips with 12,377 employees participated. 16 sessions of health examination with 4,473 employees participated and 255 large and community activities with 33,529 employees participated. The Company published two health-related articles each month to convey the proper disease prevention concept.
Balancing Work Life	With 29 hostels established in 2014, Chunghwa Telecom provides travel accommodation and annual travel subsidy of NT\$8,000 to encourage employees to balance their work life.
Flexible Working Hours	Chunghwa Telecom provides 2 sessions of flexible working hours in the morning and afternoon: 8:00~9:00 and 17:00~18:00. In addition, variable sites available for employees to enjoy community activities.

Develop Paid Volunteer

Since 1985, Chunghwa Telecom and its branch offices have initiated social responsibility programs such as "New Hope Project", "Love and Dedication Group", "Changhua coal team", "Computer program in Shanlin Tzu Chi Love Create Community, Kaohsiung city" to help those who need help. Chunghwa Telecom supports the initiatives proposed by its employees.



In November 2007, Chunghwa Telecom completed the first corporate volunteer guideline and plan based on The Volunteer Service Act, provided paid volunteer leave and volunteer training course. We also assists our employees to obtain Volunteer Handbook from Ministry of Interior to ensure that the rights of those who accept service is protected, so as to encourage its employees to take the initiative to propose and participate in the social activities.



Encourage Work-Family Balance

We have been implementing an unpaid childcare leave system since 2006 to help employees juggle between work and family. Chunghwa Telecom is required under the Employment Insurance Act to pay six months of allowance for employees who have taken this leave; female employees are further entitled under company policies to receive additional monthly allowances totaling half the sum assured under the Labor Insurance Scheme during child care leave, for a period up to 2 years.

Employees of Chunghwa Telecom are also entitled to other privileges such as family care leave, paternity leave, menstruation leave, and nursery room. In 2015, a sum of NT\$7,209,000 was paid as child care leave allowance; 185 employees had applied for maternity leave; 155 employees had applied for unpaid child care leave; and 104 employees had applied for child care leave allowance.

				Total
2015	The Number of Qualified for UP for Raising Children in 2015(A)	930	434	1,364
	The Number of Person Actual Applied UPL in 2015 (B)	22	133	155
	Application Rate for UPL in 2015 (B/ A)	2.37	31.37	11.36
	The Number of Reinstatement-to-be in 2015(C) *	22	132	154
	The Number of Application for Reinstatement in 2015 (D)	12	72	84
	Reinstatement Tate in 2015 (D/C)	54.55	54.55	54.55
2014	The Number of Reinstatement in 2014 (E)	7	51	58
	The Number of Retention Over 1 Year After Reinstatement in 2014 (F)	5	51	56
	The Retention Rate in 2013(F/E)	71.43	100	96.55

Note 1: The number of employees entitled to apply for parental leave of absence in 2015: calculated on the basis of employees who have applied for maternity leave and parental leave in 2013-2015.

Note 2: The actual number of employees applying for parental leave: total number of employees who were still on parental leave in 2015.

Note 3: The number of employees pending on returning to work after parental leave in 2015: total number of employees applying for parental leave in 2013-2015 – the number of employees applying for returning to duties in 2013 and 2014.

Retirement Benefits

Employees' retirement requests are processed according to "Chunghwa Telecom Employee Retirement Pension and Separation Guidelines," the "Labor Standards Act," and the "Labor Pension Act."

- Labor Standards Act: the Company makes monthly pension contributions up to 15% of employees' monthly salaries to the pension fund. This pension fund is held under the supervision of Labor Pension Supervisory Committee. Current balance of the pension fund account is NT\$23.6 billion.
- Labor Pension Act: the Company makes monthly contributions of no less than 6% of employees' monthly salary. These contributions are deposited into employees' personal pension accounts held under the Bureau of Labor Insurance, Ministry of Labor according to the Contribution Rate Sheet approved by the Executive Yuan.

To help employees adapt to life after retirement, the Telecommunication Training Institute was invited to organize a series of "Retiree Adaptation Course." A total of 2 sessions were organized in 2015 to 73 audiences. Furthermore, donations totaling NT\$4.5 million were made to "Chunghwa Telecom Retirees Association" for various activities, while another NT\$1.5 million was donated for the organization of travel events, and NT\$150,000 were donated to organize Chinese New Year banquet for volunteers.

To facilitate transfer of experience, we have established a set of "Consultant Recruitment Guidelines" to continually engage retired employees in our growth. Consultants are distinguished between paid roles and honorary roles. Executive vice presidents and above and heads of grade-1 institutions may be hired by Chunghwa Telecom as paid consultants after retirement. Paid consultants shall serve a term no longer than one year, and will be converted into honorary role from the day after the one-year expiry.



Green Enterprise



Strategy

Facilitating the greenness of ICT industry (Green of ICT) and greenness of the society overall through ICT (Green by ICT)



Management

Use EARTH system to manage environment data



Action

- Management of key energies
- Energy saving policy



Response

Vector-borne disease at manholes



Target

Short-term

The increased use of energy for supporting business growth is contained at 2%

Mid- and Long-term

Incremental procurement of green product with green products and services



Indicator

GRI Energy consumed 5,119,776 GJ

GRI Energy intensity 22.09 (GJ/Millions Revenue)

GRI GHG emission 834,745.37 t-CO₂e



Environmental Sustainability Management

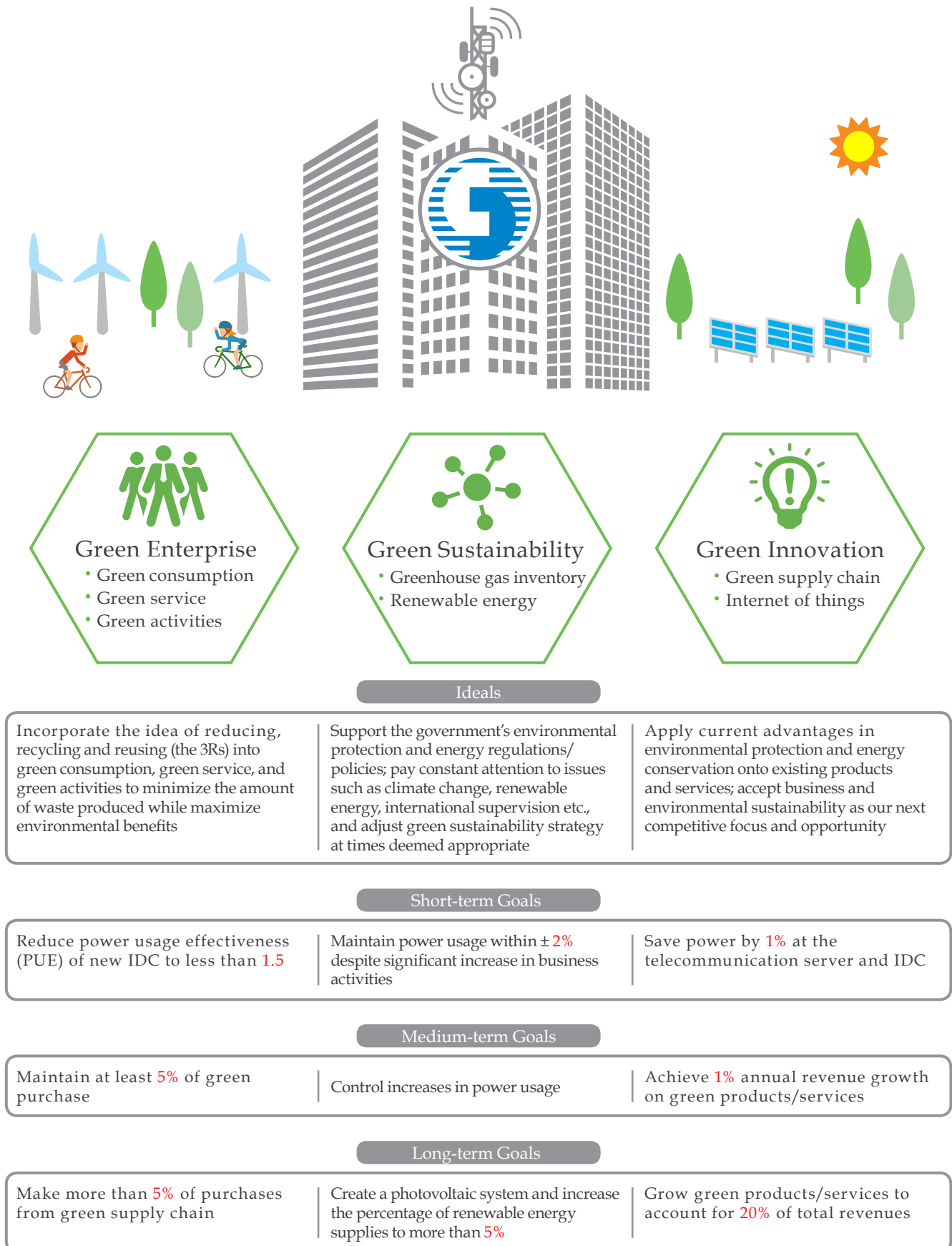
Although telecommunication is regarded as polluted industry, Chunghwa Telecom is well aware of the environmental impacts associated with energy, resources, waste, maintenance, purchasing and other aspects of our operation.

To realize our commitment as a green enterprise, we have devised our “Environmental Sustainability 5-year Plan (2016~2020)” in 2015 that outlines our overall strategy and roadmap for sustainable development. In addition, budgets will be provided in each year to support action plans.



Environmental Sustainability Strategy

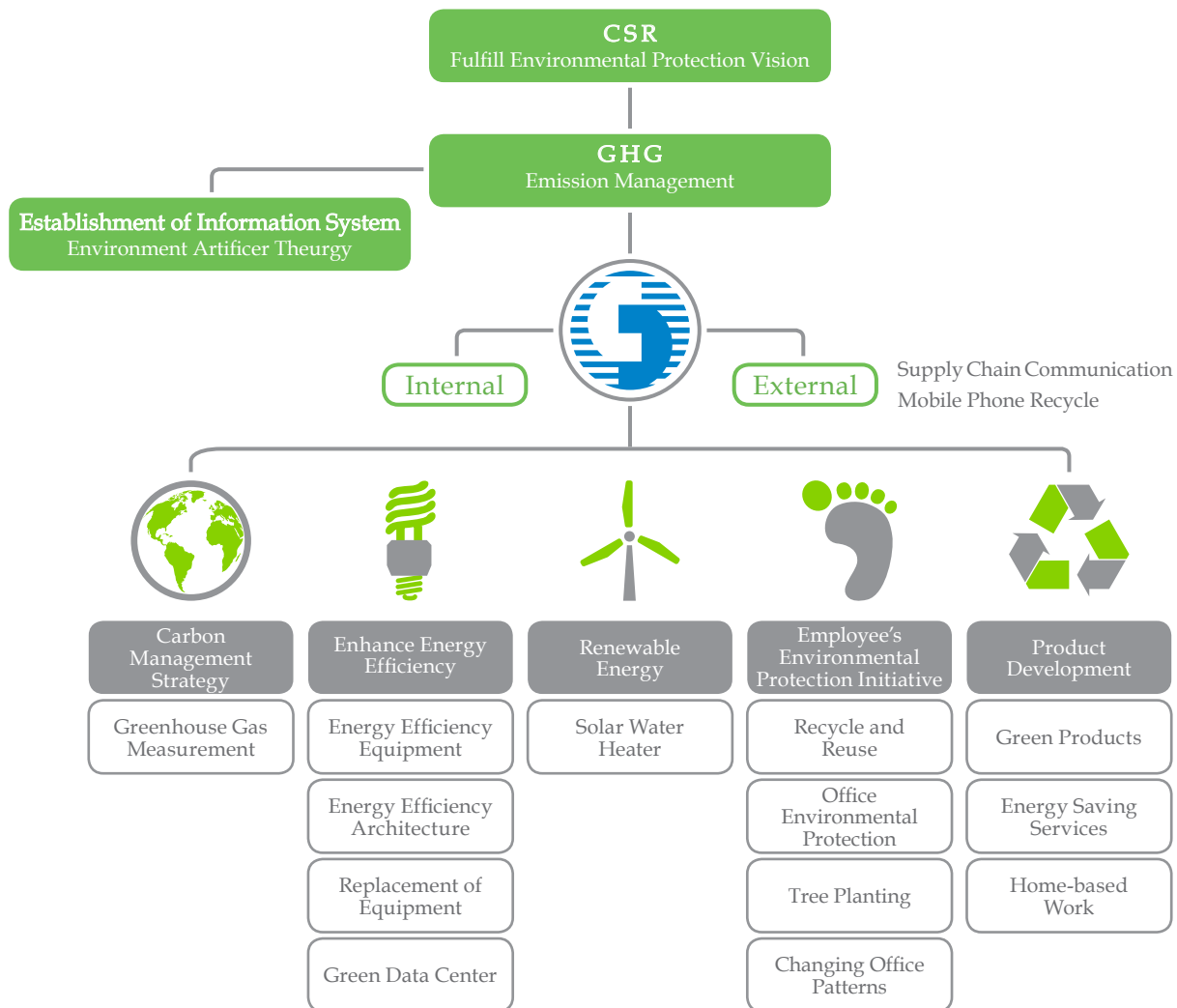
Chunghwa Telecom's environmental sustainability strategies in the next five years will incorporate three main focuses: "Green enterprise," "Green sustainability," and "Green innovation."





Environmental Sustainability Roadmap

To fulfill our commitment towards “environmental protection,” we have created an “Environmental Sustainability Team” under the “CSR Committee” that specializes in determining short, medium and long-term goals. The team exists to make sure that issues such as energy conservation, carbon reduction and environmental protection are addressed in the operational plans, and to set codes of conduct, manuals, standards and targets with respect to green energy and greenhouse gas.



100% ISO 14001 Certification in All Service Locations

“100% of Chunghwa Telecom’s revenue is derived from offices that have obtained environmental management system certification.” All the major branch offices including Southern Taiwan Business Group, Mobile Business Group, Northern Taiwan Business Group, Data Communications Business Group, International Business Group, Chunghwa Telecom Laboratories and Telecom Training Institute have obtained environmental management system certification.

In terms of energy management, we are is the first telecommunication company among local peers to fully implement ISO 50001 - Energy Management System. The Data Communications Business Group was the first to obtain certification in 2011, and was followed by Chunghwa Telecom Laboratories in 2012, Mobile Business Group in 2013, and International Business Group, Northern Taiwan Business Group (Taoyuan Office) and Southern Taiwan Business Group (Kaohsiung Office) in 2014.

Green Initiative in Full Swing

Although Chunghwa Telecom is an ICT service provider and not a manufacturer, we still pay great attention to how our products and services affect the environment, and are constantly exploring new solutions that are friendly to the environment. For detailed description of green products, please refer to page 45 of the report.

Environment Artificer Theurgy

To manage resources and environmental protection in a more efficient manner, we developed Environment Artificer Theurgy (EARTH) system in 2008 to save the spending on energy consumption and enhance environment management efficiency. EARTH system features:



Energy Saving and Innovation

Departmental uploading of energy saving and innovation initiative to encourage employees to learn from each other.



Performance Evaluation

Performance evaluation is conducted systematically to encourage employees to contribute to environmental sustainability actions.



Power Management

Request centralized payment of electricity bill; currently there are more than 56,709 electricity number and 2.28 million electricity payment data under management.



Water Management

Request centralized payment of electricity bill; currently there are more than 1,265 electricity number and 78,863 electricity payment data under management.



Carbon Emission Management

Provide carbon verification form, the results showed that largely enhanced as 300 men-day operations.



Fuel Management

Analyzed the fuel data of hybrid vehicles and ordinary vehicles, to reach energy efficiency and carbon reduction



Corporate Tree Planting

Document type, number, management department and location of trees. Currently there are over 66,591 trees data saved in EARTH database.



Recycling Management

Document type, number and management department of recycling objects. We have recorded 22 recycling types and 14,607,614 entries

	2013	2014	2015
Green procurement amount (NT\$ million)	2,087	1,522	1,525
Accounted percentage of turnover	5.73 %	4.37 %	6.55 %
<hr/>			
Environmental management expense (NT\$ thousand)	269,881	181,365	275,975
Accounted percentage of turnover	0.12 %	0.08 %	0.13 %

Participation in GreenTouch

We have joined formal membership in GreenTouch Consortium, and we continued supporting technology document formulation and case study; besides, to contribute toward ICT field and CSR, we continued sharing our energy saving findings in GreenTouch conference, IEEE ICC12 conference, etc.



Risk and Opportunity for Climate Change

Chunghwa Telecom has set our goals to becoming a sustainable “Green enterprise,” and thus incorporates environmental issues as part of business operation and management. We hope to play a more proactive role in issues such as energy and climate change. By improving energy efficiency and exploring environmental friendly products and services, we are confident of our potential to inspire a new generation of low-carbon industries.

Effective Control of Greenhouse Gas Emission

The responding strategy of climate change issues and a company’s long term business positioning is closely related. In order to reduce climate related cost and risk in value chain and evaluate the result of voluntary carbon reduction measures, Chunghwa Telecom initiated “Greenhouse Gas Inventory” in 2008.

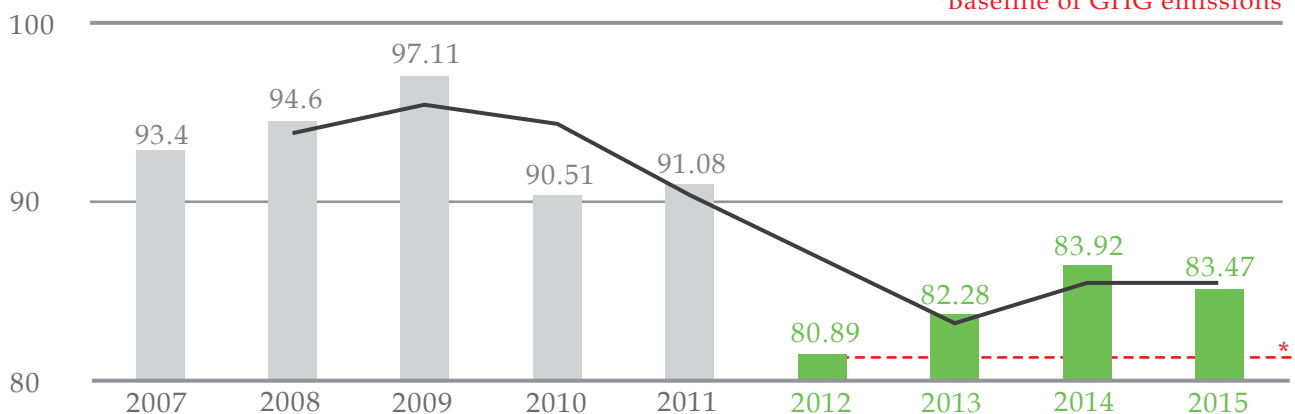
Chunghwa Telecom’s initial carbon management goals were to “reduce greenhouse gas emission to 2007 levels by 2012,” which it had achieved ahead of schedule in 2011 due to proper control.

Assuming an annual growth of 2% for 4G and mobile communication services, the Company will inevitably be required to install additional communication equipment, which consume more power and emit more greenhouse gases. In view of this development, we have revised and set a new greenhouse gas target in 2013, which is to:

Benchmarking 2012 GHG emission standard, control the annual growth of GHG emission to no more than 2%.

Greenhouse gas emission

unit on the vertical axis: 10,000t-CO₂e
*Baseline of GHG emissions



The total greenhouse gas emission is 834,745.37 t-CO₂e in 2015, including CO₂, CH₄, N₂O, HFCs, PFCs and SF₆. As a comprehensive telecom carrier, the major energy source consumed by Chunghwa Telecom is electricity, which is classified as Scope II (purchased electricity) gas emission and accounted for 96.9% of total gas emission. Scope 1 gas emission is normally sourced from general greenhouse gas emission such as offices and accounted for 3.1% of total gas emission.

unit: t-CO ₂ e	2013	2014	2015
Direct GHG Emission (Scope 1)	24,519.2	24,036.0	26,994.3
Indirect GHG Emission (Scope 2)	798,272.3	815,138.8	807,750.98
Total GHG Emission (Scope1+Scope2)	822,791.5	839,174.8	834,745.37
Emission Intensity (t-CO ₂ e/NT\$ million)	3.6	3.7	3.6
Coverage of Revenue	100%	100%	100%

Note: GHG inventories and certification accords with ISO 14064-1 standard, and the value of Global warming potential is referred to IPCC Fourth Assessment Report (2007). All the data are certified by SGS-Taiwan.

Green Transportation for Green Living

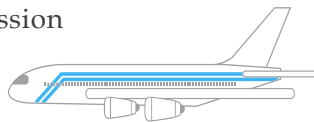
Chunghwa Telecom supports green transportation as part of green living. For public interests, we sponsored NT\$1.85 million to the creation of YouBike station at the corner of Xinyi Road and Hangzhou South Road. Our sponsorship to the 50 YouBike parking lots not only provides citizens with greater convenience, but also conveys the importance of protecting the environment and encourages employees to support green and low-carbon transports.

Chunghwa Telecom has also discussion in 2013 about carbon footprints associated with employees' business travels, given the issue's increasing popularity around the world. Boundaries have been set at "Scope 3," as specified by World Business Council for Sustainable Development (WBCSD), while emission was calculated based on mileage.

The Company's scope 3 emission in 2015 was 263,495 kg-CO₂e. Emission from employees' business travels was calculated based on the two main forms of transportation: high speed rail and airplane. On a long-term perspective, the Company is planning to include consumers' impacts into scope 3 calculation so that the greenhouse gas inventory system may produce a more complete picture.

Air transport (aircraft) GHG Emission

98,842.7 kg-CO₂e



Land transport (high Speed rail) GHG Emission

164,652 kg-CO₂e



Total GHG Emission 263,495 kg-CO₂e





Power Management

Benchmarking 2012 electricity usage standard, control the annual growth of electricity usage to no more than 2%.

Growing demand for telecom services has forced us to install additional equipment, which makes it rather difficult to control increases in the use of power. Nevertheless, we pursue different measures from the energy saving in our own buildings as the starting point. Owing to a series of effective controls, we were able to reduce power consumption by 282 million kWh (27.87%) by the end of 2015, reducing greenhouse gas emission by 14,172 t-CO₂e compared to 2007. This effective control of power usage was achieved through a combination of enhanced environmental sustainability management system and closer monitoring of telecommunication equipment power usage.

Driven by our care towards environmental sustainability and support for the government's renewable energy initiatives, Chunghwa Telecom purchased 2 million kWh of green power in 2015, making us the nation's fifth largest procurer. We will continue our support in 2016, and help realize a cleaner future through action.



本區域使用綠電

100萬度以上

104年



Electricity Consumption Analysis

unit: 10,000 kWh

	2007	2012	2013	2014	2015
Total Electricity Consumption(A)	135,180	139,272	142,580	142,216	142,092
General Consumption(B)	9,420	8,912	8,835	8,873	8,571
Business Consumption-Meter Rate Lighting Service(C)	125,151	124,166	127,023	126,128	125,740
Business Consumption-Flat Rate Lighting Service(D)	609	6,194	6,722	7,215	7,781
Business Consumption Increment(E)	NA	1,977	3,385	-402	178
Business Consumption Increment Rate(F)	NA	1.42%	2.37%	-0.28%	0.13%

- Note1: General consumption includes office buildings and employee dormitories.
- Note2: Business consumption includes base stations, depot, electric welding, and public telephone, which are not CHT-owned property.
- Note3: A=B+C+D, General consumption mainly includes the power consumption from office building. Business consumption increment includes flat and meter rate lighting service.
- Note4: E=Business consumption this year - Business consumption last year, F=E/A

This table presents electricity consumption with customer ID, other consumption without customer ID is covered by Greenhouse Gas Inventory.

Annually Report to Carbon Disclosure Project




Carbon Disclosure Project (CDP) was raised by international corporation investors, and they started to invite companies to reply CDP questionnaire since 2003, in order to understand how enterprises face and deal with carbon issue.

In response to the concerns of the international institutional investors over the information on carbon and reduction of Chunghwa Telecom, Chunghwa Telecom adopted the world café mode, which is the only telecommunication service provider of Taiwan that has participated in CPD for several years consecutively. Personnel in different functions were invited to a cross-function/level study for positive response to CDP questionnaire. Further to the positive feedback from the questionnaire that show the areas dictated for corrective action, this also helps us to set up an objective for carbon reduction. Indeed, this is the vital function beyond the answers of carbon reduction in the questionnaire.

Energy Saving for Data Center

Chunghwa Telecom places great emphasis on the energy efficiency of our data centers, and is currently implementing energy conservation measures on telecommunication data centers (including IDCs). The Ankang Data Center, for example, obtained its green certification in 2013, while the new IDC located in Banqiao is also expected to attain its green building certification in 2016. All future data centers will be featuring our proprietary iEN smart energy management system, which is our scientific approach towards reducing energy, carbon and thereby protecting the environment.

Energy Saving Measures for the Data Center

 Air-conditioning Improvement	<ul style="list-style-type: none"> • Change air speed, remove vent pipe, or disable small air-conditioner to be compatible with new equipment. • Use high sensible heat engine when replacing air-conditioner in annual replacement plan. • Isolate air-conditioning area of air-conditioner placement to avoid unnecessary air-conditioning usage. • Install temperature controllers on cooling water towers and water pumps. • Promote applications of outdoor air systems for the data center, which largely reduce electricity usage in spring, autumn and winter.
 Energy Management	<ul style="list-style-type: none"> • Monitor air-conditioning temperature, designate personnel to maintain adequate temperature in different areas. • Increase data center's temperature by 1°C after one year monitoring. • Unload cooling water tower in accordance with water outlet temperature. • Use ventilation for low loading mobile base station, telecom office and power distribution equipment. • Introduce renewable energy system such as solar power generation system.
 Equipment Consolidation	<ul style="list-style-type: none"> • Cut off disabled equipment and replace bad energy-consumption equipment after the consolidation of mobile base station, digital switching equipment, transmission equipment, broadband equipment and power supply equipment. • Consolidate equipment and isolate unused space to reduce energy consumption.

Electricity Consumption of IDCs

Year	2011	2012	2013	2014	2015
Power usage (10,000 kWh)	13,040	13,794	14,620	14,700	14,539

With regards to renewable energy sources, the Company currently has 213.8kWp of photovoltaic capacity, and plans to develop wind power with a capacity of 26.6kWp for use in multiple data centers.

The Banqiao IDC uses small amounts of solar energy, given its space layout and construction cost. Apart from that, solar energy is used mostly in remote areas, small IDCs, and telecom data centers in combination with ordinary power supply. Solar power and wind power are currently unsuitable for telecommunication applications due to concerns with system design and space layout. However, the Company will consider using renewable energy source for large IDC projects in the future.



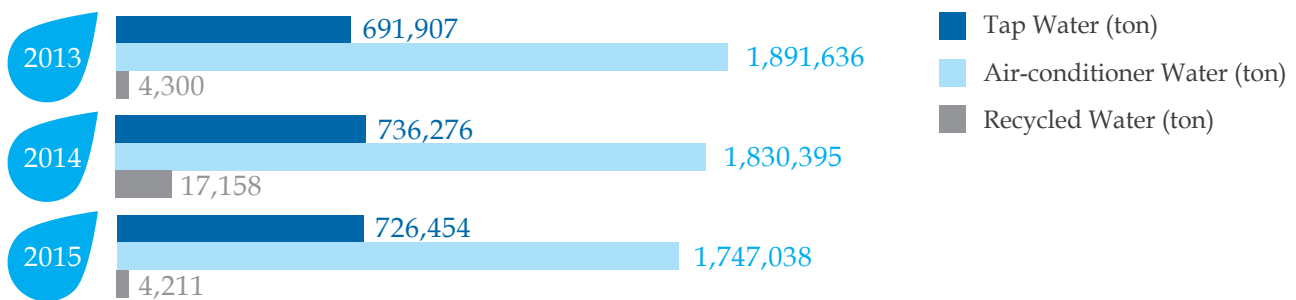


Water Resources Management

G4-22

Water usage at Chunghwa Telecom is mostly for domestic purpose. Apart from bathroom use, air conditioner cooling accounts for another major water use. Given the ongoing increase in business activities and manpower, there is limited room for water reduction besides recovery of rainwater and cooling water.

We have identified water resources as part of our management focus, and introduced a number of initiatives to improve water efficiency, such as: water conservation measures, centralized water bill management, and water-saving goals. Apart from adding a new water leakage detection feature, we have also incorporated water usage monitoring into our environmental sustainability system. Data collected from these two functions is analyzed and managed. Other conservation measures such as recycling and reuse of rainwater and domestic effluents are also being implemented on an on-going basis.



Note: We reclassified and recalculated domestic water and air conditioning water in 2014 for more accurate presentation and more effective control of water resources. The amount of water recycled in 2015 had reduced significantly due to severe drought, which was believed to have been caused by climate change.

The Plan and Objective of Water Resources Management

Currently, Chunghwa Telecom's annual business growth is 2%, we therefore benchmarking 2012 water usage standard, control the annual growth of water usage to no more than 2% and promote water saving measures accordingly, including:

- Install sink faucet sprayer to reduce water waste.
- Replace toilet with dual-flush toilet to reduce flushing water.
- Limited use of office water supply from 8am to 6pm.
- Recycle rainwater for office plants watering.
- Contact maintenance personnel immediately once water supply equipment is damaged to prevent water waste.
- Encourage the installation of water reclamation equipment in new buildings, so that the treated sewage water can be reused for non-potable and physical separated use after reaching certain water quality standard.

Recycling of Water Resources

Started from 2007, Chunghwa Telecom initiated water conservation measures by including water resources management into EARTH system, while registering centralized water bill payment through EARTH's "water bill management" function to reduce printing of water bills. Through the information interface, managers can search, generate trend charts and report forms, provide exception reports to avoid mistakes in billing and meter reading. Managers can also review the situation of water use, reduce expenses in water, and improve efficiency of management.

We have scheduled a five-year plan to enhance the effectiveness of water recycling and reusing. In the plan, we are expected to establish underground raft foundation water collection system to collect clean rainwater from rooftop and ground. Meanwhile, we also initiated recycle of cool-condensed water project for office air-conditioner.

Waste Management G4-22

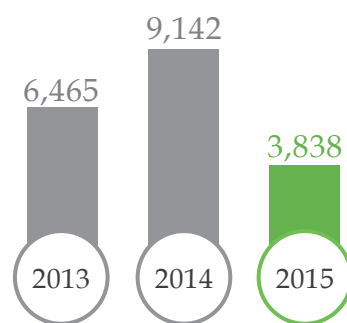
Understanding the importance of resources reduction, recycle and reuse, Chunghwa Telecom combined our five-year environmental sustainability development plan and EARTH system to manage the use of resources and control energy efficiency, while conducting systematic management on recycled and waste treatment as well as encouraging cell phone recycling in all branch offices, a total of 6,170 cell phones were recycled in 2015.

Daily Waste Treatment

Chunghwa Telecom designated professional waste treatment company to transport our daily waste to landfills or incinerator for necessary treatment. For recyclable waste, the contracting cleaning company is designated for the classification and disposal treatment.

Note: The amount of domestic waste had reduced significantly because of reclassification following a system upgrade, and because of intensive enforcement of substance recycling and reuse in 2015.

Weight of Daily Waste
(unit: ton)



Industrial Waste

The scrapped lead-acid battery is a recyclable industrial waste regulated by the EPA. To reduce pollution the recycling and disposal operations are outsourced by joint contract based public auction. The contractor must be a qualified service provider listed on the website of the Recycling Fund Management Board of the EPA to ensure legitimate management and disposal.

All the lead-acid batteries scrapped by each business unit are auctioned on site and proper documents for their disposal are filed for audit tracking. There were 32,311 scrapped lead-acid batteries, sold about NT\$25,678 thousand with a total weight of 1,592,945 kg disposed in 2015. The public and private waste clearance and disposal organizations recognized by environmental institution is designated to handle the treatment of other industrial waste such as cable and hardware miscellaneous.

Type of Waste	Unit	2013	2014	2015
Plastic-filled Cable	Ton	803	427	256
Ordinary Cable	Ton	3,917	1,851	1,534
Hardware Miscellaneous	Ton	3,250	1,781	699
Battery	PC	26,436	24,868	18,151
Treatment Cost	NT\$ thousand	263,129	191,617	265,455



Targeting on Green Enterprise

As a localized telecom carrier, facilitator of community development and important partner of international telecom carrier, we strive to become green enterprise. Following the development of technology, telecom carrier is no longer as traditional as it used to be, while incorporating Corporate Social Responsibility (CSR) into the development and application of product and service, business management strategy is integrated with CSR.

Green Environmental Hostel

Chunghwa Telecom Hostels provide accommodation for employees business or leisure travel. In response to environmental protection and personal hygiene, the hostels do not provide disposal consumption goods and towel, and implement energy saving measures such as solar water heater, air conditioning heat pump and LED lightings. Environmental friendly and tidiness has become the employees' favorite travel accommodation. 7 hostels had been certified as Environmental Friendly Accommodation in 2015.

In response to Hotel Carbon Measurement Initiative (HCMI 1.0) formulated by World Travel & Tourism Council (WTTC) and International Tourism Partnership (ITP), we introduced "carbon footprint calculator of hotel rooms" in Siziwan hostel, along with the combination of iEN system to manage the use of facilities and electricity in the hostel and construct comprehensive power monitor and room management model, so as to reach maximum energy and water saving efficiency.

Greenhouse Gas Emission of Siziwan Hostel

	2013	2014	2015
Revenue (NT\$ million)	9.1	9.5	9.4
Carbon Emission (ton)	61,300	64,527	57,443
Electricity Usage (kWh)	117,433	123,853	110,256
Energy Intensity (t-CO ₂ /NT\$ thousand)	0.01	0.01	0.01

Merger of Electronic Bills

Since 2001, we have been combining customers' bills and mailing multiple bills of the same address in one envelope, which not only makes filing easier for customers but also helps protect the environment.

The Company introduced electronic bills in 2005, saving 410 million sheets of paper each year and was estimated to have saved 37,847 trees, as 7,494 tons of carbon by the end of 2015. It was a good example of how the Company had satisfied customers' needs while at the same time contribute to the mitigation of global warming.

The Energy Saving Effect of Using Electronic Bills and Combined Bills

	2013	2014	2015
Ratio of Customers Applying for Combined Bills	88%	88%	88%
Ratio of Customers Applying for e-Bills	17%	18%	18%
Quantity of Paper Saved (1,000 sheets)	412,755	415,765	416,318
Reduction of Carbon Emission Volume (ton)	7,429	7,484	7,494
Note 1: The basis of calculation in 2014 is different from 2013. From that year onward, the calculation is based on the quantity of paper saved and reduction of carbon emission after using e-Bills and combined bills.			
Note 2: Each electronic or combined bills saves 2.5 sheets of A4 paper on printing and envelope. Total amount of paper saved: 13,877,270 records * 12 months * 2.5 = 416,318.			
Note 3: One sheet of A4 paper generates 18 grams of CO ₂ ; the amount of carbon emission reduced: 416,318 sheets * 18 grams CO ₂ = 7,493,724,000 grams CO ₂ .			

The Most Environmental Friendly IDC in Greater China Region

The Banqiao IDC (Internet Data Center) scheduled to be completed in 2016 will be the first world-class IDC in Taiwan and in the entire Greater China Region to conform with “Rated 4.” It will undoubtedly provide consumers with improved user experience and speed up the development of Taiwan’s cloud computing industry.

Environmental Features of the Banqiao IDC

- Incorporates Chunghwa Telecom’s proprietary iEN smart energy management system for automatic environmental monitoring
- Energy efficiency is measured using “The Green Grid” standards, and is targeted to achieve high energy efficiency of PUE 1.5 and below
- Rated LEED Gold and obtained Green Building and Smart Building certification in Taiwan.

We have also been actively assisting real estate developers in their construction of green buildings such as the residential complex name “Guangdian” in Banqiao. In the future, we hope to apply more of our energy-saving services and products onto old buildings, and make them smart and green in conformity with the new trend.



Environmental Information Disclosure

- Implement annual greenhouse gas inventory. Obtain ISO14064 verification and certification.
- Respond to the annual Carbon Disclosure Project (CDP) questionnaire.
- Respond to environmentally related issues in the annual Dow Jones Sustainability Index (DJSI) questionnaire.
- Respond to the Common Wealth Magazine and Global View Magazine questionnaires.
- Publish the CSR report: Provide environmentally related data.

Improve Energy Use Efficiency

- Integrate datacenters : Merge and exploit datacenter space.
- Add iEN to buildings : Incorporate iEN Intelligent Energy Saving System into new datacenter construction. In 2015, we have saved the consumption of electric power by approximately 26.6 million kWh or NT\$113 million in cost, which is equivalent to the reduction of carbon dioxide reduction of about 13.9 thousand tons.
- Save cooling energy : Had completed energy saving inverter module of 5,791 HP, high sensible heat air conditioner of 30,023 RT, 7,029 high efficiency air conditioners, 2,278 RT ventilation air conditioner and 476 natural ventilation air conditioners in the end of 2015.
- Green building and hostels : Use green materials for newly constructed datacenters or buildings.
- Solar water heaters : Install solar water heaters in Telecommunications hostels.
- Water resource recycling : Set up rainwater, underground, and condensed cooling water recycling systems.
- Environmentally friendly LED bulbs: Internal office building trial plan.



Environmental Education Mingled with Operation Activities

Chunghwa Telecom hopes to deliver the concept of “Everyone bears his/her share of responsibility of environmental issues, corporation bears responsibility for the sustainable operation.” to our employees, who then shall understand the close correlation between extreme weather and personal environmental gestures, and incorporating product life cycle into product design; in the hopes of marking environmental sustainability as the Company’s green culture on the basis of energy saving, resources reduction and waste reduction.

We offer each employee with 4 hours of environmental education training each year, host ecological tours and participate in the Taiwan Energy Conservation Patrol initiated by Epson Technology and other corporations. This focuses on increasing energy efficiency within corporate operations and production processes to achieve the objectives of carbon reduction and to mitigate global warming.

	2013		2014		2015	
	Session	Participant	Session	Participant	Session	Participant
Environmental Education	3	254	9	399	6	336
Ecological Tour	69	16,093	79	14,984	140	14,853
Corporate Volunteer Exchange	15	27	8	17	21	24



Implement Green Energy

- Photovoltaic system: a total capacity of 213.8kWp in the end of 2015.
- Wind power: a total capacity of 26.6kW in 2015.
- Voluntarily supported MOEA’s green energy trial program by purchasing 2 million kWh of green power in 2015, making us the nation’s fifth largest procurer.

Autonomous Environmental Protection

- Vehicle energy conservation and carbon reduction: Replace old vehicles with environmentally friendly, and use electric vehicles for trial.
- Green transportation: sponsored NT\$1.85 million for the construction of Youbike station at the corner of Xinyi Road and Hangzhou South Road.
- Clean homes, energy saving office, health management system, car-free days, and paperless ODAS.
- Taiwan Energy Conservation Patrol: Focus on increasing energy efficiency within small and medium enterprises and social vulnerable institutions.
- Industrial waste recycling: Set waste reduction and recycling goals.

Value-added Products and Services

- Electronic billing: Features environmental protection, promote with marketing section.
- Electronic invoice: Invoice data were treated for cloud storage permanently for saving of materials, human resources, and the preferential taxation treatment as incentive and exemption from fines by the government.
- Promote iEN and other energy-saving categories.
- Mobile device recycling: Recycle bins are available at service centers in line with the promotion of waste recycling.
- Assist suppliers in applying for product eco-labels.



Social Harmony



Strategy

- | Narrow the digital gap and create digital opportunity



Management

- | LBG assessment of investment in community



Action

- Telecommunications universal service
- Digital Good Neighbors
- Read with You - Community Network Tutoring
- Portable App for the blind and elderly
- EYE social innovative call center



Response

- | Survey on the demand for 4G of the elderly



Target

- Short-term** Continue the effort in accessible telecommunication service with the addition of Digital Good Neighbors.
- Long-term** Social investment will reach 1% revenue in 2020



Indicator

- | **GRI** Social investment NT\$**910,230** thousand
- | **CHT** Digital Good Neighbors **76** locations





Connect Hope Technology

Chunghwa Telecom expects to create an environment without technology and information boundary through telecom technology, so that inheritance of culture, extension of education, promotion of industry and upgrade of arts and intellectual can be connected in the universe of internet, and everyone can be benefited from digital technology despite their age, social standing, geographical location and education, creating infinite hope.

Based on the characteristics of ICT industry and the spirit of “value is where the responsibility lies”, Chunghwa Telecom penetrates into the communities in Taiwan; with the objective of “shorten digital difference and create digital opportunity”, Chunghwa observes the trend of digital difference and put forward solutions to facilitate society innovation and digital inclusion.

4G Smart City - Accessibility Applications





Chunghwa Telecom is currently a participant in MOEA's 4G Smart City Subsidy Program; it has three main focuses for building a smart city and leading the new smart lifestyle, which are: “Convenience,” “LOHAS,” and “Friendliness.” The Friendliness is mainly concerned with “accessibility applications.” It involves the use of 4G technology to create a living environment that is caring, friendly, and accessible to people with disability.

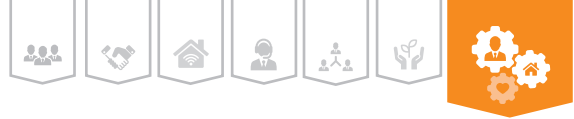
In 2015, this application had already been implemented at locations such as Qingguang Commercial Zone, the section between MRT Zhonghsan Elementary School Station and Technology Development Association for the Disabled, and the section between Tamkang University bus stop and Taipei Resource Center for the Visual Impairment. When persons with visual disability walk along these roads, their cellphones will notify them of the surrounding environment, road condition, or even read out restaurant menus and descriptions to help them shop through ears. The Company has made plans to bring accessibility to 9 MRT stations, 3 streets, and 1 campus in greater Taipei region in 2016. These measures will make life easier for the socially disadvantaged and help build the city's friendly image.

Digital Inclusion

In the era of technology advancement, the “digital gap” has triggered inequality in education and employment opportunity. Chunghwa Telecom focused its social investment in “narrowing the digital gap” and “creation of digital opportunity”, given the specific nature and the core competence of data communication of the industry we are in. In addition, we also spare no effort in the advocacy of “corporate volunteers” to participate in community service, and proactively assist the communities in creating digital opportunity.



Subject	Strategy	Assessment
 Disabilities	<p>Help disabilities and economically disadvantaged persons to use telecom services through ICT technology and favorable rates; develop ICT equipment and provide the same to the disabilities thereby improve their life quality, education and job opportunities. In addition, with the development of ICT services, we also assist in improving the life quality of people with chronicle disease and aged people who need special care.</p>	<p>Trouble-free communication use, life quality improvement, disadvantaged group employment, social change in the community, and enhance image.</p>
 Low Income Earners	<p>In addition to providing favorable rates to disadvantaged groups, we also install ICT equipment for remote and disadvantaged communities.</p>	<p>Easy to use, affordable rates, life quality improvement, social change inside community, equipment utilization, revenue, and enhance image.</p>
 General Public	<p>Provide learning opportunities through sufficient and comprehensive educational programs. We help users to utilize ICT services, smart communication equipment and value-added service through mobile equipment, our network and branch office.</p>	<p>Course integrity, service course for attentive customer, course utilization, revenue, social changes in community, and enhance image.</p>
 Remote Area	<p>Be it geographical location, distance or outlying islands, ICT service shall not have any boundary. Chunghwa Telecom never ceases to ensure the connectivity of communication. In addition to establishing dual-route in remote areas, we also use satellite to improve the communication quality in mountain area and outlying islands.</p>	<p>Basic communications coverage, high-speed wireless broadband coverage, guarantee of smooth communication, improvement of user life, equipment utilization, revenue, enhance image, social change in the community and community environment.</p>



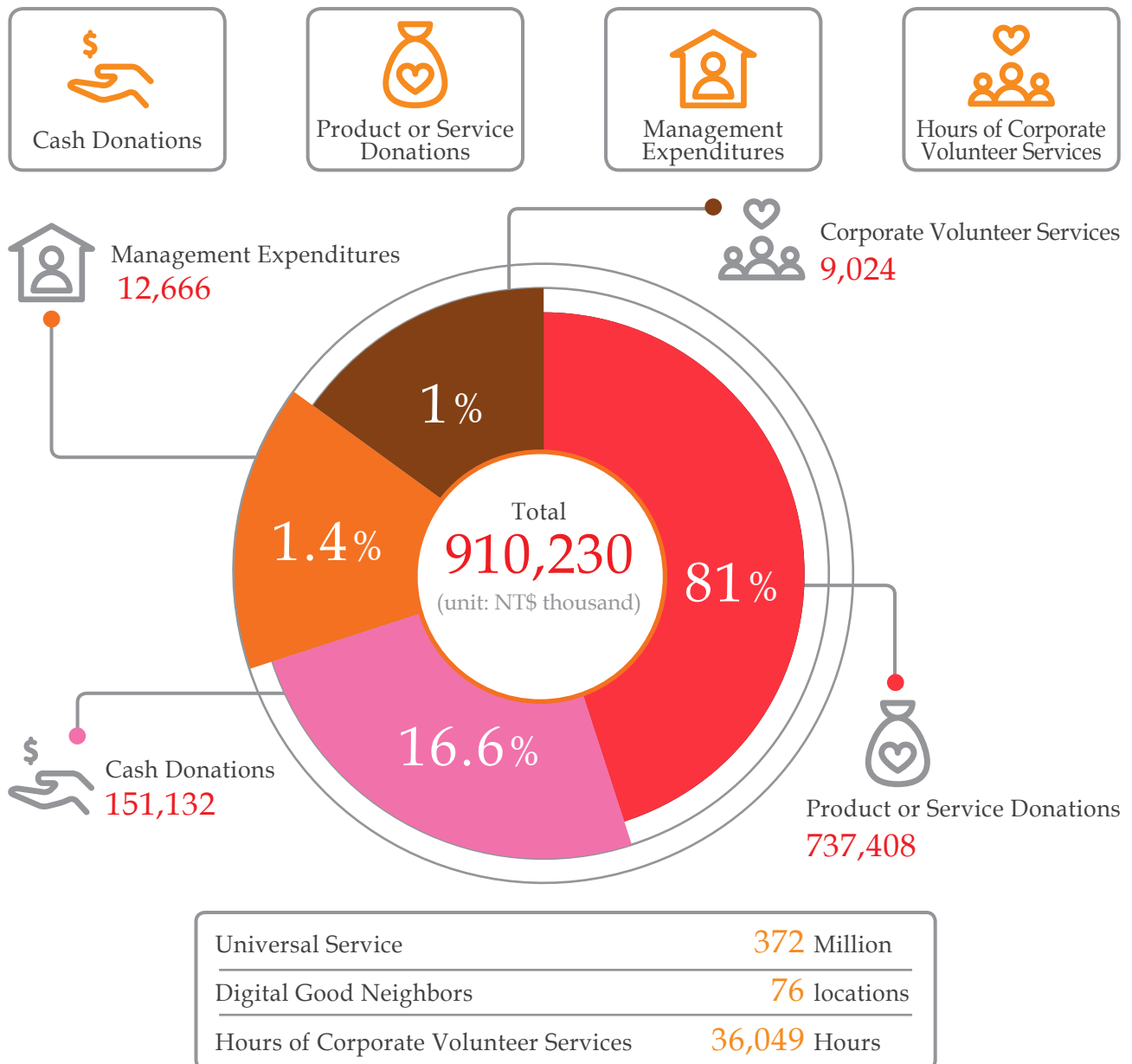
Social Investment Management G4-22

Chunghwa Telecom believes “Taking from the society and contributing back to the society”. Being the largest telecom carrier in Taiwan, our network and services provided throughout Taiwan and remote islands shapes our self-demanding of contributing to the society. Over the years, by exerting our core competence, we continue to create values for society and help society overall to improve quality of life.

Quantification of Contribution of Social Investment

By referencing community investment evaluation mechanism of LBG (London Benchmark Group), Chunghwa Telecom conducts evaluation on the possible Community benefits and Business benefits before social investment is made. The quantification of contribution of social investment allows us to make reasonable resources allocation, while avoiding repetition. It helps our future decision-making and promotion of charity or sponsor activities.

2015 Type of Social Investment



Note: Calculation for service availability has been adjusted to: “Current year net cost” + “amount allocated from previous year” - “amount approved in previous year” since 2015 to more appropriately present the cost effectiveness of social investments. Therefore, the total amount of investment in 2015 lessened a little bit.

Digital Good Neighbors, New Cloud Vision



The CHT Foundation is conceived with the spirit of “responsibility” and dedicated to “narrowing digital gap”, “creating digital opportunity”, “assisting local industries”, “cultivation of community life”, and “keep local events on record” as the directions of its work, and enter the communities from the cultural, industrial, living, and education aspects to share the growth together with the communities.

The beauty of Taiwan lies in the 368 towns and districts that make up the nation. We believe each town and district to be unique in its own way, which is why we respect autonomy of our local offices and encourage them to take sustainable actions to the needs of local residents. Due to resource constraints, it is our goal to maximize our influence by exploring needs first before committing resources.

Since 2006, the foundation has been utilizing the core advantages of Chunghwa Telecom to develop “Digital Community” throughout the nation including offshore islands. This program provides local communities with computer classrooms and open space of information to assist people who are willing but lack the resources to learn. Unlike one-time donations, “Digital Community” is a long-term program thoughtfully structured from early planning, equipment deployment, to maintenance.

Each Digital Community is assigned a different purpose; they may be designed to cater for children of disadvantaged families, or to develop local business activities, or to serve local religious organizations. We have accumulated abundant experience from our long-term engagement with the beneficiaries; for this reason, Chunghwa Telecom Foundation continues to organize Digital Communication Meeting on a regular basis to facilitate exchange of experience between different project groups. In 2015, we organized a special “educational tour” that encouraged local residents to step out of their comfort zone and engage directly with residents of Jiaxian, Kaohsiung. By seeing and experiencing personally the beauties of others, we hope to inspire growth within the participants themselves.

We have long accompanied local residents and heeded their needs through active interaction. Relationship between the Company and local communities has been founded on the basis of mutual trust and fairness, which we hope to expand and realize further growth within each community. By the end of 2015, we have established a total of 76 Digital Communities; our efforts will endure long into the future and become a part of the local community.

Digital Message to Home

Digital Communities are being used not just for computer classroom and information exchange, but have also become a gathering place for new immigrants. In 2015, Chunghwa Telecom Foundation introduced tablet courses to the Digital Community program, which gave new immigrants a chance to learn tablet PCs. The program organizer also made publications of new immigrants’ home culture, thus giving them a familiar sight of home and allowing them to pass on cultural legacy to their children.



Youth Training Scheme

Youth Training Scheme is a program organized between Chunghwa Telecom Foundation and Department of Radio & Television, National Chengchi University that encourages young adults to make real changes in life, step outside of usual circle to experience different things, and learn about themselves and the environment they grow up in through a different perspective. During summer vacations, university students were invited to provide service for 15-20 days at various Digital Communities. They were encouraged to apply what they learned at the local community and at the same time capture local stories on camera.

The 7th “Youth Training Scheme” program received entry from 48 university students, who were assigned to perform service and capture stories at 24 Digital Communities. These students came from different backgrounds, schools and departments, and had devoted themselves to community services by contributing their own specialties such as storytelling, wall arts, creative craft, photography tutoring, cooking lesson, elderly exercise, event recording, journalism and editing class, weaving/dyeing assistance, translation assistance, tour assistance, tribal family photo-taking, remodeling of old houses, and life exploration courses. In the meantime, they captured real and motivating stories through cameras.

The purpose of this program is to share with the public on how the young people see and perceive the stories around them, and in turn motivate others to re-think their connection with the environment and contribute their part. In 2016, we plan to organize a “Story of Falling in love with Taiwan-Photo Exhibition” at selected coffee shops throughout the nation, during which experts will be invited to discuss with participating students to inspire new ideas of how we may care for our local environment.



New Meanings Discovered by Participants of “Youth Training Scheme”

Duan-Yen Hsieh from National Taipei University of Technology and Ruo-Han Huang from Feng Chia University had applied their architectural expertise and helped turn abandoned school into a gathering place for young people under the guidance of local residents. This building has become an important place to preserve tribal culture and legacy.

Over this program, they found themselves learning more than they could share with locals, and experienced first-hand the difference between knowing and doing. They put their knowledge to the test, witnessed the power of teamwork, and returned home with a broader vision.

“To accomplish the task, I had to immerse myself in the local culture and to discover what local people need, and to see things from different perspectives.”

Jin-Ta Chan from Department of Radio & Television and Zi-Hao Lin from Department of Journalism, National Chengchi University were assigned to service at a Paiwan Tribe reserve called “Xinlaiyi.” The two of them started out by interviewing elders about tribal history, and as they astonished locals with the quality portraits they took, they were then asked to take family and ID photos. Photo taking became a major part of their day-to-day activities afterwards, and as they watched the locals dressed up in traditional clothes and wore proud smiles everyday, they started to appreciate the meaning behind their trip. “Many elders lost their photos after the previous Typhoon disaster; therefore they consider photo-taking a meaningful thing to do. We, too, felt happy seeing them smile the way they did, even for such a little thing as pressing a camera.”

After this trip, they received news that one of the elders whom they had taken photo for had passed away. They were asked by locals to edit the photo they took for funeral, and this was the first time they felt the passing of life and a deeper meaning to “photography.”

“Through photos, we involved ourselves in his life and gave him our blessing for his journeys ahead. Fragile as life may be, we can always offer a bit of decency and warmth to the other.”

Connected Resources for Mutual Benefit

Digital Community enable local information exchange at remote locations. Over the course of our efforts, we saw the sparks and possibilities that local residents have exhibited, and hence decided to connect them through the foundation, thereby allow community residents to express voices and seek solutions over a common platform.

Performance art gives children the room to express their imagination, which was why we invited Paper Windmill Theatre to perform at 7 elementary schools located in remote areas such as Dongao (Yilan) and Gaoliao (Hualien). We joined Taiwan Toy Library Association and Homemakers Union in organizing reading courses at seven locations; we invited award-winning singers to Yongle (Pingtung) where they exchanged music talents with local clubs and bands in a successful concert; and last but not least, we bridged support across communities with our Digital Community Program. These accomplishments made us believe that brighter future can be achieved by working with others.



2015 Social Contribution of the Foundation

Item	Input of Resources
Digital Learning	2,917
Digital Good Neighbors	4,342
Click Taiwan	6,017
Social Marketing	4,312
CHT Female Basketball Team	13,781
Administrative Expense	11,185
unit: NT\$ thousand	

Create Digital Opportunity

By utilizing our expertise in telecom technology, we hope that everyone shares the advantage of technology despite their wealth, social status or geographical location, thereby achieving the objective of shortening digital difference and creating digital opportunities. We also contributed resources in developing products and services to meet the needs of the disabled, so as to achieving their rights of enjoying the universe of digital technology.

Telecommunications Universal Service

In 2015, Chunghwa Telecom has established 62 sites for accessibility to telecommunication services in supporting the government for protecting the fundamental right of the people in communication with concrete action.



Beneficiaries of Service

- 84 rural communities in Taiwan
- Telephone service for more than 230,000 households.
- Data communication service for more than 100,000 households.
- More than 64,000 public telephone sets across 22 counties/cities.
- Data connection service for more than 500 high schools, primary schools, and public libraries.

Problems

- The topography of different rural zones are vary significantly and far away, which makes the maintenance of the telecommunication systems difficult.
- There is a higher probability that natural disasters will cause damage to the telecommunication facilities, and the cost of maintenance will not be lower than the cost of installation.



Read with You-Community Network Tutoring



Chunghwa Telecom has supported the education and showed its concern for the rural villages since 2009, after the turmoil left behind by Typhoon Morakot. We extend our service to the permanent settlement and newly developed communities in the disaster zone. Through the installation of visual technology of the Internet, we delivered the educational resources in the form of private tutorship to rural villages and the hands of the unfortunate. We hope to give the children of the next generation a learning environment with “safety, dignity, and hope”!

Cooperated with Fu Jen University- Rural Villages Network Tutoring Program

Input ▶ Resource

- From the end of December 2009 to the end of January 2016, a total of NT\$3.3 million and 58,625 tutoring hours.

Output ▶ Impacts

- The first company in ICT industry to establish collaboration relationship with university, the combination of industry and academic resources to solve long distance tutoring in remote areas.
- Exerting the core competence of communication and corporate advantage of the “Big neighbor” of the society, to help remote schools solving computer maintenance and communication issues.

Community Benefit

- Exerting corporate core competence, implement the corporate social commitment of “shorten digital difference” and “create digital learning opportunity”.
- Fulfill “Big neighbor” duty to shorten the distance between urban and rural areas through communication technology, and convey warmth between people.

Business Benefit

- The deepening care helps to open up the dialogue with stakeholders, and establish corporate image in welfare project.
- Combine social resources and minimize the gap of manpower in corporate social welfare.



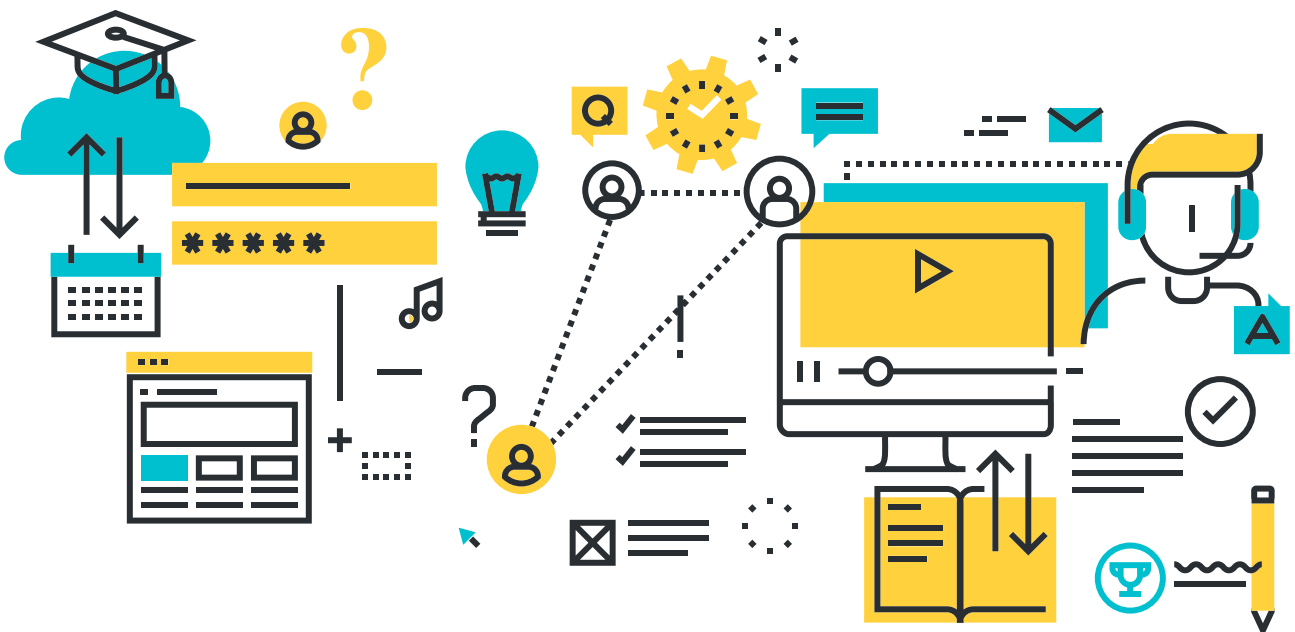
Characteristics	By way of online education, university students assist the pupils of junior high schools and primary schools in the rural villages in enhancing their learning effect and prompt for equal opportunity of learning.
Method	To realize the spirit of stakeholder engagement, we have cooperated with Fu Jen University for online education. University students were called to the cause with one-to-one tutoring to take care of the school children in the rural villages and the disaster zones.
Participants	Chin Lun Hot Spring Tribe in Taitung, Galan Community at Taitung, Pingtung Sunshine Tutoring Association, Pingtung Feng Lin Church, Pingtung Chao Chou Boys Town, Kaohsiung Liu Kuei Catholic Church, Kaohsiung Shan Lin Tzuchi Park, Chiayi Fu Jen High School, Yilan Toucheng Catholic Church, Orchid Island High School and Matzu High School.

Tutorship at Primary School Level	1,617	Tutorship at University Level	2,560
Tutorial Hours	58,625	Tutorship on Summer and Winter Classes	1,433

Note: The data period started on 2009.12.01 and ended on 2016.01.31.

Major result in 2015

- The Ministry of Education organized an “Integrated Learning” event and invited participants of Chunghwa Telecom’s long-distance tuition aid program and the ministry’s e-Tutor partners, comprising of elementary/junior high school students and teachers, to interact face-to-face.
- Following an exhibition of e-Tutor’s “Ten-year Accomplishment,” Chunghwa Telecom was awarded by the Ministry of Education for “Long-term Support of Digital Solutions.”



Voice-Based Personal Assistance App for the Visually Impaired



In 2013, we launched a “Voice-based Personal Assistance App” that was specifically designed for the visually impaired. The App incorporates image, voice, reading, and lifestyle functions to assist the visually impaired and elders in many difficulties they encounter in life. By the end of 2015, the App had received 10,676 downloads, making it one of the most convenient and useful personal assistant to the visually impaired.

Result at Present

- In 2014, the iPhone version was released in four languages, offering 30,000 audiobooks and the ability to recognize cash notes of five different countries. Currently, there are 200 volunteers in Taiwan providing service over the cloud to help users identify various items in life.
- In 2015, the iPhone version was added with new features including Internet surfing, 4G mobile learning, hand gesture control, and bookmark. It was the first application to support NCC’s “Accessible Communication Action Plan” and incorporate audio description of images, films, baseball games and other digital contents. It provides the visually impaired with great accessibility to high-speed broadband and digital learning environment.

Future Target

A 4G-based smart guidance feature will be added to bring live video assistance and Beacon assistance to the visually impaired. Using 4G live video assistance, volunteers can see for the visually impaired and help them resolve problems such as shopping and reading without having to be physically present. The App and volunteers’ assistance have enabled visually impaired persons to experience the world in different ways.



Senior Citizens App



“Senior Citizens App” was the first application developed by Chunghwa Telecom and Institute for Information Industry that specializes in addressing the needs of the elderly population. The App contains useful features including phone assistance, contact list, caller band announcement, weather inquiry, health reminder, emergency contact, photo sharing, and video streaming. Through this App, we hope to make smartphones and tablet PCs more user friendly to elders and narrow their digital divide.

Result at Present

The Institute for Information Industry later joined HonDao Senior Citizen’s Welfare Foundation in organizing one Chungyang Festival event in Chiayi followed by one family recreational event in Xinzhuang Civil Sports Center, during which senior citizens aged 55 and above were interviewed and invited to experience the App. During the two events, the App was promoted to 400 people, of which 71 had tried to use the App. More than 80% of interviewed elders were satisfied with the App’s overall impression, interface, and functionality.

Future Target

We hope to complete user experience tests in greater details on 400 elders, and use our findings to optimize the Senior Citizens App and develop long-distance companion features by combining video calls and 4G technology. Doing so would give elders a broader means to interact with the outside world.

Chunghwa Telecom plans to reach the elderly population through government and non-government organizations such as Social and Family Affairs Administration, HonDao Senior Citizen’s Welfare Foundation, Taipei Xiaocheng Residents Association, and Sanmu Riguan Residents Association. It expects to visit 10 community centers and participate in three major charity events, during which an exclusive booth will be established to market, promote, and allow users to experience the App.



Innovation Creates Employment Opportunity

Chunghwa Telecom has engaged in long-term cooperation with the Resources Center for the Blind at Tamkang University, and has established the EYE Social Innovative Call Center in 2011. The joint effort led to the unveil of the first “Total solution” in Taiwan, including the research and development of the computer assisted telephone system for the visually impaired, improvement and the training and supervision of talents and develop the skills of the telephone customer service personnel in responding to the needs of the visually impaired.

- In 2015, the Company completed an upgrade for Taipei City’s 1999 hotline, making it user-friendly to the visually impaired. This upgrade included: a real-time notification system, a three-way call feature with voice recording, English/Japanese service, verbal abuse referral feature, call duration reminder, health regulation inquiry feature, and quick link to service sub-categories. These upgrades were made to improve the scope and efficiency of services delivered by the customer service personnel.
- By the end of 2015, “Total Solutions” had provided 9 satisfaction surveyors for Chunghwa Telecom and 12 customer service personnel for Taipei City’s 1999 hotline, who process more than 11,525 calls each month. One of the surveyors for the visually impaired had even passed internal assessment and became the head of customer phone service unit.

Automated Voice Donations

The automated voice donation system developed by Chunghwa Telecom Laboratories continues to prove helpful to charity, social welfare, cultural, educational, and environmental protection institutions, as it provides donors with a more convenient means of donation using cellphones, and has proven to raise more donations than conventional methods. Donors simply need to pick up their cellphones, dial the number and follow instructions as prompted by the voice system to contribute care to those in need. This service had raised NT\$721 million in donations in 2015.

QR Code-Charity Donation

In 2013, the Company introduced a QR code-based mobile payment service that allows users to make donations more conveniently simply by scanning the appropriate QR Code. This feature enables funds to be raised through a multitude of channels other than convenience stores and websites, while at the same time reduces the amount of manual works. Since its initial launch until the end of 2015, this service was used 401 times and raised NT\$179,028 in donations.



Preferential Subsidies for the Disadvantaged Groups

Chunghwa Telecom has long been subsidizing telecommunication services for the socially disadvantaged, and assuring their accessibility to basic communication:

Preferential Plan	Preferential Content	Preferential Amount and Benefited People
Public Phone Card Subsidy	<ul style="list-style-type: none"> • NT\$100 IC public phone card for the disadvantaged applicant. • Provides two IC public phone card for visually impaired each year. 	4,533 People 2,367 thousand
Caring Series Rate Plan	<ul style="list-style-type: none"> • Double communication hours at original rate plan. • 300 free SMS intra-network and 100 free SMS extra-network. 	- 16,297 thousand
Broadband Preferential Plan for Low-income Households	<ul style="list-style-type: none"> • 50% off on HiNet 6M/2M, 20M/5M, 60M/15M monthly rate. • 50% off on ADSL 2M/64K and 5M/384K monthly rate. 	2,188 People 9,405 thousand
4G mobile data plan for disabled persons	Disabled persons are entitled to a NT\$200 discount on monthly subscriptions when subscribing to 4G 636 plan and above. During the contract period, users are further entitled to complimentary CHT Wi-Fi Internet access; limited to one account per ID.	- 5,001 thousand
Broadband Preferential Plan for the Disabled	<ul style="list-style-type: none"> • 5% off on HiNet 20M/5M and 60M/15M monthly rate. • 15% off on ADS 5M/384K monthly rate. • 5% off for other rates. 	898 People 423 thousand
MOD Plan for the Socially Unfortunate	<ul style="list-style-type: none"> • Platform charges: 50% discount (NT\$45/month) for the first 24 months from the work completion date. • Subscribers of family premium package are entitled to 10% discount (amount payable: NT\$243/month; excluding MOD platform charges) for 24 months, and the normal rate after the discount period expires. 	2,967 People Note: The data period started on 2015.1.01 and ended on 2016.5.15 1,566 thousand Note: The charges not include the Channel package
Healthy Internet Plan	For low-income households, providing free first year service to protect children from harmful websites such as pornography, violence, suicide, weapons, gambling AND drugs.	112 People 133 thousand
Welfare Public Telephone	<ul style="list-style-type: none"> • Installed 110 cm from the floor in public areas for the convenience of the handicapped. • The keyboard was designed with embossment for the visually impaired on the "5" key, and a function for voice adjustment from 3db to 6db that is exclusively prepared for people using hearing aids. • A slot for inserting an IC card is designed on the side of all public telephone sets for the convenience of the visually impaired. 	
Message Relay Service for the Hearing and Speech Impaired	All telephone messages will be translated and faxed to the service hotline 0800-080885. The service personnel will then relay the message in voice and return the message to the hearing and speech impaired caller (up to 80 words for relay and up to 30 words for reply). Those who are not hearing and speech impaired may also call the hotline for the relay of messages via fax to the hearing and speech impaired. The service hours are 08:00-21:00 daily.	



Table of the Key Associations Jointed by Chunghwa Telecom

G4-16

Chunghwa Telecom has joined almost 100 associations and groups with a view to upgrading its technology and stimulating the development of the industry through exchange and cooperation within the industry and across different industries:

Name of Organization	Note
The Chinese Institute of Electrical Engineering	Present opinions on the telecommunication policy of the government through the telecommunication symposium held by the institute, and sponsor the activities of the institute so as to perform the responsibility of supporting the industry.
Taiwan Intelligent Aerotropolis Association	CHT leads the planning and the operation of the association so as to develop new business opportunities and the industrial prowess of Taiwan, and develop the kind of skills capable of exporting solutions to all parts of the world.
Taiwan Telecommunication Industry Development Association	This is a platform for interchange among the industry peers. With collective consultation and discussion on important issues, this association plays the role as the bridge between the industry and the competent authority.
Chinese International Economic Cooperation Association	CHT delivered speeches on special topics at invitation of the association, and assist in the promotion of international exchange and business joint venture.
TCCDA (Taiwan Customer Service Center Development Association)	Organize seminars frequently and introduce the latest customer service system techniques, operation management, and concept of service and business innovation, which is helpful for CHT to improve its operation management and customer service.
Pacific Telecommunications Council(PTC)	Contact with worldwide telecommunications firms at regular intervals for business deal in nearby locations. This provided substantial result in overseas business expansion.
BCSD Taiwan	Good for the review of sustainable corporate development strategy and the introduction of related management tool, control the dynamics of the international development of CSR issues.
Cloud Computing Association in Taiwan	It helps to get a grip on the information of the government cloud and business opportunity and give recommendations to the government on the cloud industry through the association.
Taiwan Electromagnetic Industry-Academia Consortium	This is a research consortium organized by the university faculties specialized in electromagnetic across Taiwan who have strong potential in the research and development of B4G/5G wireless technology.



ASSURANCE STATEMENT

SGS TAIWAN LTD.'S REPORT ON SUSTAINABILITY ACTIVITIES IN THE CHUNGHWA TELECOM CO., LTD.'s CORPORATE SOCIAL RESPONSIBILITY REPORT FOR 2015

NATURE AND SCOPE OF THE ASSURANCE/VERIFICATION

SGS Taiwan Ltd. (hereinafter referred to as SGS) was commissioned by Chunghwa Telecom Co., Ltd. (hereinafter referred to as CHT) to conduct an independent assurance of the Corporate Social Responsibility Report for 2015 (hereinafter referred to as CSR Report). The scope of the assurance, based on the SGS Sustainability Report Assurance methodology, included the text, and data in accompanying tables, contained in this report.

The information in the CHT's CSR Report of 2015 and its presentation are the responsibility of the management of CHT. SGS has not been involved in the preparation of any of the material included in CHT's CSR Report of 2015. Our responsibility is to express an opinion on the text, data, graphs and statements within the scope of verification with the intention to inform all CHT's stakeholders.

The SGS protocols are based upon internationally recognized guidance, including the Principles contained within the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines (2013) for accuracy and reliability and the guidance on levels of assurance contained within the AA1000 series of standards and guidance for Assurance Providers.

This report has been assured using our protocols for:

- evaluation of content veracity at a high level of scrutiny for CHT and moderate level of scrutiny for subsidiaries, and applicable aspect boundaries outside of the organization covered by this report;
- AA1000 Assurance Standard (2008) Type 2 evaluation of the report content and supporting management systems against the AA1000 Accountability Principles (2008);
- evaluation of the report against the Global Reporting Initiative Sustainability Reporting Guidelines (G4 2013);
- evaluation of the report against the GRI Telecommunications Sector Supplement (Pilot Version 1.0); and
- evaluation of the report against the IIRC International <IR> Framework (Chinese version 2015) requirements for content elements

The assurance comprised a combination of pre-assurance research, interviews with relevant employees, superintendents, CSR committee members and the senior management in Taiwan; documentation and record review and validation with external bodies and/or stakeholders where relevant. Financial data drawn directly from independently audited financial accounts has not been checked back to source as part of this assurance process.

STATEMENT OF INDEPENDENCE AND COMPETENCE

The SGS Group of companies is the world leader in inspection, testing and verification, operating in more than 140 countries and providing services including management systems and service certification; quality, environmental, social and ethical auditing and training; environmental, social and sustainability report assurance. SGS affirm our independence from CHT, being free from bias and conflicts of interest with the organisation, its subsidiaries and stakeholders.

The assurance team was assembled based on their knowledge, experience and qualifications for this assignment, and comprised auditors registered with ISO 26000, ISO 20121, ISO 50001, SA8000, EICC, QMS, EMS, SMS, GPMS, CFP, WFP, GHG Verification and GHG Validation Lead Auditors and experience on the SRA Assurance service provisions.

VERIFICATION/ ASSURANCE OPINION

On the basis of the methodology described and the verification work performed, we are satisfied that the information and data contained within CHT's CSR Report of 2015 verified is accurate, reliable and provides a fair and balanced representation of CHT sustainability activities in 01/01/2015 to 12/31/2015.

The assurance team is of the opinion that the Report can be used by the Reporting Organisation's Stakeholders. We believe that the organisation has chosen an appropriate level of assurance for this stage in their reporting. In our opinion, the contents of the report, CHT's 2015 Corporate Social Responsibility Report, meet the requirements of GRI G4 Comprehensive Option, GRI Telecommunications Sector Supplement (Pilot Version) and AA1000 Assurance Standard Type 2, High level assurance. The report also appropriately responds to the content elements requirements of The IIRC International <IR> Framework.

AA1000 ACCOUNTABILITY PRINCIPLES (2008) CONCLUSIONS, FINDINGS AND RECOMMENDATIONS

Inclusivity

CHT has demonstrated a strong commitment to stakeholder inclusivity and stakeholder engagement. A variety of engagement efforts such as survey and communication to employees, customers, investors, authorities, local communities, suppliers and other stakeholders are implemented to underpin the organization's understanding of stakeholder concerns.

Materiality

CHT has established effective processes for determining issues that are material to the business. Formal review has identified stakeholders and those issues that are material to each group and the report addresses these at an appropriate level to reflect their importance and priority to these stakeholders.

Responsiveness

The report covers comprehensive and balance responses to stakeholder concerns and material issues. It is recommended to report on more direct engagements results with stakeholders in the future.

GLOBAL REPORTING INITIATIVE REPORTING GUIDELINES (G4 2013) CONCLUSIONS, FINDINGS AND RECOMMENDATIONS

The report, CHT's CSR Report of 2015, is adequately in line with the GRI G4 Comprehensive Option. The material aspects and their boundaries within and outside of the organization are properly defined in accordance with GRI's Reporting Principles for Defining Report Content. Disclosures of identified material aspects and boundaries, and stakeholder engagement, G4-17 to G4-27, are correctly located in content index and report. More disclosures on the material aspects related to the subsidiaries are encouraged for future reporting.

Signed:

For and on behalf of SGS Taiwan Ltd.



Dennis Yang, Chief Operating Officer
Taipei, Taiwan
17 June, 2016
WWW.SGS.COM



AA1000
Licensed Assurance Provider
000-8

Annual	Disclosure Item	Page Number and Comment	Identified Omission and Explanation	External Assurance
G4-1	Provide a statement from the most senior decision-maker of the organization	4~5		v
G4-2	Provide a description of key impacts, risks, and opportunities.	26~27,36~38		v
G4-3	Report the name of the organization.	Chunghwa Telecom		v
G4-4	Report the primary brands, products, and services.	14,16~17		v
G4-5	Report the location of the organization's headquarters.	14		v
G4-6	Report the number of countries where the organization operates, and names of countries where either the organization has significant operations or that are specifically relevant to the sustainability topics covered in the report.	14		v
G4-7	Report the nature of ownership and legal form.	14		v
G4-8	Report the markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries).	14		v
G4-9	Report the scale of the organization	14,17		v
G4-10	Report the total number of employees	16		v
G4-11	Report the percentage of total employees covered by collective bargaining agreements.	72		v
G4-12	Describe the organization's supply chain.	20-21		v
G4-13	Report any significant changes during the reporting period regarding the organization's size, structure, ownership, or its supply chain	None		v
G4-14	Report whether and how the precautionary approach or principle is addressed by the organization.	36-38		v
G4-15	List externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes or which it endorses.	31		v
G4-16	List memberships of associations (such as industry associations) and national or international advocacy organizations	111		v
G4-17	List all entities included in the organization's consolidated financial statements or equivalent documents.	Please refer to Chunghwa Telecom's 2015 annual report p.100		v
G4-18	Explain the process for defining the report content and the Aspect Boundaries.	6-9		v
G4-19	List all the material Aspects identified in the process for defining report content.	6-9		v
G4-20	For each material Aspect, report the Aspect Boundary within the organization	6-9		v
G4-21	For each material Aspect, report the Aspect Boundary outside the organization	6-9		v
G4-22	Report the effect of any restatements of information provided in previous reports, and the reasons for such restatements.	93~94,101		v

Annual	Disclosure Item	Page Number and Comment	Identified Omission and Explanation	External Assurance
G4-23	Report significant changes from previous reporting periods in the Scope and Aspect Boundaries.	None		v
G4-24	Provide a list of stakeholder groups engaged by the organization.	6~9		v
G4-25	Report the basis for identification and selection of stakeholders with whom to engage.	6~9		v
G4-26	Report the organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process.	6~9		v
G4-27	Report key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting. Report the stakeholder groups that raised each of the key topics and concerns.	6~9		v
G4-28	Reporting period (such as fiscal or calendar year) for information provided.	2015/1/1~2015/12/31		v
G4-29	Date of most recent previous report (if any).	2015/8/31		v
G4-30	Reporting cycle (such as annual, biennial).	Annual		v
G4-31	Provide the contact point for questions regarding the report or its contents.	1		v
G4-32	Report the 'in accordance' option the organization has chosen.	Comprehensive		v
G4-33	Report the organization's policy and current practice with regard to seeking external assurance for the report.	1		v
G4-34	Report the governance structure of the organization, including committees of the highest governance body. Identify any committees responsible for decision-making on economic, environmental and social impacts.	28~29		v
G4-35	Report the process for delegating authority for economic, environmental and social topics from the highest governance body to senior executives and other employees.	34		v
G4-36	Report whether the organization has appointed an executive-level position or positions with responsibility for economic, environmental and social topics, and whether post holders report directly to the highest governance body.	34		v
G4-37	Report processes for consultation between stakeholders and the highest governance body on economic, environmental and social topics. If consultation is delegated, describe to whom and any feedback processes to the highest governance body.	34		v
G4-38	Report the composition of the highest governance body and its committees	29		v
G4-39	Report whether the Chair of the highest governance body is also an executive officer (and, if so, his or her function within the organization's management and the reasons for this arrangement).	29,34		v
G4-40	Report the nomination and selection processes for the highest governance body and its committees, and the criteria used for nominating and selecting highest governance body members	30	Environmental and social aspects have yet to be incorporated into the selection criteria.	v
G4-41	Report processes for the highest governance body to ensure conflicts of interest are avoided and managed. Report whether conflicts of interest are disclosed to stakeholders	30		v

Annual	Disclosure Item	Page Number and Comment	Identified Omission and Explanation	External Assurance
G4-42	Report the highest governance body's and senior executives' roles in the development, approval, and updating of the organization's purpose, value or mission statements, strategies, policies, and goals related to economic, environmental and social impacts.	4~5, 34		v
G4-43	Report the measures taken to develop and enhance the highest governance body's collective knowledge of economic, environmental and social topics.	Please refer to Chunghwa Telecom's 2015 annual report p.41~43		v
G4-44	Report the processes for evaluation of the highest governance body's performance with respect to governance of economic, environmental and social topics. Report whether such evaluation is independent or not, and its frequency. Report whether such evaluation is a self-assessment.	34	We have formulated assessment procedure and are waiting to get approval by Board of Directors	v
G4-45	Report the highest governance body's role in the identification and management of economic, environmental and social impacts, risks, and opportunities. Include the highest governance body's role in the implementation of due diligence processes.	34		v
G4-46	Report the highest governance body's role in reviewing the effectiveness of the organization's risk management processes for economic, environmental and social topics.	34		v
G4-47	Report the frequency of the highest governance body's review of economic, environmental and social impacts, risks, and opportunities.	34		v
G4-48	Report the highest committee or position that formally reviews and approve	34		v
G4-49	Report the process for communicating critical concerns to the highest governance body.	34		v
G4-50	Report the nature and total number of critical concerns that were communicated to the highest governance body and the mechanism(s) used to address and resolve them.	Please refer to Chunghwa Telecom's 2015 annual report p.54~58		v
G4-51	Report the remuneration policies for the highest governance body and senior executives	Please refer to Chunghwa Telecom's 2015 annual report p.34,42		v
G4-52	Report the process for determining remuneration. Report whether remuneration consultants are involved in determining remuneration and whether they are independent of management. Report any other relationships, which the remuneration consultants have with the organization.	Please refer to Chunghwa Telecom's 2015 annual report p.34,42		v
G4-53	Report how stakeholders' views are sought and taken into account regarding remuneration, including the results of votes on remuneration policies and proposals, if applicable.		We don't have such process yet	v
G4-54	Report the ratio of the annual total compensation for the organization's highest-paid individual in each country of significant operations to the median annual total compensation for all employees (excluding the highest-paid individual) in the same country.	73		v
G4-55	Report the ratio of percentage increase in annual total compensation for the organization's highest-paid individual in each country of significant operations to the median percentage increase in annual total compensation for all employees (excluding the highest-paid individual) in the same country.	Highest-paid individual's pay did not increase in 2015		v
G4-56	Describe the organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics.	39		v
G4-57	Report the internal and external mechanisms for seeking advice on ethical and lawful behavior, and matters related to organizational integrity, such as helplines or advice lines.	39,74		v
G4-58	Report the internal and external mechanisms for reporting concerns about unethical or unlawful behavior, and matters related to organizational integrity, such as escalation through line management, whistleblowing mechanisms or hotlines.	39,74		v

Specific Standard Disclosures

DMA and Indicators		Disclosure Item	Page Number and Comment	Identified Omission and Explanation	External Assurance
CATEGORY: ECONOMIC					
MATERIAL ASPECT: ECONOMIC PERFORMANCE					
DMA p.16	EC1	Direct economic value generated and distributed	16		v
	EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change	37~38,89		v
	EC3	Coverage of the organization's defined benefit plan obligations	81-83		v
	EC4	Financial assistance received from government	None		v
MATERIAL ASPECT: MARKET PRESENCE					
DMA p.73	EC5	Ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation	73		v
	EC6	Proportion of senior management hired from the local community at significant locations of operation	All our employees are Taiwanese and hired from local community		v
* PROCUREMENT PRACTICES					
DMA p.43	EC9	Proportion of spending on local suppliers at significant locations of operation	43		v
CATEGORY: ENVIRONMENT					
MATERIAL ASPECT: Energy					
DMA p.85	EN29	Monetary value of significant fines and total number of nonmonetary sanctions for noncompliance with environmental laws and regulations	None		v
*ENERGY					
DMA p.91	EN3	Energy consumption within the organization	91	Main consumption is power usage, for 95% of overall	v
	EN4	Energy consumption outside the organization	-	Cannot calculate temporarily	v
	EN5	Energy intensity	84		v
	EN6	Reduction of energy consumption	48,91,96~97		v
	EN7	Reduction in energy requirements of products and services	48,91,96~97		v
*MATERIAL ASPECT: EMISSIONS					
DMA p.89	EN15	Direct greenhouse gas (GHG) emissions (SCOPE 1)	89		v
	EN16	Energy indirect greenhouse gas (GHG) emissions (SCOPE 2)	89		v
	EN17	Other indirect greenhouse gas (GHG) emissions (SCOPE 3)	90		v
	EN18	Greenhouse gas (GHG) emissions intensity	89		v
	EN19	Reduction of greenhouse gas(GHG) emissions	86~90,96~97		v
	EN20	Emissions of Ozone-Depleting substances (ODS)	-	Not applicable	v
	EN21	NOX, SOX, and other significant air emissions	-	Not applicable	v
*MATERIAL ASPECT: PRODUCTS AND SERVICES					
DMA p.86	EN27	Extent of impact mitigation of environmental impacts of products and services	48,96~97		v
	EN28	Percentage of products sold and their packaging materials that are reclaimed by category	-	Not applicable	v

DMA and Indicators	Disclosure Item	Page Number and Comment	Identified Omission and Explanation	External Assurance
CATEGORY: SOCIAL				
SUB-CATEGORY: LABOR PRACTICES AND DECENT WORK				
MATERIAL ASPECT: EMPLOYMENT				
DMA p.73	LA1	Total number and rates of new employee hires and employee turnover by age group, gender and region	73	v
	LA2	Benefits provided to full-time employees that are not provided to temporary or part time employees, by significant locations of operation	81~82	v
	LA3	Return to work and retention rates after parental leave, by gender	83	v
Aspect: Labor/Management Relations				
DMA p.72	LA4	Minimum notice periods regarding operational changes, including whether these are specified in collective agreements	72	v
Aspect: Occupational Health and Safety				
DMA p.78	LA5	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs	79	v
	LA6	Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work related fatalities, by region and by gender	79	v
	LA7	Workers with high incidence or high risk of diseases related to their occupation	80	v
	LA8	Health and safety topics covered in formal agreements with trade unions	Please refer to Chunghwa Telecom's Collective Agreement Chapter 6.	v
MATERIAL ASPECT: TRAINING AND EDUCATION				
DMA p.75	LA9	Average hours of training per year per employee by gender, and by employee category	77	Current system does not support the function of categorizing by gender v
	LA10	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	83	v
	LA11	Percentage of employees receiving regular performance and career development reviews, by gender and by employee category	76	v
Aspect: Labor Practices Grievance Mechanisms				
DMA p.74	LA16	Number of grievances about labor practices filed, addressed, and resolved through formal grievance mechanisms	None	v
SUB-CATEGORY: HUMAN RIGHTS				
Aspect: Investment				
DMA p.31	HR1	Total number and percentage of significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	41	v
	HR2	Total hours of employee training on human rights policies or procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained	31	v
Aspect: Nondiscrimination				
DMA p.74	HR3	Total number of incidents of discrimination and corrective actions taken	None	v
Aspect: Child Labor				
DMA p.31	HR5	Operations and suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor	None	v

DMA and Indicators		Disclosure Item	Page Number and Comment	Identified Omission and Explanation	External Assurance
*MATERIAL ASPECT: Freedom of association and collective bargaining					
DMA p.72	HR4	Operations and suppliers identified in which the right to exercise freedom of association and collective bargaining maybe violated or at significant risk, and measures taken to support these rights	None		v
SUB-CATEGORY: SOCIETY					
MATERIAL ASPECT: LOCAL COMMUNITIES					
DMA p.102	SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs	68,102	The calculation method is under discussion	v
	SO2	Operations with significant actual and potential negative impacts on local communities	None		v
Aspect: Anticorruption					
DMA p.39	SO3	Total number and percentage of operations assessed for risks related to corruption and the significant risks identified	None		v
	SO4	Communication and training on anticorruption policies and procedures	39		v
	SO5	Confirmed incidents of corruption and actions taken	None		v
Aspect: Compliance					
DMA p.42	SO8	Monetary value of significant fines and total number of nonmonetary sanctions for noncompliance with laws and regulations	None		v
Aspect: Grievance Mechanisms for Impacts on Society					
DMA p.40	SO11	Number of grievances about impacts on society filed, addressed, and resolved through formal grievance mechanisms	None		v
SUB-CATEGORY: PRODUCT RESPONSIBILITY					
MATERIAL ASPECT: PRODUCT AND SERVICE LABELING					
DMA p.58	PR3	Type of product and service information required by the organization's procedures for product and service information and labeling, and percentage of significant product and service categories subject to such information requirements	100%		v
	PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes	None		v
	PR5	Results of surveys measuring customer satisfaction	64		v
MATERIAL ASPECT: MARKETING COMMUNICATIONS					
DMA p.39	PR6	Sale of banned or disputed products	None		v
	PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship, by type of outcomes	39		v
MATERIAL ASPECT: Customer Privacy					
DMA p.59	PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	None		v
Aspect: Compliance					
DMA p.68	PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	68		v
*MATERIAL ASPECT: CUSTOMER HEALTH AND SAFETY					
DMA p.68	PR1	Percentage of significant product and service categories for which health and safety impacts are assessed for improvement	68		v
	PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services during their life cycle, by type of outcomes	None		v

Note: Indicators marked with * have been disclosed voluntarily, and are not part of the material aspects identified in 2015.

Telecommunication Sector Specific Indicators

DMA and Indicators	Disclosure Item	Page Number and Comment	Identified Omission and Explanation	External Assurance
SUB-CATEGORY: INTERNAL OPERATIONS				
MATERIAL ASPECT: Investment				
DMA p.105	IO1	Capital investment in telecommunication network infrastructure broken down by country/region.	62~63,105	v
	IO2	Net costs for service providers under the Universal Service Obligation when extending service to geographic locations and low-income groups, which are not profitable. Describe relevant legislative and regulatory mechanisms.	101	v
MATERIAL ASPECT: Health and Safety				
DMA p.68	IO3	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. Related health and safety issues include working at heights, electric shock, exposure to EMF and radio frequency fields, and exposure to hazardous chemicals.	78~80	v
	IO4	Compliance with ICNIRP (International Commission on Non-Ionising Radiation Protection) standards on exposure to radiofrequency (RF) emissions from handsets	12,68	v
	IO5	Compliance with ICNIRP (International Commission on Non-Ionising Radiation Protection) guidelines on exposure to radiofrequency (RF) emissions from base stations.	12,68	v
	IO6	Policies and practices with respect to Specific Absorption Rate (SAR) of handsets.	12,68	v
MATERIAL ASPECT: Infrastructure				
DMA p.68	IO7	Policies and practices on the siting of masts and transmission sites including stakeholder consultation, site sharing, and initiatives to reduce visual impacts. Describe approach to evaluate consultations and quantify where possible.	68	v
	IO8	Number and percentage of stand-alone sites, shared sites, and sites on existing structures.	69	v
SUB-CATEGORY: PROVIDING ACCESS				
MATERIAL ASPECT: Access to Telecommunication Products and Services: Bridging the Digital Divide¹				
DMA p.105	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. Include an explanation of business models applied.	24~25, 63,105	v
	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.	24~25, 63,105	v
	PA3	Policies and practices to ensure availability and reliability of telecommunications products and services and quantify, where possible, for specified time periods and locations of down time.	58~59	v
	PA4	Quantify the level of availability of telecommunications products and services in areas where the organization operates. Examples include: customer numbers/market share, addressable market, percentage of population covered, percentage of land covered.	62,105	v
	PA5	Number and types of telecommunication products and services provided to and used by low and no income sectors of the population. Provide definitions selected. Include explanation of approach to pricing, illustrated with examples such as price per minute of dialogue/bit of data transfer in various remote, poor or low population density areas.	110	v
	PA6	Programmes to provide and maintain telecommunication products and services	66~67	v
MATERIAL ASPECT: Access to Content				
DMA p.100	PA7	Policies and practices to manage human rights issues relating to access and use of telecommunications products and services.	100	v
MATERIAL ASPECT: Customer Relations				
DMA p.68	PA8	Policies and practices to publicly communicate on EMF related issues. Include information provides at points of sales material.	68	v
	PA9	Total amount invested in programmes and activities in electromagnetic field research. Include description of programmes currently contributed to and funded by the reporting organisation.	68	v
	PA10	Initiatives to ensure clarity of charges and tariffs.	58	v
	PA11	Initiatives to inform customers about product features and applications that will promote responsible, efficient, cost effective, and environmentally preferable use.	58~60	v
SUB-CATEGORY: Technology Applications				
MATERIAL ASPECT: Resource Efficiency				
DMA p.45	TA1	Provide examples of the resource efficiency of telecommunication products and services delivered.	58	v
	TA2	Provide examples of telecommunication products, services and applications that have the potential to replace physical objects (e.g. a telephone book by a database on the web or travel by videoconferencing)	46~48, 108~109	v
	TA3	Disclose any measures of transport and/or resource changes of customer use of the telecommunication products and services listed above. Provide some indication of scale, market size, or potential savings.	45~48, 108~109	v
	TA4	Disclose any estimates of the rebound effect (indirect consequences) of customer use of the products and services listed above, and lessons learned for future development. This may include social consequences as well as environmental.	62~64, 108~109	v
	TA5	Description of practices relating to intellectual property rights and open source technologies.	50~53	v

The background features a stylized globe with a network of white lines connecting various points, suggesting global connectivity. On the left, a large, curved, blue and white structure resembling a data tunnel or fiber optic cable curves around the globe. The overall color palette is light blue and white, with a decorative orange, green, and blue striped bar at the bottom left.

Smart CSR Leads Smart City



Chunghwa Telecom