

2020 ESG Report

Environmental Social and Governance



Editorial Policy

Welcome to Chunghwa Telecom’s 14th 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 our stakeholders gain a better understanding of our CSR-related efforts and performances in 2020.

<https://www.cht.com.tw/en/home/cht/sustainability/csr-report-download> 

Reporting Period

This report discloses the Company’s CSR management policies, material issues, countermeasures, initiatives and results between January 1 and December 31, 2020. However, to ensure complete coverage, parts of the report include descriptions of initiatives and results from 2019 to 2021.

References

| Issuing Organization | Item |
|--|---|
| The Global Reporting Initiative, GRI | GRI Standards: Core option |
| | G3.1 Telecommunications Sector Supplement |
| The International Integrated Reporting Council, IIRC | International <IR> Framework |
| Sustainability Accounting Standards Board, SASB | Telecommunication Services Sustainability Accounting Standard, SASB |

How to Read the Report



Assurance

Content and data of this report have been reviewed and assured by SGS Taiwan Ltd. based on the “Core” option of GRI Standards for compliance with the Core elements of GRI Standards and AA1000 AS (2018) Type 2 High Assurance Standards and requirements of the Integrated Reporting <IR> Framework and Telecommunication Services Sustainability Accounting Standard, SASB.

Feedback

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

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GRI Topics of GRI Standards

CHT Chunghwa Telecom’s Indicator

Unless otherwise specified, all currency units used in this report’s financial data are by default New Taiwan Dollars (NT\$).

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Message from the Chairman

Welcome to the 2020 ESG Report of Chunghwa Telecom Co., Ltd.

The year 2020 marked a year of challenges worldwide. Under the threat of COVID-19, we managed to promote the transition strategy with “customers at the core” to continue explore markets in depth while develop various technological applications in telecommunication. Meanwhile, we set our eyes on corporate’s sustainability strategy. Upholding the brand spirit of “Always Ahead”, we established five pillars of sustainability, “The Digital Economy Motivator, The Creative Industry Pilot, The Happiness Value Protector, The Green Corporation Pioneer, and The Social Value Guide”. Leveraging constantly our advantages in ICT industry and technology, we stipulated and implement various ESG action plans and targets. Together with enterprises in Taiwan, we created the industrial ecosphere to jointly realize the Sustainable Development Goals and create positive social impacts.

In 2020, we launched the 5G services on June 30 as the first among our peers to bridge ourselves to the world with our extraordinary technology. Upholding the dual-axis strategy “5G+Transformation”, we connected extensively with industrial ecospheres at home and abroad, integrating and expanding vertically fields of application across industries. With the widest bandwidth and the best frequency bands, we are committed to the development of 5G+AIoT innovative applied technologies, “Showcasing the Splendor, Co-creating the Future” with our customers so as to accelerate the intelligent transition and upgrade for industries in Taiwan and lead the enterprises in Taiwan into a sustainable, innovative future.

To better bridge our competency in digital economy, we continued to promote “Rise On, Together 2021” transformation plan. Putting the business philosophy “customers at the core” into action, we established the “data-driven” decision-making model to drive our core business performances, kick off new businesses, invest continually in technology R&D, recruit and cultivate brilliant minds and elites in order to set the keystone for our sustainable operation.

In 2020, we stipulated Preparedness and Contingency Plan in Response to “Severe Special Infectious Pneumonia” to tackle the impacts of COVID-19 pandemic. Apart from the establishment of the epidemic prevention and response group and exercises carried out internally, we also initiated off-site working and split working (remote working included), while ensure the business continuity with full epidemic prevention supplies and thorough execution of various control measures so as to safeguard the health and safety of all employees.

In the meantime, we proactively utilized our ICT core competences to put “ICT epidemic prevention” to good use. Rapidly forming the “hi-tech epidemic prevention team”, we developed the innovative “monitoring and control system for epidemic prevention”. Tapping into our collective momentum, we swiftly responded to all kinds of needs for COVID-19 prevention, assisting the government in protecting Taiwan, containing the pandemic, and maintaining the health of citizenry and economic activities. Our results of hi-tech epidemic prevention effort were widely applauded.

In response to the global issue of sustainable development, we drew on our years of practical experiences in the ESG area on the basis of digital inclusion strategy. In 2018, we launched the “5I SDGs” (i.e. “I love SDGs”) initiative to set up pillars of “I-Technology, I-Protecting, I-Helping, I-Learning, and I-Sharing”. With an army of corporate volunteers full of passion as the seeds, we pushed for an array of ESG action plans, including the all-round next-generation AI young talent empowerment efforts, care for the underprivileged in the rural areas with the state-of-the-art technology as well as participation in the national team for epidemic prevention, innovating and fostering place-making models in alliance with local industries and energies, and formation of low-carbon sustainable supply chains with partners to exercise diverse environmentally sustainable practices in depth, bridge to the UN SDGs from multiple facets, and demonstrate the specific contributions of Chunghwa Telecom in connection with the SDGs to the global community.

As a result, our commitment to the ESG sustainability has won hordes of accolades from the stakeholders concerning sustainability in 2020.

1. Included in the Dow Jones Sustainability Index (DJSI) for 9 consecutive years
2. Awarded Top 5% of the Corporate Governance Evaluation from the Taiwan Stock Exchange Corporation for the 5th time
3. Included in the Taiwan Sustainability Index (TWSI)
4. Included in the FTSE4Good Emerging Index
5. Excellence in Corporate Social Responsibility Award from Commonwealth Magazine Top 10 in “Large Enterprises”
6. SGS Taiwan_CSR Supply Chain Management Excellence Award & Personal Information Management Awards
7. Taiwan Corporate Sustainability Awards including the Corporate Sustainability Report Awards (Services), The Most Prestigious Sustainability Awards – Top Ten Domestic Corporates, and 6 Outstanding Corporate Sustainability Professionals Awards

To align ourselves with the global trend of net-zero and in light of institutional investors incorporating the ESG performances of enterprises into their investment metrics, we proactively entered the market of green energy to develop green renewable energies such as solar power and wind power, installing over 450 project sites nationwide that generate power over 270 MW in total. In addition, we fully implemented sustainable supply chain management, joined the CDP supply chain program, and set the inventories of carbon management in motion throughout the supply chain. Also, we practice the “Sustainable Partner Certification” system, construct the “low-carbon sustainable supply chain” to march towards a sustainable tomorrow of lower carbon emissions with our vast number of partners on the supply chain, while elevating the sustainability for the ICT supply chain and the society.

“Chunghwa Telecom can do more.” Looking forward, we shall continue to take one step at a time, striding steadfastly towards the corporate sustainability and pushing for various ESG actions on the ground. Meanwhile, utilizing our core expertise in ICT, technologies, resources, competences, and features, we efficiently help resolve social issues, exercise our commitment as a corporate citizen, and create values for stakeholders across fields. As such, we aspire to fulfil our visions in corporate development – Leader in Smart Living and Agent of Digital Economy Empowerment – while expecting your continuous supports and encouragements to Chunghwa Telecom.

Chairman & CEO
Chunghwa Telecom Co., Ltd.



2020 ESG Milestones

2 Feb

- “Intelligent Community of the Year” from Intelligent Community Forum
- “Voice Assistance APP” for the Visually Impaired shortlisted in GSMA GLOMO Awards

5 May

- Awarded Top 5% of the Corporate Governance Evaluation from the Taiwan Stock Exchange Corporation

8 Aug

- Epidemic Prevention Medal from the Executive Yuan
- 2020 Smart City Outstanding Contribution Award - Smart Health from Taiwan Smart City Association



9 Sep

- Smart Agricultural Service awarded with “2020 Smart City Innovative Application Award” from Taipei Computer Association
- Inclusion in the Emerging Market Index of DJSI



- Excellence in Corporate Social Responsibility Award from CommonWealth Magazine Top 10 in “Large Enterprises”



- SGS-Taiwan_ CSR Supply Chain Management Excellence Award

10 Oct

- SGS Taiwan_ Personal Information Management Awards
- National Communications Comissions_The first telecom service provider certified with NCC IS2051 and PLMN12 TAF

11 Nov

Nov

- Red Hat, Inc._APAC Innovation Awards 2020
- Silver Prize and Bronze Prize of the 2020 PwC’s CSR Impact Awards
- Best Smart Customer Service System Application and Best Enterprise in Service Innovation from the 2020 Customer Service Excellence Awards (CSEA) of TCCDA



- 8 prizes of the Taiwan Corporate Sustainability Awards, including the Corporate Sustainability Report Award (Services), The Most Prestigious Sustainability Awards – Top Ten Domestic Corporates, and Outstanding Corporate Sustainability Professionals Awards: the Growth through Innovation Award, Information Security Award, Supply Chain Management Award, People Development Award, Social Inclusion Award, and Climate Leadership Award



- 2020 Frost & Sullivan Best Practices Awards_“2020 Taiwan Cloud Infrastructure Service Provider of the Year”, “2020 Taiwan Mobile Service Provider of the Year”, and “2020 Taiwan Data Center Service Provider of the Year”
- The first telecom operator in the world to pass “TCFD Conformity Check” by BSI



12 Dec

Dec

- S&P Ratings: rated “AA” in foreign long-term rating
- Taiwan Ratings: rated twAAA / twA-1+ in domestic long-term/short-term Rating
- Sports Activist Awards of Sports Administration, Ministry of Education
- The Asset ESG Corporate Awards Platinum Award
- “Brand of the Year” in the “2020-2021 World Branding Awards”

2020 Material Issue – COVID-19 Prevention Measures

During the Lunar New Year of 2020, the COVID-19 epidemic broke out worldwide. Either enterprises or individuals had suffered severe impact. As a local leading enterprise, under the stewardship of our Chairman, we “deployed preemptively” and “improved on a rolling basis” comprehensively. Hence, we urgently assembled the elite teams, return to work from holidays early, established the Command Center, joined the national team of epidemic prevention, and stipulated CHT Preparedness and Contingency Plan in Response to COVID-19 as the “overall solution” for epidemic prevention response.

The national team of epidemic prevention of CHT supported the disadvantaged and demonstrated its social care while put its ICT advantages to good use, applying various advanced ICT in the works of epidemic prevention. Through a systematic application, we facilitated the government to accomplish tasks in the most timely, accurate, thorough manner in epidemic prevention efforts. As such, CHT was further recognized as the “champion in technology for the national team of epidemic prevention” by President Tsai.

Employees

In response to the COVID-19 epidemic, with the internal epidemic prevention plan formulated, we promulgated “epidemic prevention measures for different levels of epidemic situations”, issued “requirement for all personnel to have temperature checkup and sanitation with alcohol sanitizer before entering the facilities”, conducted “random inspection of epidemic prevention measures”, “tracking and caring for the personnel that are listed as identified contacts”, “preparation of epidemic prevention promotion materials”, and enacted Ten Epidemic Prevention Measures as follows.

[CHT Ten Epidemic Prevention Measures](#)

Caring Case –Diamond Princess

During the epidemic, Personnel A and their families went for a tour onboard Diamond Princess Cruise Ship and was subject to the quarantine measures on the seas demanded by the Japanese Government. Nevertheless, it was full of stress in the quarantine period. Therefore, CHT cared for the personnel in a proactive, friendly, and swift manner to ease the mind of the personnel.

- ▶ 2 / 5 The health authority of Japan demanded a 14-day quarantine on the sea for Diamond Princess.
- ▶ 2 / 7 The direct supervisor of Personnel A reported that Personnel A was onboard the cruise ship with their children and worried about the impact of quarantine to the work and the leave arrangement. CHT responded promptly on the same day that leave for statutory reasons was granted besides the original leave for the trip to ease the mind of Personnel A.
- ▶ 2/10 In response to the worsening development of the epidemic onboard the ship, the unit of Personnel A, the HR Department, and the Occupational Safety Department created a caring team on LINE to care for the personnel at all times.
- ▶ 2/21 Personnel finally took the chartered flight back to Taiwan upon receiving the certificate of negative test result from Japan.

Afterwards, CHT made sure that Personnel A arrived at Taiwan via the chartered plane safe and sound before going to the collective quarantine facility for another rigorous quarantine for 14 days. The support team continued to provide care in the duration. As a result, Personnel A returned to work smoothly upon the expiration of the quarantine period at the collective quarantine facility.

Customers

General Consumers

To reduce the risk of contact for customers over the counter, we provided the free customer service hotline 24/7, developed an Interactive Voice Response (IVR) System, as well as multiple self-service channels like online/SMS/Internet customer services and application, so that consumers could engage telecommunication businesses at home and at ease.

In addition, in light of the delayed school opening for epidemic prevention, “ibobby smart voice service” of Chunghwa Telecom offered services like storytelling and music and became a quality AI assistant to parents during the pandemic period. Aside from utilization of voice service to keep children company and receiving the latest information on epidemic prevention, it was linked with “Pick Me Up” service to learn about the ETA of parents to school accurately to reduce the risks of cross infection in student pick up.

Corporate Clients

Our featured corporate services of “meeting, working, and access to corporate networks at ease even away from the office” that offered services for Business, Amazon Chime, Amazon WorkSpaces solution, and SSL VPN remote secure access service, along with rigorous cybersecurity monitoring, assisted businesses to operate as usual while reducing the operating costs during the epidemic.



Society

We actively partook in the focused works of government's epidemic prevention effort, which could fall into the six categories as follows. None of them were in violation of laws pertaining to the personal information.

Quarantine Cellphone

- The quarantine cellphone is issued to specific individuals subject to home isolation/quarantine in line with the Quarantine and Tracking for Entry demanded by Taiwan CDC.
- A total of 3,360 cellphone for emergency purposes were assembled, including 2,400 quarantine cellphones, 200 cellphones for the police departments, and 760 cellphones for the civil administration and health department.

Development and maintenance of Epidemic Monitor and Management System

- We Self-developed "Epidemic Monitor and Management System", through the address of the dedicated cellphone or home quarantined persons' cellphone to determine if the quarantined individuals were staying at the designated locations.
- It integrated data of telecom operators for Taiwan CDC to learn about the whereabouts of individuals under home isolation/quarantine up to 160,000 persons.

Use of Big data analytics

- Quarantine route estimation: the technology of big data analytics was utilized to estimate the key loci of the confirmed cases/individuals at high risks as well as the list of potentially exposed individuals for Taiwan CDC to follow up and send warning text messages in order to effectively reduce the risk of virus spread.
- Crowding hotspot warning: the information of crowding attraction hotspots throughout the country was available for the public and the police department's reference.



Guaranty of telecommunication quality for epidemic prevention

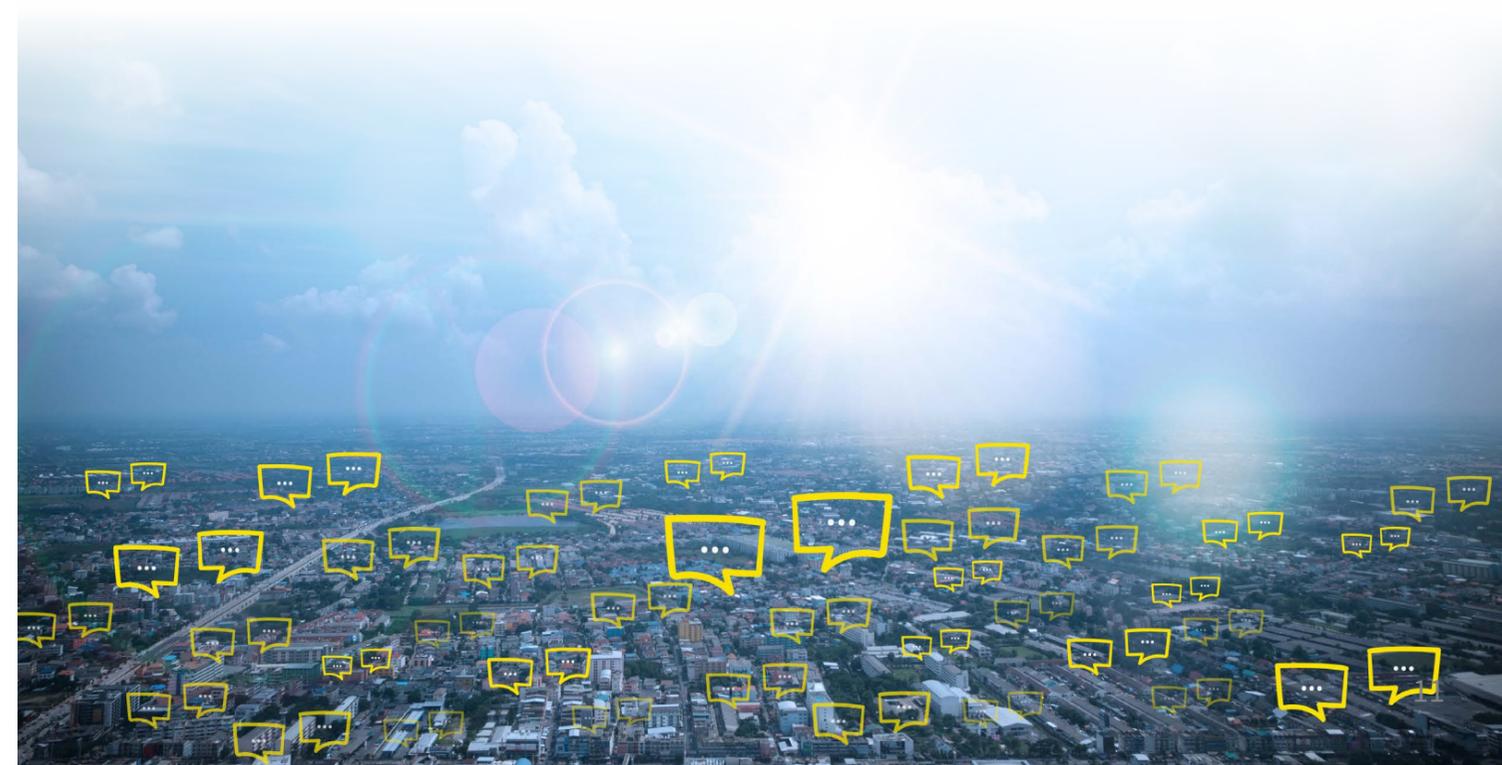
- Pursuant to the policy of "name-based mask distribution system", the 6,245 circuits of the NHS pharmacies nationwide were incorporated for real-time monitoring.
- The signals and covered facilities nearby the designated isolation hospitals for communicable diseases were boosted to ensure a good quality of the mobile signals.
- Dedicated lines, MOD, Wi-Fi equipment, and mobile base stations were added to enhance the communication quality in the quarantine areas.

Discounts for telecom service fees

- The telecom rates of the businesses and schools impacted by the epidemic were lowered moderately to reduce the burdens thereto, while 10,000 Prepaid SIM Cards were provided to especially economically-disadvantaged students, free of charge.
- In support of the "name-based mask distribution" policy, 5 million "free SMS messages" and "e-mail" services were offered respectively.
- The hotels with MOD services were exempted from 3 months of service fees in line with the epidemic prevention promotion of the government with up to 8 million person-times reached.

Support to "CDC's Consultation Hotline 1922" and NIA's 0800 Foreigners Hotline

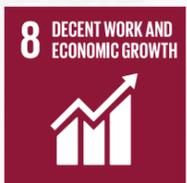
- 500 personnel were mobilized to support Taiwan CDC toll-free hotline 1922 and NIA's Foreigners In Taiwan Hotline with up to over 425 individuals allocated in a day.
- A home quarantine caring team was formed in support to the Ministry of Health and Welfare (MOHW) to provide accurate epidemic prevention knowledge and learn about the health condition of the public in real-time.
- The number of calls to Taiwan CDC toll-free hotline 1922 in 2020 were up to 1.82 million. The average response rate is 86%, exceeding the goal of 80%. The number of calls served by NIA's Foreigners Hotline were 340,000.



01

Corporate Overview

The SDGs CHT contributes to in this chapter



Corporate Governance
CSR Management

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For 2020, Chunghwa Telecom's consolidated net income was NT\$ **207,600,000** thousand and its annual earnings per share was NT\$ **4.31**.

The **only** telecom operator to have a **labor director** elected.

To link sustainability performance with compensation, Chunghwa Telecom implemented a soft incorporation of sustainable development strategies and targets into its review of compensation.

Chunghwa Telecom established a **CSR committee and six task forces** responsible for the setting of sustainability policies.

Annual review of the Company's budget planning for **carbon management strategies**; execution of action plans; setting performance targets.

Sustainability issues addressed by Chunghwa Telecom: **social integration, digital inclusion, green ICT products & services, green brand management, and energy-saving & carbon reduction.**



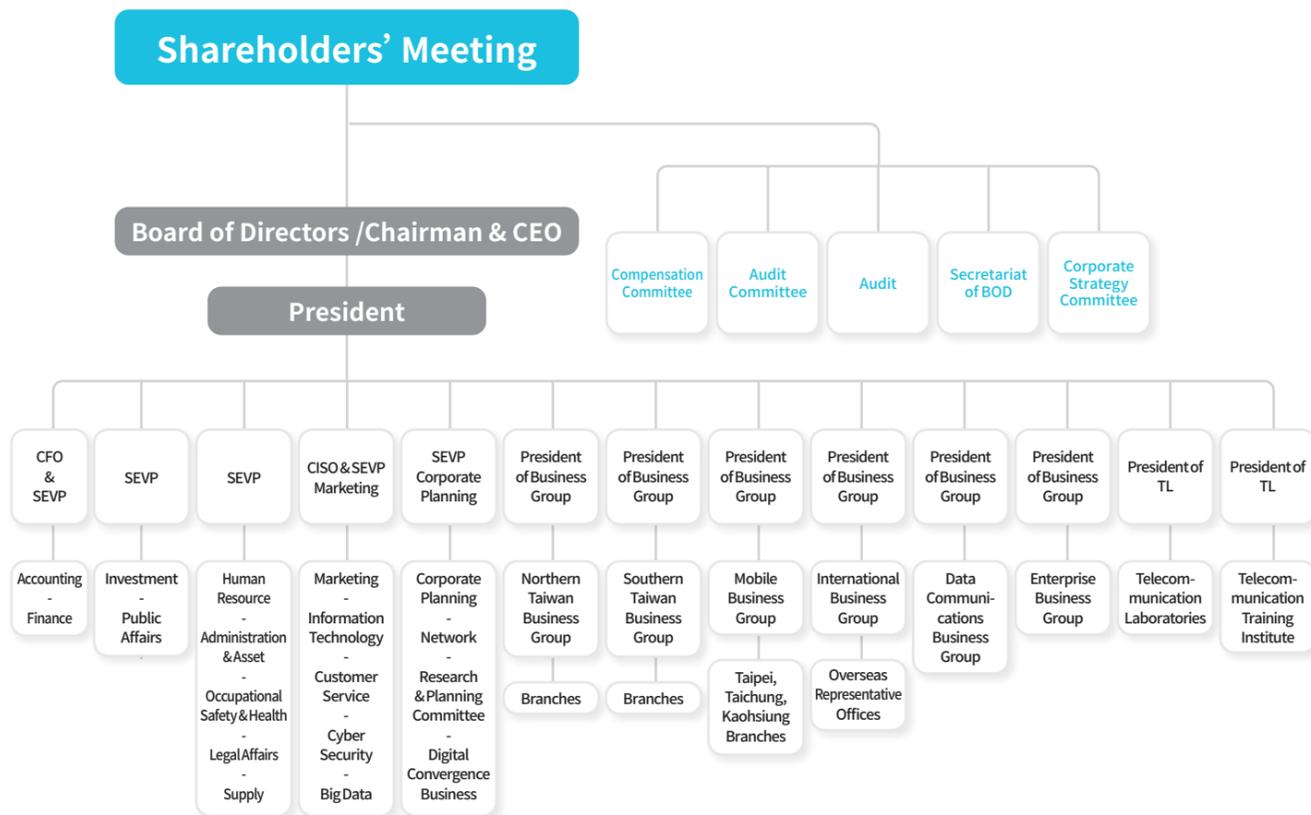
Chunghwa Telecom (TAIEX:2412, NYSE: CHT) is the largest integrated telecom carrier in Taiwan. The head office is located at 21-3, Section 1, Xinyi Road, Taipei with more than 455 locations in 22 counties and cities in Taiwan. Our major business include fixed and mobile communications, broadband access and the Internet. We also provide corporate customers with information and communication services, including big data, information security, cloud and Internet Data Center. We also offer innovative technology services, such as the IoT (Internet of Things) and AI (Artificial Intelligence), to create an outstanding communication environment and extraordinarily convenient digital life. We also have important business partnerships with other international telecom carriers.

Since 2006, Chunghwa Telecom upholds the service philosophy of “bridge the digital divide, implement environmental sustainability, and care for the disadvantaged”. Hence, the core technologies, resources, competencies, and features of the Company have been leveraged to implement the brand spirit of “Always Ahead” on the three fronts of Environmental, Social, and Governance. We demonstrate our determination in sustainable operation with our actions to fulfill our corporate social responsibility on all fronts. In recent years, our active efforts in ESG were constantly recognized by professional institutes at home and abroad.

[Three Telecom Laws](#)

Main businesses of branch offices and reinvestment companies: Please refer to P.15, 71 in the 2020 Annual Report.

Chunghwa Telecom Organization Chart



We expect to start the organizational restructuring of our Enterprise Business in July 2021 and complete the customer-centric organizational structure in January 2022, strengthen the strategic functions of our headquarters, and restructure our eight business groups into three business groups and three technology groups.

We Strive to

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 the business profit from a satisfied customer base

Business Model

Household market

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

Personal market

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

Corporate market

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

Product and Services

| Customer amount | Product/Service | Annual growth |
|-----------------|-----------------|---------------------------|
| 11.298 million | Mobile phone | Annual growth 6.1% |
| 1.756 million | 100 Mbps | Annual growth 11% |
| 3.621 million | 光世代 (Broadband) | Broadband Customers 83.3% |
| 3.584 million | HiNet | Market share NO.1 |

Mobile communication

| Customer amount | Market share |
|---------------------------|--------------|
| 11.298 million households | 36% |

Domestic fixed network

| | Customer amount/ Communication amount | Market share |
|--------------------|---------------------------------------|--------------|
| Local network | 9.897 million households | 92.1% |
| Long haul Internet | 1,640.7 million minutes | 81.6% |
| Broadband access | 4.348 million households | 65.6% |
| MOD | 2.069 million households | 29.8% |

Internet 15.5%

| Customer amount | Market share |
|-------------------------|--------------|
| 3.95 million households | 62.5% |

International fixed network 4.2%

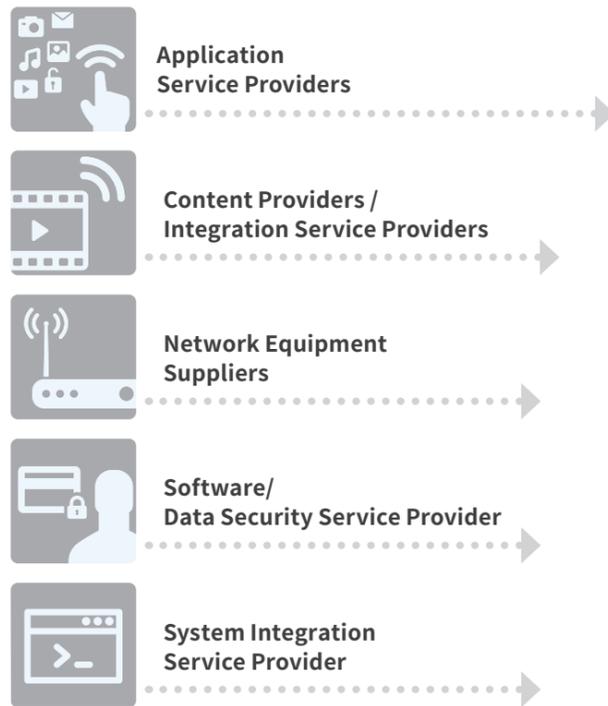
| Communication amount | Market share |
|-----------------------|--------------|
| 222.3 million minutes | 50.9% |

Others 3.4%

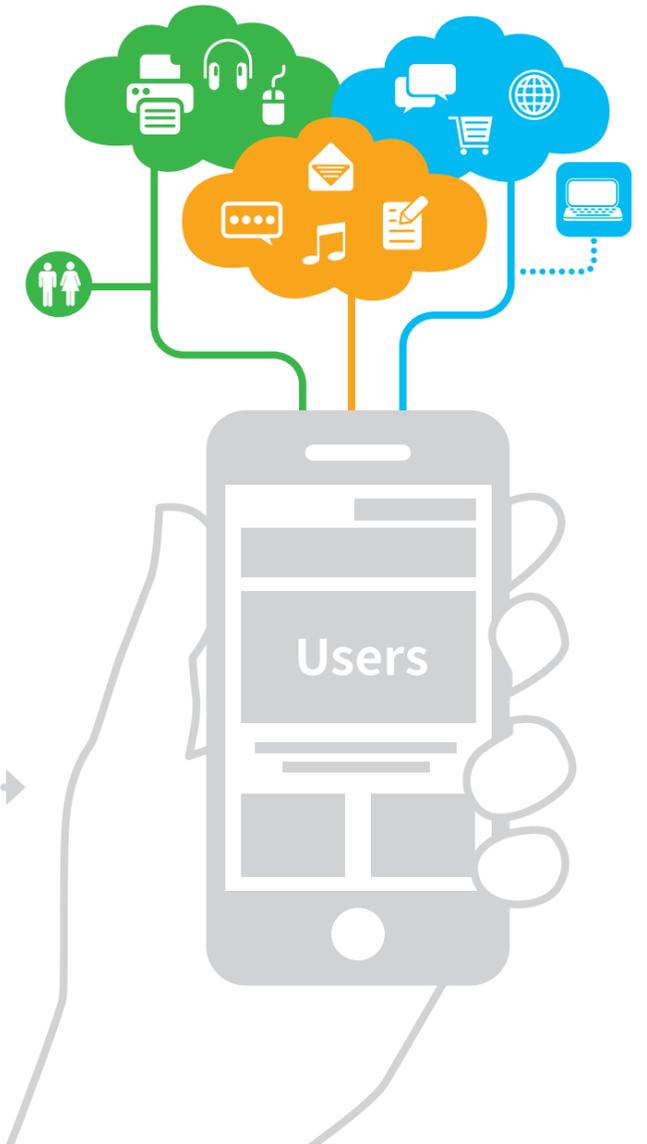
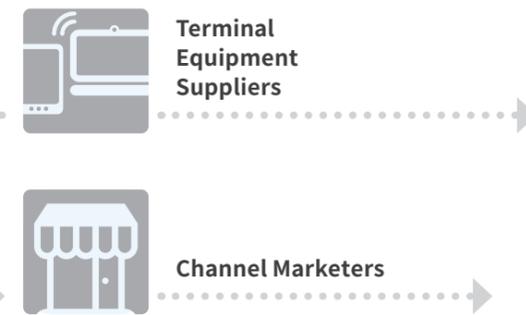


Industry Value Chain and Critical Sustainability Performance

Due to technological advancements, boundaries of specialized markets that we used to know of are starting to shift, thus allowing industry participants to compete outside of their dominant markets. International Data Corporation has even combined ICT, e-Commerce, Electronics and Entertainment into a new segment called eICT to recognize the increasingly common cross-industry collaboration.



The wave of digital convergence brings new values to the telecom industry and opportunities to meet users' needs by offering innovative eICT services, which makes content providers and integrators, application service providers, network equipment suppliers and terminal equipment suppliers the important value partners to a telecom carrier in the development of digital convergence services. Moving forward, Chunghwa Telecom shall continue to better itself in services of fixed network, mobile, data, and eICT while strengthening the partnership with its suppliers throughout the supply chain to form a closer industrial ecosphere to introduce more quality services.



Environment

Contract capacity of photovoltaic system **2,783.665** kWp

The **first** telecom operator in the world to pass "**TCFD Conformity Check**"

First telecom carrier that has been certified with environmental standards "**ISO 14046** Water footprint and **ISO 14067** Carbon footprint"

Society

Collective Agreement coverage **99.26%**

"5I SDGs" **first** initiative connecting 5I to the UN SDGs and DIGI+ in Taiwan

Obtained SGS **Certificate** of Conformity for **Code of Conduct (CoC)**

Governance

Consolidated revenue NT\$ **207.6** billion

The only telecom operator to have a **labor director** elected

Independent director percentage **38.5%**

Corporate Governance

Chunghwa Telecom Board of Directors is the highest governing body. The Board of Directors is responsible for appointing and nominating high-level managers, as well as formulating and reviewing corporate social responsibility, and sustainable development strategies. The 9th Board has 13 directors. To date, there are 1 female and 12 male directors, including 5 independent directors. Directors' tenure is three years (June 21, 2019 to June 20, 2022). All of the independent directors are included in the Audit Committee to ensure the independence of governance and the perspectives of the stakeholders.

To meet the needs of Chunghwa Telecom's business development, the Board of Directors of Chunghwa Telecom shall comprise experts and scholars in the industries as well as in the fields of finance and accounting, management, etc.; the members on the Board of Directors shall include one or more talent in the fields of innovation capacity, business experience, legal expertise, and ICT, respectively. In addition, gender equality in the composition of the Board of Directors is highlighted. A goal of 20% female seats on the Board of Directors in 5 years has been stipulated.

Chunghwa Telecom's outside directors (including independent directors) provide expertise based on their respective areas of practice and professionalism to assist the Board of Directors in making decisions as to benefit the Company and the shareholders. To prevent personal liability and financial losses due to third-party litigation, we have purchased indemnity insurance for Directors.

To ensure an effective operation of sustainable management, apart from the key performance indicators listed for the Company, departments, and individuals, we also incorporate items pertaining to the CSR development trends, including innovative development, risk management, code of conducts, information/cybersecurity, climate change, stakeholder engagement/inventory, and social participation, in Directions Governing Performances of Senior Managers of Chunghwa Telecom.

| CHT Board of Directors | | |
|------------------------|--------------------|---|
| Unit: person | | |
| 2 | 30-50 Years Old | 1 |
| 10 | Above 51 Years Old | 0 |

[Chunghwa Telecom 2020 Annual Report](#)

- Experiences of the Directors: Please refer to the 2020 Annual Report on P.18-19
- Continuing Education of the Board of Directors: Please refer to the 2020 Annual Report on P.72-74



Audit Committee

Consists of all the independent directors, whose main duties are to hire or dismiss the CPA, determine the CPA compensation, review and discuss quarterly, semiannual, and annual financial reports, the adoption of or amendments to the internal control system and the assessment of the effectiveness of the internal control system.



Corporate Strategy Committee

Consists of 8 board members, who are responsible for mid to long-term development plans and other critical issues, as well as major investment and mergers and acquisitions, major reorganization of the Company, applications or returns of business licenses, annual operating plans and budget compilations and revisions, capital increases or decreases, and other major strategic decisions. The resolutions are submitted to the BoD for final approval.



Compensation Committee

Consists of three independent directors, who are responsible for the evaluation of the performance of directors and managers, and for determination of appropriate compensation policies, system standards and structures. Also, the compensations of directors and managers are evaluated and stipulated on a regular basis.

Board Diversity Policy

Chunghwa Telecom implements diversity in the Board of Directors and recruits talents primarily based on skill sets. Selection of directors is not limited to any particular gender, age, nationality, culture or ethnicity. Directors are expected to have outstanding quality, industry experience and expertise to complement the Board.

Linking Compensation to Sustainability Performance

All Chunghwa Telecom directors are nominated by the Board of Directors and shareholders holding the legally required percentage of shares, they are then subsequently appointed by the Board of Directors. The Compensation Committee has implemented a soft incorporation of sustainable development strategies and targets into its review of director compensation in accordance with the Company's Articles of Incorporation so as to achieve the following: (1) evaluation of required core competencies in order to facilitate the connection between director performance and the Company's sustainability outlook and short, medium, and long-term strategies and targets, (2) strengthening accountability and linking performance with compensation, recruitment and retention to attract key talent on the Board of Directors. The implementation of this measure coupled with the substantial effect of the variable compensation plan is a win-win for the Company and its directors.

Director compensation: Please refer to P.30-33 of the Company's 2020 annual report.



Avoidance of Conflict of Interest

Chunghwa Telecom’s Chairman is concurrently the CEO. The election of directors comply with relevant laws and regulations, which suggests the directors are nominated by the Board and shareholders who meet the statutory shareholding requirements, and the announcement of director nomination and nomination process are conducted in accordance with the statutory procedures. In order to avoid conflicts of interest in the highest governance body, we conduct strict controls in accordance with the following procedures, including:

- All the new directors shall sign the Consent to act as a director, and to comply with Article 23 of the Company Act, to exercise the due care of a good administrator in conducting the business operation of the Company.
- All directors have to sign the Declaration stating that they are aware of the recusal of the exercise of voting rights under Article 206 of the Company Act and the legal effect of any violation.

Due to the directors’ high ethical standards and self-discipline, and under the operation of the mechanism, no conflict of interest has occurred since the Board of Directors was established. Moreover, the Board has adopted a total of 50 articles of “Code of Corporate Governance for Chunghwa Telecom,” while all departments are required to implement the Code of Conduct, and the Secretariat of the BoD also evaluates on a regular basis.

Protection of Shareholders’ Interests

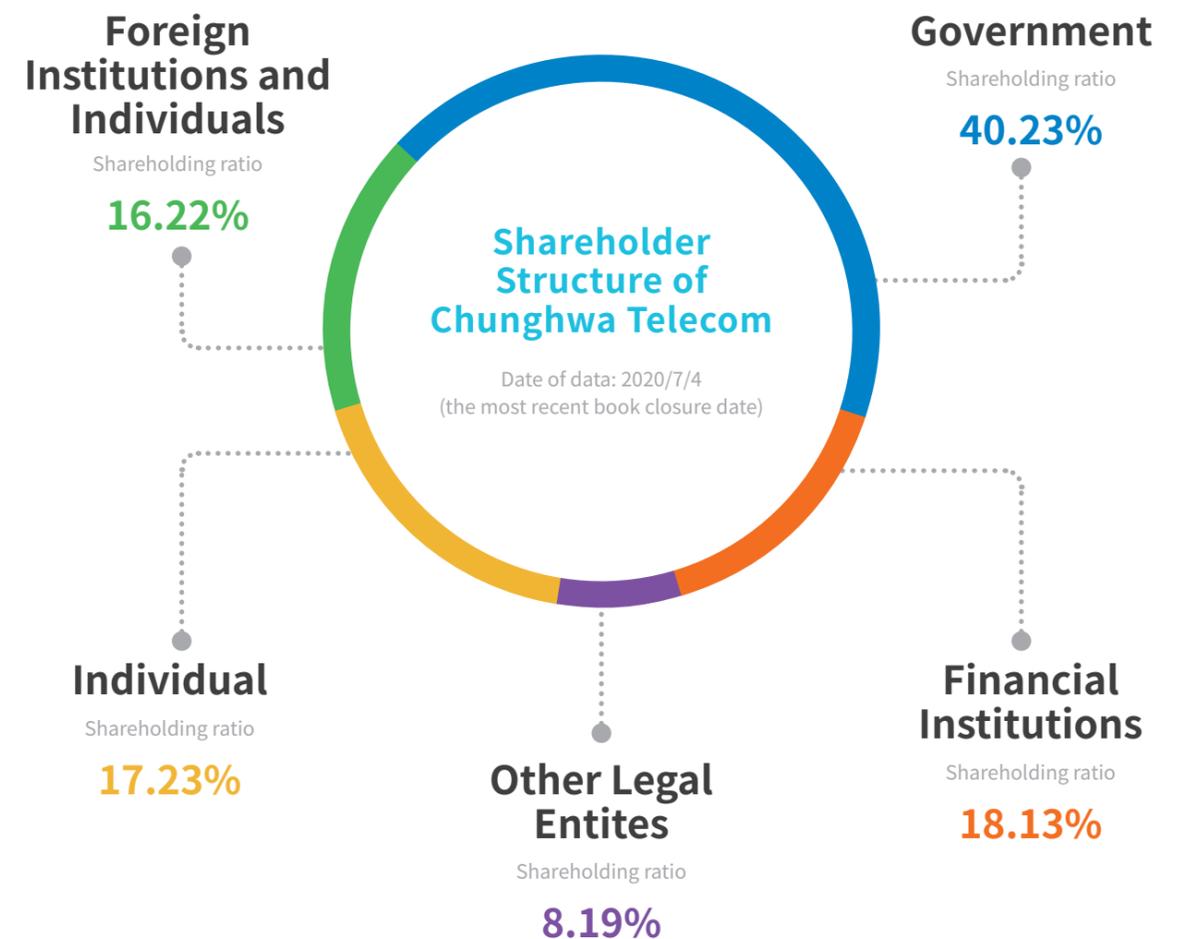
Chunghwa Telecom has made changes and revisions to several systems and measures based on a corporate governance mindset. These include e-voting, voting by poll and the disclosure of meeting resolutions made on the Company official website. These diverse voting channels allow shareholders to exercise their rights easily and this has made corporate governance more effectively.

Performance Evaluation for the Board of Directors

To implement corporate governance and enhance the functions of the Board of Directors, performance objectives are set forth to improve the operation of the Board of Directors. In 2019, at the 2nd meeting of the 9th Board of Directors the Company adopted the Regulations Governing the Performance Evaluation of the Board of Directors of Chunghwa Telecom Co., Ltd. that details rigidly the cycle, period and scope of the performance evaluation of the Board of Directors as well as the evaluation procedures, evaluation indexes, scoring criteria, and other matters of compliance. The self-evaluation for the Directors on the Board as well as the self-evaluation on the performance of functional committees is conducted on an annual basis, while the performance evaluation by external, independent, professional institutions or external teams of experts and scholars is carried out once every 3 years.

[Regulations Governing the Performance Evaluation of the Board of Directors of Chunghwa Telecom](#) [Results of the 2020 Performance Evaluation](#)

Shareholder Structure of Chunghwa Telecom



Creating Value for Shareholders

Chunghwa Telecom business operations have been stable for years. Profitability and financial completeness have been uninterrupted. We pay our taxes honestly year after year, following the law, and make solid contributions to the country. Despite the existence of many challenges in the telecom operation environment, we maintain complete focus on our field and create value for the shareholders. Chunghwa Telecom generated consolidated revenues totaling NT\$207.6 billion in 2020.

Owing to the impact by replacement and competition from free messaging apps and VoIP technology, the revenue from voice service tumbled; ICT projects were completed as scheduled in line with the quality requirement, which benefited the revenues from tender projects. The overall revenue in 2020 was flat compared to that of 2019. Net income attributable to the parent company amounted to NT\$33.4 billion while EPS reached NT\$4.31 in 2020.

In 2020, Chunghwa Telecom income tax was the equivalent of an effective tax rate of 18.97%. The deviation from statutory 20% tax rate was mainly attributed to the provisions of Article 42 of Income Tax Act, in that net dividends or net earnings recognized from local invested businesses are exempt from income tax. In addition, the application can also be made for tax preference pursuant to Article 10 of the Statute for Industrial Innovation as well.



Economic Performances

| | |
|---|---------|
| Paid-up capital | 77,574 |
| Revenues | 207,609 |
| Operating cost | 137,029 |
| Operating expenses | 29,814 |
| Employee salaries and benefits* | 44,963 |
| Dividends paid to shareholders | 32,783 |
| Income tax paid | 7,852 |
| Expenses of social investment/donations | 1,077 |
| Retained economic value* | 131 |

Unit: NT\$ Million



Total number of employees in the Company including subsidiaries

32,318 persons

1. *Operating costs and expenses included

2. Retained economic value = revenues - operating costs - operating expenses - income tax paid

Climate Risk Management

Chunghwa Telecom builds a systematic and organized corporate governance structure to ensure that climate change related challenges are incorporated into the Company's annual strategy in real time and that relevant projects are implemented.

The Supervisory Responsibility of the Board of Directors

The chairperson and vice-chairperson of the CSR Committee are the Company's Chairman and President respectively, who both are also members of the Board of Directors of CHT. As the chairperson for Chunghwa Telecom's Risk Management Committee, the President can further manage the risks and opportunities related to climate change thanks to the overlapped responsibilities and familiarity thereof, so as to ensure that climate change-related issues are discussed and reviewed at the annual CSR Committee, while supervise and manage the routine operation via the existing internal control and risk management process and report to the Board of Directors.

Recognizing the importance of climate change issues, CHT started to promote the Directions Governing the Performance of Senior Managers in 2018, incorporating Corporate Social Responsibility and Climate Change flexibly in the indicators for performance evaluation of the Directors and senior managers that are hooked with the compensations respectively.

The Role of Management

The CSR committee conducts annual review of the Company's carbon management strategies, and appropriate budget implementation action plans, and sets related performance targets to ensure the incorporation of climate-related strategies in departments annual business operations. The related management mechanisms include:

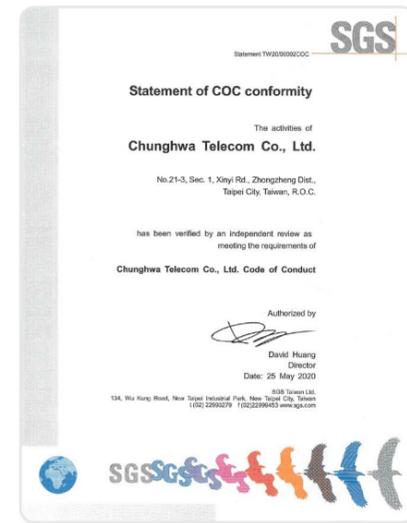
- Target Setting: Setting the targets for Chunghwa Telecom greenhouse gas management and carbon reduction.
- Strategic Planning: Planning for energy efficiency enhancement projects and product/service of carbon intensity reduction strategies and action plans.
- Solutions: Oversight and proposal of innovative solutions, including innovative ICT technologies & services and the reduction of CO₂ emissions within the Company and the industry.

The Environmental Sustainability Task Force is established under the Chunghwa Telecom CSR Committee to evaluate climate-related risks and opportunities via the Company's risk management procedures, which is carried out in accordance with the long-term strategies set by the Board of Directors, the needs of international investors, rating agencies, and stakeholders, and to faithfully implement various solutions.



Highest Moral Standard

We have set up 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 basic ethical guidelines to ensure that all employees engage in all activities with the highest standard. In addition to these codes being included in the training program for new hires, all employees are required to log into the web, review the material and take a test annually. All employees participated in the test in 2020 except for those who were not available for a legitimate reason at the time of the test. Meanwhile, to implement “Code of Conduct” in Chunghwa Telecom, we also passed the rigorous check procedures of SGS-Taiwan and obtained Certificate of Conformity for Code of Conduct (CoC) from the external third party.



Prevention of Corruption

Chunghwa Telecom has prepared the Employee Appraisal Guidelines and Employee Reward/Disciplinary Standards for the evaluation of performance. Rewards and sanctions are applied according to these rules whenever employees exhibit conduct deserving of them. Information such as a grievance hotline has been made available on the Chunghwa Telecom intranet/employee portal. A total of 43 internal complaint cases (disciplinary and leak investigations) were accepted in 2020, 43 of which are closed and 0 of which are still under investigation; 4 were associated with violation of the code of conduct. (Relevant cases were lower by 78% compared to those in the previous year.) All complaints were investigated and handled according to company internal policies and principles, and taught as case studies to strengthen employee esteem for the rules, discipline, corporate image, and shareholders’ interests.

[Chunghwa Telecom Anti-Corruption Policy](#)

The Internal Audit System

The internal audit helps the Board and managers to check the effectiveness of the internal control systems and operations. It is located under the Board and conducts business audits in accordance with the regulations and policies. The annual audit plan is formulated based on the results of the risk assessment made at the end of every year. After the approval of the Board, the plan is sent to the competent authorities via the Internet information system for their reference.

[Organization and functioning of Chunghwa Telecom’s internal audit unit](#)

Transparent Information Disclosure

The corporate governance of Chunghwa Telecom places great emphasis 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 the corporate website, a Market Observation Post System, Annual Reports, CSR Reports, press conferences and investor conferences to facilitate transparent communication with stakeholders. Furthermore, measures have been taken to ensure the timeliness, quality, balance, and credibility of the information disclosed. In the 6th Corporate Governance Evaluation, we were recognized as the top 5% for the fifth time as well as the top 10% in “The electronics industry with a market value of 10 billion TWD or more” of the TWSE- and TPEX-listed companies in the Evaluation!

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 aligns with the requirements of the competent authority, while including compliance status into the evaluation of higher management’s performance. Committed to compliance with relevant regulations, there was zero case fined by the Fair Trade Commission in 2020.

Supporting Global CSR Initiatives and Guidelines

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

Chunghwa Telecom has publicly disclosed its human rights policy and emphasizes the importance of such issues. It has a system in place to address violations and will continue with human rights protection as part of corporate policy. The Company openly states a respect for human rights and reviews human rights issues on a yearly basis. The Company keeps detailed records of internal findings concerning human rights policy, including child labor, the rights of indigenous peoples, and supplier human rights assessment. Current practices are audited regularly and the findings are used for review and correction by relevant departments. Chunghwa Telecom Training Institute organizes human rights-related courses on a yearly basis and whenever there is a change in labor regulations and policies. 3 courses were held in 2020. The course hours were 63,609 in total with 21,203 person-times enrolled.

[Chunghwa Telecom Human Rights Policy](#)



CSR Management

We launched a CSR management system in 2006, and established the CSR Committee to stipulate sustainable policies. We also established six CSR working groups, using a top-down approach to achieve sustainable action in environment, society and governance respectively, to implement “Always Ahead” brand inspirit. The Chunghwa Telecom sustainable development strategy utilizes the competence and unique resources of the Company to implement sustainable action with the focus on such matters as “Create social harmony, Digital inclusion, Green ICT products and services, Green brand management and Energy conservation and carbon reduction.”

Chunghwa Telecom’s CSR Vision



[Corporate Social Responsibility Best-Practice Principles for Chunghwa Telecom Co., Ltd](#)

Internalization and Communication of CSR

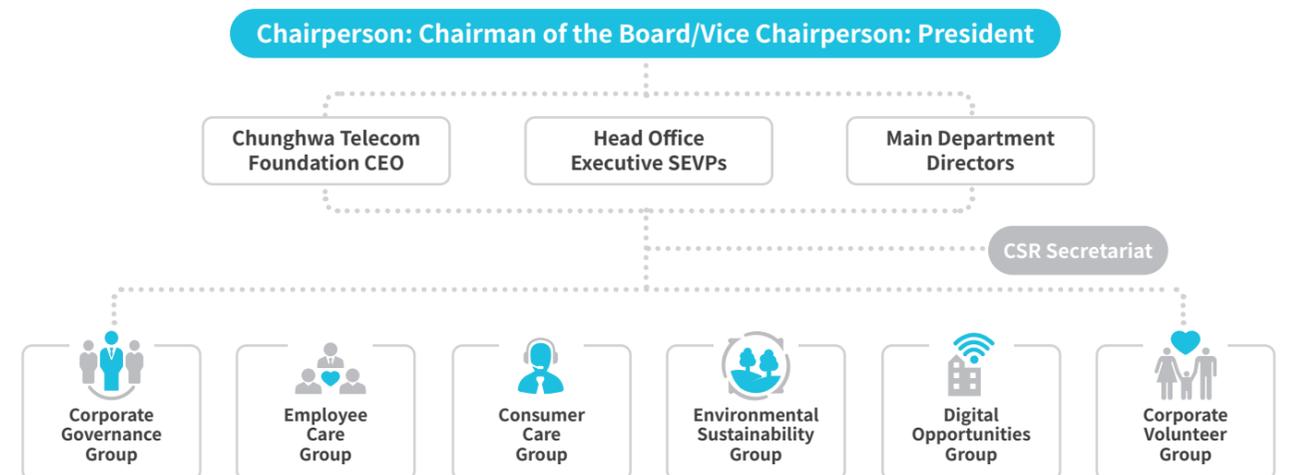
To ensure that all employees understand the spirit of CSR, we have established diverse channels for communications and education of related topics.

| Channel | Item | Item |
|--|-------------------------------|--|
| Communication within Senior Management | Senior management meeting | Material CSR issues are discussed in the senior management meeting annually, and the resolution indicates our improvement and direction. |
| Employee Forum | Chunghwa Telecom online forum | We have an intra-site for employees to share opinions with the Company and make suggestions. We will discuss the issues of concern with the employees and resolve them timely. |
| Employee Training | Environmental training | We provide at least 4 hours of training every year as well as educational ecological tours that instill a spirit of environmental sustainability. |
| | CSR training | We provide CSR related education every year, and invite external consultants to run seminars and courses in accordance with international trends. |
| | New employee training | New employees undergo digital pre-service training that includes the personnel system, working guidelines, and labor relations. The Labor Standards Act is explained in detail with respect to labor-management coordination and the handling of disputes. |
| | e-Learning | We post relevant training courses and information on the e-Learning system that can be downloaded and studied freely by the employees. |

The CSR Committee

The “Chunghwa Telecom CSR Committee” was established for expanding sustainable benefits of our core competence and implementing CSR vision as a starting point to promote the sustainable development of the industry and society.

| Item | Description |
|---------------------------|---|
| Representative | Chi-Mau Sheih, Chairman |
| Mechanism | CSR Committee is responsible for coordinating each plan and supervising the progress of the policies approved by the Board of Directors. It also periodically reports the relevant issues and the results of communicating with stakeholders to the Board. The Board is in charge of the final performance evaluation every year. |
| Execution | <ul style="list-style-type: none"> The Public Affairs Department is designated as CSR Secretariat. The CSR Secretariat is responsible for relative policies and action planning. It is also in charge of budgeting, educational training, and management of follow-ups and awards measures. The six groups, branches and affiliates are responsible for promotions and implementation of related projects. The results of the quarterly stakeholder engagement are incorporated into the materials for the Board. |
| Meeting Frequency | Every Half Year |
| Report Approval | Reports are submitted to the Chairman for final approval after the managements’ (SEVP) review. |
| Execution Results in 2020 | Policy, Organizational Structure and Management Guidelines Governing the Corporate Social Responsibility of Chunghwa Telecom was approved and submitted for adoption in the resolution of the 8 th session of the 9 th Board of Directors to implement its CSR practices. |



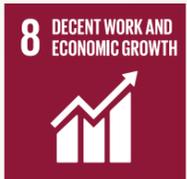
The initiative integrated with a performance evaluation that helps to translate the concept of sustainability into actions and is practiced in routine operations.

| Channel | Item | Item |
|-------------------|---|--|
| Annual Evaluation | Administrative sustainability performance | We set energy reduction targets and link the results with employees’ performance bonuses. |
| | Online test on CoC | All our employees are required to take the “Chunghwa Telecom Code of Business Conduct Test” each year. |
| | Reporting mechanism | Once an employee is found to violate corporate regulations, it will affect his/her performance bonuses. |
| Others | CSR Report workshop | Internal training on new ways of preparing reports is held from time to time. |
| | Official website and social media | To coordinate with modern stakeholders’ communication pattern, we established dedicated CSR multimedia webpages on the official website, YouTube channel and a Facebook fan page as ways of communicating with our stakeholders. |

02

Sustainability Value Strategy

The SDGs CHT contributes to in this chapter



| | |
|------------------------------------|-----------|
| Six Main Capitals - | |
| Create Sustainability Value | 30 |
| Five Major Forces - | |
| Drive the Sustainable Cycle | 30 |
| Creating Sustainable Value | 32 |



We utilize our ICT corporate core competence and integrate with CSR to establish the five main forces, "The Digital Economy Motivator, The Creative Industry Pilot, The Happiness Value Protector, The Green Corporation Pioneer, and The Social Value Guide." We think that the input in these five main fields will help accomplish a society with digital inclusion and the future of sustainability development.

Financial Capital

- Share capital **77,574,465** thousand
- Capital expenditures **23,510,820** thousand

Human Resource Capital

- Salary and welfare expenses **44,963,207** thousand
- Training expenses **493,000** thousand

Intelligence Capital

- R&D expenses **3,849,999** thousand
- Marketing expenses **20,912,848** thousand

Manufacturing Capital

- Equipment installation and maintenance expenses **26,838,242** thousand
- Cell tower installation expenses **7,997,131** thousand

Social Capital

- Social investment **1,076,692** thousand
- Universal telecom services **491,271** thousand

Nature Capital

- Green procurement **904,204** thousand
- Environmental management expenses **329,126** thousand



Six Main Capitals
Create Sustainability Value

The Digital Economy Motivator

Vision

Digital economy transformation

Strategy

- Becoming the 5G telecom leading brand
- Stimulating innovative application and creating new business models



The Creative Industry Pilot

Vision

Industry innovation & Talent Startup

Strategy

- Investing and fostering startup business
- Encouraging innovation and start-up internally



The Happiness Value Protector

Vision

Happy corporation & Considerate services

Strategy

- Establish a healthy and happy workplace
- Protect cyber and labor human rights
- Provide excellent innovative services



The Green Corporation Pioneer

Vision

Transforming into a green corporation thoroughly

Strategy

- 5G(Green) green action
- Constructing a green and low-carbon supply chain



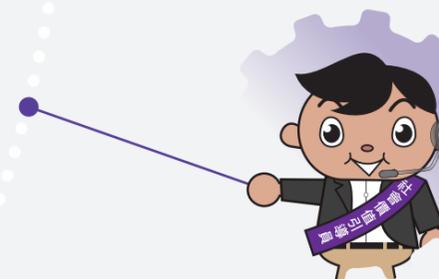
The Social Value Guide

Vision

Connect · Hope · Technology

Strategy

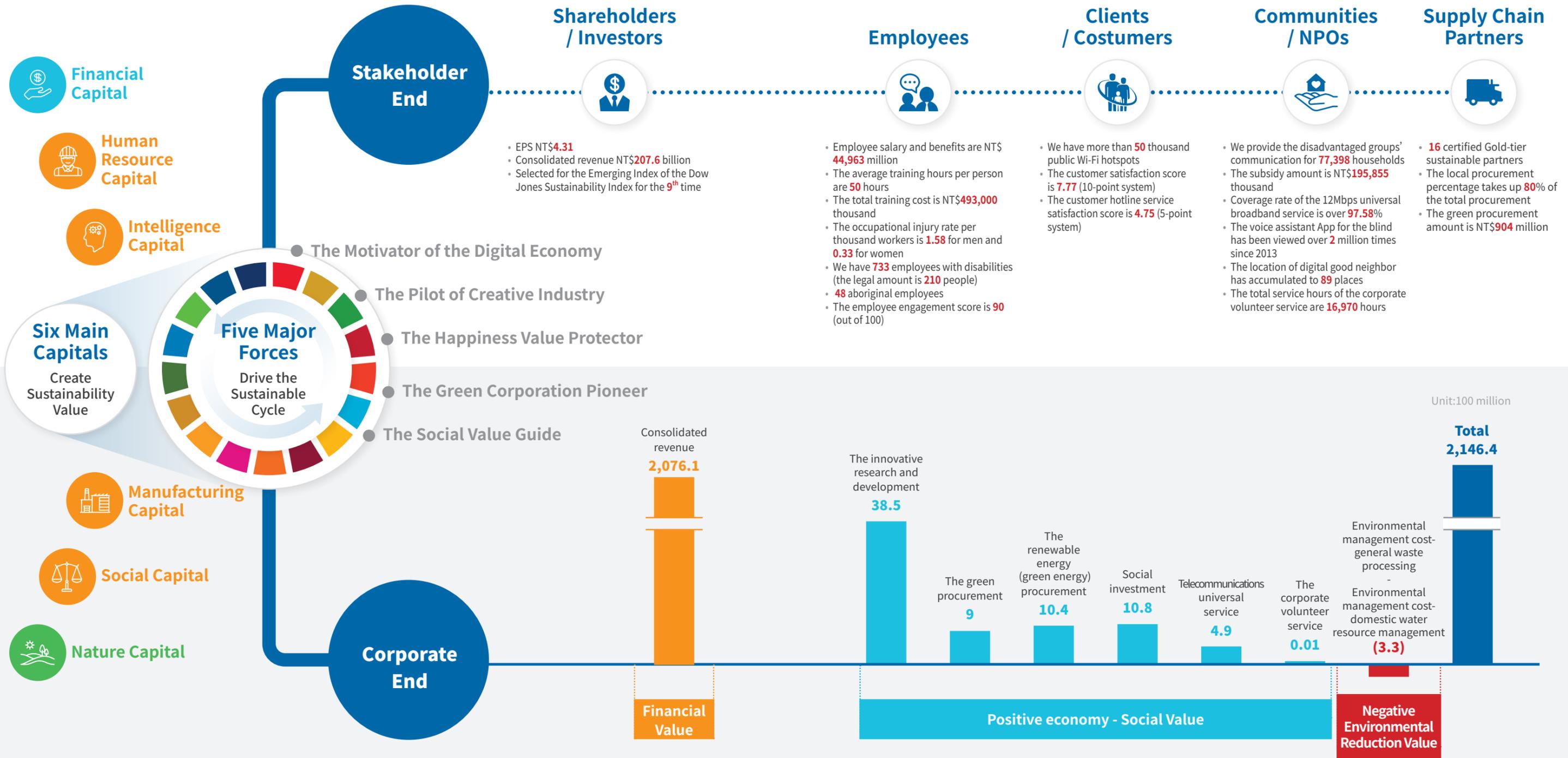
- 5I SDGs digital inclusion initiative
- Corporate volunteering services



Creating Sustainable Value

Our CSR issues and actions have created sound economic, environmental and social value since 2006. Although we have made serious efforts to adapt quantized data when setting-up and managing CSR plans, targets and performance, we have come to realize the difficulty of quantizing environmental and social values. There is still lots of true value that cannot be realized with the currency presently used as evaluation indicators of CSR performance.

We have used a “True Value” method of calculation. Positive (+) and negative (-) currency values have been assigned in an assessment of our influence on society and environment. This gives a sound idea of the real environmental and social value (profit and cost) of our sustainability efforts in 2020. The economic, social and environmental currency value CHT created on operation has also been blended in. The true value CHT creates in 2020 is NT\$214.64 billion.



Source of true value calculation for corporate volunteer service [\[Link\]](#)

Source of true value calculation for Telecom universal service :
Research conclusion, Journal of China Institute of Technology Vol.40-2009.06

03

Material Topics and Impacts

 The annual material topics are determined through the following process: internal feedback, external questionnaires, topic identification by the CSR Secretariat, topic analysis by the six CSR task forces, ranking the topics, and finally, confirming the results.

 We have a set of procedures in place to identify, engage, interact, and communicate with stakeholders through various channels based on the **Stakeholder Engagement Standard (AA 1000SES:2015)**.

We intend to provide all stakeholders concerning the future of Chunghwa Telecom as well as the telecom industry with a more comprehensive understanding of how Chunghwa Telecom has exerted its industry influence on CSR topics. This purpose has improved the quality of our actions and disclosures.

| | |
|--|-----------|
| 2020 Material Topics and Impact | 36 |
| Stakeholders Engagement | 40 |

2020 Material Topics and Impact

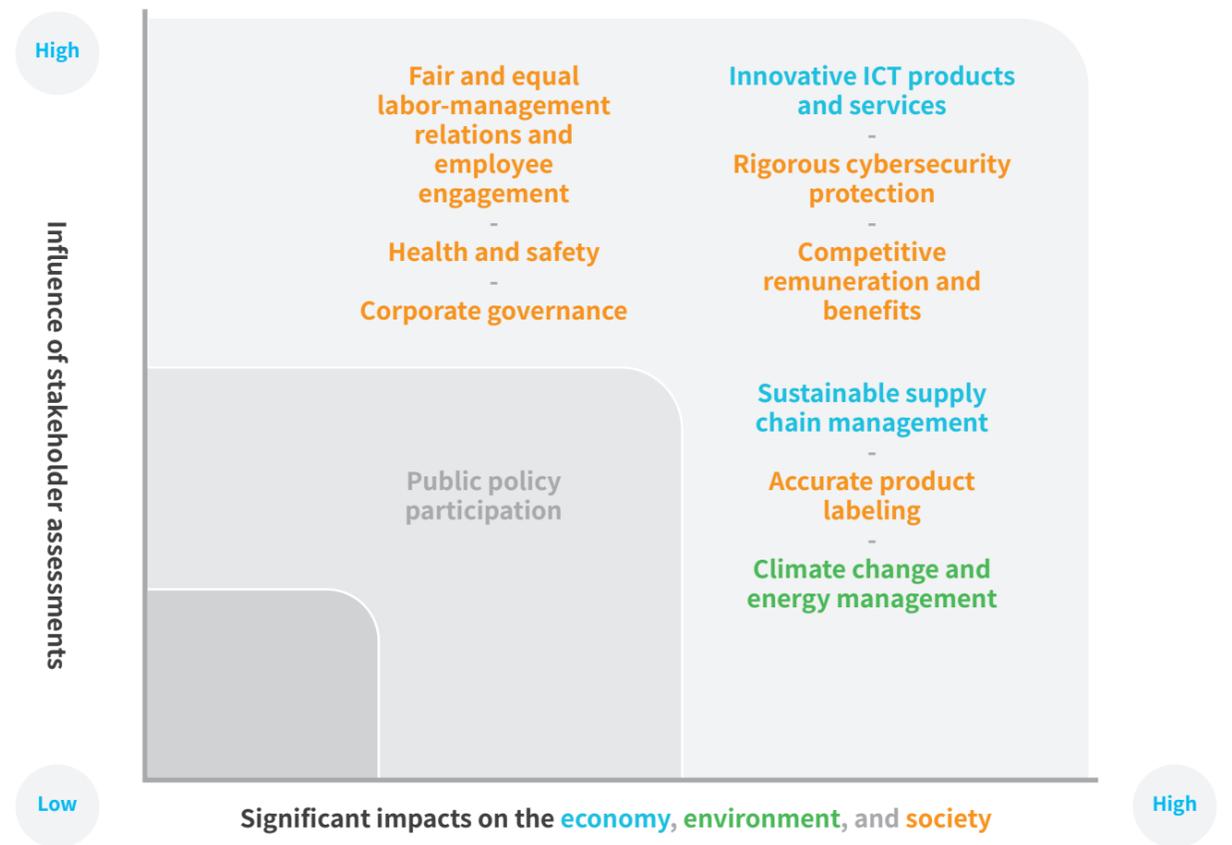
CHT is an integrated telecom service provider. Except for the use of electricity at business locations, facility rooms, and data centers, our other service processes and mechanisms have no major negative impact on the environment and society. However, with over 20 thousand employees, the capabilities of value chain procurement and supply and business locations all over Taiwan, we understand that our ICT services and products can bring positive transforming and business opportunities to the industry, economic development and people's life in Taiwan. Therefore, we seize opportunities and endeavor to decrease the potential risks from material CSR topics.

Within the organization < Range of impact > Outside the organization

| Entity Material Topics | CHT | Honghwa Subsidiary | CHT Security Subsidiary | Engineering Suppliers | Equipment Suppliers |
|-----------------------------------|-----|--------------------|-------------------------|-----------------------|---------------------|
| Economic Performance | ● | ▲ | ▲ | | |
| Market Presence | ● | | | | |
| Energy | ● | | | ■ | ■ |
| Supplier Environmental Assessment | ● | | | ■ | ■ |
| Employment | ● | ▲ | ▲ | | |
| Occupational Health and Safety | ● | ▲ | ▲ | ■ | ■ |
| Supplier Social Assessment | ● | | | ■ | ■ |
| Marketing and Labelling | ● | ▲ | ▲ | | |
| Customer Privacy | ● | ▲ | ▲ | | |
| Socioeconomic Compliance | ● | ▲ | ▲ | ■ | ■ |

- : direct impact ; ▲ : indirect impact ; ■ : impact from business relations
- Except for the impact within the CHT organization (including 2 subsidiaries), the influence of the external impact is determined by the "supplier type."
- CHT also promotes relative management principles and actions. For detailed topic information, please refer to the corresponding chapter and page.

The Materiality Matrix



- The materiality threshold: 2.5 and above for both the X-axis and the Y-axis (3-point scale)
- Chunghwa Telecom also willingly discloses issues that are not identified as material issues in 2020, please refer to the topics with "*" in the index catalog (P.142-143).

Process for Determining Material Topics

STEP 1 Confirming the determining process for material topics

The CSR Secretariat calls for the six CSR working groups to confirm the material topics determining process of the current year. We perform through feedback and external questionnaires.

STEP 2 Information collecting / Topic identification

The CSR Secretariat is responsible for identifying CSR topics while considering CHT's short-, mid-, and long-term achievement and referring to the material it collects including international guidelines, such as the GRI Standards, sustainability rating surveys, international benchmark business information and the news related to CHT in 2020.

STEP 3 Analysis / Prioritizing

The CSR working groups analyze topics and hold discussions based on internal consideration, industry status, industry chain practice, and advices from stakeholders. The topics are prioritized according to urgency and seriousness and the level of impact.

STEP 4 Result Confirmation / Materiality Matrix

Members of the CSR working groups were invited to consider the relevance between the topics and the actual operation according to internal and external information. The 2020 topic identification results were confirmed and a materiality matrix was prepared for submission to the CSR Committee for approval.

2020 Material Topics Description

| ESG Aspect | Material Topics | Meaning to CHT | Topic Corresponding to the GRI Standards | Management Principle (page number) | 2020 Performances (page number) | Topic Corresponding to UN SDGs |
|-------------------------------------|---|---|--|------------------------------------|---------------------------------|--------------------------------|
| <p>Environment</p> | Climate change and energy management | Aiming to become a “green enterprise”, we aspire to enhance our core competencies, identify relevant risks and opportunities, and steer the development of a low-carbon industry on the issues of energy and climate change. | Energy | P.104 | P.106 | |
| <p>Society</p> | Competitive remuneration and benefits | With remuneration above the statutory standards and the industry average, we stress on the well-being of our employees, encourage our employees with actions for them to focus on work without distraction, and share our business results. | Market Presence | P.71 | P.71 | |
| | Fair and equal labor-management relations and employee engagement | Through formal engagement, an agreement can be reached regarding the rights and responsibilities of employees to both protect them and the employer. | Employment | P.70-71, 74 | P.71-73 | |
| | Health and safety | We incorporated ISO 45001 to ensure that each process is in compliance with the regulation. | Occupational Health and Safety | P.83 | P.83-85 | |
| | Accurate product labelling | We accurately communicate product and service information, and actively provide instructions and usage regulations to ensure that consumers are aware of the effects while overuse of products and services. | Marketing and Labelling | P.24 | P.24, 96-97 | |
| | Rigorous cybersecurity protection | We have continued to strengthen our processes and systems in response to external security threats and regulatory changes, and constantly refine information security systems and management strategies for consumer data protection. | Customer Privacy | P.55, 94-95 | P.55, 94-95 | |
| | Corporate governance | The upright operation is the core value CHT insists on. We make the employees strictly follow the laws and regulations through policies and propaganda. | Socioeconomic Compliance | P.24 | P.24 | |
| | <p>Governance</p> | Innovative ICT products and services | Due to impacts from the global industrial chains, Chunghwa Telecom more proactively strengthens its core businesses, introducing momentum to drive revenues via innovative ICT products and services while elevating shareholders’ willingness to hold shares in the long run. | Economic Performance | P.22 | P.22 |
| Sustainable supply chain management | | Now that we cannot take our influence on our supply chain lightly, we are obliged to lead our partners on the supply chain to implement measures in conformity with the international ESG standards of management so as to guide the ICT industry towards sustainability. | Supplier Environmental Assessment - Supplier Social Assessment | P.115 | P.112-117 | |



Stakeholders Engagement

We have always thought that “Chunghwa Telecom can do more.” As the leading brand in Taiwan telecom industry, CHT focuses on industry development and competition. In addition to good products, services and profits, we also give back to society. We also pay close attention to the voices of our internal and external stakeholders before making careful responses to the needs of society.

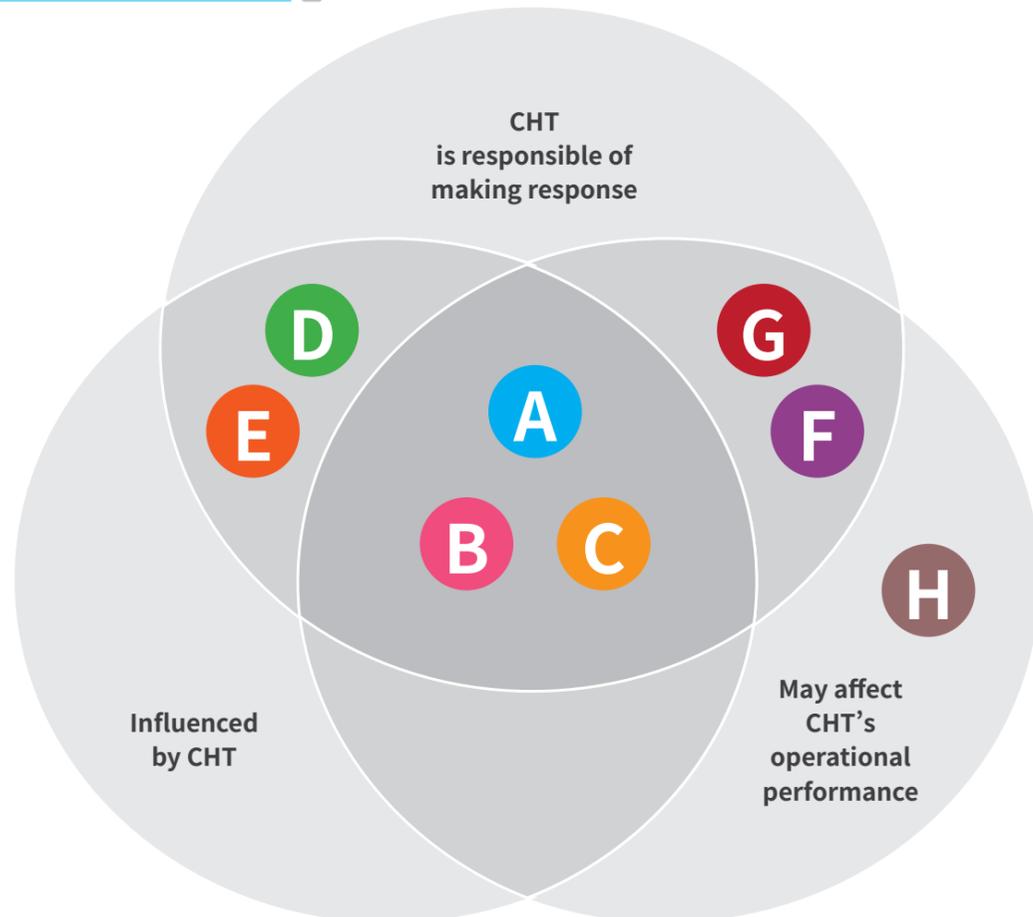
The identification of the stakeholders and their issues is a very important part of the CSR practice. In the initial meeting of CSR report preparation, we invite members from all departments to exchange the issues related to current key stakeholders and their concerns. Upon reaching mutual understanding, the result is incorporated into a table that is regarded as an essential reference for the disclosures in the report. In the process of promoting CSR activities and information disclosure, we consult the opinion of the internal and external stakeholders, important relevant mechanisms include:

- “Consultation meeting with external professionals” for CSR report
- Regular invitation of external professionals to the “CSR Conference” and relevant forums
- The “CSR Supplier Conference” is held every year
- Specialists designated for CSR and the CHT Foundation
- CHT was the first to create “CSR videos” and the CHT official YouTube CSR program to record the implementation of CSR action on a regular basis, as well as the collection of internal and external feedback for further improvement

[CSR Video](#)

CHT Stakeholder Engagement Guidelines:

1. [CHT Stakeholder Engagement Results](#)
2. [CHT Stakeholder Engagement Guideline](#)
3. [CHT Stakeholder Communication Channel](#)



| Stakeholder | Meaning to Chunghwa Telecom | Focused Topics | Communication channel | Communication Frequency |
|--|--|---|--|---|
| A Shareholders / Investors | As shareholders / investors are our stockholders, we must be accountable to them. | • Economic Performance | • Shareholders' meeting • Shareholder hotline • Earning results conference • Investors' meeting | • Annually • Real-time • Quarterly • Nonperiodic |
| B Employees | Employees are critical to the sustainable development and they are the driving force for sustainable growth. | • Market Presence • Employment • Occupational Health and Safety | • E-mail • Telephone call • Online forum • Labor employer meeting • Negotiation meeting | • Real-time • Every 2 months • Nonperiodic |
| C Clients / Customers | Only when customers prefer the products and services of Chunghwa Telecom could we have value for existence. | • Marketing and Labelling • Customer Privacy | • Service hotline • Customer service center | • Real-time |
| D Suppliers | The large product and service chain of Chunghwa Telecom relies on the stable support of the suppliers. | • Supplier Environmental Assessment • Supplier Social Assessment | • E-mail • Hotline • CSR Supplier Conference • Supplier Training • Survey | • Real-time • Annually |
| E Communities / NPOs | We wish to reciprocate for society with our professional standing in telecom and create a better future. | • Energy • Socioeconomic Compliance | • E-mail • Hotline • Stakeholder forum | • Real-time • Nonperiodic |
| F Media / Accreditation Institutes | We have learned and grown with the media and accreditation institutes through their mentorship in sustainable development. | • Socioeconomic Compliance | • E-mail • Hotline • Press release • Press conference • Survey | • Real-time • Nonperiodic |
| G Competent Authorities | Our products, services and related marketing behaviors are subject to audits by the competent authority. | • Socioeconomic Compliance | • Public hearing/press conference • E-mail • Official document • Meeting • Telephone call • Visit | • Real-time • Nonperiodic |
| H Competitors | As the leading brand in the telecom industry in Taiwan, we strive to engage in fair competition in the industry for a healthy development of the industry. | • Economic Performance • Market Presence | • Official document • Meeting • Telephone call | • Real-time • Nonperiodic |

2020 CSR Results of Critical Stakeholders Engagement



Employees

- 6 Labor-management conferences (to deliberate on 22 proposals)
- 5 Negotiation meeting (to deliberate on 19 proposals)



Shareholders / Investors

- 1 Annual general meeting
- 4 Earning results conferences
- 2 NDR and broker investor conferences
- 62 conferences for visiting investors



Clients

- The “123 customer service hotline” has served over 39.44 million cases
- 12.97 million tickets received



Media

- 262 Press releases in total
- 16 Press conferences in total



Competitors

- 86 conferences attended



Suppliers

- 126 suppliers participating in the Supplier Sustainable Environmental Visits
- 105 suppliers participating in the “2020 Annual CSR Supplier Conference”



Competent Authorities

- 14 press conferences and public hearings convened
- 456 appeal and negotiation meetings completed
- 282 business inspections

2020 Annual CSR Supplier Conference

To facilitate our supplier partners in understanding the climate risks and harness the future opportunities for development, the 2020 Annual CSR Supplier Conference was themed with “Form Alliance Extensively in Sustainability; Create Opportunities in Low Carbon”. Chi-Ming Peng, CEO of WeatherRisk Explore, Inc., was invited specifically to decode weather for all the attending partners and share on the climate risks an enterprise ought to pay attention to. Also, Stephen Pao, Senior COO of SGS-Taiwan, was invited to share on how an enterprise can be green and be rich in the transition to a low carbon economy in order to seize the business opportunities in sustainability.



Chunghwa Telecom was the first telecom operator to kick off “sustainable supply chain” initiative in Taiwan. During the conference, Stephen Pao, Senior COO of SGS-Taiwan, presented the Certificate of Excellence in Sustainable Supply Chain to Shui-Yi Kuo, President of Chunghwa Telecom, on behalf of the Sustainable Alliance for Low-carbon Economy (SALcE) to recognize its ongoing commitment to the sustainable value chain of telecommunication.

To continue to exert its influence of sustainability, Chunghwa Telecom created the first “Supplier Sustainability Rating” system. President Kuo awarded the “Certificate of Sustainability Rating” to 6 outstanding suppliers, including Delta Electronics, Baycom Opto-Electronics Technology Co., Ltd., SYSAGE Technology Co., Ltd., Ablerex Electronics Co., Ltd., Interactive Digital Technologies Inc., and Basecom Telecommunication Co., Ltd., which passed the rigorous checks by SGS-Taiwan and received “Gold-tier Certificates”. “CSR Information Disclosure Award” was awarded to HwaCom Systems Inc., Arcadyan Technology Corporation, and Ta Ya Electric Wire & Cable Co., Ltd. “CDP Award” was presented to D-Link Corporation (Taiwan).

Moving forward, Chunghwa Telecom shall uphold the spirit of Form Alliance Extensively in Sustainability to join hands with its huge group of supplier partners to exercise corporate social responsibility, bridge to the international development, and create low-carbon opportunities together, and ultimately forge the sustainable future of ICT industry through “Customer-centered Value Creation”.



[Sustainable Alliance for Low-carbon Economy \(SALcE\)](#) [Video](#)

4 Sustainability Risks and Opportunities

The SDGs CHT contributes to in this chapter



| | |
|--|----|
| Emerging Risks | 48 |
| Emerging Opportunities | 48 |
| Climate Change Risks and Opportunities | 50 |
| Cybersecurity Risks | 55 |

 Our **“Risk Management Committee”** adopts Enterprise Risk Management (ERM) software and the **“Risk Analysis Matrix”** as our assessment tools, governing every business decision made by our employees.

 The development of the Artificial Intelligence of Things (AIoT) will popularize edge computing, IoT phone numbers, drones, AR, VR, and smart homes. These emerging industries will **propel the development of hardware and operating systems.**

 The first telecom operator in the world to pass **“TCFD Conformity Check”** by BSI and obtain certification of the highest level.

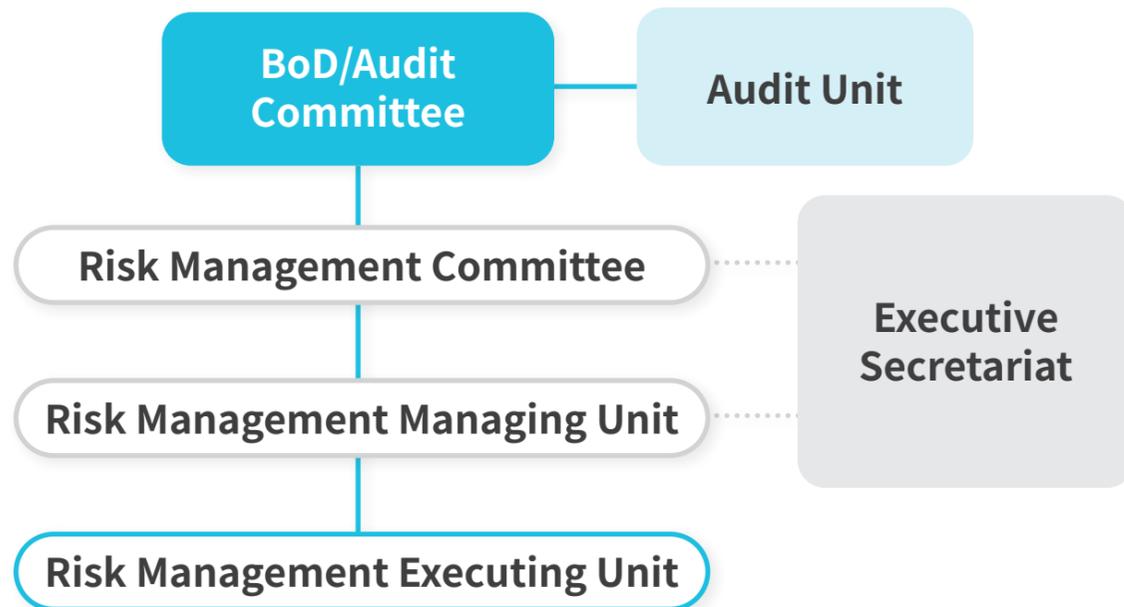
 CHT is actively looking into the development of **renewable energy**, self-built or for solar energy.

 Adopting a risk-based approach, CHT **established the “Chunghwa Telecom Cybersecurity and Privacy Protection Framework.”** Based on NIST’s Cybersecurity Framework (CSF) and domestic and international standards and regulations, the framework includes five steps: identify, protect, detect, respond, and improve.



CHT places emphasis on the control of the corporate operation and sustainability risk. In 2016, the Company established a Risk Management Committee with the President as convener and high rank managers as members. The committee supervises risk management throughout the organization and is responsible for prioritizing identified risks, formulating response strategies to key risk issues, and reporting to the board of directors when deemed necessary. Through control of the mechanism at each level, potential risks and loss to the Company can be minimized.

CHT Risk Management Organization Structure



| Aspects | Description |
|---------------------------------|--|
| Organizational Aspect | <ul style="list-style-type: none"> “Risk Management Committee” was established in 2016 to inform the Audit Committee of significant risk incident and related information. The Committee reports to the Board of Directors at least once a year. |
| Strategic Aspect | <ul style="list-style-type: none"> The BoD established the risk management strategy and structure. The Risk Management Regulations were established as a foundation and are followed by all employees engaged in business operations. |
| Management System | <ul style="list-style-type: none"> The Enterprise Risk Management (ERM) system was established for the regular control of the risks from each division and business. |
| Assessment Tool | <ul style="list-style-type: none"> We use the Risk Analysis Matrix as our assessment tool to assess legal, network maintenance, market and financial operation risks, etc. For the major operational items and relative CSR issues, we enhance the performance of sensitivity analysis and the pressure test. Pursuant to Recommendations of the Task Force on Climate-related Financial Disclosures (referred to as “TCFD Framework” hereinafter), we analyzed the scope of operation, upstream and downstream, as well as the climate-related risks and opportunities throughout the life cycles of assets in the short-, mid-, and long-terms. |
| Audit Aspect | <ul style="list-style-type: none"> The executive Secretariat helps promote the risk management activities in all company. The Auditor reviews the risks and reports to the BoD. |
| Feedback and Improvement | <ul style="list-style-type: none"> Risk status is followed up monthly and reported to the Risk Management Committee generally. The Committee improves the current risk management mechanism based on feedback from individual units to ensure the process is up to date and satisfies the operational need. |

Implementation outcomes in 2020

- 3 meeting were convened.
- “Operation of Risk Management” presented in the operation overview on the Board Meeting in November.

For more information about Risk Management, please refer to 2020 Annual Report P.97-103



Emerging Risks

CHT continues with advanced technological research and development to take advantage of many business opportunities in this digital convergence era and reduce operational risk. We absorb, cultivate and make good use of excellent available talent to integrate Internet and marketing resources.

Risk Factor

Potential Influences (Obstacles)

| | |
|---|--|
| <p>The decrease in the voice revenue</p> | <ul style="list-style-type: none"> Market competition and VoIP have caused a slight decrease in voice revenue. We continue to maintain our competitive edge in broadband Internet, even in the face of low-price competition from cable television. |
| <p>The 5G business model is unclear</p> | <ul style="list-style-type: none"> The cost of our 4G investment has not been fully recovered and 5G belongs to the high-frequency spectrum. We predict that serious investment will need to be made to satisfy the requirements for new construction in the near future. |
| <p>Energy supply stability</p> | <ul style="list-style-type: none"> The electricity supply is unstable and insufficient. IDCs and base stations are facilities and equipment of high energy consumption, whereas unstable power supply will result in disruption in operation that impacts the revenue. |

Countermeasures (Risk Avoidance and Opportunity Seizure)

We cooperate closely with our strategic partners in the launch of new services and products that satisfy our customers. We have become The Digital Economy Motivator and The Creative Industry Pilot, and we create values for clients, shareholders, employees and society.

- In addition to enhancing current core business, we continue with new product research and development, as well as service and value-added applications. These include video service, information security, IoT, the cloud, mobile payment and other new business.
- We are concentrating on applications related to big data, information security, the cloud, IoT, 5G and the intelligent city. CHT is being transformed into the leading brand for information, communications and digital convergence.
- We have developed an IoT intelligent internet platform by combining five main services, which are information security, big data, blockchains, AI and AR.
- We expect IoT applications to develop rapidly with the advent of 5G and we already have 3 million phone numbers authorized by the NCC. We intend to provide IoT for both industrial and domestic applications.
- We are increasing the percentage of self-built renewable energy devices and have set up emergency power generating equipment to avoid interruption to our services in times of crisis.
- We plan to establish the Green Energy Office in charge of green procurement and renewable energy installment.
- CHT phases out the old and introduces high energy efficient IDC equipment and low-carbon base stations in order to lower the energy consumption and reduce its reliance on the power utility.

[CHT IoT Smart Platform](#)

Emerging Opportunities

The 5G technology will drive intelligent technological applications. AI will be everywhere around us in the future. Completely new types of services such as AIoT (AI and IoT) will become the core of fast convergence. The rise of new industries, edge computing, the volume of the IoT, drones, AR, VR and the intelligent family will push corporations in Taiwan to move their business emphasis. We predict that the global output value of AI hardware will exceed NT\$ 5 trillion. This will inevitably become an important force in pushing global economic growth. With the advent of Industry 4.0 and the rapid emergence of new online applications, cybersecurity specialists are issuing warnings regarding the looming threat of multimodal, multifaceted attacks. However, this also creates an opportunity for companies that offer an integrated cybersecurity service package. The government has classified information security as a matter of national security, including it as part of the national defense industry in the 5+2 New and Innovative Industries Policy.

Opportunity Factors

Potential Business Opportunity

| | |
|---|--|
| <p>Development of 5G</p> | <ul style="list-style-type: none"> Forecasts show that 5G technology will result in an output of US\$ 134 billion to the companies in Taiwan in 2035. |
| <p>IoT / Big Data</p> | <ul style="list-style-type: none"> International research institute Gartner predicts that the IoT product and service providers will create a marginal benefit of US\$6 trillion in 2025. |
| <p>Information Security Management</p> | <ul style="list-style-type: none"> Popularization of emerging technological applications (e.g. IoT, AI, and cloud services) as well as diversified attacks by hackers, and the increased frequency of supply chain attacks gradually blur the existing security perimeters and boost the challenge of protection against cybersecurity threat while create new opportunities in the cybersecurity area. The FSC promulgated “Financial Cyber Security Action Plan” in 2020 to drive the demands for cybersecurity protection, monitoring, and joint defense in the financial sector. The Executive Yuan announced the Cybersecurity Industry Development Action Plan. The gross output of the industry is expected to exceed NT\$ 78 billion dollars by 2025. Gartner predicts the investing amount the companies put into information security will rise to US\$ 146 billion in 2021 with a compound annual growth rate of 8.4% around the globe. |
| <p>Climate Change Low Carbon Products and Services</p> | <ul style="list-style-type: none"> The World Economic Forum (WEF) foresaw the top five potential risks in the next decade to be environmental issues, especially the “extreme weather”. Businesses around the globe are investing in low carbon emission infrastructure, including green energy, electric automobiles, and smart cities to reduce reliance on electricity. The WEF estimated that the values of green bonds traded worldwide could soon hit US\$2.36 trillion. |

Countermeasures (Risk Avoidance and Opportunity Seizure)

In the face of the trends of user-friendliness and rapid launch of diversified emerging technological applications, security perimeters are blurred as a result. Meanwhile, openness and softwareization increase the chance of exposure as well, which in turn pose a threat to security. Hence, apart from taking user experience and service functions into consideration, corporations are to employ the concept of Secured by Design in the beginning of development in order to effectively reduce potential information security risks. CHT spares no effort in the refinement of cybersecurity technology. In response to the government’s cybersecurity automatization and industry innovation policies, in 2017, CHT founded Chunghwa Cybersecurity International, a subsidiary dedicated to the development of integrated cybersecurity solutions especially for emerging technologies. We hope that our endeavors will encourage other companies to follow suit, while effectively broadening opportunities in information security and driving the growth of revenues apart from the reinforcement of national cybersecurity defense capability.

- Launching “Taiwan 5G Industry Development Alliance - CHT leading team” with the 5G office in DoIT, ITRI, and III.
- CHT Pilot Team extends laboratory testing to practical “5G Testing and Training Site.” All industries in Taiwan can take advantage of this environment to develop innovative applications and grasp the opportunities.
- We are forming a national IoT team. Through allying with the international and Taiwanese companies, we create international competitiveness for the IoT industry in Taiwan.
- We developed the IoT intelligent internet platform on our own, combining 5 main services, including information security, big data, the blockchain, AI, and AR.
- The cyber intelligence joint defense platform we developed and key emerging technologies like MEC security monitoring offer an environment for 5G and IoT that is more secured and reliable.
- Developing inter-disciplinary financial security solutions, we strive to become a cybersecurity service provider for digital finance.
- With our current IT solutions, we offer complex solutions for clients using ICS/OT infrastructure connected to a hybrid network.
- As a managed security service provider (MSSP), we dedicated to the provision of a wide range of cybersecurity solutions. In addition to extending our market reach within the border, we are actively seeking business opportunities overseas.
- Maintain our leading position in the industry by consolidating our advantages in internet services, distributions channels, and R&D capabilities with domestic and overseas high-quality products to provide integrated solutions to large enterprise clients.
- Green Product and Service Program — we provide businesses with energy-saving technology and services.
- By combining innovative green services, such as video conferencing, e-bills, and other cloud services, with our existing technology, we plan to build smart cities with lower carbon emission.
- We are building a cloud service platform that enables clients to access real time data regarding their energy usage and equipment status so that failures can be predicted and prevented.
- We began investing in the photovoltaics and Green ICT industries in 2017, establishing the Smart Energy Lab and the Smart Architecture Lab. Also, we planned to establish the Green Energy Office in charge of green energy procurement and renewable energy installment to enter the field of renewable energy. As of 2020, we have the largest capacity, self-built or otherwise, for solar energy among all telecom companies in Taiwan.



Climate Change Risks and Opportunities

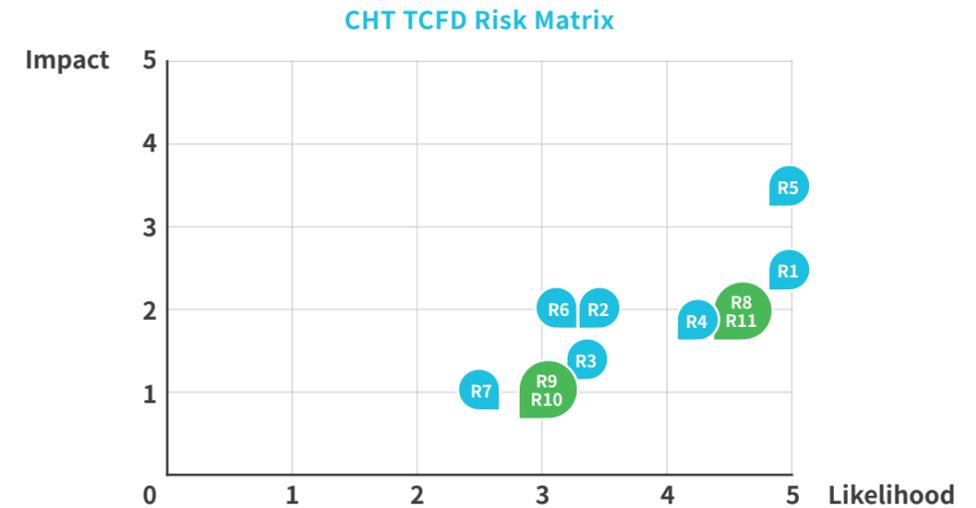
Chunghwa Telecom is the first telecom company in Taiwan to sign on as supporter of the Task Force on Climate-related Financial Disclosures (TCFD) initiative. In 2020, CHT has started to analyze climate-related risks and opportunities in accordance with the TCFD’s recommended framework, and accordingly promote climate change mitigation and adaptation, in order to continuously reduce climate-related risks and create opportunities for the industry.

Chunghwa Telecom Disclosures to TCFD

| Framework | Disclosures | Page |
|---------------------|---|---------|
| Governance | • The board’s oversight of climate-related risks and opportunities | P.46-47 |
| | • Management’s role in assessing and managing climate-related risks and opportunities | P.46-47 |
| Strategy | • The climate-related risks and opportunities the company has identified over the short, medium, and long-term | P.51 |
| | • The impact of climate-related risks and opportunities on the Company’s businesses, strategy, and financial planning | P.51 |
| | • The potential impact of the Company’s businesses, strategy, and financial planning in different scenarios | P.52-53 |
| Risk Management | • The Company’s processes for identifying and assessing climate-related risks | P.50 |
| | • The Company’s processes for managing climate-related risks | P.50 |
| | • Processes for identifying, assessing, and managing climate-related risks and how they are integrated into the Company’s overall risk management | P.46-47 |
| Metrics and Targets | • The metrics used by the Company to assess climate-related risks and opportunities | P.54 |
| | • Scope 1, Scope 2, and Scope 3 greenhouse gas emissions | P.54 |
| | • The targets used by the organization to manage climate-related risks and their implementation | P.111 |

Referring to the ISO 31000 risk management guidelines, the strategy group assess the hazard caused by each climate-related risk (risk hazard = likelihood × impact), through Delphi method, which investigates the professional experience of senior executives in related departments, and focuses on the likelihood from five levels, which are “very unlikely”, “unlikely”, “probable”, “likely” to “very likely”, and the degree of impact is divided into five levels based on the proportion of CHT’s paid-in capital, which are “extremely high”, “very high”, “high”, “moderate”, and “minor”. As the result for identifying of climate-related risk, there are 6 transition risks and 5 physical risks.

After analyzing low, medium, and high risks, the Risk Management Committee will comprehensively assess the climate-related risk and other risks of the company and conduct necessary mitigation measures depending on the impact of risk. After the Risk Management Committee conducts an overall risk assessment based on the evaluation and analysis results, the Chief Auditor shall review the risk assessment results and the Risk Management Committee will report to the Board of Directors. The outcome of risk identification is shown in the following figure.



| Risk Type | NO. | Risk Factor | Risk Issue | Time |
|--------------------|-----|--------------------------|--|----------------------------|
| Transitional Risks | R1 | Policy & Regulation Risk | Increase in operating costs due to the carbon emissions pricing | Mid- and Long-term |
| | R2 | Market Risk | Higher electricity rate due to change in Taiwan’s structure of electricity generation | Mid- and Long-term |
| | R3 | Technical Risk | Increase in operating costs as replacing low energy-consuming equipment ahead of time to improve energy efficiency | Long-term |
| | R4 | Technical Risk | Increase in operating costs as replacing fuel vehicles with electric ones to improve energy efficiency | Long-term |
| | R5 | Policy & Regulation Risk | Increase in operating costs due to the adoption of renewable energy forced by updated regulations | Short-, Mid- and Long-term |
| | R6 | Reputational Risk | Losing the favor of investors and consumers because of lacking active sustainable actions | Short-, Mid- and Long-term |
| | R7 | Long-term Risk | Operational assets are damaged owing to the rise of sea level covering the low-lying coastal areas | Mid- and Long-term |
| Physical Risks | R8 | Short-/ Long-term Risk | Tense operating pressure and serious impact due to lack of water resource | Short-, Mid- and Long-term |
| | R9 | Long-term Risk | Decrease of international service revenue due to worsening environment which deters tourists from visiting Taiwan | Long-term |
| | R10 | Long-term Risk | Employees’ leaving their jobs forced by rising temperature | Long-term |
| | R11 | Long-term Risk | Equipment inoperability and service interruption resulting from Increased frequency and severity of heavy rains and floods | Mid- and Long-term |

The short-term is 2020-2025; the mid-term is 2025-2040; and the long-term is 2040-2100.

In consideration of the transition risks, we took reference to International Energy Agency, IEA Sustainable Development Scenario, SDS and Intergovernmental Panel on Climate Change, IPCC RCP 2.6 Scenario to identify the possible operational impacts and risks in the scenarios set.



Risk Related to Climate Change



Transitional Risks

| | |
|----------------------------|--|
| Climate scenarios | IEA SDS |
| Main Risk | In response to regulatory trends, CHT uses renewable energy |
| Preventive solution | CHT uses IEA SDS as the climate scenario, and comply nation regulation, such as “Greenhouse Gas Reduction and Management Act” and “Renewable Energy Development Act”. CHT plans to establish a green energy office, which will in charge of purchase renewable energy and installed capacity. In order to reduce emission, CHT import high-efficiency telecommunication facilities, low-carbon base stations and adopt low-carbon product equipment with government’s green label. By the end of 2020, CHT’s installed capacity of renewable energy has exceeded 2,783 kWp and our energy saving target is 1% year over year. |

Physical Risks

| | |
|----------------------------|---|
| Climate scenarios | RCP 2.6 |
| Main Risk | Increased frequency and severity of heavy rains and floods, resulting in equipment inoperability and service interruption |
| Preventive solution | CHT conducts climate scenarios analysis according to RCP 2.6 and the “National Climate Change Adaptation Action Plan (2018-2022)” formulated by the Executive Yuan. In further, CHT uses the Taiwan Climate Change Projection Information and Adaptation Knowledge Platform (TCCIP) as an analysis tool, and carries out the “Telecommunication Adaptation Action Plan for climate change adaptation” to elevate our adaptive capacity to climate change. |

Low-carbon Transition Opportunities

Chunghwa Telecom adopts a two-pronged strategy which is dedicated to the pursuit of a low-carbon transition and taking advantage of future business opportunities both internally and externally.

- Internally: Establishment of the Company’s “Environmental Sustainable Development Strategies and Targets” via organized, systematic methods, and effectively improving the effective management of carbon emissions and other environmental information through the use of our internally developed environmental information management system.
- Externally: Development of green products and services to develop renewable energy and provide businesses with energy-saving technologies and services.

As the “Smart City” leading brand by its core technologies and resources combined, Chunghwa Telecom has utilized its long-established experience in the development of information & communication systems and electrical environment monitoring systems to integrate and monitor the energy-consuming status for its clients. It has also adopted a cloud platform to provide clients with services such as energy-saving performance calculations, equipment operational status monitoring, and real-time notifications. These services help businesses lower carbon reduction threshold and reach their energy-saving and carbon reduction targets. In addition, Chunghwa Telecom offers innovative green products and services to accelerate the spread of Smart Living.

As for our development of renewable energy, Chunghwa Telecom has invested thousands of manpower to build the Zhangbin Solar Power Plant. This plant is the country’s largest solar power plant, with a total capacity of 100 MW and an annual output of 130 million kWh. The power plant reduces annual CO₂e missions by 70,000 metric tons, creating revenues for the Company, and thus it is a mutually beneficial endeavor, benefitting both the environment and our operations.



Carbon Reduction Practices and Measures

In order to adapt to the potential changes in the environmental and climate related regulations & international accords, we have developed the following strategy:

Close Observation of Regulatory Changes Both Domestically and Abroad

We are actively cooperating with relevant stakeholders and have established the “Chunghwa Telecom Energy Saving Policy for a Sustainable Environment”, which aims at “Green Enterprise”, “Green Sustainability” and “Green Innovation” to actively expand environmental protection actions; at the same time, we promote facilities-room disaster mitigation and climate adaptation programs to strengthen disaster response measures and reduce climate risks.

Universal Services

We have also installed solar panels on cell towers in remote mountainous areas to reduce energy consumption and carbon emission; these panels can also provide power to the cell towers in the case of a power outage to support emergency communications.

Establishment of a Sustainable, Low-Carbon Supply Chain

In 2017, Chunghwa Telecom joined the CDP Supply Chain Program and became the first telecom company in Taiwan to participate in CDP’s international platform. The official implementation of our carbon management measures with our 100 suppliers prompted them to disclose complete greenhouse gas information in a positive and proactive manner and commence planning of carbon management measures and strategies.

In 2018, we incorporated the ISO 20400 Sustainable Procurement Standard to implement our sustainable development beliefs in procurement practices; green supply chain was constructed in 2019 through a sustainable perspective, supplier evaluation, and classification management, with 16 suppliers passing the external third-party auditing and obtaining the Gold-tier Certificates.

Development of Low-Carbon Products and Services

In addition to mitigating the environmental impact caused by our operations, products, and services, we have reduced our carbon footprint via green innovative services and revolutionary technologies such as video conference, digital receipt services, and cloud products. We’ve also utilized the technological advantage in our primary businesses to help build smart cities; an example of such low-carbon solutions is a smart taxi dispatch system that lowers the number of empty cabs on the road and reduces fuel consumption.

Management of Service Centers Carbon Footprints

We carried out carbon footprint inventory for the service center in 2019, which not only is ISO 14067 and PAS 2060 verified, but attains the Environmental Protection Administration Carbon Footprint Label in Q2, 2020, making Chunghwa Telecom the first telecom company in Taiwan to acquire the label. This shall be beneficial for the “green communication” between the customers and ourselves.

Greenhouse Gas Emissions Management

The total greenhouse gas emissions in 2020 were 790,320.9986t-CO₂e, consisting of six types of greenhouse gases, namely, CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆.

As the operations of Chunghwa Telecom primarily use electrical power, the greenhouse gas is mainly category 2 emissions (purchased electricity), accounting for a percentage of 97.19%. Category 1 emissions, which account for 2.81%, are mostly generated by workplace emission sources. Through implementation of various energy-saving carbon reduction measures, the total emissions in 2020 demonstrated a slight decrease as a result.

To facilitate the decrease of greenhouse gas emissions, Chunghwa Telecom has actively built solar photovoltaic systems in recent years. We also acquired 105 Taiwan Renewable Energy Certificates (T-REC), reducing carbon emissions by 53.45 t-CO₂e in 2020.



| | 2018 | 2019 | 2020 |
|--|--------------|--------------|--------------|
| Direct emissions (Category 1) | 30,469.8920 | 28,455.5921 | 22,192.9316 |
| Indirect emissions (Category 2) | 804,043.4163 | 795,295.4952 | 768,128.0670 |
| Total emissions (Category 1 + Category 2) | 834,513.3083 | 823,751.0873 | 790,320.9986 |
| Emission intensity (t-CO₂e/NTD in million) | 3.9 | 4.0 | 3.8 |
| Percentage of category in revenue | 100% | 100% | 100% |

All the inventories and audits in 2018-2019 were conducted in line with the standard of ISO 14064-1:2006, while the GWP was derived from the Fourth Assessment Report of IPCC (2007). The standard was converted to ISO 14064-1:2018 as of 2021 with the scope changed into category. The GWP was derived from the Fifth Assessment Report of IPCC (2013). All data has been verified by SGS-Taiwan.

GHG Inventory and Verification

Chunghwa Telecom conducts regular annual inventories of the organization's greenhouse gas emissions and conforms with the ISO 14064-1:2018, investigating the greenhouse gas emissions of upstream and downstream activities. In 2020, Chunghwa Telecom conduct GHG inventories on category 3, 4, and 5. All data has been verified by SGS-Taiwan.

| Operation Value Chain | Category | Item | Emissions (t-CO ₂ e) |
|------------------------|----------|-------------------------------------|---------------------------------|
| Upstream | 3 | Employee Commuting | 67,132.5036 |
| | | Business Travel | 648.2457 |
| | 4 | Product & Service Procurement | 628.4054 |
| | | Waste Disposal and Transportation | 3,619.4288 |
| | | Fuel- and Energy-related Activities | 169,158.1056 |
| Downstream | 5 | Leased Assets | 3,678.6770 |
| Total Emissions | | | 244,865.3661 |

Cybersecurity Risks

Driven by the Industry 4.0 development and emerging network applied technologies (e.g. 5G application, softwareization, cloudification, IoT, and AI), cybersecurity threats have evolved into multi-faceted mixed attacks that increase challenges for enterprises in cybersecurity management. Chunghwa Telecom continues to develop risk protection countermeasures, bridges to international information security standards, and has established joint-defense mechanism with the government and international information security organizations, dedicated to the elevation of overall cybersecurity defense and response capabilities. Also, CHT proactively develops key cybersecurity technologies, besides facilitating developments of emerging businesses, and to offer its clients a secured and reliable digital environment.

Corresponding Strategies

With the cybersecurity vision of building the most valuable, safe, reliable, trustworthy telecom carrier in line with international standards as the point of departure, we implement "Cybersecurity Policy" and "Privacy Policy" from the start, and passes government inspection and third-party verification (ISO 27001, ISO 27011, BS 10012, CSA STAR Certification remain effective). Through the Plan-Do-Check-Act (PDCA) cycle, actions regarding cybersecurity and privacy protection management are continuously improved to ensure the goal of "zero tolerance" for major cybersecurity and personal information incidents is achieved.

Opportunities and Actions

In accordance with standards, laws, and regulations at home and abroad, "Chunghwa Telecom Cybersecurity and Privacy Protection Framework" was established to prevent possible risks, implement concrete, effective safety protection and personal data and privacy protection measures, safeguard customers' rights, and expedite the popularization of digital living services, including:

- Implementing the appropriate risk management strategies, introducing security requirements into design phase (security by design), and practicing rigorous cybersecurity protection management. These are conducted while selecting and supervising suppliers in an appropriate manner, to ensure supply chain security and enhance privacy protection.
- Deploying multi-layer, in-depth security protection and detection mechanisms, as well as the Intelligent Security Operation Center(SOC), to uncover malicious behaviors and hunt down possible cyber threats at an early hacking stage. Meanwhile, through threats intelligence gathering and early warning mechanisms, the Company will acknowledge cybersecurity incidents timely and process emergency incident response to have any damage controlled at a very early stage.
- Conducting Red Team Security Assessments and joint cybersecurity defense with national-level C-ISAC, including IOCs and threat intelligences exchanging, malicious website taking down. Moreover, the Company participates in national-level drills of Critical Infrastructure to ensure the effectiveness, safety and resilience of system and data protection.

The performance in cybersecurity and privacy protection risk management has been tracked and managed on a monthly basis by "Risk Management Committee". Any material risk issues will be reported to the Audit Committee under the Board of Directors or directly to the Board of Directors. In light of the major cyber security incidents domestically over the years, apart from a preemptive deployment of defense measures such as the ban on Network Neighborhood, security monitoring for Active Directory (AD), and blocking of APT attack via email, we utilize the smart cybersecurity monitoring platform that not only is capable of detecting incidents of breach or risks in peacetime, but also promptly backtracks impacts of external threats on the basis of intelligence. There has been no impact to the corporate businesses nor fine incurred from cybersecurity issue or personal data breach as of 2020. In 2020, we bridged ourselves to the world, planning for purchasing "data protection insurance", which will take place in 2021.

For more information of Chunghwa Telecom Cybersecurity and Privacy Protection, please refer to the official website [🔗](#)

05 The Creation of Sustainable Value

| | |
|-------------------------------|-----|
| The Digital Economy Motivator | 60 |
| The Creative Industry Pilot | 64 |
| The Happiness Value Protector | 70 |
| The Green Corporation Pioneer | 102 |
| The Social Value Guide | 118 |

- CHT develops an **IoT (Internet of Things) platform** that integrates five major services— **information security, big data, cloud computing, artificial intelligence (AI), and augmented reality (AR)**.
- CHT is the **first** telecom operator to launch **5G services**.
- CHT is the **first** mobile network operator to receive **ISO 45001** certification.
- CHT is **the only telecom company in Taiwan to have a labor union**.
- CHT is the **first** telecom company to institute sustainable supply chain management:
 - Working with the Sustainable Alliance for Low-carbon Economy (SALcE) to audit and issue sustainability labels
 - Joining the Carbon Disclosure Project (CDP) in an effort to establish a sustainable supply chain
- The **first** telecom carrier that obtained both environment management certifications, “ISO 14067 and ISO 14046”
- CHT proposed “**5I SDGs**” —**iHelping, iSharing, iLearning, iTechnology, iProtecting**—Taiwan’s first sustainable initiative that corresponds with the UN’s Sustainable Development Goals (SDGs).



In addition to the pursuit of operational value and the growth of profit for the benefit of our stakeholders, we also allocate substantial resources for the creation of sustainable value. The approach to this is five-fold: capital investment, strategy formulation, action plan, regular follow-up and performance reviews. We take all the necessary steps to ensure that each investment input has a proper sustainability result.

| Capital | Impact on Value Creation | Resource Allocated to Sustain Value Creation |
|---------------------|--|---|
| Financial | <ul style="list-style-type: none"> To ensure eligibility for licensing (e.g., the 5G bands) Provides sufficient financial resources to support value creation Effective execution of commercial activities Generation and allocation of other forms of capital, such as distribution of shareholder equity, investments, and capital expenditure | <ul style="list-style-type: none"> Contribution to the government in the form of tax revenue Supports the development of network infrastructure Improves the quality of telecom services |
| Human | <ul style="list-style-type: none"> Telecom knowledge and skills acquired by employees Human capital represents one of our major operational costs | <ul style="list-style-type: none"> Introduction to compensation and incentive schemes to attract and retain talent Encourage high value-adding services and innovations Talent training and development programs |
| Intellectual | <ul style="list-style-type: none"> Licensing, laboratory and R&D expenses, and the acquisition and development of industry technologies Investment to maintain the brand | <ul style="list-style-type: none"> Ongoing investment in R&D, construction, and services, and maintain service quality and customer satisfaction Investment in the R&D of new technologies and the setting of new protocols |
| Production | <ul style="list-style-type: none"> Allocate financial capital to develop and maintain infrastructure facilities Operation of the Internet Data Center (IDC) and the installation of wireless facilities and development of software and applications | <ul style="list-style-type: none"> Ongoing new construction, maintenance, and operation of network equipment Procurement control and the acquisition of more cost/energy efficient network equipment Consolidation of idle space and the recycling and disposal of obsolete equipment |
| Social | <ul style="list-style-type: none"> Regular contact with the relevant authorities to ensure the conformance and legitimacy of the operations and competition Positive feedback from consumers and the general public helps build credibility of the Chunghwa Telecom brand, and minimizes financial outlay | <ul style="list-style-type: none"> Engage with stakeholders actively to make them better understand of the Company operations Engage in social activities to exert influence through core activities to minimize the digital divide |
| Natural | <ul style="list-style-type: none"> Natural capital such as infrastructure, raw materials, and energy sources are needed to allocate and take advantage of human capital The use of energy-saving processes and solutions can effectively reduce the consumption of natural capital | <ul style="list-style-type: none"> Purchase products that are environmental and friendly to reduce consumption of natural resources and raise energy efficiency Use carbon management to minimize energy consumption and apply renewable energy solutions to a greater extent Focus on the development of renewable energy sources, by proprietary and commissioned Photovoltaic systems |

S Strategy

We have enhanced the current core business, and actively develop and research new products. It will bring new revenue through better and more innovative ICT products and services, becoming the leader in smart living and the agent of digital economy empowerment.

M Management

We have established the “Digital Convergence Business Department” (an UI team included), which is a core business unit that imports ISO standards of quality system, capable and mature integration models, project management as well as systematized R&D workflow.

A Action

CHT was the first telecom operator that launched 5G services.

We are the first telecom operator that obtained dual certifications in “the regulatory standards for the testing of 5G NR” from the NCC.

We have developed an IoT application platform using our own innovative technology.

Five previously separate pursuits have now been combined, including IoT, AI, Big Data, AR/VR and self-driving cars.

R Response

5G commercialized applications P.62-63

T Target

Short-term:
The accumulation of R&D power and the launch of innovative products and services

Launch of “RISE ON, TOGETHER 2021” Transformation Plan

Mid-long term:
Over 5 million 5G users

Over 10,000 5G base stations

Over 2.3 million users of MOD services

I Indicator

GRI
2,408 patents accumulated

CHT
NT\$3.85 billion of investment in R&D

CHT
More than 1,200 R&D employees

The Digital Economy Motivator



The SDGs CHT contributes to in this section

ICT Products and Services

Chunghwa Telecom has been developing ICT services across borders and smart applications that integrate with networks in the cloud. Seasoned with rich industrial service experiences, it acquired the largest bandwidth in 5G bidding. With the licenses in the 3.5GHz and 28GHz bands for mobile broadband businesses, we were the first to launch the 5G services. With the high speed, low latency, and great connectivity of 5G, combined with the alliance at home and abroad for the industry’s innovative technologies, CHT built an emerging ecological chain of 5G industries. To accelerate the startups in Taiwan’s transition for internationalization, it became the one and only AWS Consulting Partner and Technology Partner for networks in Taiwan. Equipped with certificates in Amazon Web Services (AWS) DevOps Competency, AWS IoT Competency, and AWS Well-Architected, CHT successfully facilitates enterprises in building cloud environments for corporate operation with higher degrees of safety, efficiency, and flexibility.

5G gave rise to the applied IoT technologies as well as new forms of services like the emerging industries of AI, big data, drones, AR, VR, smart home, and smart long-term care, which shall drive the economic growth worldwide. Hence, we charge ahead with technological innovations, self-developing the IoT application platform that combines five service functions in information security, big data, cloud, AI, and VR in the hope of a tighter integration of the hardware advantages of domestic industries with the software energy of telecom operators to offer competitive solutions that embrace transitions.

[5G Vertical Applications](#)



Embrace the Dawn Year of 5G - Annual Convention of CHT Pilot Team

The Annual Convention of “Taiwan 5G Alliance - CHT Pilot Team” was attended by nearly 200 representatives from over 60 institutions in the industries. Chunghwa Telecom took 5G and AI as its foundation for the 5+2 Innovative Industries Plan, actively responding to the government’s Six Core Strategic Industries. We preemptively deploy resources in the Information and Digital Industries, Cybersecurity Industries, Precision Health Industry, as well as Green and Renewable Energy Industry. Releasing “5G Services White Paper”, CHT heralded 5G advancement from “technical verification” to “commercial services”. It joined hands with the partners on CHT Pilot Team to demonstrate 30 corporate applications of 5G vertically across fields while collectively probe into the 5G network evolution and lead the 5G development in Taiwan forward.

5G Consumer Applications

Education

Science Summer Camp

[Website](#)

Working with Institute for Information Industry, we offered new co-branded programs with dual resources. In line with the principle of “adaptative talent development” of the Curriculum Guideline and the premise of “self-regulated learning” of the Ministry of Education, we offered five themed science camp activities that balanced between new technology learning and hands-on work tailored to students in senior high schools (vocational schools) and those to become the freshmen in universities: maker, AI, programming, network communication (e.g. 5G, smart living and smart manufacturing programs), and digital omnimedia.



IoT Smart Platform Competition

[Website](#)

To promote the IoT education, we offer prizes of NT\$1.55 million and organize “IoT Smart Platform Competition” in hopes of drawing students and creators in the society to utilize the IoT Platform to tap into diversified creativity to align their productions better with the 5G IoT industrial application. With that, we endeavor to introduce innovative applied services in different areas of 5G.



Entertainment

iListen

[Website](#)

Working with Smartfun Digital Co., Ltd. in a different field, we launched “iListen” service that offers over 30,000 digital audio contents across sectors and industries as the first telecom operator that invested in the integrated audio content market to foster new experiences for 5G digital reading and listening novel to your “ears”. iListen is divided into Audio Book, Audio Program, and Audio News categories, in which Audio Program (Podcast) accounts for the majority. Anyone with carriers like cellphone or tablet can access and listen to an array of audio.

Superb Experience of 5G across Space

[Website](#)

We set up the state-of-the-art highly efficient base stations and expanded our network capacity on the site of the New Year’s Eve Party in Taoyuan. Meanwhile, a huge army of engineers were mobilized to provide the best 5G communication quality for the New Year’s Eve. Also, with the high speed of 5G and the MEC technology, we presented the performances on the primary stage via the “12K immersive panoramic video” in sync on the secondary immersive stage for 5G premiere.



Medicine

AR Smart Glasses and Telemedicine

[Website](#)

Together with the Yuan Rung Medical System, Jorjin Technologies Inc., and Pingen Co., Ltd., we promoted “smart medical application service”. We cooperated on telemedicine through AR smart glasses and broadband network to avoid the risk of cross infection, so that physically-challenged patients could also access quality medical care, the medical quality improved and the health of our citizens safeguarded.

5G AIoT Smart Medical Application Service

[Website](#)

We signed the Letters of Intent with National Chiao Tung University and National Yang-Ming University. Combining the advantages of the three parties, we jointly developed 5G AIoT advanced smart medical service and build the future smart hospitals that puts patient at the center for a complete medical care.

Transportation

Autonomous Bus

[Website](#)

Working with Kingwaytek Technology Co., Ltd. and Tamshui Bus Company, Ltd., CHT complied with “Unmanned Vehicles Technology Innovative Experimentation Act” and obtained the license plate for the self-driving bus trial. Conducting the passenger transport service over the route between Danhai LRT Kanding Station and Miranew Square Stop, it became the first “autonomous bus” with passengers on the road in Taiwan. It is also the first self-driving shuttle service in Taiwan that integrates Cellular Vehicle-to-Everything (C-V2X), self-driving technology, roadside sensors, and the cloud monitoring platform. In the future, leveraging the features of high speed, low latency, and great connectivity of 5G, we will continue to integrate relevant technologies like V2X to demonstrate our ability in integration. With the smart transportation service, we aspire to introduce a smarter and more convenient living for our citizens and lead the way forward to usher in more business opportunities for the 5G V2X industry.



Housing

Dementia Friendly Community

[Website](#)

Working with Fashion Intelligence Co., Ltd. and the Pingtung County Government, CHT joined the smart urban and rural subsidies of the Industrial Development Bureau of MOEA, “Elderly Care for a Happy Living in Pingtung”. We built the first “Dementia Friendly Community” in Taiwan. Establishing services like the anti-lost positioning service, emergency rescue, smart images, friendly and safe transportation, and IoT-enabled autonomous health management services for the elderly, we unveiled the first demo anti-lost community in Taiwan, which was recognized with the “2020 Smart City Outstanding Contribution Award - Smart Health”.

5G Smart Yunlin

[Website](#)

With the vision of leading the development of a 5G Smart Nation, we collaborated with the Yunlin County Government to introduce various smart city applications, offering services of smart agriculture, smart flood prevention, telemedicine, smart emergency service, smart tourism, and smart security to collectively build Yunlin as the most brilliant 5G smart city in Taiwan.



Food

Agricultural IoT and AI-powered Farming

[Website](#)

To facilitate precision agriculture, CHT worked with the large field that grew Iceberg lettuce in Yunlin on the “Agricultural IoT and AI-powered Farming” solution. We introduced smart management as well as installed micro weather station and 3-in-1 soil sensing equipment so as to learn about the environmental information in the field like soil and climate in a timely and accurate fashion. Meanwhile, the farming efficiency was increased thanks to the intelligence gathered via IoT and big data. Today, it has been a supplier to a renowned domestic chained restaurant and successfully exported produce overseas. This solution was recognized by the 2020 Smart City Innovative Applications Awards.



Innovative R&D Results in 2020

Cloud Computing & IoT Association in Taiwan

Enterprise Healthcare System (EHS) the Outstanding Application Award of the Cloud Computing & IoT Innovation Awards

Intelligent Transportation Society of Taiwan

Smart self-driving bus monitoring and management system
ITS Application Award

Thesis
An Architecture for Traffic Flow Prediction using Cellular-Based Vehicle Probe
ITS Paper Award Winner

Taiwan Contact Center Development Association (TCCDA)

IVR voice navigation and verification won the TCCDA-CSEA Best Intelligent Customer Service System Application Award for Outstanding Customer Service

Industrial Technology Research Institute (ITRI)

“Intelligent Photovoltaic Monitoring System” won the masterpiece in solar photovoltaic innovative application product design contest, making it the only cloud management system application service that won the honor

Taiwan External trade development council (TAITRA)

Recognition with **3** gold, **5** silver, and **1** bronze awards from Taiwan Innotech Expo

The Creative Industry Pilot



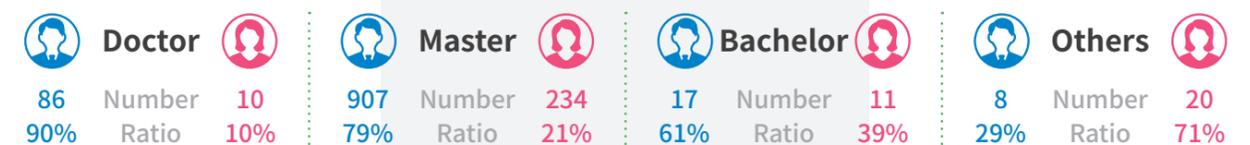
The SDGs CHT contributes to in this section

CHT’s innovative strategies to cope with this situation include enhancing the current core business, active research into new product development, and generate more revenue from new and innovative ICT products and services. Chunghwa Telecom Laboratories (CHT-TL) is a designated R&D institute that has been established for research into new innovative services, core technology, and visionary applications. We strive to explore convenient and useful services from the consumers’ perspective. Solutions are formulated through intricate coordination; the purpose is to find ways to “simplify tasks for consumers, and let CHT deal with the complexity.”

Overview of Chunghwa Telecom Laboratories in 2020

- **1,293** employees (nearly 6% of total) with **94%** being R&D personnel
- The funding for R&D totaled NT\$**3.85** billion, which was **1.85%** of the consolidated operating revenue.
- The laboratories secured **184** new product/ technical patents (**152** domestic and **32** overseas) to a total of **2,408** (**2,170** domestic and **238** overseas). **1,032** of the patents are currently in force (**904** domestic and **128** overseas).

The Telecom Laboratories Human Resources Structure



Innovation, Creativity, Startup

We constantly encourage creativity and innovation. To convert creativity to tangible output, drive industrial development, and boost the future revenues of the Company, we adopted strategies of concurrent advancement internally and externally. In response to the digital convergence and the cultural and creative trend, CHT presents Digital Innovation and Application Series themed with digital living. We uncover top-notch innovative talents through the competitions while allow creativity to be realized so as to elevate Taiwan's soft power in innovation.

IoT Smart Platform Competition

The "IoT Smart Platform Competition" in 2020 established "NB-IoT Special Award" specifically in light of the 5G commercialization in order to encourage the research, development, and application in NB-IoT. Prizes totaled NT\$1.55 million were offered to fully encourage and discover the top-notch innovative talents in IoT.

Nearly 200 teams signed up for the competition with participants up to a thousand. Through the research, development, and application of IoT, we shall better meet the needs of smart city all around. The juries took creativity and completeness of works as well as their IoT commercialization value as the key criteria. Through the competition, we expected to inspire students, industries, and startups to chip in and demonstrate creativities in variety. Through the fusion of all sorts of technologies, we build seamless IoT services and aspire to unveil innovative services and applications in the 5G and IoT business areas.



Social Innovation

CHT PHR – Building a Digital Healthy Living

Chunghwa Telecom is committed to the innovative 5G application as "Leader in Smart Living" that harnesses the technology power in smart medicine to improve the efficiency in diagnosis and treatment for users. A user may open their access on CHT Personal Health Record (PHR) to synchronize their physiological data for the medical team to track, so that the medical institution may retrieve the latest physiological data, provide accurate health information in line with the user's condition, and determine if there is a need for another hospital visit as well as help the user in clinic registration to save patient's effort in traveling and waiting, which further benefits the doctors on the hospital to analyze and diagnose patient's condition. In addition, the users may review their medical records and health conditions via My Health Bank, which elevates the care quality.

The First Integrated Smart Prison in Taiwan

We enhanced the smart prison management via ICT integration technology, assisting the Chiayi Detention Center to effectively reduce the manpower burden and improve the management efficiency and safety for the corrective agency, which also improved the human rights and autonomous management of the inmates. The five smart management highlights are as follows:

1. Two-factor Identification System: Face recognition system is combined with the QR Code to realize a rapid two-factor authentication while prevent impersonation.
2. Installation of Electronically monitored Smart Elevators and Passages: Managing through the dedicated gateway control to monitor the spaces electronically and reduce the manpower dispatched repeatedly on site.
3. License plate recognition and positioning: Identification and authorization of vehicles entering the detention center are conducted via AI image recognition and sensing technology to enhance the security.
4. Shopping: The inmates may purchase items and inquire the balance of their deposited amount via the kiosks in the detention center, which reduced the burden of the staff.
5. Medical Care: Health bracelets are issued for inmate health management, while medical staff can access and monitor the physiological information of inmates to reduce the likelihood of anomalies.

Environmental Innovation

Air Quality Sensing IoT

In light of the rising demands for air quality monitoring from the government agencies in these years, we utilized smart monitoring IoT technology and assisted the Changhua County Government to install air quality sensors, so as to monitor temperature, humidity, fine particulate matter (PM2.5), etc. The sensing data is transmitted to the air quality analysis platform in real time. With the temporal changes and relative positions of the sensors, it analyzes "the relative tendency of data" and "the temporal and spatial attributes in data" as the basis for inspection.

The MOD Microfilm Contest

An ultra-high amount of prize up to a million NTD was offered this year with the addition of “CHT VR Collaboration Award”. With the prizes as well as the provision of VR screening equipment and technical support, we aimed to fuel the creative energy of VR short film production domestically and take the microfilm works to a new level. With CHT HamiVideo, smart glasses, and the high speed of 5G combined, it ushered in a whole new experience with film watching.

There were 300 creative teams registered in 2020 with a variety of themes and rich collection of genres. In the end, 37 microfilms and 5 proposals of original VR microfilm were shortlisted. In light of the Dawn of the 5G Era and to put the innovative spirit of “Lead the Future and Showcase the Creativity” in action, we further organized “VR Film Festival” to screen four masterpieces.

The finalist film festival this year not only put the works on screen, but also presented After-Screening Talks to share the creators’ thoughts and emotions with the audience. All the shortlisted entries of the microfilm group will be available on the MOD platform to offer these brilliant works more opportunities to shine.



FunPark Creative Storytelling Digital Picture Book Contest

The one and only “FunPark Creative Storytelling Digital Picture Book Contest” catering to children in Taiwan have been organized for eight years in a row. Aside from encouraging children to dare to imagine, create, and perform, it also expected to allow children to pave their way of digital learning and living early, helping children to equip themselves with digital competencies.

There were over 1,600 entries submitted this year. Under the guidance of the Ministry of Justice, the Best Performance Award was added to the Anti-drug Group. Best creative children ambassador team would be recruited from the Contest, which was designed to motivate these young creative teams while spicing up the performances in the Final. In addition, we worked with the largest publisher in the U.S., Scholastic, and introduced “English Reading Group” to encourage children dare to speak English and cultivate their language proficiency so as to bridge themselves to the world.



S Strategy

Enhance talent recruitment with “5G and transition” as the dual-track strategy

Ensure employees’ work rights and freedom of association and implement communication channels to facilitate the exchange of opinions between the employer and employees

Provide consumers with virtually and physically diverse, multilateral and high-quality service channels

M Management

Ensures all employees sign a formal “Employment Agreement” duly observe the Labor Standards Act and other applicable laws, and calls for labor-management meetings at regular intervals

Accreditation of the SGS Qualicert service certification in service center

A Action

The Company has specialized training facilities - Telecom Training Institute and Occupational Safety and Health Department in place

Transparent and diverse means of communications and grievances

The external third-party Certificate of Conformity for Code of Conduct (CoC) obtained

Established the system of self-inspection, audit, and supervision for service quality

Launch the personal information management and auditor certification system

R Response

The only Taiwanese telecom carrier with an established union

Electromagnetic wave inspection service

The first telecom carrier in Taiwan to receive ISO 45001 certificate

T Target

Short-term:
Extensively recruits talents in 5G application

Fosters talents and allows all employees to share the results of the operations, recruit and retain talent with a **3%** salary increase

Make personalized high-quality products and services available to all our customers

Mid-long term:
All branches receive ISO 45001 certification by 2021

I Indicator

GRI
Basic salary offered by Chunghwa Telecom is **1.3** times the minimum wage in Taiwan

GRI
Training Hours Per Capita: **50** hours

GRI
“Collective Agreement” employee coverage of **99.26%**

GRI
No violation of laws concerns personal information, health, safety or product labeling

The Happiness Value Protector



The SDGs CHT contributes to in this section

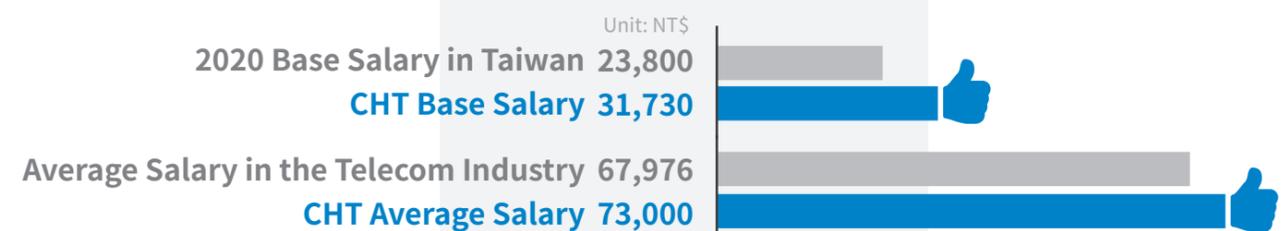
Ensuring Employees’ Happiness

Protecting the Rights of Workers

Chunghwa Telecom treats employees as their most important business partners. To ensure the best protection for the work rights of the employees, Chunghwa Telecom signs an “Employment Contract” with each employee and undertakes to notify them of any changes in terms of employment in compliance with the Labor Standards Act. Furthermore, CHT uses several different channels, including seminars and labor-management meetings, to maintain harmony and a mutually beneficial working relationship with employees.

A Competitive Compensation System

We have a “Compensation Committee” in place to ensure that compensation for the best talent is competitive. In addition, the Company has a transparent system for sharing business performance with its employees. Compensation for executive management has been standardized and details are disclosed publicly in the annual reports. The Company offers equal compensation for all 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 qualifications. Under no circumstances will compensation ever be determined by gender or racial differences.



1. Average Salary in the Telecom Industry: According to the “Monthly Wage and Productivity Report, December 2020” published by the Directorate General of Budget, Accounting, and Statistics.
2. Base Salary of CHT: The average salary level in December 2020.

Benefits Expense of Full-time Non-supervisory Employees

| Item | Unit | 2019 | 2020 | YoY |
|---------------------|--------------|--------|--------|--------|
| Full-time Employees | Person | 21,473 | 20,957 | -2.40% |
| Average Salary | NTD Thousand | 1,483 | 1,489 | +0.40% |
| Median Salary | NTD Thousand | 1,466 | 1,467 | +0.07% |

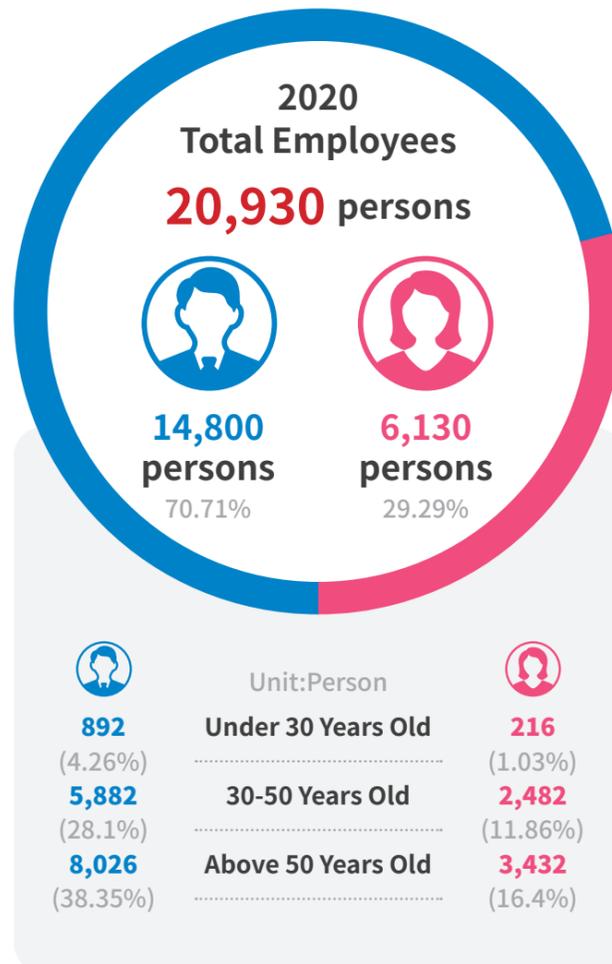
1. The number of full-time employees is calculated on a “yearly average” basis. The total number of employees of the year (including the ones on leave without pay, separated, and retired) is subtracted by the number of managers before calculating the yearly average number of employees of the year based on the months of pay to the employees in service in a year, instead of based on the number of employees at the end of a year.

2. The definition of non-supervisory employees, please refer to P.32-35 of the Annual Report.

Human Resources Structure at CHT

In 2020, CHT has more than 20 thousand employees with an average age of more than 50 years old. There will be more than 5 thousand employees retiring over the next 5 years, and 50% of the employees will be eligible for retirement over the next 10 years. Current senior management is included in this retirement tide. To cope with this problem, CHT is actively cultivating new talents to ensure that knowledge is passed down, filling the manpower gap of new generations.

Chunghwa Telecom understands that the industry competition we are facing now is not only the telecommunications industry, but the changing information and communication industry chain. In the future, the recruitment direction of talents will be based on the large-scale public recruitment method which focuses on various professional fields. We will adopt an external network approach to transform Chunghwa Telecom’s talents into an important kinetic energy for the continuous improvement of the next stage.



New recruits rate = Number of new employees / [(Number of people at the beginning + number of people at the end) / 2]

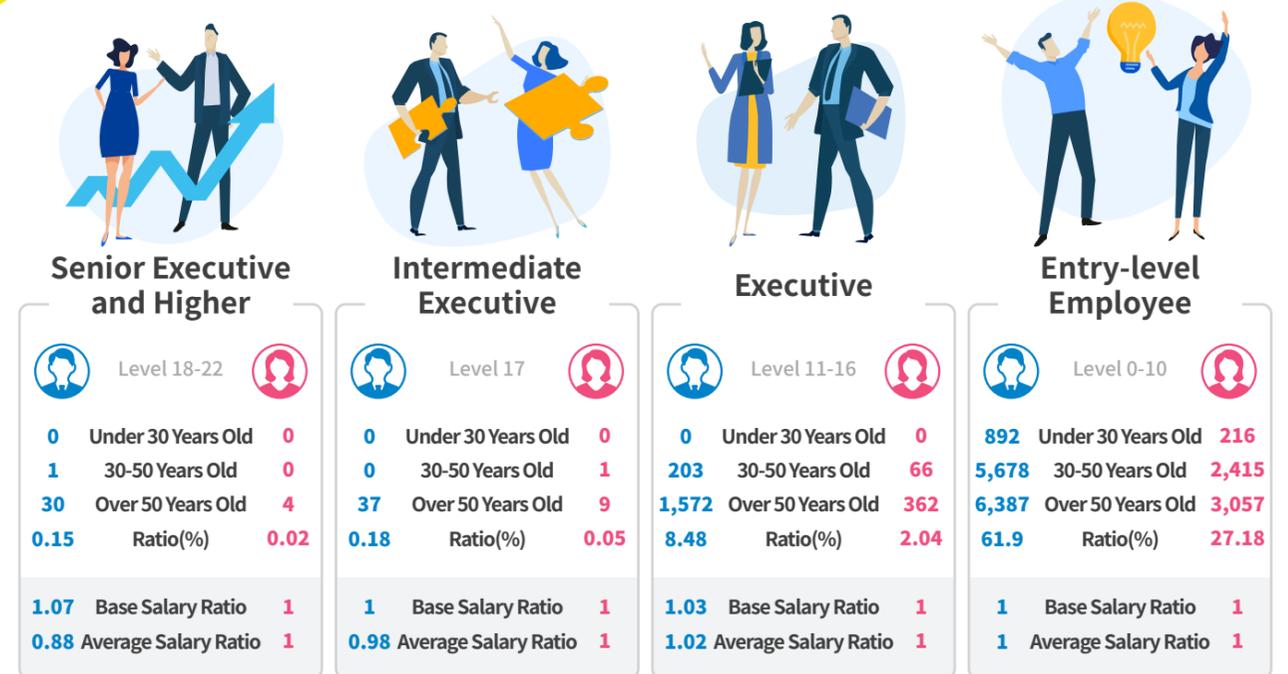


1. Turnover rate (resigned+retired) = Number of turnover employees / [(Number of people at the beginning + number of people at the end) / 2]

2. In 2020, there are 114 employees resigned (0.54% of all employees), and 1,525 employees retired (7.23% of all employees)

3. The turnover rate in 2017-2019 are 4.2%, 3.97%, 5.76%

Number of persons in each grade and sex salary ratio



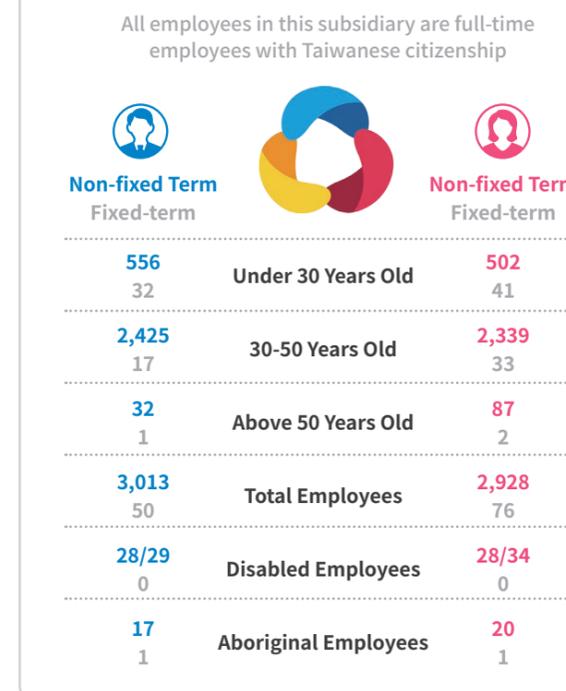
1. All employees are Taiwanese and mainly full-time. Due to the needs of industrial management, we hire 1 contract-based employee.

2. For all grades, basic salary is defined as the fixed salary (monthly).

3. For all grades, average salary includes fixed salaries and variable portions (including the monthly salary, year-end bonus, bonus, etc.)

4. Levels of all grades: Basic 0-10; Executive 11-16; Intermediate Executive 17; Senior Executive 18-22.

Human Resource Structure of Honghwa International Subsidiary in 2020



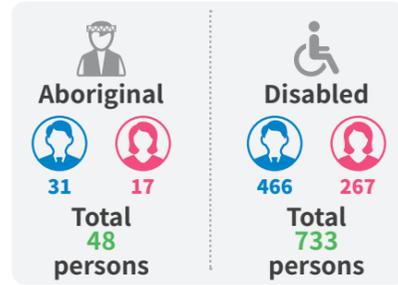
The table includes non-fixed term contract personnel/non-fixed term part-time personnel included.



Gender Equality and Diversity

Chunghwa Telecom is committed to provision of a working environment with dignity and safety for employees. We implement employment diversity, equal pay, and impartiality in promotion opportunities, protecting employees from discrimination, harassment, or unfair treatment due to race, gender, religious belief, age, political inclination, or any condition thereof protected by the pertaining laws and regulations.

Chunghwa Telecom places great value on human rights and gender equality. In 2020, female staff accounted for 29.29% of the total, and 27.84% of the managers were women. To conform to the essence of the Gender Equality in the Employment Act, the Company has outlined its sexual harassment prevention policy and established a “Complain Investigation Committee” that specializes in the handling of employee complaints about work-related discrimination and improper behavior. The investigation committee has 5 members, 3 of whom are female. Our effective control has resulted in no incident of discrimination being reported in 2020. Chunghwa Telecom has done more than comply with the quota required by Article 38 of the Persons with Disabilities Rights Protection Act and have hired more than the required number. In 2020, the number of persons with disabilities hired was 3.49 times of the statutory quota. (quota: 210; actual hire: 733. Where a department or institution employs a seriously disabled person in accordance with the act, the disabled person shall be calculated as two.) We had 48 aboriginal employees on board in 2020. We fully respect their cultures and no violation of work or human rights was reported during the year.



The Only Telecom Carrier in Taiwan with a Union

Chunghwa Telecom is the only telecom carrier in Taiwan with a union established. We have signed a collective bargaining agreement with them which 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 the protection of employee interests. In addition to the union established by Chunghwa Telecom, employees have also assembled 15 other unions under the organization. Until February 2021, 99.26% of employees were union members. A labor director is appointed to sit on the Board of Directors for a worker’s representative, through whom workers can more freely express opinions.

Chunghwa Telecom complies with Article 16 of the group agreement about transfers. If there is a need to transfer a union member due to changes in the organization such as establishment, alteration, merger, and/or closure of a department, the Company will do so only if necessary and will respect the wishes of the member. In addition, all transfers must comply with the “Five Principles of the Labor Standards Act.”

Open Communication and Grievance Channels

We have open communication channels in place to ensure that employees needs or suggestions are heard. Any violation or misconduct in the workplace can be reported to the relevant department using the channels provided. There were 43 complaints in 2020, including behavior as disrespect of the CHT system, principles, administrative management, and violation of the employee code of conduct or other misconduct. There were no human rights related cases in 2020.

We hold regular labor-management meetings to maintain contact between employees and the employer. There are 9 representatives from each side, employer and employees. The chair is held by each side in turn. The Chairman and President of Chunghwa Telecom engage regularly with the Chairman of the Union, Directors, and Supervisors in meetings, in person and by telephone. The Chairman of the Chunghwa Telecom Workers Union is entitled to participate in disciplinary review meetings, performance appraisals, and business report meetings to ensure that workers are kept up to date on Company news. In 2020, the Company held 6 nationwide labor-management meetings during which employees and the employer were able to reach consensus on many issues. Meetings for the discussion of particular matters can be convened, or if any change to work conditions is necessary.

The 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)
- Hotline: 0800-080998
- Fax: (02) 2357-0007
- Email: chthr@cht.com.tw



Focusing on Employee Training and Development

Our fundamental business focus is “core competitiveness, professionalism, efficiency, and touched service”, and we seek to develop innovative talent through a combination of internal and external training. We have a comprehensive training system to assist employee development in all dimensions. The system starts with the incorporation of “needs analysis” and “in-depth planning”, and is followed by performance assessment and review after the program ends. This systematic approach enhances professional skill and work efficiency, and helps the Company improve its coordination of human resources. Also, it is connected with the operational benefits of the Company.

Human Resource Development Strategies

The Chunghwa Telecom Training Institute has devised human resource development strategies based on business focus and talent requirements.

- ✓ Alignment of training and business development
- ✓ Alignment of training targets and courses
- ✓ Mobilization of digital learning
- ✓ Government-industry-university institute platform
- ✓ Innovation and Benefits

Digital Classroom

Chunghwa Telecom has introduced an online learning social network (the Digital Classroom) with an e-Learning approach quite unlike that of conventional classroom teaching. In this new learning social network where users may share and transfer knowledge at a lower cost, and with a far better yield of good results. The broadband installation college, for example, is a platform where information such as technical documents, cases, video tutorials, and technical discussions can be exchanged and learned.

Online Broadcast

Online broadcasts can be used to teach topics related to specific work. They are delivered over the internal UC platform, and offer employees a fast and convenient way to gain knowledge and observe new trends. Online broadcasts transmit the experiences of experts to all employees without limit and boost business growth. The topics in 2020 included core business, ICT extended business, business in the new field and new knowledge of management and health care. There were 227 classes with 12,989 person-times.

Results

1. Provide international public cloud certification training

In line with the corporate cloud strategy, training and certification mentoring for AWS, Azure, and GCP certificates were organized in 2020 to facilitate different institutes to acquire a total of 279 international public cloud certificates.

2. Improve management capacity

Manager management seminar was organized to effectively resolve management issues and promote business development and profit the revenue growths. Quality of communication was enhanced in the seminar to promptly respond to clients' pain points and accurately promote the focused businesses of Chunghwa Telecom. A total of 357 senior managers participated in 2020.

3. New business potentials

- In light of the Dawn Year of 5G Commercialization, there came a huge demand for 5G constructions, maintenance, and promotion for relevant personnel trainings. The base station installation and settings certification programs were organized with 19 staff certified, while a series of 5G technology programs and programs for corporate client applications were organized with 6,088 person-times trained, so as to prepare the talents required for 5G development.
- 31 important professional seminars were organized with 3,309 participants, including seminars respectively on 5G wireless technology, IoT development trend and service application, and big data application, etc. Courses of photovoltaic technical training series, business promotion, planning and design, construction and maintenance manpower are totaling 16 classes and 181 person-times.



Dedicated Training Units

Chunghwa Telecom has founded the Telecom Training Institute that specializes in training technical as well as managerial talent to gain more core competitive advantages. A Talent Development Team has also been established, with the President as convener, to conduct regular reviews of the planning and outcome of training. This is important to ensure that the training outcome is closely aligned with the operational policy to achieve a “seamless combination of training and practice”. It was awarded with “Certificate of Talent Quality-management System (TTQS) – Gold” by the Workforce Development Agency, Ministry of Labor in 2020.

[Chunghwa Telecom Telecommunication Training Institute](#)

Diverse Learning Channels

To meet the needs of the organization, and the personal interest and even the personality traits of employees, the Telecom Training Institute provides a diversity of learning channels. These help employees develop new in-depth professional ability as well as a renewal of their management skills to bring about growth and proper career development. Employees can attend training at the Telecommunication Training Institute during regular hours, in the evening or on holidays. The institute can also dispatch tutors to relevant business units for organized training sessions. The institute offers 8 learning channels: class teaching, distance education, digital learning, mobilization digital learning, direct-broadcast courses, external programs, on-site tutoring, and the digital library.

New Employee Orientation

To provide new recruits with a general understanding of company vision, values and culture and help them adapt to the new criterions and work environment, the “New Recruit Counseling Guidelines for Chunghwa Telecom and Subordinate Institutions” was introduced in 2014 as well as a counselor system and e-Learning audio courses to accelerate the new employees blended into new work.

Recruitment and Development of the New-Generation Talents

The year 2020 marked the Dawn Year of 5G, we endeavored to develop important businesses in 5G, IoT, AI, and cybersecurity. Formulating the golden trinity of Chunghwa Telecom, “Innovation First, Technology First, Talent First”, we built the stage for youth to shine, fostering the values of ONE CHT.

- Recruiting professional talent in ICT, AIoT, 5G application, technology innovation, and other new business opportunities.
- The nurturing of the next-generation talent: The Company introduces new talent-training programs on a yearly basis. It provides employees with professional and diverse training options, and certifies the development of skill.
- Emerging businesses: new ICT technologies are being infused with knowledge from other fields. The Company will focus on training professionals who can adapt and apply their knowledge across several different fields of expertise such as cloud computing, big data, and product packaging to actual practices.

Fair Evaluation

Chunghwa Telecom now applies “Employees Performance Evaluation Guidelines” which are used in the appraisal of employee performance to develop the corporate culture where employees, customers, shareholders, and the Company will all be winners. Supervision will be provided for underperforming employees who will be guided until the appropriate improvement has been made and they are back on track. CHT conducts performance appraisal at two levels: general staffs and senior managers. Performance appraisal involves a series of face-to-face discussions between employees and line managers at the beginning of a year to set personal goals, and also at mid-year and years end to evaluate the degree of employee contribution to the Company. Performance bonuses and employee remuneration are tied to individual performance. In addition to linking employees’ salary bonus to their annual performance, CHT has established a reward of senior employees, which is payable on a one-year deferred basis and apply to all employees, provided that the employee has a certain standard of continuous service and recent performance appraisal results.

Nurturing of Professional Talents

Chunghwa Telecom is dedicated to providing employees with a diverse learning environment. In 2020, Chunghwa Telecom training expenses exceeded NT\$493 million and employee training sessions totaled 1,045 thousand hours. We encourage employees to commit themselves to long-term learning. Subsidies were given to 329 employees in 2020 and the Company compensation amounted to NT\$6.05 million.

| Item | 2018 | 2019 | 2020 |
|---------------------------------------|---------|---------|-----------|
| Total Training Expense (NT\$thousand) | 502,370 | 497,901 | 493,000 |
| Training Per Capita (NT\$) | 22,707 | 22,938 | 23,555 |
| Total Training Hours | 908,316 | 961,234 | 1,045,267 |
| Training Hours Per Capita | 41 | 44 | 50 |

In line with the Company’s policy of austerity, the total training expense in 2020 was lower compared to that of 2019. Nevertheless, the total training hours and the training hours per capita increased to meet the trainings for important businesses like the Dawn Year of 5G.

The Happiness at Work Survey

Since 2011, we have carried out annual “Chunghwa Telecom Happiness at Work Surveys” on an anonymous basis. This helps us to understand how employees feel about their work and their working status, and are used as a reference for the improvement of management. The survey topics include individual opinions about the working environment, welfare and corporate transformation. By listening to the opinions of the employee, we get to understand their feelings and expectations. The 2020 “Happiness at Work” survey is in a hundred-mark system. In total, 4,698 questionnaires were returned (23% response rate), 4,431 of which were determined to be valid (94%). The average score of “Happiness at Work” is 82, and the average score of “Employee Engagement” is 90. We will continue these surveys and respond to employee opinions.



Health and Safety Management

Chunghwa Telecom was the first telecom service provider in Taiwan to adopt the OHSAS 18000 Occupational Health and Safety Management System. In response to the renaming and migration from OHSAS 18001 to ISO 45001, as of the end of 2020, the total of 26 branches completed the certification of ISO 45001. It is scheduled to complete the migration to ISO 45001 certification throughout the branches by 2021. We shall better our objectives in workplace safety and health management, “ongoing improvement in safety and health facilities; establishment of a safe, healthy, comfortable, and friendly working environment; reduction of work-related accidents”.

In addition to identifying hazards and assessing the risks associated with telecom operations, the Company has also applied restrictions and enhanced risk control for high-risk tasks, while taking effective precautions to reduce occupational hazards. In addition to complying with safety and health regulations, the Company has also been active in the improvement of the current work environment and takes regular action with regard to safety and health facilities and measures.

We take part in all government initiatives and actively promote a healthy workplace. 3 divisions within the Company have received awards under the “National Workplace Safety and Health Campaign” organized by the Health Promotion Administration, Ministry of Health and Welfare.

[More information about GRI 403 Occupational Health and Safety Disclosure](#)



- ✓ 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 Consultation
- ✓ Continue the Improvement of Equipment and Create a Quality Work Place
- ✓ Conduct Safety Training Programs to Raise Safety Awareness

The Dedicated Occupational Health and Safety Management Unit

There is Labor Safety and Health Committee at all levels of institutions in CHT, the average proportion of labor representatives is 34%. Meetings are held quarterly to deliberate, coordinate and make suggestions on labor safety and health issues. There is also Labor Safety and Health Department, which is responsible for the planning and implementation of labor safety and health matters.

The head office's Labor Safety and Health Committee has 29 members, 10 members are from the labor union, accounting for 34%. 4 meetings were held in 2020 and 8 proposals were presented by the labor representatives, 6 were related to the refinement of safety and health management, and 2 were related to employee benefits. All of the above are solved.



Full-Time Physicians and Nurses to Improve Employee's Health Management

To better provide immediate medical assistance and attend to worker health, we engaged 22 full-time nurses and contracted 20 physicians in 2020 for this specific purpose. Also, we set up health service centers at ten locations, including the Xinyi Campus (Yilan and Hualien included), Aiguu Campus, Daan Campus (Keelung included), Guoguang Campus (TTI included), Taoyuan Branch, CHT-TL (Hsinchu and Miaoli included), Taichung Branch, Taichung Branch of the Mobile Business Group (Nantou included), Changhua Branch (Yunlin included), as well as Linsen Campus (Pingtung and Taitung included), offering health services, consultation, and care.

The contracted doctors help with the on-site inspection at the offices, offer advice in line with human factors engineering for employees using computers at work, and adjust the heights of computers and chairs. The procurement of office equipment, besides in conformity to "the materials technical specifications" of the Company, is in compliance with the National Standards of the Republic of China (CNS). Also, we conduct monitoring and keep records of the temperature, humidity, illuminance, noises, indoor air quality (CO₂) in the working environments for our employees in order to ensure the comfortability and safety of working environments. All the monitoring results in 2020 were in line with the regulations.

The Company has deployed 6 i-med Systems at local customer centers for employees involved in high-risk activities. Blood pressure is measured and employees are given careful health checks before they engage in any high-risk work. Also, we deployed 10 sets of workplace health management physiological (blood pressure) measurement system in our facilities. Combined with our "Enterprise Healthcare System (EHS) and Personal Health Record", our employees can monitor the changes in their blood pressure anytime.

National Fitness Program

In 2020, the Sports Administration of the Ministry of Education cooperate with Global Views Monthly to organize National Fitness Program, 100 employees from CHT Xinyi Park signed up to learn more about fitness. The program included body measurements (height, weight, waist line, hip line, muscle mass, body fat, protein/mineral levels, and degree of obesity), muscle strength training (grips), flexibility training (forward flexion exercise), and cardiorespiratory fitness (knee-ups), designed to help employees learn more about their health and absorb new knowledge about sports.

Health Promotions for Senior Employees

The health checkups for the elderly in 2020 promoted autonomous health management actions from inside out. Apart from physical exercise, the support system among friends was established through the activities.

1. Health checkups: The Company provided checkup services specifically targeted at senior employees, including carotid duplex and echocardiography for the risk of ischemic stroke, coronary artery narrowing and incomplete heart valve closure, as well as fundus photography for checking macular degeneration, retinal vessels and glaucoma.
2. Health promotion lectures: Dr. Chen Wei-Ling from Ministry of Health and Welfare Pingtung Hospital was invited to talk on "The Health in Female Climacteric States" to exercise health checkup and prevention while reduce hazards of diseases; Dr. Lin Yi-Jun from the Renai Branch of Taipei City Hospital was invited to talk on "Learn about Dementia and the Care" to understand dementia and thus support those with dementia and their families; the counseling psychologist Liu Su-Feng was invited to talk on "The Physical and Psychological Health of the Middle-aged and Older Workers" to share the roles of the middle-aged and older individuals and their physical and psychological changes; Dr. Hsin-Ying Lin from Taiwan Adventist Hospital to talk on "Introduction to and Care for Common Musculoskeletal and Joint Diseases" to share how to adjust the sitting postures to avoid physical discomfort.



Reducing Occupational Hazards

The Chunghwa Telecom Work Accident Guidelines contain detailed procedures for assessing occupational illness. Employees suspected of having become ill as a result of their occupation are assisted with an application for verification at the local municipal/county/city authority, in accordance with the Protecting Workers from Occupational Accidents Act. We manage risks at the source, by making sure that construction risks are under control from the early design stages of a project. The line construction management system has been amended with respect to highlighting high-risk operations as well as risk assessment information to ensure operators are able to identify potential risk in advance.



All high-risk operations are subject to approval by the ICT. 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 such accidents as falls, oxygen deprivation, etc. To promote employee awareness and safety and health skills, we organized 124 training sessions in 2020 and there were 7,570 enrollments. Among which, the enrollment for first aider training is 614 with a total of 11,052 hours, and that for AED training of Taipei City is 307 with a total of 614 hours.



The “eSafe Wizard” App

As part of our effort to mobilize management, the eSafe Wizard app allows employees and contractors to report safety violations, and apply for operation permits. The app also allows us to remotely perform spot checks on safety compliance, moving the entire management process onto the cloud. It is completely paperless, instantaneous, and highly effective. Through the eSafe Wizard app, the completion rate of permit applications for operations (hot work, work aloft, scaffolding, power or fire protection interrupted) hit 97.8% while that of hazard notification reached 99.9% in 2020.

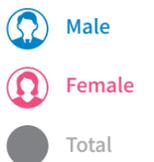
The app eSafe Wizard was awarded with the Taipei City Labor Safety Award - Work Safety Creative Award from the Department of Labor, Taipei City Government. Starting from 2017, the app has been promoted for all institutions of Chunghwa Telecom as well as Taiwan Railways Administration and Taiwan Power Company to introduce the mobilized safety and health management with our technological resources sharing.



Table of Work-related Injuries and Illnesses of Employees and Non-employees in 2020

| Workers | CHT | | | On-site Contractors | | |
|--|------------|--------|-------|---------------------|--------|-------|
| | Male | Female | Total | Male | Female | Total |
| Number of hours worked (hr) | 41,860,000 | | | 11,934,360 | | |
| Number of fatalities as a result of work-related injury (person) | 1 | 0 | 1 | 0 | 0 | 0 |
| Fatalities as a result of work-related injury rate (%) | 0.02 | 0 | 0.02 | 0 | 0 | 0 |
| Number of recordable work-related injuries (person) | 33 | 7 | 40 | 11 | 9 | 20 |
| Recordable work-related injuries rate (%) | 0.79 | 0.17 | 0.96 | 0.92 | 0.75 | 1.68 |

- Number of hours worked: 8 hr*number of people *number of working days
- Fatalities as a result of work-related injury rate =(Number of fatalities as a result of work-related injury / Number of hours worked) × 1,000,000
- High-consequence work-related injuries rate (disabled for more than 6 months)=(Number of high-consequence work-related injuries / Number of hours worked) × 1,000,000
- Recordable work-related injuries rate =(Number of recordable work-related injuries / Number of hours worked) × 1,000,000
- Definition of On-site Contractors: individuals or organizations that work on the operation sites of Chunghwa Telecom.
- The main types of work-related ill health: trip, fall, and traffic accidents.
- Traffic accidents during commute is excluded.
- One fatality as the result of work-related injury at Chunghwa Telecom in 2020, who passed away in coma at work due to cardiogenic shock.



Health Promotion Activities

CHT considers its employees health to be a valuable company asset. Providing a safe and healthy workplace is a basic requirement to our employees. Apart from a wide range of benefits, including health checkup, keynote speeches, and promotional activities, we also commit ourselves in the promotion of sports in workplace and in the support to sports industry. In 2020, we spent NT\$76,915 thousand on employee health care.



| Item | 2020 Contributions | | | Item | 2020 Contributions |
|---|--|-------------------------------------|----------------------------------|----------------------------------|---|
| Health Examination of Employees and Dependents | <ul style="list-style-type: none"> The Company offers much better care than required by law and employees are given the choice of various health checkup packages. A total of 20,428 employees had checkups in 2020. Family members are also entitled to checkups at the same rate, and a total of 3,276 persons participated in 2020. | | | Healthy Workplace | <ul style="list-style-type: none"> The noise level, lighting, temperature, humidity and air quality of our offices is tested regularly. The offices are also cleaned and maintained on a regular basis to ensure workers have a comfortable working environment. Furthermore, all offices feature ergonomic chairs, natural ventilation, indoor plants and other elements of a healthy work environment provided. |
| Free Influenza Vaccination | <ul style="list-style-type: none"> Free influenza vaccination is available for all employees who fit the requirements for vaccination at public expense. Registration can be done online and 1,171 employees were vaccinated. | | | Employee Cafeteria | <ul style="list-style-type: none"> Our employee cafeteria offers a diverse range of nutritionally balanced meals to choose from. All food suppliers are subjected to rigorous review to ensure the safety of food served to our employees. |
| Employee Assistance Program (EAP) | <ul style="list-style-type: none"> CHT was one of the largest corporations in Taiwan to start promoting the Employee Assistance Program (EAP) since 2007. The EAP carries out 5 consultation sessions each year, in which outside experts are contracted to help employees resolve their legal, medical, family, workplace, and stress problems. Case managers made 19 visits and completed 480 service sessions in 2020. | | | Balancing Work and Life | <ul style="list-style-type: none"> Chunghwa Telecom has 30 hostels that provide travel accommodation, encouraging employees to achieve a balance between work and life. |
| Employee Health Service | <ul style="list-style-type: none"> Provide employees health consultation via online or phone appointment. Physicians visited the plants 34 times a month. Sessions were for 3 hours and each patient was allocated 30 minutes. Healthcare personnel use the Employee Health Management System for the analysis and evaluation of health records. Where necessary, extra consultations can be arranged between the physicians and the employees for proper guidance and healthcare. | | | Flexible Working Hours | <ul style="list-style-type: none"> Chunghwa Telecom provides two flexible working hour sessions in the morning and afternoon: 8:00-9:00 and 17:00-18:00. |
| | Thirty-minute medical consultation with a physician (30 minutes / per person) | On-site visits by physicians | Consultation with a nurse | | |
| | 2,385 | 407 | 10,485 | Epidemic Prevention Leave | <ul style="list-style-type: none"> During the 2020 COVID-19 epidemic prevention period, 75 employees granted with epidemic prevention leave for home quarantine, totaled 3,139 hours. The "epidemic prevention childcare leave" is available without pay and would not affect the full attendance and bonus, nor did it count as personal leave/sick leave. 124 employees applied for such leave with a total of 3,798 leave hours. |
| Employee Health Promotion | <ul style="list-style-type: none"> A total of 10,398 employees participated in 151 health seminars. 10,950 employees attended 71 educational trips. Health examinations were given to 877 employees in 12 sessions and 21,811 employees participated in 316 large-scale events. The Company published two health-related articles each month about the concept of disease prevention. | | | | |

Building a Happy Business

CHT regards employees as important assets. We offer a commitment to our employees refrain from making layoffs and salary reductions. This means employees can devote themselves fully to boosting performance at work to create more value for themselves and the Company. In response to the government's policy to boost birth rates, CHT is providing childcare subsidies and maternity benefits to young employees with children aged 0-6 years old. We are committed to building through software and hardware resources, expecting to set up workplace childcare support centers in Taipei City, New Taipei City, Taoyuan City, Taichung City, Tainan City, and Kaohsiung City that are scheduled to open in August 2022 to provide education and care services for the children and grandchildren of employees and create a friendly workplace, so that employees can be confident in their work, creating higher value for individuals and businesses, and build a healthy and secure business.



Leaves Better than the Statutory Requirements

Labor Standards Act

| CHT Policy | Statutory Requirement | Labor Standards Act |
|--|-------------------------------|--|
| <ul style="list-style-type: none"> Employment years 7 : 21 days Employment years 10 : 28 days Employment years 15 : 30 days | Annual Leave | <ul style="list-style-type: none"> Employment years 7 : 15 days Employment years 10 : 16 days Employment years 15 : 21 days |
| 14 days | Marriage | 8 days |
| 5 days of personal leave with pay | Personal Leave | No pay |
| 42 days regular leave, rest day, and national holiday not included | Maternity Leave | 8 weeks regular leave, rest day, and national holiday included |
| 8 days | Precancy Checkup Leave | 5 days |
| Better than the statutory requirement for certain kin | Funeral | - |
| Full salary | Sick Leave | Half salary |
| Full salary | Menstrual Leave | Half salary |
| Full salary | Miscarrage Leave | No pay |

| Item | Activities and Description | Number of Participant / Beneficiaries | Contribution / Supplement |
|---|---|---------------------------------------|-----------------------------------|
| Maternity Allowance (Company Issued) | We offer a 6-month maternity allowance in compliance with the Employment Insurance Act. CHT also offers additional monthly allowances totaling half the sum assured under the Labor Insurance Scheme. | 116 persons | NT\$13,705 Thousand |
| Childcare Allowance (Company Issued) | Employees with children aged 0 - 6 years old will automatically receive childcare allowance of NT\$5,000 per year. It is raised to NT\$6,000 per year since September. | 2,523 persons | NT\$14,668 Thousand |
| Sports Activity | Regional activities include 90 road running events, 383 hiking activities, 79 ball sports activities and 946 other activities (e.g. stair-climbing, health exercise, strolling, and health promotion lectures). | 58 thousand persons | NT\$11,543 Thousand |
| ESOT | Improvement of employee welfare, enhancement of employee coherence, and sharing company achievements. | 17,913 persons | NT\$2.4 Thousand/month per person |
| Dependent Education Subsidy | Twice a year (two semesters). | 17,953 persons | NT\$80,786 Thousand |
| Wedding Subsidy | A wedding subsidy is available for employees who are to be lawfully married. | 187 persons | NT\$467.5 Thousand |
| Childbirth Subsidy | Employees or their spouses are eligible for a childbirth subsidy. | 374 persons | NT\$935 Thousand |
| Funeral Subsidy | A funeral subsidy is available in the event of the death of a parent, foster parent, step-parent, the spouse or a child of an employee. | 677 persons | NT\$3,385 Thousand |
| Recreation and Sports Space | Includes an integrated stadium, swimming pool, tennis, badminton, basketball, and table tennis courts, multifunctional event space, karaoke room, and employee dormitories. | Total 13,103 square meters | |

Welfare is provided for employees of Chunghwa Telecom, but not for those of subsidiaries.



Better Maternity Benefits than the Legal Requisites

We have been implementing an unpaid childcare leave system since 2006 to help employees juggle their attention between work and family. The employees who have taken childcare leave are entitled to receive a six months maternity allowance from the authority under the Employment Insurance Act. While six months expiry, the Company will further pay an additional childcare-subsidy of half assurance sum of Labor Insurance Scheme according to its policy. Employees of Chunghwa Telecom are also entitled to other privileges such as family care leave, paternity leave, menstrual leave, and a nursery room service, as well as epidemic prevention childcare leave pursuant to the government’s epidemic prevention policy. In 2020, 71 employees applied for unpaid childcare leave; 116 employees applied for child-care leave allowances. NT\$13,705 thousand was paid out as child-care leave allowances.

| Year | Item | | | Total |
|------|---|------|-------|-------|
| 2020 | The Number Qualified for UPL for Raising Children 2020(A) | 852 | 369 | 1,221 |
| | Number of Applications for UPL 2020 (B) | 9 | 62 | 71 |
| | Application Rate for UPL (B/A) | 1.1% | 16.8% | 5.8% |
| | Number of Expected Reinstatement 2020 (C) | 11 | 69 | 80 |
| | Number of Applications for Reinstatement 2020 (D) | 12 | 66 | 78 |
| | Reinstatement 2020 (D/C) | 109% | 95.7% | 97.5% |
| 2019 | Number of Reinstatement 2019 (E) | 18 | 61 | 79 |
| | One Year Retention after Reinstatement 2019 (F) | 18 | 61 | 79 |
| | Retention Rate 2019 (F/E) | 100% | 100% | 100% |

- The number of employees entitled to apply for a parental leave of absence in 2020 (A): calculated as employees who had applied for maternity leave and parental leave in 2018-2020.
- The number of expected reinstatements 2020 (C): The number of employees who applied from 2018 to 2020 and should be reinstated in 2019.
- The number of actual reinstatements 2020 (D): The number of employees who applied from 2018 to 2020 and were reinstated in 2020.
- Reinstatement rate: (actual number of reinstated employees that year/number of employees who should have been reinstated that year) × 100%
- Retention rate: (the number who continued working after reinstatement/reinstated number for the previous year) × 100%



Retirement Benefits

Employee requests for retirement are processed in accordance with the Chunghwa Telecom Employee Retirement Pension and Separation Guidelines, the Labor Standards Act, and the Labor Pensions Act.

- The Labor Standards Act: The Company makes monthly pension contributions of up to 15% of an employees’ monthly salary to the pension fund. This fund is held under the auspices of the Labor Pension Supervisory Committee. The current balance of the pension fund account is 39.2 billion.
- The Labor Pension Act: The Company makes monthly contributions of no less than 6% of an employees monthly salary. These contributions are deposited in the employees pension account held by the Bureau of Labor Insurance of the Ministry of Labor, in accordance with the Contribution Rate Sheet approved by the Executive Yuan.

Monthly pension contributions were made in accordance with the Monthly Contribution Wages Classification Scheme published by the Ministry of Labor, subject to biannual adjustments.



Lifelong Learning and Training Programs

To help our employees to adapt and create quality lives after retirement, Chunghwa Telecom Training Institute was commissioned to organize “Care Program for Retirees’ Sweet, Happy Lives”. A total of 12 sessions were organized with 748 person-times involved in 2020. Also, we continued to contribute to “Chunghwa Telecom Retirees Association” with an amount of NT\$4.5 million to support them to organize relevant activities. We also donated NT\$1.5 million for travel activities and NT\$300,000 for the meal expenses of all volunteers across branches during the Lunar New Year.

To help facilitate the transfer of knowledge and experience, we have stipulated “Consultant Recruitment Guidelines” to hire paid consultants and honorary consultants. Managers at a position of Senior Executive Vice President or above, or the head of Level-1 institutions, may be hired by Chunghwa Telecom as paid consultants after retirement. Paid consultants shall serve a term of no more than one year, and assume honorary consultants upon the day after one-year period has expired.

Human Rights Value Protection

We proactively monitor and protect human rights. We respond to the UN Declaration of Human Rights and the ILO Convention on the elimination of all forms of discrimination and the prohibition of forced and child labor. We also respond to the UN International Covenant on Civil and Political Rights and the International Covenant on Economic, Social, and Cultural Rights, dedicating to promote human rights awareness and assure respect and fair treatment to all stakeholders.

CHT is a member of the International Telecom Union and we fully comply with International Radio Regulations. The regulation concerning: freedom of communication, transparency in global roaming charges and competition, support of Telecoms in developing nations, telecom services for persons with disabilities and the freedom of speech over telecom networks. In addition, we support the UN Guiding Principles on Business and Human Rights by conducting a human rights due diligence investigation and make sure that each human rights issue in the operational value chain is evaluated and we maintain all risk at a minimum level.

Human rights issues include anti-discrimination, gender equality, freedom of association, collective bargaining, child labor, forced or compulsory labor, and aboriginal rights.

| Subjects of the Value Chain | Location / Amount | Evaluation Mechanism | Evaluation Percentage | Percentage at Risk | Description / Boosting Mechanism |
|---|-------------------|---|--|--------------------|--|
| CHT owned institutes at 1 to 2 lower levels | 28 | <ul style="list-style-type: none"> Labor-management meeting Collective agreement Workers' Union meeting Annual human rights event inspection | 100% | 1.6% | <ul style="list-style-type: none"> Labor-management meeting Collective agreement Workers' Union meeting Annual human rights event inspection |
| Subsidiaries | 21 | Annual CSR implementation inspection | 100% | | |
| Re-investment Companies | 16 | Annual CSR implementation inspection | 100% | 2.5% | Some institutes were in violation of regulations. Suggestions for improvement have been provided and will be tracked and managed continuously. |
| Upstream and Downstream Suppliers | Tier 1 | 2,078 | <ul style="list-style-type: none"> CSR survey inventory CSR second party audit Occupational health and safety audit | 100% | <ul style="list-style-type: none"> Some suppliers had violated the labor laws and regulations. Continue to follow-up of suppliers with identified risk to see if improvements have been made through Supplier Conference and other channels. |
| | Critical Tier 1 | 192 | | | |
| | Critical Tier 2 | 28 | | | |
| The Public | All consumers | <ul style="list-style-type: none"> Diverse compliant channels (including discrimination and harassment) Satisfaction survey Personal information and privacy protection inspection Minority group service mechanism | 100% | 0% | <ul style="list-style-type: none"> No discrimination or harassment, or any invasion of CHT customer privacy or misuse of personal information in 2020. Continue to promote the 5I SDGs Initiative to ensure information equality among the groups. |

Human Rights Material Risk Issues



Local Human Rights

To fulfill the concept of anti-forced labor and appropriate working environment, we required the bidders to sign a Declaration of Minerals as Conflict-Free during procurement. We evaluated the suppliers to determine if raw materials derived from human rights high-risk areas like the Democratic Republic of the Congo to avoid harm to the basic human rights of local residents while we providing ICT products and services. We depend on demand and require the suppliers to provide certification of material resources, third-party verification or accepted auditing to confirm no related violations.

We also required that all suppliers complied with the Restriction of Hazardous Substances Directive (RoHS) to prevent hazardous substances from the source endangering local employees, the environment or customers.



Employment Human Rights

We use the Occupational Health and Safety Management System (OHSAS 18000/ISO 45001) to avoid potential risk and have systematically fulfilled employee safety and health management. In addition to compliance with the safety and health-related regulations toward high-risk tasks, we have also enhanced risk control. We continue to improve the working environment and act in regards to safety and health facilities and measures to actively ensure employee protection.

Sometimes customer service personnel encounter irrational requests and even personal abuse from customers in the provision of our services. We established an SOP for employee response and acted at a critical level in certain circumstances. Legal assistance can be authorized to aid in the event of serious offenses and to prevent illegal practices. CHT adopted the ISO 10002 quality management system in 2011 and have a certified and flawless customer service procedure and management mechanism in place. We regularly offer pertinent training courses in customer relations, the management of emotional stress, and occupational hazard prevention. While building up professional capability, we positively avoid pressure to mental and physical health problems on customer service personnel.



Information Equality

CHT is creating a free and open information sharing environment without technological boundaries that can be shared with everyone. Such a system inherits culture, extends education, promotes industry, and upgrading art with a connection to the universe of the Internet. Digital technology can be beneficial to everyone irrespective of age, social standing, wealth, geographical location, or education.

We base our approach on the characteristics of the ICT industry and the spirit of "where the value is where the responsibility lies" in our work with the communities in Taiwan. Our main objective is to minimize the digital divide and create digital opportunities, CHT watches the trends of this digital divide and offer solutions that facilitate social innovation and digital inclusion. We spare no effort in corporate volunteer, participate in community services, and proactively assist communities in the creation of digital opportunities.



Customer Human Rights

Due to the nature of our industry, in addition to establishing information security management applicable to the enterprise operation, we also implement measures to safeguard our customers' personal information. We implemented information security in compliance with the international standards ISO 27001 and BS 10012 and carried out regular supplier auditing and supervision through employees or a third party. We also carried out vulnerability scanning and the testing of all equipment and software from outside suppliers to ensure there were no back-doors or malware.

Besides acquiring the customer's agreement before the collection of any personal information, we established the internal Security and Safety Principle of Customer Information Re-use. Related information also complies with the principle of no names are revealed to prevent the downloading of personal information and avoid leakage or disclosure.

To prevent damage from the products or services to stakeholders, the measured values such as that of environmental electromagnetic wave should be in line with the "recommended non-ionizing radiation exposure limits for the general public in non-occupational environments" released by the International Commission on Non-Ionizing Radiation Protection (ICNIRP). Citizens may apply for the free base station electromagnetic wave measuring service to reduce the concerns in health and safety of the people in communities.

Safeguarding Consumer Rights and Interests

Digital Transformation of Diverse Virtual and Physical Channel Services

Chunghwa Telecom values consumers opinion. In addition to conveying technical features of the products and services we offer; we look at the matter from the point of view of the consumer. We provide consumers with the most comprehensive, high quality and efficient services putting a wide and diverse range of service channels at their disposal. By the end of 2020, we had 455 direct physical channel service stores, and 245 franchised stores, a total of 700 service outlets that provide convenient services for all consumers in cities, or even in remote areas in Taiwan.



Ethical Marketing and Information Transparency and Friendliness

We provide a handbook about products and services for consumers that details product characteristics and applications, consider the negative aspect of overuse, and has friendly reminders provided while marketing. In addition, Chunghwa Telecom has set up the “Channel Sale Items Management Guideline” and “Channel Sales Items Management Implementation Procedures” to make the display of sales items and operation management consistent throughout all the service and business locations. This ensures a positive service environment for consumers. These are vital for maintaining a superior and professional image as well as the service quality at Chunghwa Telecom. No violations of health and safety and product labeling was reported in 2020.



Green Services with Environmental Protection and Innovation Combined

In 2018, telecom combinative stores were established in Zhongli, Miaoli and Hsinchu, including cafe, 3C and an experimental display. The green stores capabilities were also developed and energy-saving household appliances such as electric scooter, TV, refrigerators, and air purifiers, promoting green business development and offering customers the one-stop shopping and whole-new store service experience.

| Category | Description |
|--------------------------------|--|
| Customer service Kiosks | These serve as the “Database” for business and engineering-related information. When new information is received, it will be verified according to an SOP. Afterward, an FAQ will be further drafted and uploaded to the customer information station for use by the Chunghwa Telecom customer service personnel (at service outlets and call centers) and the Internet counter. |
| Consumer Hotline | Provides complete information on the features of products and services, and related special offers. |



Proper Management of Personal Information

We highly value the personal data and privacy rights of our customers. The collection, processing, use, and protection of personal data and privacy are conducted within the scope allowed in the “Privacy Protection Policy”, “Personal Data Collection Notice” of respective businesses as well as relevant provisions in “Personal Data Protection Act”. Personal data and privacy shall not be disclosed to a third party by means of exchange, lease, or others at will.

Pursuant to the laws and regulations as well as international standards, we established rigorous personal data and privacy protection management mechanism, carry out risk assessment prior to business promotion, and construct strict protective measures and safe environments to avoid stole, alter, or illegal use of customers

Collection, Processing, and Use of Customers’ Personal/Private Data

Type and Content of Data Collected

When customers use services of Chunghwa Telecom, we collect their personal/private data, including account, location, browsed webpages/mobile app, etc. out of the regulatory requirement for identity verification or the needs for service provision.

Customers may access with ease from multiple channels (e.g. website, app, store, and customer service hotline) and learn about the types of data and methods we collect, process, use personal data and disclosure thereof to a third party, as well as the rights customers are entitled to exercise, including inquiry, request to stop collecting, processing, and using, as well as erase.

Data Use and Protection

To elevate customers’ experience and maintain customer relationship, we use customers’ data for analyses so as to provide optimized services and promotion information catering to our customers, whereas the customers may request stop such use at any given time.

We fully monitor the use of customers’ personal data and implement rigorous protection measures to prevent any unauthorized access, disclosure, use, or tampering of personal data in order to protect the security and rights of customers’ personal/private data. The percentage of Chunghwa Telecom’s secondary use of customers’ data in 2020 was 84.4%.

Provision of Personal Data

We do not disclose customers’ personal data to a third-party by means of exchange, lease, or other alternatives at will, unless consented by the customers or specified otherwise in laws and regulations.

Application by Law Enforcement Agencies

In the event that any government agency or law enforcement agency sends Chunghwa Telecom a letter to access or inquire information of customers for the protection of public security and against crimes, in compliance with relevant laws and regulations, Chunghwa Telecom shall provide customer information thereto accordingly after a rigid examination of such application, or reject application that are not in line with regulatory procedures or criteria. The rate of the provision in 2020 was 92.5% with a rejection rate of 7.5%, most of which were primary due to inconformity to the relevant laws and regulations or source data error.

Compliance with the Epidemic Prevention Effort of the Government

In response to the COVID-19 epidemic, in compliance with the epidemic prevention needs of the government, and pursuant to “Communicable Disease Control Act” and “Special Act for Prevention, Relief and Revitalization Measures for Severe Pneumonia with Novel Pathogens” on the basis of advancing the public interests for all, the telecom service providers in Taiwan are liable to provide necessary information to Taiwan Centers for Disease Control (Taiwan CDC), Ministry of Health and Welfare, so as to assist the government to enforce the home isolation policy and prevent the disease spread. We safeguard our customers’ privacy with a rigid management over data security.

data. Also, we conduct comprehensive trainings for internal personnel regarding personal privacy protection in line with the requirements of the competent authority in order to protect customers’ privacy.

We continue to improve our operational procedures, elevate our information technology, ensure implementation of personal privacy protection and security measures across all elements in operations, track the results of various performance indicators regularly, and have audits internally and externally annually as well as pass inspections of competent authorities and third-party certifications (ISO 27001 / ISO 27011 / BS 10012 / CSA STAR Certification remain effective), so as to offer consumers best cybersecurity and personal/private data protection.

Personal Data and Privacy Risk Management

The personal data and privacy risks management mechanism of Chunghwa Telecom is based on the identification of risks brought by threats, internally and externally, to the organizational operations and businesses, including changes in the laws and regulations and international standards, requirements of the competent authorities, trends of cybersecurity threats, and check results. It inventories significant risk issues of the year, followed by the analysis of the impact levels and likelihood of risks, evaluation of the priority for risk handling, formulation of objectives and measures for risk handling, and regular review and evaluation of indicators attainment.

Personal Data and Privacy Protection Consultation and Grievance Channel

Regarding personal data and privacy protection issues, we have personnel trained in Personal Data Protection Act to provide professional consulting and grievance channels to our customers.

Grievance Hotline: + 886 800 080 090

Suggestion Mailbox: <https://www.cht.com.tw/zh-tw/home/cht/service/emailus>
Should customers find their personal data and privacy use issues unresolved within 30 days, they could also reach us through:

Recipient: Chief Information Security Officer, Chunghwa Telecom Co., Ltd.

Address: No. 21-3, Section 1, Xinyi Road, Zhongzheng District, Taipei City 100, Taiwan (R.O.C.)

Phone: +886 2 2344 6789



We have implemented the notification, response, and improvement mechanism and its related operation procedures for privacy data breach incidents. Upon detection of potential privacy incident, it is required to complete the reporting in accordance with the report window list. In the event of major incident, it will be escalated to the Cyber Security Department at the Headquarters and the CISO, while a response team will be formed within a specified window to enact emergency response.

Upon the privacy incident verified, the Company shall conduct incident investigation and analysis to find the root case, define scope of damage, preservation of relevant evidence, while take emergency response measures. We monitor the changes in public opinions and client grievance, learn about the personal data illegally collected, processed, or used in the incident, prevent further damage, and notify parties affected and the competent authorities. Where the incident causes damage to clients’ rights, Chunghwa Telecom will provide compensation or legal support to the parties involved to assist and protect our clients’ rights to the best of our ability.

There were 8 complaints over “alleged information breach cases” filed via the customer hotline in 2020, of which 1 was notified by the National Communications Commission (NCC) and 7 submitted via the customer service hotline (4 more cases compared with those in 2019, accounting for 0.000018% of the customer hotline service provided of the year). All the cases were investigated and verified that there had not been any fact of personal data and privacy breach.

[For more information on the cybersecurity and personal data and privacy protection of Chunghwa Telecom, please visit our website](#)



Refined Customer Service

Chunghwa Telecom provides services which are refined, thoughtful and professional to build warm atmosphere around customer relations. We use big data analysis to learn the true needs of customers so that we can offer thoughtful and customized services and products. CHT's positive approach cultivates both favorable impressions and brand loyalty. We set high standards for our customer service hotline. To ensure quality service, we sought multiple international certifications, including ISO 9001, ISO 10002, BS 10012, and ISO/IEC 27001. In recent years, we have been using big data analytics to identify customers concerns and to improve the overall user experience. Through sincere communication and system improvements, we are able to create additional value for our customers. CHT has been presented with "Personal Information Management Awards" by SGS-Taiwan, an international and external third-party verification entity, in 2020.



Chunghwa Telecom Customer Service Mechanism Overview

| Category | Description | | | | | | | | | | | | | | | | |
|--|--|----------------------|------------------------|----------------------|------------------------|------|-------|--------|-----|------|-------|---------|------|------|-------|---------|------|
| Customer Service Location / Scale | The Company has 15 customer service centers, and the number of customer service personnel averages 2,500 | | | | | | | | | | | | | | | | |
| Multi-Channel Customer Services | <ul style="list-style-type: none"> • Webchat • Social media, "Chunghwa Telecom Dr. Q Fan Page" • Web customer service center • Mobile customer service center • Mobile App • SMS | | | | | | | | | | | | | | | | |
| Training Result | <p>To refine our customer-centric approach and devotion to the provision of the most thoughtful services, while taking the COVID-19 impacts into consideration, we utilized Microsoft Teams in 2020 to throw three sessions of remote training program online, "Driving Sales with Services", with zero students and zero clustering on site. A total of 150 seed personnel were trained with an average training hour of 6 hours per capita. CHT holds a very high standard for customer representatives. Besides the basic requirement of tone and manners of speech, we place even more emphasis on professional knowledge and competence. In 2020 alone, 9,853 employees received 44,368 hours of training combined.</p> <table border="1"> <thead> <tr> <th>Year</th> <th>Total Participants</th> <th>Total Training Hours</th> <th>Average Training Hours</th> </tr> </thead> <tbody> <tr> <td>2020</td> <td>9,853</td> <td>44,368</td> <td>4.5</td> </tr> <tr> <td>2019</td> <td>5,885</td> <td>127,511</td> <td>21.7</td> </tr> <tr> <td>2018</td> <td>5,684</td> <td>141,207</td> <td>24.8</td> </tr> </tbody> </table> <p>Due to the pandemic impact in 2020, TTI reduced offline education programs and adopted online programs with shorter hour per session instead. Hence, the trained participants (person-times) increased while the total training hours decreased.</p> | Year | Total Participants | Total Training Hours | Average Training Hours | 2020 | 9,853 | 44,368 | 4.5 | 2019 | 5,885 | 127,511 | 21.7 | 2018 | 5,684 | 141,207 | 24.8 |
| Year | Total Participants | Total Training Hours | Average Training Hours | | | | | | | | | | | | | | |
| 2020 | 9,853 | 44,368 | 4.5 | | | | | | | | | | | | | | |
| 2019 | 5,885 | 127,511 | 21.7 | | | | | | | | | | | | | | |
| 2018 | 5,684 | 141,207 | 24.8 | | | | | | | | | | | | | | |

Customer Service Excellence Awards (CSEA)

"Best Intelligent System Application Enterprise Award"

– Self-developed IVR voice navigation and verification application

To offer a better service experience for our customers, CHT has proactively develop innovative and smart customer service applications. In 2018, CHT introduced the text-based customer service chatbot and successfully built the human-robot collaboration model. In 2020, the IVR voice navigation and verification came online. It is an AI chatbot, developed by CHT its own, equipped with five core competencies, including voice recognition, semantic comprehension, speech synthesis, automated feedback learning, and flexible adjustment mechanism, intended for the voice navigation and verification for the incoming calls from customers, which significantly improved the efficiency of our customer service.



"Best Customer Service Management Enterprise"

– supporting the government's epidemic prevention works with ICT

Ever since the outbreak of COVID-19 in the early 2020, we have been supporting the government's epidemic prevention works with information communication technology, including designing and providing the quarantine cellphones, developing Digital Fence, analyzing the footprints of epidemic development with big data, and other innovative measures, which effectively helped the government in epidemic control. Starting from the Lunar New Year holidays, the workforce of four customer service centers were mobilized, along with other resources like venues, seats, systems, and electric circuits. Also, we adjusted the IVR voice service on the fly, rapidly established the Knowledge Management Database, and initiated active care for home quarantine. As a result, we set the record of answering up to 47,000 calls in a single day. By helping the Taiwan CDC to cope with the calls to 1922 toll-free hotline, we fully demonstrated our ability to react.



Commendation for Best Customer Service Personnel

To inspire passion and professionalism among customer service officers, we reward customer service personnel who receive praise from customers, and accept these credits as part of their performance appraisal as an excellent service quality.



KPIs for Customer Service Hotline

In 2011, Chunghwa Telecom became the telecom carrier to have all its centers certified for the ISO 10002:2004 Customer Complaint Management System. The Company views customer complaints as opportunities to make ongoing improvements. The resolution of customer complaints and dissatisfaction is rule-based and they must be settled within 3 working days. This approach ensures the continuous improvement of service quality. In addition to the customer service hotline, consumers may also use the corporate website or Representative Line authorized by the President (02-23446789) to raise complaints directly to the assistance of the senior executive.

| KPI | 2018 | 2019 | 2020 |
|--|--------|--------|--------|
| Customer Service Response within 20 Seconds | 73.42% | 73.37% | 68.98% |
| Service Satisfaction (5-point scale) | 4.71 | 4.74 | 4.75 |

Customer Satisfaction Survey

We conduct a broad variety of satisfaction surveys to identify the issues of most concern to consumers and their expectations. We use these findings to guide future improvements. After each survey, the opinions and suggestions are conveyed promptly to product or business personnel (including Risk Management and the Public Relations Departments) using the consumer feedback system. Furthermore, consumers opinions are brought to the attention of the senior manager of the product and customer service departments for discussion at monthly meetings to ensure that the consumers expectations receive proper consideration. Regarding the IPA (Importance-Performance Analysis) items belonging to the fourth quadrant (high importance and low performance) after a review of the results of the annual satisfaction survey, we will request that the relevant functional units conduct further analysis and propose measures for concrete improvement every year. There will also be a follow-up in the next quarter to keep track of the progress of any corrective action found necessary.

| Customer Type | Survey Method | Survey Result (10-point scale) |
|-----------------------------|---|--------------------------------|
| Large Enterprise | Designate an external market survey company to conduct consumer satisfaction survey | 9.09 |
| Medium and Small Enterprise | | 8.72 |
| General Customer | | 7.77 |



1Gbps Network Speed across All Townships 100 Mbps across All Villages

We are constantly expanding our mobile network. We have the most 4G cell towers and the highest 4G signal coverage in Taiwan. According to test results published by the government, our network speed is the fastest across all 22 administrative districts in Taiwan. Our network quality has been unanimously commended by domestic and international mobile analytics organizations, including OpenSignal top 4G download speed and best overall download speed and Speedtest fastest mobile Internet speed in Taiwan.

As always, customer satisfaction is our top priority. We will continue to improve our mobile network to provide customers with top-notch services. To ensure the equal sharing of information, in addition to a positive strengthening of mobile Internet quality in populous metropolitan areas, we have paid more attention to signal coverage in remote areas. We have achieved 100% total 4G coverage in all towns.

To promote equal digital rights, we support the DIGI+ Program initiative introduced by the Executive Yuan. We planned to increase 1Gbps network coverage to 90% by 2020, 2Gbps network coverage to 90% by 2025. Providing ultra-broadband Internet in remote areas to balance urban-rural development, encouraging innovation in the digital economy, creating value added in the industry, and, in turn, stimulating overall economic growth. In 2020, we invested NT\$200 million in 80 network improvement projects, and the following projects were successfully completed: 1Gbps network speed across all townships, 100 Mbps across all villages, increasing Wi-Fi hotspot bandwidths, improving 4G cell towers in rural areas, etc.

Expand Wireless Hotspots

We have also supported the government initiative for the promotion of free wireless Internet services nationally. Through a reasonable Wi-Fi rental package available, as well as a robust user authentication platform and a nationwide maintenance/monitoring system, we have helped the government deploy free Wi-Fi hotspots nationwide.

Our contributions to social events in 2020 included working with local county and city governments to provide Wi-Fi hotspots and enable Internet access at festive gatherings and international sports events. We installed 81 hotspots for New Year's Eve festivity, 19 for the Lantern Festival and about 31 for other activities. The Company participated in 20 festive occasions, built 131 hotspots in total, and spent more than NT\$1.02 million.

Enhanced Disaster Response and Communication Coverage

Chunghwa Telecom continues to install repeaters, backup wireless routers, and backup power supplies to increase reliable transmission capacity in remote areas. By increasing the capacity of backup batteries to more than 72 hours, the Company ensures that residents in remote locations can stay connected even when main power has been disrupted by a natural disaster.

| Item | Description |
|------------------------|---|
| Responses Measure | We conduct annual emergency drills for a wide number of different events, from the coordination of 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 will not disrupt the operation of other nearby base stations. |
| Occurrence of Disaster | If communication is severely disrupted in the unfortunate event of a natural disaster, we take contingency measures, that depends on the actual circumstances, to maintain communication between the disaster locations and the outside world. These can include microwave radio, satellite transmission, portable base stations, etc. |

Disaster Report and Upgraded Safety

In efforts to minimize the impact of disasters by prompt messaging, the Chunghwa Telecom self-developed "Emergency Response SMS System" sent out more than 60,000 SMS alerts in 2020, and apply to Directorate General of Highways' "Traffic Conditions Alert System," and Atomic Energy Council's periodic "Nuclear Safety Drills," and the National Fire Agency's disaster prevention exercises, successfully playing its part in disaster prevention information notification.

In addition, a Public Warning System (PWS) has been established to support the national policy of emergency message dissemination about typhoons, earthquakes, thunderstorms, landslides, roadblocks, reservoir discharge or an outbreak of disease, fast and correctly to specific regions simultaneously, assisting government agencies and the general public improving their disaster prevention awareness and capabilities. As long as a mobile phone is open to the PWS function, all our customers will receive messages about disasters. The PWS issued over 2,400 times of emergency warnings across Taiwan in 2020. In the early stage of the epidemic outbreak, 4 warnings were issued that effectively helped the government agencies to communicate the relative policies and orders as well as dispersed the crowds.

Major Service Interruptions in 2020 and Countermeasures

- 1. Overview of the Obstacle:** The obstacle with SVG equipment at CHT KLSY Branch on September 12 affected the fixed line communication of 15,585 households.
- 2. Reasons for the Interruption:** Two SVG L2 SWs were down due to lightning strikes that led to anomalies of system operation.
- 3. Improvement Measures:** Two L2 SWITCH spares stored at all branches in case of emergency. Continuous enhancement of maintenance measures and promotion for preemptive centralized monitoring.
- 4. Implementation Status:** All the L2 equipment subject to the risk of lightning strikes replaced to enhance the protection against lightning strikes. Completed L2 SWITCH emergency backup SOP and education training to enhance the emergency response capability of staff.
- 5. Outcomes:** With the ceaseless improvement of maintenance mechanism by the network maintenance department, the average number of obstacles encountered by users has been improved from 0.0007 in 2019 to 0.0006 in 2020, while the average time for obstacle removal improved from 0.138 minutes in 2019 to 0.096 minute in 2020.



The Alleviation of Public Concern about Electromagnetic Waves

According to a report by the World Health Organization (WHO) and related scientific research, exposure to base stations and Wi-Fi signals does not affect human health. NCC also declared that all the powers of the electromagnetic waves from the domestic base stations are within the threshold of international standards and thus cause no harm to human body. Therefore, the Environmental Protection Administration of the Executive Yuan do not list base station as a source of environmental pollution.

For this issue, Chunghwa Telecom ensures strict compliance with the authority's safety standards when constructing telecom infrastructure. The Specific Absorption Rate (SAR) of all mobile communication products we purchased have complied with the restrictions of the National Communications Commission (NCC). Given the scarcity of suitable base station locations and the need to assure consumer rights to quality communication, we will strive to comply with regulations by taking the approved precautions at all stages of installation. In 2020, Chunghwa Telecom incurred NT\$0.5 million in fines and administrative penalties associated with base stations. These violations occurred as we sought to address consumers' demand for good reception and concern towards negative health impacts from base stations.

The measurement of the electromagnetic radiation in the environment conforms 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 less than 0.9 $\mu\text{W}/\text{cm}^2$ at 1,800MHz. Any resident who has concerns regarding base stations near their home can request a free complimentary measurement of the strength of the nearby electromagnetic waves by calling 0800-580-010.

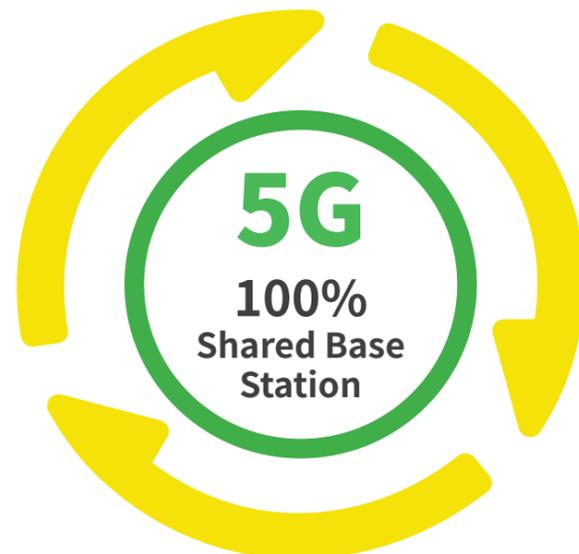
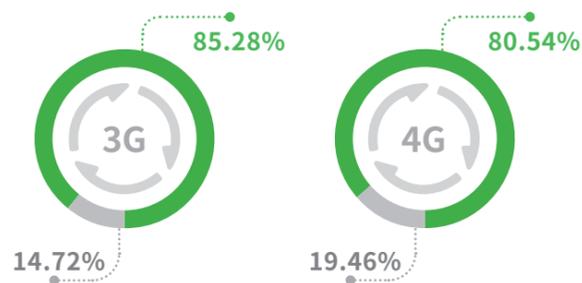
Advocate the Accurate Understanding of Electromagnetic Waves

Chunghwa Telecom has been working closely with the Taiwan Telecom Industry Development Association to convey to the public the correct information about electromagnetic waves, by organizing conferences and issuing promotional materials.

1. The Company joined NCC and 10 county/city governments nationwide in hosting 12 seminars on the topic of electromagnetic waves, 24 local infrastructure promotion forums, and 125 free complimentary electromagnetic wave measurements have been completed to date.
2. Local government bodies were issued some promotional material and pamphlets about electromagnetic radiation, which were distributed to the public during various activities to promote proper understanding.

Types of Base Stations Installed by CHT

Shared Base Station Independent Base Station



1. All these are established on the existing buildings.
2. The 5G services kicked off on July 1, 2020.

Telecom Services and Promotions Fraud Prevention

In 2007, Chunghwa Telecom assisted the government in establishing the 165 Anti-Fraud Consultation Hotline to support the police and authorities in the defiance against fraud.

| Item | Description |
|---|---|
| Resources Committed | <ul style="list-style-type: none"> An average of 10 customer service personnel joined the service every month to work with the Criminal Investigation Bureau in a concerted front-line duty effort from Monday to Friday. "Disconnection Service Fraud Prevention System" offers information on some suspected telephone gimmicks used for cheating customers and a timely settlement of the problem. An average of 3.1 customer service person participated in the program each month. |
| Prevention of Fraud on Network / Mobile Devices | <ul style="list-style-type: none"> A two-way, SMS-based authentication system was introduced for small payments. A scam alert was added to all two-way SMS authentication messages. |
| Progress Description in 2020 | <ul style="list-style-type: none"> The hotline received 184,589 calls, and 19,579 cases of fraud were referred to the authorities. The Company assisted the Criminal Investigation Bureau, National Policy Agency in disconnecting 1,582 phone numbers, and successfully stopped 2,287 scams. |

Reducing Negative Impact of the Internet

We continue to minimize negative material circulating on the Internet through diverse action plans, and endeavor to provide consumers with a healthy, trouble-free network environment.

| Item | Description |
|----------------------------|---|
| Anti-Virus and Anti-Hacker | A HiNet mailbox gives customers access to a free webmail service. A simple setup, allows users to decide if questionable e-mail will be automatically deleted in the future. We continue to monitor the formulation of the "Regulations for Commercial Electronic Spam Mail", in which add the management obligations to the Internet Service Provider (ISP). |
| Adult Content | Provides K12 Mailbox Forced Isolation, the HiNet Adult Content Gatekeeper, and the Mobile Adult Content Security Guard, keeps children and teenagers out of harmful websites. |
| Usage Time Control | The HiNet Online Time Management Service and mobile phone "3G Talk without Worries" programs, giving parents effective control of the mobile phone and Internet use. |
| MOD Parental Lock | The Parental Lock can be set at protected or parental guidance. Settings are in effect immediately once the password has been entered. The parental lock can be used to protect children from harmful or bad content. |

S Strategy

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

M Management

Instituted the Code of Corporate Social Responsibility for Suppliers of Chunghwa Telecom Co., Ltd.

Instituted the Chunghwa Telecom Co., Ltd. Procurement Grievance Procedures

Collect the suppliers information on climate change and carbon emission at least once a year

A Action

Efficient energy management using EARTH

The launch of the 5G initiative in pursuit of profit, environmental sustainability, and social responsibility

Became **the first** telecom service provider in Taiwan to implement:

- Collaboration with the Sustainable Alliance for Low-carbon Economy (SALcE) to issue the Sustainable Partnership Certificate
- Incorporation of the ISO 20400 Sustainable Procurement Standard
- ISO 14064 certified
- Joined the Carbon Disclosure Project (CDP) Supply Chain
- "TCFD Climate-related Financial Disclosures" certification obtained

R Response

CHT CSR Supplier Conference / Sustainable Environmental Visit

Targets low-carbon industries and promotes solar power

T Target

Completion of the first smart green-energy staff dormitory in Taiwan by 2021 (50% progress made)

Promises to Reach the Following Targets in 2023

- The capacity for renewable energy constructed from proprietary was **3,975.5** kWp
- Taking 2017 as the base year, a **10%** reduction of greenhouse gas emissions in our buildings
- Taking 2017 as the base year to cumulatively save **10%** of the energy by 2023 pursuant to the generator room energy-saving program

I Indicator

GRI

GHG Emissions **790,320.9986** t-CO₂e

CHT

A CHT photovoltaic system with a total capacity **2,783.665** kWp

CHT

Nearly **100** suppliers receiving ESG education and trainings

CHT

Implement the "Suppliers CSR Second Party Audit" on **20** suppliers

CHT

105 Taiwan Renewable Energy Certificates (T-REC) acquired

The Green Corporation Pioneer



The SDGs CHT contributes to in this section

5G Green Enterprise

Although telecom is regarded as a low-polluting industry, Chunghwa Telecom is well aware of the environmental impacts associated with energy, resources, waste, maintenance, purchasing and other aspects of our operation.

We have devised a new set of Sustainable Environment Development Strategy and Target Plan that outlines our overall strategy and roadmap for sustainable environmental development. In addition, budgets will be provided in each year to support action plans.

Green Operations

(1G)

- A self-developed EARTH system for **100%** control of environmental information
- The **sole** telecom carrier that has obtained the ISO 14046 certification in the industry of Taiwan
- Received ISO 14001/ISO 50001 and ISO 14064-1 certification at all our business locations
- "TCFD Climate-related Financial Disclosures" certification obtained

Green Energy

(2G)

- Self-constructed photovoltaic systems reached a total capacity of **2,783.665** kWp
- Acquired **105** Taiwan Renewable Energy Certificates

Green Stores

(3G)

- Transformed **455** service centers into Green Stores
- Syntrend Store in Taipei as the **sole** net-zero carbon store in the industry of Taiwan that obtained ISO 14067, EPA's Service Carbon Label, and PAS 2060 carbon neutrality certification
- Promoted paperless services and accumulated a saving of **590** million sheets of paper per year

Green Supply Chain

(4G)

- Became the **first** telecom carrier to promote supply chain sustainability management
- Formally incorporated the ISO 20400 Sustainable Procurement Standard
- Participated in the CDP Supply Chain Project to expand the efficiency of carbon management

Green Procurement

(5G)

- Reached a total of NT\$**904** million in green procurement in 2020
- Reached **1.08%** of total procurement as green procurement yearly

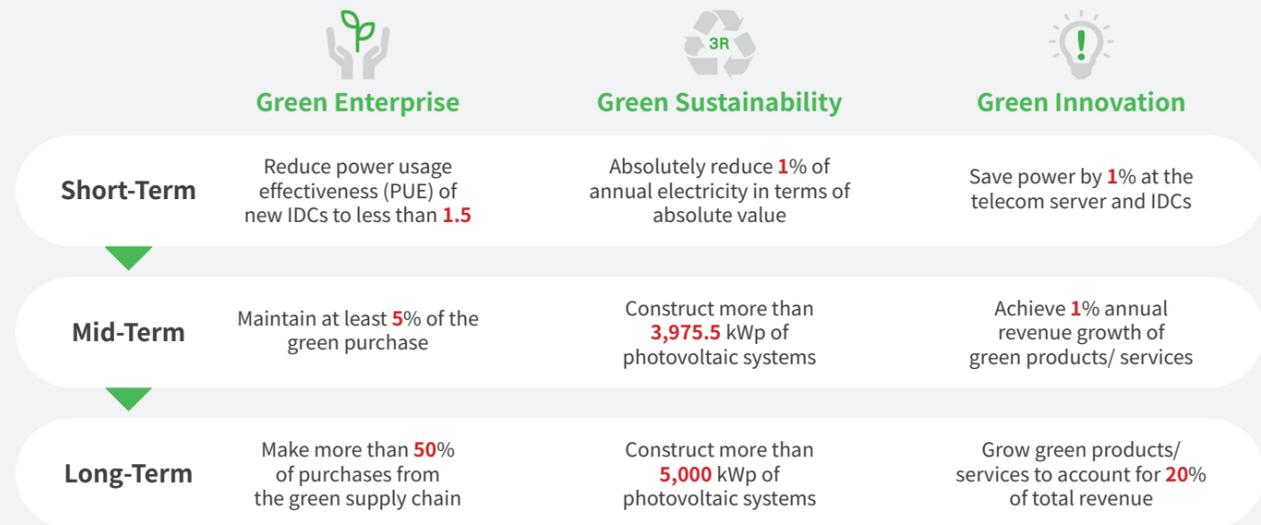
The certification of ISO 14001 is effective till 2023/12/24, while that of ISO 50001 is till 2022/12/17.



Co-construction of the Largest Solar Power Plant in Yilan in 2020

Working with VITEC ENERGY TAIWAN CO., LTD., we completed two solar power plants in Yilan County, for Alchemy Steel Inc. and Yi Lian Steel Manufacturing Co., Ltd. respectively. With an installed capacity of 3,000 kW in total, it is estimated to generate energy up to 3 million kWh per year while reduce approximately 1,600 tonnes of CO₂e annually, which is close the amount of carbon sequestered by 4 Daan Forest Parks. In the future, we shall continue to expand the solar power projects in Yilan. From development, planning, installation to maintenance, we manage the engineering quality along the way, so that more enterprises may join the green energy business together.

To fulfill our green commitment and embrace the world’s green challenge, Chunghwa Telecom has adopted a “Green Enterprise, Sustainability and Innovation Strategy” with the introduction of 5G (Green): Green Operation, Green Energy, Green Stores, Green Supply Chain, and Green Procurement, aiming to address financial success, sustainability and social responsibility.



((1G)) Green Operations

Chunghwa Telecom has set a goal to become a sustainable Green enterprise, and has made environmental issues an incorporated 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 eco-friendly products and services, we are confident of our potential to inspire a new generation of low-carbon industries.

Environment ARTificer THEurgy (EARTH)

We developed the Environment ARTificer THEurgy (EARTH) system in 2008 to manage resources and protect the environment more efficiently as well as to reduce spending on energy consumption. EARTH system features include:

- Energy Saving and Innovation: Energy savings and innovation initiatives have been uploaded and implemented in all departments 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; there are more than 64,710 electricity accounts and 2,918,907 units of electricity payment data under management.
- Water Management: Request centralized payment of water bill; there are more than 1,298 water accounts and 126,142 units of water payment data under management.
- Carbon Emission Management: This provides a carbon verification form and the results were greatly enhanced as 300 man-day operations.
- Fuel Management: Fuel use data for hybrid and ordinary vehicles were analyzed to improve energy efficiency and reduce carbon emission.
- Corporate Tree Planting: Document type, number, management department and location of trees. There are over 251 varieties of tree and 67,350 tree data saved in the EARTH database.
- Recycling Management: Document type, volume of recycled material and the recycling management department. We have recorded 22 types of recycling and there have been 18,188,291 entries made.

Green Environmental Hostels

Chunghwa Telecom Hostels provide accommodation for employee business or leisure travel. In response to environmental protection and personal hygiene, the hostels do not provide disposable, or consumable items or towels. They also take energy-saving measures such as solar water heating, air conditioning using heat pumps and LED lighting. 19 hostels had been certified as Environmentally Friendly Accommodation by 2020.

Ecotourism

Chunghwa Telecom hopes to provide eco-tours that are both educational and entertaining for our employees, so that they understand concepts of extreme weather, responsible tourism, respect for nature and the rights of local residents. We hold regular company eco-tours with the hopes of incorporating environmental education into traveling and daily life. We held 102 tours in 2020, costing a total of NT\$54,283 thousand with 15,209 participants.

Environmental Management Expenses

| Item | 2018 | 2019 | 2020 |
|--|---------|---------|---------|
| Environmental management expense (NT\$ thousand) | 319,637 | 328,558 | 329,126 |
| Accounted percentage of turnover (%) | 0.15 | 0.16 | 0.16 |

Building the First Solar-powered Parking Lot in Response to the Green Energy Policy

In response to the government’s green energy policy and the realization of Nuclear-free Homeland by 2025, Chunghwa Telecom acted in accordance with the “2020 Photovoltaic 6.5GW Compliance Plan” in the photovoltaic promotion plans for energy transition of MOEA, building the first solar-powered parking lot with the features of power generation and car park in the Yunlin Technology-based Industrial Park. Generating 575,000 kWh of green energy per year, it effectively reduces the CO₂ emissions by 293 tonnes, which is equivalent to the effect of 30 hectares of afforestation. A total of 200 parking spaces are offered to the employees working in the adjacent businesses and meet the demands for parking in the Industrial Park. It comes with the advantages of environmental protection and long-term investment returns. In the future, we shall introduce intelligent parking management equipment and solar-powered LED guidance lights for parking in succession in order to build a significant landmark in the Industrial Park.

(2G) Green Energy

In response to the climate change, Taiwan has planned to raise the ratio of renewable energy from 6% in 2017 to 20% by 2025 so as to reduce CO₂ emissions. Chunghwa Telecom has been positively supporting the government policy and applying its extensive ICT background knowledge in the construction of solar power stations. By the end of 2020, the Company had 55 solar power stations around Taiwan with a total capacity of 2,783.665 kWp.

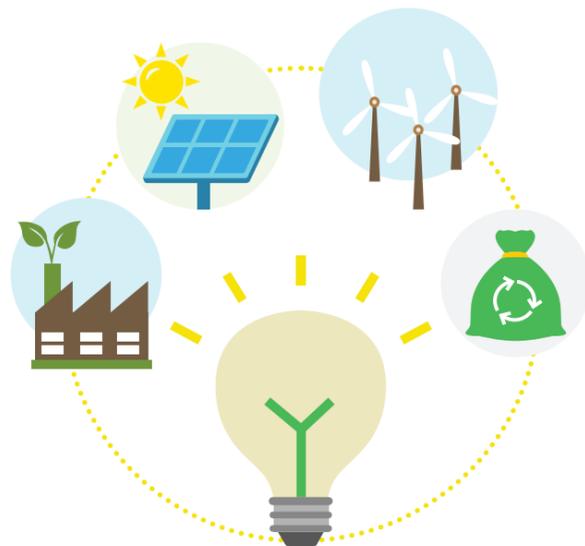
Unit: 10,000 kWh

| Item | 2007 | 2018 | 2019 | 2020 |
|---|---------|---------|---------|---------|
| Total Electricity Consumption (A) | 135,180 | 137,191 | 135,066 | 135,350 |
| General Consumption (B) | 9,420 | 106,264 | 103,338 | 102,684 |
| Business Consumption – Meter Rate Lighting Service (C) | 125,151 | 24,107 | 25,497 | 26,784 |
| Business Consumption – Flat Rate Lighting Service (D) | 609 | 6,819 | 6,231 | 5,883 |
| Business Consumption Increment (E) | NA | 3,182 | 802 | 938 |
| Business Consumption Increment Rate (F) | NA | 2.32% | 0.59% | 0.69% |

1. B: office buildings and employee dormitories; C: base stations, depot, and public telephone, which are not CHT-owned property.
2. A=B+C+D, General consumption mainly includes the power consumption of office building. Business consumption increment includes flat and meter rate lighting service.
3. E=Business consumption this year - Business consumption last year; F=E/A
4. This table presents electricity consumption with customer ID, other consumption without customer ID is covered by greenhouse gas inventory.

Energy Savings for Data Centers

Chunghwa Telecom places great emphasis on the energy efficiency of our data centers, and is currently implementing energy conservation measures for telecom facility centers (including IDCs). The efficient application of our proprietary iEN smart energy management system and Power Operation Supervisory System (POSS) for IDCs are our scientific approach to reducing energy, carbon emission and protection of the environment through dynamic energy management via the Internet.



Electricity Consumption of IDCs

| Year | 2018 | 2019 | 2020 |
|-------------------------|--------|--------|--------|
| Unit: 10,000 kWh | 16,440 | 16,600 | 16,576 |

Renewable Energy Usage in Banqiao IDC

| Item | 2018 | 2019 | 2020 |
|-------------------------------------|------------|------------|------------|
| Solar power generation (A) | 95,624 | 100,896 | 104,608 |
| Total power consumption (B) | 21,411,200 | 24,470,132 | 34,446,400 |
| Energy-saving ratio(A/[A+B]) | 0.44% | 0.41% | 0.30% |

The Most Eco-friendly Data Center in the Greater China – Banqiao IDC

The Banqiao IDC of Chunghwa Telecom is the first world-class data center in Taiwan that is certified as TIA-942 Rated-3 and Rated-4. Meanwhile, it acquired certifications and labels at home and abroad successively, including ISO 27001 and PCI DSS. With the most rigorous standards and regulations ranging from architecture to electricity, machinery, telecommunication, and information security of IDC in place, we ensure a sustainable operation of the data center.

To effectively reduce the risks in IDC maintenance and raise the confidence of customers, it successfully obtained Uptime Institute’s Management and Operations (M&O) Stamp of Approval in 2020, which made it the first professional IDC in Taiwan that secured the M&O certification. It also acquired the SOC certification in the same year, signaling that we have lived up to the international standards in the sustainable data center maintenance and management.

Water Resource Management

Water usage at Chunghwa Telecom is mostly domestic. 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 the recovery of rainwater and cooling water.

We benchmarked the 2012 water usage as the standard, and now control the annual growth of water usage to no more than 2%. In addition to a new water leakage detection feature in products, we have also included Company water consumption in the EARTH system. Centralized water bill payment is done through the EARTH water bill management function to reduce the printing of water bills. Managers can use the system to search, generate trend charts and report forms, and provide exception reports to avoid mistakes in billing and meter reading. Managers can also review the situation of water usage according to trend charts and reports, reduce expenses in water, and improve the efficiency of management.

The management and analysis information interface can be used to promote water conservation measures and set concrete management goals. We also promote water-saving measures to increase efficiency in water use:

- Install sink faucet sprayers to reduce waste
- Install dual flush toilets to reduce waste
- Use collected rainwater for watering office plants
- Encourage the installation of water reclamation equipment in new buildings, so that physically separated and treated sewage water can be reused for non-potable purposes after it has reached a certain quality standard

To enhance the effectiveness of water recycling and reuse, we have set up raft foundation water collection systems underground to collect clean rainwater from rooftops and the ground surface. We have also initiated the recycling of cooled and condensed water from office air-conditioners and promoted a recycling and reuse plan for rainwater, bathwater and air conditioner water. The recycled water is reused for watering plants and cleaning sidewalks, being utilized to its fullest extent.

| Year | 2018 | 2019 | 2020 |
|-----------------------|-----------|-----------|-----------|
| Tap Water | 753,023 | 691,954 | 679,629 |
| Recycled water | 1,624,419 | 1,590,716 | 1,617,960 |
| Recycled water | 7,398 | 3,776 | 2,777 |

Starting from 2018, the amount of resource and energy consumed by Honghua International in its rented areas are excluded.





The sole telecom operator in Taiwan that passed water footprint certification

To accurately capture the water resource risks and in response to the UN SDG 6 Clean Water and Sanitation, we chose the most representative Rated 4 IDC of the Greater China region – Banqiao IDC and Cloud Data Center of Chunghwa Telecom for ISO 14046 certification on water footprint inventory and certification. As a result, it passed the verification by the SGS-Taiwan and obtained the assurance statement, making Chunghwa Telecom the sole telecom operator in Taiwan that passed water footprint certification. The benefits achieved are as follows:

- Water resource management strategy established: establishment of the SOP for organizations water footprint helps in the attainment of water resource management targets.
- Enterprise water usage management enhanced: the water usage distribution in the enterprise is captured effectively via water footprint inventory in order to create a complete water resource management system and stipulate proper measures to achieve the target of water conservation.



Waste Management

Chunghwa Telecom understands the importance of resources reduction, recycling and reuse and has combined related reduction plans into the EARTH system. This is used to manage the use of resources and control energy efficiency, as well as to conduct systematic management of recyclables and waste treatment. We contracted a professional waste treatment company to transport our daily waste to landfills or incinerators for disposal. Recyclable waste is handled by a contracted cleaning company that is responsible for classification, treatment and proper disposal.

| Year | 2018 | 2019 | 2020 |
|---|-------|-------|-------|
| Weight of domestic waste Unit: tonnes | 3,505 | 2,881 | 3,173 |

Starting from 2018, the amount of resource and energy consumed by Honghwa International in its rented areas are excluded.



Industrial Waste

Scrapped lead-acid batteries are recyclable industrial waste regulated by the EPA. Business organizations are responsible for the reduction of pollution, disposal of toxic substances and simple waste disposal. All recycling and disposal operations are outsourced by joint contract based on the 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.

Scrapped lead-acid batteries from each business unit are auctioned on site, and the Announcement and Delivery Slip for Removal and Disposal of Waste Lead-Acid Batteries is retained for reference. A total of 34,148 leadacid batteries with a total weight of 1,630,201 kg were scrapped and sold for NT\$31,143,557 in 2020. In fulfilling our responsibility for environmental protection, we also increased Company revenue. The public and private waste clearance and disposal companies recognized by environmental institutions are designated to handle the treatment of other industrial waste such as cables and miscellaneous hardware.

| Item | Unit | Amount | | | Disposal Fee (NT\$ thousand) | | |
|------------------------|------------|--------|--------|--------|------------------------------|---------|---------|
| | | 2018 | 2019 | 2020 | 2018 | 2019 | 2020 |
| Plastic-filled Cable | Metric ton | 290 | 126 | 347 | 227,460 | 191,223 | 369,766 |
| Ordinary Cable | | 1,348 | 1,152 | 1,504 | | | |
| Miscellaneous Hardware | | 1,350 | 703 | 1,329 | | | |
| Batteries | Piece | 27,194 | 33,332 | 11,908 | | | |

3G Green Stores

Chunghwa Telecom is a highly-localized telecom carrier, a generous contributor to community development, and one of the most important partners to other telecom carriers around the world. As technologies progressed and improved, we began some operations that were outside the conventional telecom boundaries, corporate social responsibility concepts were introduced into products and services research, development, applications, and into the Company management strategies.



Green Revenue

In addition to developing products friendly to the environment, we have been promoting Green Stores and were the first telecom carrier in Taiwan to fully turn service centers into Green Stores. In 2020, green revenue was NT\$ 361 million, which was 16.3% of the commercial products revenue.

Paperless Receipt Service

We have been promoting electronic billing since 2001, and reduce carbon emission by eliminating the use of paper bills. In 2017, we offered paperless receipt service. At the end of 2020, the percentage of paperless receipts exceeded 71%. The service saved 590 million sheets of paper and an estimated 53,673 trees, reducing carbon emission by 10,627 metric tons.

| Item | 2018 | 2019 | 2020 |
|--|---------|---------|---------|
| Customer applying for e-bills (10 thousand) | 1,869 | 1,933 | 1,968 |
| Ratio of customers applying for e-bills | 68% | 70% | 71% |
| Quantity of paper saved (per 1,000 sheets) | 560,700 | 579,946 | 590,000 |
| Number of trees saved | 50,973 | 52,722 | 53,673 |
| Reduction of carbon emission volume (metric ton) | 10,093 | 10,439 | 10,627 |

1. The data of paper saved and reduction of carbon emission is by e-bills (including SMS) and combined bills.
2. Each e-bill reducing the use of envelopes and paper are 2.5 sheets of A4 paper. Total amount of paper saved: number customers applying for e-bill × 2.5 × 12 (month).
3. 1 sheet of A4 paper generates 18 grams of CO₂; Carbon emission reduced: number of paper saved (1,000 sheets) × 18 grams.
4. The number of trees saved: each ton of paper pulp produced=20 trees; one ton of paper pulp=220 thousand sheets of A4 paper. Therefore, the number of trees saved = number of papers saved ÷ 220 thousand × 20.

The Sole Net-zero Carbon Emission Store in The Industry of Taiwan

We became the first telecom service provider in Taiwan that obtained carbon label for service center with our “CHT Syntrend Store”, which is also the only store with zero emission in the industry!

It passed the certifications of and reviews by standards at home and abroad (ISO 14067 and the Carbon Label of Taiwan EPA) and purchased 50 tons of carbon right, securing the carbon neutrality certification PAS 2060 and achieving the standard of zero carbon emission.

We have connected tightly eco-friendliness and green energy with network services. While offering premium services to the general public, we further aim to achieve a green communication with our consumers for them to capture the eco-friendliness and low-carbon nature in products and services precisely. As such, we live up to our corporate philosophy ‘Always Ahead’.



((4G)) Green Supply Chain

The responsibilities and mission of Chunghwa Telecom, as the leader of the telecom industry, are Green of ICT and Green by ICT. This implies facilitation of the greenness of the ICT industry (Green of ICT) and overall greenness of society through ICT (Green by ICT). From 2008 onwards, Chunghwa Telecom developed measures year by year to improve the sustainability of the supply chain, and we accomplished two pioneering achievements:

- **We were the first telecom company to propose the “Sustainable Supply Chain Initiative”**
Effectively connecting with internationally prominent sustainability organizations and partners, also connecting the supply chain to respond to the United Nations Sustainable Development Goals (SDGs).
- **We were the first in the industry to join the “CDP Supply Chain Project”**
We invited 67 suppliers to participate in an international platform to submit carbon management information and improve their ability in managing carbon emissions with scientific and quantification mechanisms.



((5G)) Green Procurement

Chunghwa Telecom supports government policy and prepares annual budgets for the purchase of green products that are either environmental-certified (less polluting, recyclable, resource-saving or green building material) or self-declared to be of less environmental impact throughout the product lifecycle (from raw material to disposal). The Company also actively participates in green procurement programs and activities to inspire green purchases amongst others in the industry and the public.

Our goals and policies concerning green procurement, as we hope to maintain green purchases at more than 5% of the total purchases per year over the mid-term, and increase this percentage to more than 50% over the long term. To achieve this goal, we incorporated the ISO 20400 Sustainable Procurement Standard at the end of 2018. The implementation of the ISO management system helped reinforce the idea of green procurement.

| Year | 2018 | 2019 | 2020 |
|--|--------|-------|-------|
| Green procurement total (NT\$ million) | 1,487 | 1,024 | 904 |
| Accounted percentage of total procurement | 3.36 % | 2.47% | 1.08% |

For more information about Green Supply Chain and Green Procurement, please refer to P.112-117

2020 Environmental Performance

| Item | Description |
|---|---|
| <p>Environmental Information Disclosures</p> | <ul style="list-style-type: none"> • Published ESG reports and disclosed environmental data to respond to the Dow Jones Sustainability Index (DJSI) • Execution of an annual greenhouse gas inventory and acquisition of ISO 14064-1 verification and certifications • Responded to the annual Carbon Disclosure Project (CDP) questionnaire • Responded to related national rating questionnaires (including Common Wealth Magazine, Global Views Magazine, and Taiwan Corporate Sustainability Award) • Signed on as a supporter of the Task Force on Climate-related Financial Disclosures (TCFD) initiative and disclosed relevant information in line with the TCFD Framework • Passed the “TCFD Conformity Check” as the first telecom operator in the world |
| <p>Improve Energy Use Efficiency</p> | <ul style="list-style-type: none"> • Merged and exploited data center spaces • Saved cooling energy: implemented energy saving with 90 HP inverter module, sensible heat air conditioners of 1020 RT, 495 highly efficient air conditioners, 90 RT ventilation air conditioners and 510 natural ventilation air conditioners by the end of 2020 • Used green materials for newly constructed data centers and buildings • Set up rainwater, underground, and condensed cooling water recycling systems for the reuse of water resources • Replaced lamps in the public areas and internal office buildings with environmentally friendly LED bulbs |
| <p>Implement Green Energy</p> | <ul style="list-style-type: none"> • Constructed 2,783.665 kWp of photovoltaic systems by the end of 2020 • Acquired 105 Taiwan Renewable Energy Certificate |
| <p>Autonomous Environmental Protection</p> | <ul style="list-style-type: none"> • One and only in the industry of Taiwan: Banqiao IDC passed ISO 14046 certification • Replaced old vehicles with environmentally friendly ones, and used electric vehicles in trials • Sponsored the construction of the YouBike station at the corner of Xinyi Road and Hangzhou South Road • Promoted clean homes, energy-saving offices, car-free days, and paperless Office Document Automation System (ODAS) • The Taiwan Energy Conservation Patrol: focus on increasing energy efficiency within small and medium enterprises and vulnerable social institutions • Set waste reduction and recycling targets |
| <p>Value-Added Products and Services</p> | <ul style="list-style-type: none"> • One and only in the industry of Taiwan: net-zero emission Syntrend store acquired both the EPA’s Carbon Label for Services domestically as well as the ISO 14067 and PAS 2060 internationally • Promoted e-bill with a marketing section • Electronic invoicing: invoice data were prepared for permanent cloud storage to save material, human resources, and receive preferential tax treatment as an incentive and exemption from fines by the government • iEN smart energy-saving services and promotion of energy-saving products • Mobile device recycling: recycle bins are available at all service centers in line with the promotion of waste recycling • Green Stores: transform 455 service centers nationwide into Green Stores • Collaboration with the Sustainable Alliance for Low-carbon Economy (SALcE) to issue the Sustainable Partnership (products, services, and organizations) Certificate |

Sustainable Supply Chain

Every year Chunghwa Telecom purchases the software, hardware and services necessary for operations from international and domestic suppliers. This includes networking and data equipment, cables, marketing, design and waste disposal services. Our enormous purchasing power gives us a profound influence over the supply chain, hence the responsibility to guide our suppliers in the fulfillment of their CSR. This is achieved by implementing conduct that complies with the international supply chain ESG standards to guide the ICT industry towards sustainability.

We were the first telecom enterprise in Taiwan to join the CDP Supply Chain Project in 2017 when the industry was confronted by the critical issues of global climate change and its effect on corporate development. In 2018, we again became the first telecom company to incorporate the ISO 20400 Sustainable Procurement Standard. We strive to establish a better connection to the world on our path towards the development of sustainability. We officially launched Sustainable Partner Certification mechanism in 2019. A total of 16 sustainable suppliers have been awarded with Gold-tier certificates as of 2020.

From earlier on we have encouraged suppliers to disclose their carbon emissions and reduce them gradually. We plan to incorporate low-carbon emissions into our tender regulations: only groups with carbon emissions under a certain level can participate in our tendering process. Through sustainable planning, supplier evaluation and a green supply chain constructed on a hierarchical management system, we hope to achieve the following goals of sustainability: environmental protection, effective operations and management, robust labor rights, as well as safety and health. We were presented with “Certificate of Excellence in Sustainable Supply Chain” by SALcE in recognition of our implementation of supply chain management mechanism in 2020.



CHT's Sustainable Supply Chain Initiative – Sustainable Partner Certification

Chunghwa Telecom upholds its company motto and its mission as a Digital Economy Motivator and a Creative Industry Pilot, formally adopting the ISO 20400 Sustainable Procurement Standard in 2018. With that, it evaluates its suppliers' sustainability performance with the sustainable framework.

We launched “Sustainable Partner Certification” mechanism in 2019. We examine suppliers by SGS second party audit results as well as their type and level of importance, and rate them as 4 tiers of “Gold, Silver, Bronze and Participation” accordingly. If a supplier fails to pass the certification process, it is granted a limited period of time to implement corrective measures. Rated suppliers shall receive a mark that corresponds to their rating, and an excellent mark will be seen as a favorable term when submitting a tender.

We hope to compile a “Chunghwa Telecom Sustainable Supply Chain” list through evaluation, training, audit and certification; we'd also like to lead our suppliers toward a sustainable future, improve the sustainability of telecom companies, business, and society as a whole, as well as keep abreast with the international trends of low-carbon economy.



Supply Chain ESG Management Strategy

| Strategy | Management Target | 2020 Results |
|--|--|---|
| Integrate ESG Principles to Chunghwa telecom supplier assessment | Complete 100% of “tier 1 suppliers” CSR current status assessment in 2020 | 100% of suppliers completed the CSR survey questionnaire |
| Ensure ESG conduct of the suppliers complies with “Code of Corporate Social Responsibility for Suppliers of Chunghwa Telecom Co., Ltd.” | Complete 100% of “critical tier 1 suppliers” ESG on-site visits and audits in 2023 | CSR on-site visits and audit rate reached 71% |
| Continue communication activities to promote supplier climate change adaptation measures and emissions data management | <ul style="list-style-type: none"> Complete 100% of “critical tier 1 suppliers” carbon management knowledge education in 2020 Collect information on climate change and carbon emission from suppliers at least once a year. The number of suppliers who respond to Chunghwa Telecom’s CDP Supply Chain Project questionnaire reaches 200 | <ul style="list-style-type: none"> The first Taiwan telecom carrier to participate in the CDP Supply Chain Project The suppliers’ response rate to the questionnaire was 87.58% |

The Chunghwa Telecom suppliers fall into three categories: property, labor and engineering. Apart from professional network communication equipment which is mainly purchased overseas, we buy as much from local suppliers as possible to promote local economic development. The domestic procurement percentage was 80% in 2020. Our target is to reach 96% by 2023.

Suppliers Analysis

| Item | Number of Suppliers | Accounted Percentage of Turnover |
|--------------------------------------|---------------------|----------------------------------|
| Tier 1 Suppliers | 2,078 | 99.16% |
| Critical tier 1 suppliers | 192 | 85.61% |
| Critical non-tier 1 suppliers | 28 | -- |

- Tier 1 suppliers are those that provide products or services directly to Chunghwa Telecom with an annual procurement of \geq NT\$100 thousand.
- Critical tier 1 suppliers are those that provide products or services directly to Chunghwa Telecom with an annual procurement of \geq NT\$50 million.
- Critical non-tier 1 suppliers are those that provide critical products and services to CHT tier 1 suppliers, but are not CHT tier 1 suppliers.

ESG Capacity Promotion of Suppliers

In 2020, aside from the existing Annual CSR Supplier Conference and environmental education visits, we organized the first CSR education and training for suppliers, inviting 70 representatives from nearly 50 suppliers to Chunghwa Telecom. Apart from the ESG lecturers internally, we also invited professional ESG consultants to offer a 4-hour ESG program. With the education and training, we expected to communicate to the suppliers our commitment to the sustainable supply chain management and Sustainable Partner Certification system, so as to collectively bridge the supply chains of telecom industry to the international trend of sustainability, which also come with the benefits in the ESG area.



CSR On-Site Audits

To promote awareness of CSR and ESG management in supply chain partners, SGS-Taiwan has been granted to tier 1 supplier on-site audits since 2010 in accordance with ESG principles of supply chain of Chunghwa Telecom. Since 2019, we increased the number of suppliers for second-party audit to 20 with an additional review process. We commit ourselves to 100% completion of ESG second-party audit for our key tier 1 suppliers by 2023. To make sure all our supply chain partners will be in compliance with ESG management requirements, our goal is to complete the sustainability rating of 140 suppliers and issue the certification mark by 2025.

| CHT Management Indicator | Method | Ratio |
|--|--|-------|
| Supplier ESG auditing ratio per year | <ul style="list-style-type: none"> Occupational health and safety on-site audits / engineering and cable audits | 71 % |
| Percentage of suppliers assessed in ESG in the last 3 years | <ul style="list-style-type: none"> Second-party audit by the SGS-Taiwan Critical non-tier-1 suppliers audits | 29 % |

Overview of the Supply Chain ESG Management Results

| Item | Description | 2020 Goal | 2020 Outcome | 2021 Goal |
|--|--|-----------|--------------|-----------|
| Completion of Online Supplier CSR Survey | Suppliers with a procurement amount of NT\$5 million or above is liable to fill out the Supplier CSR Survey that covers items of corporate ethics, labor rights, environmental management, and occupational safety and health. | 95% | 100% | 95% |
| Procurement staff that received CSR-related training | It is to ensure all CHT procurement staff understand and execute faithfully the “Code of Corporate Social Responsibility for Suppliers of Chunghwa Telecom Co., Ltd.” | 100% | 100% | 100% |
| Supplier contracts containing CSR-related terms | Suppliers are explicitly required to abide by the “Code of Corporate Social Responsibility for Suppliers of Chunghwa Telecom Co., Ltd.” in their procurement contracts. | 100% | 100% | 100% |
| “CSR self-assessment form for suppliers” included in the documentation necessary in the tendering process | Tendering documentation stipulates that all bidders to fill out CSR self-assessment form for suppliers; additional elaboration on improvement is required in the event of breach of laws or regulations by suppliers. | 100% | 100% | 100% |
| Suppliers without violations against environmental protection laws | The environmental management status by suppliers is captured via online questionnaires. | 100% | 100% | 100% |
| Supplier CSR second-party audit | Through second-party audit, key suppliers are ensured free from environmental and human right risks such as forced labor. | 100% | 100% | 100% |
| Audits on civil engineering/cable contractors | A total of 191 audits were carried out on 74 contractors. As of the end of 2020, 29 suppliers were found with incidents of violation and the fines amounted to NT\$874 thousand. | | | |
| On-site safety and health inspections | Occupational safety and health officers under the Northern and Southern Taiwan Business Groups and the Mobile Business Group conduct at least three on-site safety and health inspections per week. Upon discovery of non-conformities, relevant departments will be notified for corrective action tracking. A total of 19,716 inspections were conducted on 936 contractors in 2020. | | | |



The first Taiwan telecom carrier to participate in the CDP Supply Chain Project Connecting Low-Carbon Supply Chain

After The Paris Agreement took effect, we entered an age of low-carbon economy. Chunghwa Telecom is a carrier in the information and communications industry, and this is a crucial issue of great urgency. We need to understand and respond to the impact of climate change and plan appropriate response strategies and actions at once. In 2017, CHT first joined the “Carbon Disclosure Project (CDP) Supply Chain Project.” We are promoting an understanding of climate change among our suppliers and will make every effort to increase their efficiency in carbon management. CHT is going to put an encouragement mechanism in place that will help suppliers with the research and development of products and services that have less impact on climate and environment. Our three goals for the supply chain carbon management are:

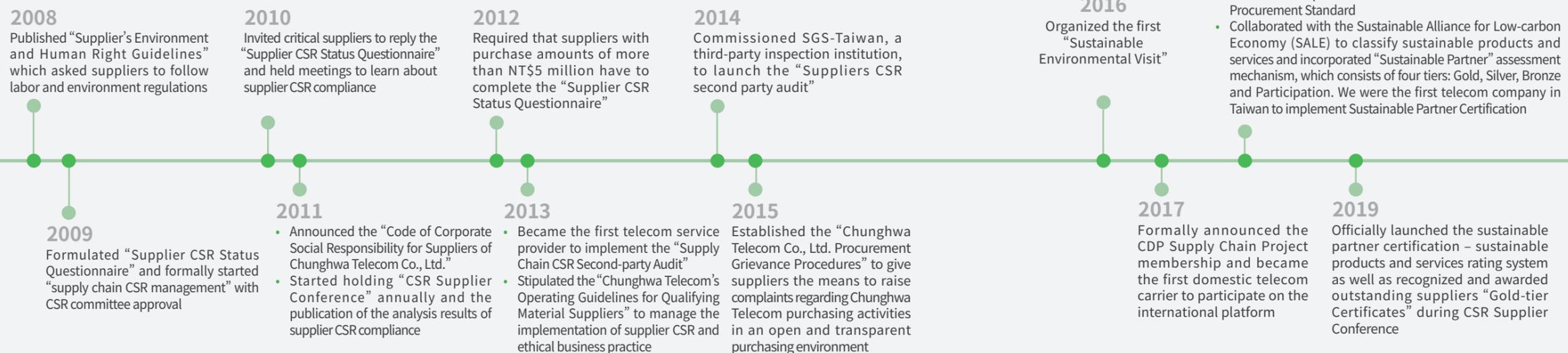
1. Increase supplier awareness and knowledge of climate change
2. Collect greenhouse gas emission information
3. Communicate and encourage changes in the behavior of suppliers



Abstract of the Results of Chunghwa Telecom’s 2020 “CDP Supply Chain Project”

| | | |
|---|---|--|
| 49% of suppliers responded to Chunghwa Telecom’s questionnaire (71% globally) | Chunghwa Telecom’s supply chain reduced carbon emissions around 2,470 thousand t-CO ₂ e | 48% of suppliers have taken energy-saving and carbon reduction measures |
| 79% of supplies incorporated climate change into long-term business strategic planning (on average 85% globally) | 55% of suppliers have set emission reduction goals | 61% of suppliers have established procedures for evaluating climate-related risks |

Supply Chain Sustainable Low-Carbon Management



2020

- Organization of the first ESG education and training event for suppliers
- Certifications of Excellence in Sustainable Supply Chain and of Sustainable Partner by SALcE
- Ongoing implementation of “Sustainable Partner Certification – Sustainable Products and Services Rating” with 16 suppliers rated as Gold-tier

The Achievements of CHT’s 2020 Supplier Energy Conservation Project

| Types of Projects | The Amount of Carbon Emissions Reduced (t-CO ₂ e) | Estimated Amount of Money Saved Each Year (USD) |
|--|--|---|
| Changes in Corporate Policies and Behaviors | 230 | 138,916 |
| Energy Efficiency in Buildings | 1,165 | 5,624,859 |
| Energy Efficiency in Manufacturing Processes | 1,544 | 3,344,367 |
| Low-carbon Energy Consumption | 307 | 14,285 |
| Self-produced Low-carbon Energy | 0 | 232,314 |
| Waste Reduction and Material Recycling | 5 | 1,210 |
| Others | 0 | 14,751,915 |
| Total | 3,251 | 24,107,866 |

Improvement of Suppliers’ Sustainable Actions

We published “Code of Corporate Social Responsibility for Suppliers of Chunghwa Telecom Co., Ltd.” in 2011, and it 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 extend to other participants of the supply chain to which the supplier is directly or indirectly related. We hope that suppliers will commit to our values and take more proactive steps towards maintaining a sustainable business ecosphere.

CHT shares resources with suppliers to help them develop R&D capabilities and future technologies. We also devote ourselves to the creation of a friendly and innovative environment. We engage suppliers in R&D projects, reward their contributions, and make arrangements for the transfer of acquired technology and licenses fairly. Regarding hardware, we continue to support the development of telecom facilities and testing environments; in terms of software, we utilize open platforms to share our benefits with suppliers.

| Type | Description |
|----------------------------------|---|
| Rewards 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, as well as a reduction of the performance bond to 5% of the value of the contract won. This was an attempt to exert influence as an industry leader and bring more attention to corporate social responsibility. |
| Training of professional skills | Our Telecom 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 2020, the institute organized 38 classes and trained 707 workers; 383 of whom had obtained certification. |

[Participation in the Arena of Environmental Education Together with Suppliers in 2020 Video](#)

S Strategy

Minimize the digital divide and create digital opportunities

M Management

The LBG assessment of investment in the community

Social Return on Investment (SROI) calculation

A Action

5I SDGs digital inclusion initiative

Telecom universal service

Digital Good Neighbors

“Read with You” - Community Network Tutoring

R Response

“I Helping” Training volunteers for the visually impaired

Corporate volunteer action

“5I SDGs” strategies and goals

T Target

Short-term:
Effort to make telecom services more accessible continually and adjust the Digital Good Neighbors sites resiliently

“5G Limitless Plastic Free Day” Campaign for the implementation of I Sharing and I Protecting in 2021

Mid-long term:
Social investment will reach 1% of revenues by 2025

To support the installation of access points for large-scale national festivals or sporting events and keep on providing tourists with a high-quality internet service every year

The Chunghwa Telecom Foundation funds NT\$30 million in the creation of digital opportunities in local communities

I Indicator

GRI
Social investment: NT\$1,076,690 thousand

GRI
Telecom subsidy for underprivileged groups: NT\$195,855 thousand

CHT
Digital Good Neighbors: 89 locations

CHT
SROI of “Read with You”: NT\$6.47

The Social Value Guide



The SDGs CHT contributes to in this section

Chunghwa Telecom “5I SDGs” Initiative

As the pilot of CSR, Chunghwa Telecom has developed its core competence to positively minimize the digital divide and devote itself to the creation of digital opportunities. Since 2015, we have chosen to connect with the 2030 Sustainable Development Goals (SDGs) of the United Nations. Through real action, we have demonstrated our determination to develop and implement global sustainability.

On the basis of complete digital inclusion strategy and bridging our years of experience in social inclusion, we promoted the 5I SDGs initiative. The “5I” in the initiative, apart from being a homonym to the phrase “I Love” in Chinese, the “I” also suggests to “achieve the SDGs via ICT” that effectively connects the SDGs with the objectives of the DIGI+ locally. By expanding partnerships in collaboration with NPO/NGO, supporting the sharing of knowledge and technology resources, creating a connection between the underprivileged and other diverse groups in this digital era, and realizing a win-win situation for digital human rights and an innovative economy, technology allows us to link to the good cycle.

CHT’s 5I SDGs initiatives: I Helping, I Sharing, I Learning, I Technology and I Protecting, as the first real initiative in Taiwan that connects Sustainable Development Goals (SDGs) with the Digital Country Innovative Economy Development Program (DIGI+) from the Executive Yuan. The goals of the 5I SDGs are:

1. Embrace the world from Taiwan, officially responding and implementing the UN SDGs
2. Respond to the objectives of the DIGI+ of the Executive Yuan, widen the scope of digital inclusion and ensure Information Equality in the networked digital era
3. Leverage the core functions, connect expertise across branches and corporate volunteer resources, and work with professional communities to deepen the impacts of socially inclusive actions



| 5I | I Technology | I Protecting | I Helping | I Learning | I Sharing |
|----------------------------|---|--|---|---|--|
| Corporate Volunteer | Technology Education Team | Green Service Team | Visually-impaired Service Team | Love in Learning Team | Community Service Team |
| Core Competence | Utilize digital technology to promote digital equality | Save energy and reduce carbon emission to treasure Earth with green actions | Assist the visually-impaired in bridging to digital technology and services | Bridging the rural-urban gap and flip education in rural areas | Promote local services as a friendly significant neighbor |
| Action Plan | <ul style="list-style-type: none"> Cellphone expert program in service center | <ul style="list-style-type: none"> Reduce marine debris Energy-saving volunteering | <ul style="list-style-type: none"> Beacon case Blind aid courses | <ul style="list-style-type: none"> Read with You CHTF's projects | <ul style="list-style-type: none"> Taiwan telecom digital collection commenting |
| UN SDGs | | | | | |
| 2030 Goals | <ul style="list-style-type: none"> Cultivate 2,000 technology education volunteers Technology education services for over 5 million | <ul style="list-style-type: none"> Reduce over 10 million t-CO₂e carbon emission of suppliers Help reduce energy and carbon emissions of communities over 1 million t-CO₂e Cleaning the marine debris for over 100 t | <ul style="list-style-type: none"> Benefits over 60,000 visually impaired people in Taiwan Helping in lives and entertainment of over 200 thousand visually impaired people | <ul style="list-style-type: none"> Over 8,000 university students as tutors Schoolchildren who have been tutored for over 180,000 hours | <ul style="list-style-type: none"> Over 50,000 Corporate Volunteer Services Over 3 million communities stakeholders being helped |

[Video of 5I SDGs](#)

I Technology + I Sharing – the Stronghold for the National Critical Infrastructure Protection

“National CIP Designated Exercise for Critical Infrastructure” led by the Executive Yuan is one of the highest level of national exercise, Chunghwa Telecom constantly evolves its technology and has been designated by the Executive Yuan to organize the Designated Exercise for six years in a row. With multifaceted cyber resources and meticulous response capability against disasters combined, CHT was awarded the collective honor of “Outstanding Entity” in 2020. Also, in light of the proper commanding and coordinating performance of our President Shui-Yi Kuo, which were highly recognized by the assessors, President Kuo was presented with the honor of “Best Commander”.



Our core expertise span from mobile, fixed line, submarine communication cable, and data to the emerging technological energies like AI big data, cybersecurity, and blockchain, which fall into the “communications” area of the national critical infrastructure. The exercise went for more than 7 months. We joined hands with 26 external response entities and realized a highly efficient horizontal communication. Targeting complex scenarios such as natural disasters, cybersecurity, man-made terrorism, we deployed overall contingency plans that fully demonstrated our resiliency in fighting and responding to disasters. As such, we successfully pulled off the contingency exercise that covered the widest in terms of disaster types and entity number while mobilized the most manpower over the years, and thus received the highest national recognition.

We shall continue to better the protections for various critical infrastructure, work closely with the public and private sectors to form joint defenses to ensure the business continuity of enterprises and the smooth communication and management of the country.

I Helping + I Learning – Helping the visually-impaired to see museum

Chunghwa Telecom works with the Tamkang University Resource Center for the Visually Impaired, to live up to the spirit of the Convention on the Rights of Persons with Disabilities (CRPD), proactively exercising the digital and cultural equality. In 2020, we donated the computers for the blind we developed together over the past 3 decades to the National Science and Technology Museum to establish “Telecom@Taiwan”, the first exhibition with the guiding service for the visually impaired permanently available to facilitate the visually-impaired visitors to “see” the works of science and technology.

“I Helping” of Chunghwa Telecom utilizes the smart information communication technology to develop “the integrated solution of in-depth museum tour for the visually impaired”, so that the visually impaired may listen to the information of exhibits via “Voice-based Personal Assistance App” before the tour. Combined with the QR Code on site for introduction, the braille system, push messages, and professional tour guides, one can gain knowledge of his/her surrounding environments via text and images. Also, corporate volunteers “exclusive to individual” are recruited and trained. “I Learning” – an effective, appropriate companion for the visually impaired to enjoy the tours to the National Science and Technology Museum and the National Museum of Natural Science throughout to explore the mysteries with biology and technology in depth.

“I Helping” and “I Learning” of Chunghwa Telecom bridges the cultural lag via intelligent technology, helping the visually impaired to learn, expand their living sphere, and cultivate expertise. It aims to present a decent example to bring out more applications that follow, so as to fulfill the Goal 9 “Industry, Innovation and Infrastructure” and Goal 10 “Reduced Inequalities” in the UN Sustainable Development Goals (SDGs). The popular science tours in 2020 benefited 42 visually-impaired individuals with 115 corporate volunteers involved.

[Video](#)





| UN SDGs | Description of CHT's responses to the UN SDGs |
|---------|--|
| | <ul style="list-style-type: none"> To bridge the gap of communication and information quality between the rural and urban areas, we go into the mountains and offshore islands to construct 4G cell sites. In response to the objectives of Digital Nation & Innovative Economy Development Program and Forward-looking Infrastructure Development Program - Digital Infrastructure, actions are taken as the testimony to CHT's capacity in social inclusiveness. Over NT\$400 million is allocated to construction and maintenance of universal telecommunication service to realize 4G in every town and village and 100% coverage in towns and villages in an endeavor to fulfill the visions of promote social innovation and information equality and realize the win-win of digital human rights and innovative economy. Responding to SDG 1 with actions to ensure that all, the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services. |
| | <ul style="list-style-type: none"> CHT develops AI agricultural analysis model. Agricultural sensors are deployed for catering to the needs of farmland to collect data of growth environment and weather for compilation and analysis to produce forecast of the farmland's conditions in the following days. Also, the data is uploaded to a smart agriculture cloud platform via NB-IoT technology, with which farmers can arrange their farming schedule accordingly. Through NB-IoT technology, technology is introduced to agriculture, analyzing key environmental monitoring parameters of produce. The optimum environment for produce's growth is built and risks of agricultural disaster are reduced via forecast of the future tendency of data changes, which facilitate the improvement of yield and quality of produce and achieve the goal of a smart quality agriculture. |
| | <ul style="list-style-type: none"> As the first telecom service provider that introduced OHSAS 18001 and TOSHMS as well as obtained certification of ISO 45001 – occupational health and safety management systems, CHT implements the management of its employees safety and health in an institutionalized and systematic manner. Health checkup for employees is conducted annually, together with Employee Assistance Programs, health lectures, hiking, tours, and sports competition for employees; professional medical doctors and health managers are invited to offer health advisory to employees, so as to build well-rounded caring measures for employees. The Mobile management tool eSafe Wizard app for occupational safety and health developed to allow personnel to manage the operation on-site via cellphone introduces cloud, paperless, real-time, and effectiveness into the safety and health management. |
| | <ul style="list-style-type: none"> Read with You Network tutoring program has been promoted joint forces with Fu Jen Catholic University since 2009, assisting disadvantaged students in primary and middle school students in the rural areas in their schoolwork while keeping the students company for their psychological need for companionship, which substantially facilitate school children in the rural areas in overcoming rural-urban gap and flipping their lives. CHT Digital Good Neighbor program executed for over a decade set up digital centers in 89 towns and villages across the country to promote digital applications joint forces with CHT, CHT Foundation, and local organizations and teams. CHT's ICT expertise is fully leveraged to assist local organizations in rural areas or in need to establish a stable network environment and ensure the rights to digital technology in local community. |
| | <ul style="list-style-type: none"> We value right to work and gender equality; the pay to female employees, management level or not, is equal to that of a male employee. Directions for Chunghwa Telecom Sexual Harassment Prevention and Grievance Management has been stipulated to put the Act of Gender Equality in Employment into practice. Appeal Review Committee has been established to handle appeals concerning discrimination against employees and other inappropriate conducts. There are 5 members on the committee, including 3 female members, which is over a half of the seats. |
| | <ul style="list-style-type: none"> Our water usage is primarily domestic purpose; apart from water for washing, water for cooling air-conditioning accounts for the majority of water usage. The water resource management nationwide is included in the EARTH system of CHT's own device, as the innovative water bill management in the system can achieve a centralized management of water bills and water usage throughout the branches in Taiwan with ease that not only reduces the waste of water bill printing, but also analyzes and controls the consumption of water resource via big data. In 2019, the water footprint inventory for the IDC at Banqiao introduce ISO 14046 water footprint standard and having obtained the assurance statement upon passing the SGS certification. Through the water footprint inventory of the IDC, the water usage and water pollution throughout the life cycle of the IDC are taken into consideration to identify the environmental risks concerning water resource and as the critical reference to the planning for water management policy and measures in the future. |
| | <ul style="list-style-type: none"> Renewable energy has been actively developed to bridge ourselves to green energy. As of the end of 2020, CHT has installed solar PV systems throughout Taiwan with a total capacity of 2,783.665 kWp. Marching into the green energy industry, we assisted to build the solar power stations. Undertook solar power plant construction projects of Taiwan Cement subsidiary and Taipower respectively, the previous one is the largest construction project of solar power plant commissioned by the private sector. |
| | <ul style="list-style-type: none"> CHT is the only telecom carrier with a labor union established and a collective bargaining agreement with it. The agreement covers issues pertaining to layoff, reward/punishment, promotion, health and safety, etc. In 2020, the employees covered by the agreement reached 99.26%. Meanwhile, a labor director is appointed to sit on the Board of Directors to voice the needs of employees to the top level. Complete education, reasonable remuneration, and a dignified environment allow our employees to commit themselves at work and reduce turnover rate. In 2011, EYE Social Innovative Call Center was established and the first comprehensive solution in Taiwan was released, training the visually-impaired individuals into call center personnel and offering work opportunities. |
| | <ul style="list-style-type: none"> High-speed broadband network is deployed continuously to improve the network speed for clients; ultra-speed broadband network of 1Gbps is being deployed pursuant to the DIGI+ of the Executive Yuan, which is expected to reach a 90% coverage by 2020 to meet the demands from the video streaming services in the age of digital convergence. Upholding the spirit of digital equality, we are actively deploying mobile network in rural areas and improving network infrastructure and communication coverage in the rural areas in addition to being the No. 1 in the number of cell sites both across Taiwan and of counties/cities deployed; the mobile broadband coverage in the rural areas is above 97.58%. |

| UN SDGs | Description of CHT's responses to the UN SDGs |
|---------|---|
| | <ul style="list-style-type: none"> We proactively monitor and protect human rights issue (anti-discrimination, gender equality, freedom of association, collective bargaining, child labor, forced or compulsory labor, and aboriginal rights etc.). We respond to the UN Declaration of Human Rights and the ILO Convention on the elimination of all forms of discrimination. We prohibit forced and child labor, and also respond to the domestic legalization of UN International Covenant on Civil and Political Rights and the International Covenant on Economic, Social, and Cultural Rights, dedicating to promote human rights awareness and assure respect and fair treatment to all stakeholders. On digital equality issue, CHT is a member of the International Telecom Union and we fully comply with International Radio Regulations and assure the freedom of communication, transparency in global roaming charges and competition, support of Telecoms in developing nations, telecom services for persons with disabilities and the freedom of speech over telecom networks. In addition, we support the UN Guiding Principles on Business and Human Rights by conducting a human rights issue in the operational value chain is evaluated and we maintain all risk at a minimum level. |
| | <ul style="list-style-type: none"> Following the development of IoT, 5G, big data analysis, and AI, as the Leader in Smart Living and Agent of Digital Economy Empowerment, we assist Taiwan in constructing smart sustainable cities via smart solutions. Utilization of Intelligent Operation Center (IOC) on the foundation of technologies such as IoT is at the core of a smart city. Local governments can integrate individual systems of different departments, collect and analyze municipal information, present it in an intelligent, systematic, and visual fashion, gain information of appeals from citizens, air quality, fire disasters, traffic safety, and medical resources, and construct sustainable, safe, health cities with the IOC platform. |
| | <ul style="list-style-type: none"> The first edition of CSR/ESG report was released in 2007 and has been disclosing the non-financial information of the corporation for 14 years consecutively. A green procurement strategy is fully implemented with over NT\$904 million of green procurement amount and accounting for 1.1% in the total procurement amount in 2020. We took the initiative of supplier CSR management actions in 2008, which made us the first telecom carrier that promotes CSR management for supply chain in Taiwan. From Code of Corporate Social Responsibility to questionnaire survey, annual CSR Supplier Conference, sustainability education, and on-site audits of over 100 suppliers in cooperation with the SGS, we improve the sustainability capacity of our supplier partners step by step. Through accumulation of a decade, apart from introduction of ISO 20400 sustainable procurement guidance, sustainable rating label was implemented in 2019, realizing the idea of sustainability in our products and services while maximizing the influence of procurement to create new green business opportunities. |
| | <ul style="list-style-type: none"> The dedicated Environmental Sustainability Task Force has been established under the CSR Committee, tasked with stipulation of environmental sustainable development goals and incorporation of issues of carbon management in the operation plan. In 2008, we introduced ISO 14064-1 greenhouse gases management system to inventory the carbon emissions with over 1,800 buildings and cell sites and pass the SGS certification each year, and the standard was officially converted to ISO 14064-1:2018 in 2020. We further connect to the external supply chains to promote sustainable, low-carbon supply chain practices and develop green products and services. Since 2016, approximately 100 supplier partners are led to environmental education venue to engage carbon management training to elevate their environmental protection awareness every year. We joined the CDP in 2018, promote whole supply chain carbon management actions, and are the first telecom carrier in Taiwan that signed and responded to the initiative of Task Force on Climate-Related Financial Disclosures (TCFD). We became the first telecom operator in the world that passed BSI's "conformity check for the TCFD Recommendations on climate-related financial disclosures" with the highest level attained. |
| | <ul style="list-style-type: none"> In response to "Changhua County Joint Beach Cleanup Activity" in 2020, a total of 60 corporate volunteers joined the effort to clean up 14,100 kgs of general wastes and recycle 5,600 kgs of resources to contribute to the cause of "Protect the Ocean; Love the Planet". |
| | <ul style="list-style-type: none"> We worked with Dr. Jane Goodall in 2006 and formed an alliance to participate and care for environmental education and conservation issues and sponsored the Jane Goodall Institute in planning, producing, and publishing the "Roots & Shoots Environmental Education Newsletter for Children." "Sustainable Environmental Education" initiative, firstly created in 2016, we take 126 supplier partners to the environmental education venue to engage "Sustainable Environmental Visit" training in 2020. |
| | <ul style="list-style-type: none"> To ensure that all employees engage operation activities with the highest ethical standards, we have stipulated Ethical Corporate Management Best Practice Principles, Code of Ethics, and Procedures for Ethical Management and Guidelines for Conduct to lay out the required ethics and responsibilities when employees engage business conducts while comprehensively promote and deepen the corporate culture of ethics and integrity. Guidelines for Personnel Evaluation and Standards Governing the Administrative Rewards and Discipline of Chunghwa Telecom Personnel have been stipulated for personnel evaluation; rewards and disciplines are to be given in a timely manner pursuant to the regulations upon deeds worthy of rewards and conducts to be disciplined. Safe and rigorous whistleblowing mechanism is established; the employee grievance hotline is made available in the Employee Section on the EIP. Certification of Conformity to Code of Conduct by an external third party is conducted as of 2020. |
| | <ul style="list-style-type: none"> We connect organizations, global and local, with the corporate resources and core competences to serve specific stakeholders, stakeholders in the rural areas, and disadvantaged stakeholders, so as to create a digitally inclusive society. Since 1988, we have been working with the Center of Resources for Visual Impairment of Tamkang University and dedicating ourselves to aiding the visually-impaired with telecom technologies and development of a voice-based assistance app for the convenience of their lives. Since 2009, we have been promoting Read with You network tutoring for over a decade joint forces with Fu Jen Catholic University, replacing roads with networks to offer schoolchildren in rural areas a hand on their schoolwork. Since 2015, working with the NTU Hackathon and establishing the network environment in the venue for the participants to retrieve data to produce innovative solutions. To facilitate the economic autonomy of community industries, CHT Foundation has been working with social enterprises like Xizhou Water Farmer Company, Indi-Power Social Enterprise, and Kanner Foundation of Taiwan, putting the produce and products of the indigenous communities on the CHT Employee Purchase Net for our fellow employees to jointly support the community-based industries while promote the idea of sustainability. Also, the Children Are Us bakery was set up on the Company to increase its channels with real actions. |



360 Degree of Digital Inclusion Actions

Chunghwa Telecom focuses its social investment in minimizing the digital divide and the creating of digital opportunities, given the specific nature and the core competence of information and communication in the ICT industry. We also spare no effort in the advocacy of corporate volunteers to participate in local community services, and proactively assist the communities in creating digital opportunities. We promote all aspects of digital inclusion using 360-degree vision. In 2020, Chunghwa Telecom established 27 sites for accessibility to telecom services in long-term support of a government initiative to protect fundamental rights to communications.

Chunghwa Telecom Digital Inclusion Strategy 2020 Results



Minimize the Digital Divide

Chunghwa Telecom Foundation Digital Good Neighbors

- The Digital Good Neighbors were located in **89** places

The annual investment of Telecom universal service is approximately 4.9 hundred million

- Telephone services for more than **220,000** homes in **86** rural communities in Taiwan
- Data communication service for more than **120,000** households
- Data connection service for more than 600 high schools, primary schools, and public libraries.
- More than **36,000** public telephones installed across **22** counties/cities

Preferential subsidies for the disadvantaged groups

- Care for **77,398** households of the disadvantaged groups, with subsidies amounting to NT\$**195,855** thousand

Equipment supports for major events

- Broadband circuit, MOD platform promotion, mobile base station vehicles, SMS, Wi-Fi AP, temporary data circuit
- The coverage rate of the 12Mbps popularization broadband service is over **97.58%**



Create Digital Opportunities

Chunghwa Telecom Foundation Click Taiwan

- The 12th Click Taiwan: totaling **58** school students went deep into **29** different villages

The CHT Digital Innovative Application Series

- The CHT Digital Innovative Application Series has been running for **13** years to promote digital development in Taiwan

PC education Network tutoring

- Read with You Community Network Tutoring has tutored near **3,152** students over **12** years and the tutorial hours has now reached **97,105**
- iPhone usage training courses for the visually impaired were regularly held in support of the visually impaired assistance plan

Assistance application development / Employment

- App for the Visually Impaired has been viewed over **20 million** times since 2013
- We established the EYE Social Innovative Call Center where the visually impaired can become paid service personnel and earn their own living

Social Investment Management

Chunghwa Telecom refers to the community investment evaluation mechanism of the LBG (London Benchmark Group), to conduct evaluations on the possible community benefits and business benefits before an investment made. The quantification of the contribution of social investment allows us to make reasonable resources allocation while avoiding repetition. It helps the decision-making and promotion of charities as well as future sponsorship.

Social Investment Statistics for 2020

| | |
|---------------------------------------|------------------|
| Cash Donations | 167,262 |
| Product or Service Donations | 705,118 |
| Management Expenditures | 20,891 |
| Corporate Volunteer Services | 183,420 |
| Total | 1,076,692 |
| Hours of Corporate Volunteer Services | 16,970 |
| Percentage of Revenue | 0.52% |

Unit: NT\$ thousand

Minimizing the Digital Divide

Chunghwa Telecom Foundation was founded in 2006. Through long-term cultivation of our core competence to communities, tribes, urban fringe, and areas with relatively lack of resources, the Foundation is a resource platform for connecting and arranging the good material, and further share to needed locations. It has become the strength that supports and assists the advancement of these local areas.

Chunghwa Telecom Foundation Cultivates and Works with Communities for the Common Good

Chunghwa Telecom and Chunghwa Telecom Foundation have joined hands cultivating communities for 13 years, establishing digital good neighbors across Taiwan to bridge the rural-urban gaps in resources, serve as the platform to connect resources, offer resources such as community digital learning, youth volunteering, sports/cultural/art activities, and local industries promotion, as well as discover moving stories and local industries unique to local communities.

Today, the partnering bases have been set up across all corners of Taiwan Island and offshore islands, covering ethnic groups of Minnan, Hakka, indigenous peoples, and the new immigrants. With the unity and connection of good neighbors, we expect a variety of residents different in ethnicity and ages can all gain opportunities and energy from them while bridging the gap between cities and towns/villages in resources.

Click Taiwan — Service Learning for Youth in Universities and Colleges

Since 2009, Chunghwa Telecom Foundation accepts applications from youth in college with 2 people in a group. The students are required to have a prior knowledge of the needs in the community, combine their expertise, design, and implement services catered to the local needs, while documenting the processes in texts and images. In 2020, students from 31 departments across 16 universities, total 29 groups carried out services in communities with the respective expertise and talents like planning activities of poetry composition and reciting, GPS hometown treasure-hunting game, painting hometown as well as courses like reading, laws, baking, play writing, and photography for the people in the communities, young and old, to enjoy a fruitful summer vacation. Meanwhile, they also conducted historical and cultural field research in the communities, designed pamphlets for the industries, shot the root-seeking documentaries of the tribes, curated the opening exhibition for the Tribal History Museum, etc. to preserve local stories while bring forth new ideas and perspectives for the communities to facilitate the communities' growth and bridge the urban-rural gaps from diverse facets. The participants in Click Taiwan had been primarily youth from the departments relevant to communication. In 2021, we adjusted our marketing approach and expand our reach to more schools and departments such as those of natural science in hopes of ushering in more perspectives for the local communities in rural areas in order to propose service solutions tailored to the needs on the ground locally.

[Event Link](#)

Reflections from the Participating Students in Click Taiwan



Katratripulp Tribe, Taitung

From the youth of the Katratripulp Tribe, we could detect their profound affection and passion for the tribe and cultural inheritance. Hence, we'd like to share the spirit and emotion with each and every audience.



Rubas Tribe, Hualien

"There are numerous ways to come home. You get to choose what you want, as no one demands you to know them all. Just find something interesting to find your own identity." As time goes by, the people of Truku dwelling in the Rubas Tribe have gone beyond the old days when they traded with each other in kind self-sufficiently to the days of trading in currency. Making a living for the family and for study become the new center in their lives.



Tian En Association, Taichung

The family of the pastor gave up their works, following the pastor's footstep to contribute to the children of Dadu. They support and believe in each other and work collectively. Everyone in Tian En is an essential piece to a puzzle that builds this place full of love. The pastor's family share a more intimate, stronger bond thanks to Tian En. Hence, this is what we want to document, i.e. the content, kind family that left a mark on our hearts.



Mailiao Culture Association, Yunlin

Without the invitation of my partner, my summer vacation this year would have been just like the other summer vacations previously, working day in and day out and going on trips with friends to the Instagram hotspots everybody goes. The trip I've always aspired for is a trip for me to find a place to stay longer. I think if you want to know a place, you have to blend in the local life, so you can truly appreciate the features, the beauty, and the attractions of the place.

2020 Social Contribution of the Foundation

| Item | Youth Empowerment | Digital Empowerment | Local Empowerment | Social Marketing | CHT Women's Basketball Team |
|------------|-------------------|---------------------|-------------------|------------------|-----------------------------|
| Unit: NT\$ | 2,888,895 | 4,004,915 | 3,302,624 | 4,249,313 | 20,946,802 |

Preferential Subsidies for the Disadvantaged Groups

Chunghwa Telecom has long been subsidizing telecom services for the socially disadvantaged, and assuring their access to basic communications. The following are the main preferential plan and amount in 2020.

| Preferential Plan | Preferential Content | Preferential Amount (NT\$ thousand) | Beneficiaries (persons) |
|--|--|-------------------------------------|-------------------------|
| Caring Series Rate Plan (Mobile) | <ul style="list-style-type: none"> Double communication hours from the original rate plan for the visually impaired, hearing impaired and speech impaired. 300 free SMS intra-network and 100 free SMS extra-network for the hearing and speech impaired. The intra-network image telephone rate is the same for 3G customers. | 390 | 123 |
| Broadband Preferential Plan for Low-income Households | 50% off on 16M/3M, 35M/6M, 60M/20M, 100M/40M, ADSL 2M/64K & ADSL 5M/384K monthly rate. | 40,116 | 8,361 |
| 4G Mobile Data Plan for the Disabled | Disabled persons are entitled to an NT\$100 discounts for limited 399/436/499 plan, NT\$200 discounts on monthly subscriptions when subscribing to the 4G 599 plan and above plus Wi-Fi hotspots for free during the term of the contract. | 132,519 | 58,505 |
| Broadband Preferential Plan for the Disabled | <ul style="list-style-type: none"> 5% off on HiNet 16M/3M, 35M/6M, 60M/20M and 100M/40M monthly rate, 30% off for the announced rate of HiNet non-fixed monthly plan 15% off on ADSL 5M /384K monthly rate. 5% off for other speed rates. Monthly rate for non-fixed Internet plan lowered from NT\$280 to NT\$180. | 13,578 | 7,317 |
| MOD Caring Project and Project for the Socially Unfortunate | <ul style="list-style-type: none"> Platform charges: A 50% discount (NT\$45/month) from the work completion date. Subscribers of the MOD self-choose package, family premium package, family advance package, family advance package B, family high-quality package, family special package, family popular package, family golden package are entitled to 30% discount, and the normal rate after the discount period expires. The above projects all apply to the socially unfortunate and the caring project has no time limitation, the project for the socially unfortunate provides discounts for the first 24 months after the work completion date. | 9,237 | 3,079 |
| Healthy Net Plan | HiNet Adult Content Gatekeeper protects children from harmful websites such as pornography, violence, suicide, weapons, gambling, and drugs. The service in the first year is rendered to low-income households for free. | 15 | 13 |
| Welfare Public Telephone | <ul style="list-style-type: none"> Installed 110 cm from the floor in public areas for the convenience of the disabled. The keyboard was designed with embossing on the 5 key for the visually impaired, and a voice adjustment function (from 3db to 6db) was provided exclusively for people with hearing aids. A slot for inserting is designed on the side of an IC card 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 (Help Me in Chinese homonym). 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 the relay and up to 30 words for reply). Those who are not hearing and speech impaired may also call the hotline (0800-080880) for the relay of messages via fax to the hearing and speech impaired. The service hours are 08:00 to 21:00 daily. | | |

The Creation of Digital Opportunities

By utilizing our expertise in telecom technology, we will ensure that everyone shares the advantage of technology despite financial or social standing, or geographical location. In this way we hope to quickly achieve the objective of minimizing the digital divide and creating digital opportunity. In addition to previously described action plans and subsidy, different from those of other enterprises, we also contributed resources to developing related products and services to meet the needs of the disabled and allow them to realize their right of access to the digital technology and convenient lives.

Chunghwa Telecom Women's Basketball Team Gives Back to Communities

Established in 1974, Chunghwa Telecom Women's Basketball Team (CHT WBT) has been involved in "Love & Care Charity Tournament Series" for 10 consecutive years since 2011, hoping to convey the refreshing, healthy image of CHT WBT and the ESG philosophy of Chunghwa Telecom via the Series.

In 2020, to enhance its bonds with communities and in light of the epidemic, we presented "Basketball Kids Summer Camp - CHT WBT in the House" at Good Digital Neighbors to play basketball with kids in the communities like Changhua, Yilan, and Tainan. In addition, 3 games of "3-on-3 Basketball Charity Cup" were organized in Hsinchu, Taitung, and Pingtung, drawing nearly 400 teams across Taiwan. Hence, we promote the sport of basketball via basketball games while uncover young seeds here and there and inspire young students to dare to realize their dreams.



Placemaking Promotion - Click Taiwan Innovative Design Action

The CHT Foundation saw the manpower and resources in short supply locally while the local industries were limited in their developments. With 2020 as the starting point, we came up with the project of "Click Taiwan Innovative Design Action". Together with a social enterprise, we recruited designers with expertise in design and urban-rural development as well as teachers from universities and colleges. They were to team up and go into the designated communities. By tapping into their design power, the selected teams were to produce solutions for local industries jointly with their community partners. After a fierce competition in the selection process, three designer teams from NCKU, NKUST, and Asia University stood out.

Starting from August 2020, they went into the communities to engage dialogues locally. After brainstorming with multiple stakeholders, preliminary studies, design and development, prototyping, and the funding for realization in the end, they assisted Song Zhu Community in Lucao Township of Chiayi County, Liming Community in Neipu Township of Pingtung, and Paqeljing Social Enterprise from Tjuabal Tribe of Taitung to produce design solutions together. Also, they organized an offline exchange event, followed by an online salon, inviting Frank Hung, the author of bestsellers, and Qing-Yang Xiao, renowned designer shortlisted in Grammy Awards, to talk with each other and share their practical design solutions for placemaking.



Paqeljing Social Enterprise, Taitung County

- The original lines and colors of "Paqeljing" were softened to present a new logo that is more friendly and warm.
- In echo with the imagery of tenth anniversary, the "Gleaning Series" belly bands were designed with the earth tones and food ingredients introduced to promote the produce of the indigenous community.

Liming Community, Neipu Township, Pingtung

- To promote indigenous produce, the traditional mochi is fused with local produce (e.g. dragon fruit, peanuts, cocoa, butterfly peas, etc.) to give birth to the new mochi that is colorful and healthy. Ten corresponding mascots were designed as well to draw the younger population to buy the products.
- The brand identity, Liming Boutique, is created with the community's landscape, name, and local industry as the elements for the CIS.

Song Zhu Community, Lucao Township, Chiayi County

- The giftbox is designed with the "Song Zhu Cattle" by the elderly as well as story cards and a community map inside to arouse the nostalgic mood of the people away from home while invite new friends to pay a visit.
- The picture book of the community produced through field research preserves the local stories.



Community Network Tutoring—“Read with You”

Chunghwa Telecom has supported education and shown its concern for rural villages ever since 2009, in the aftermath of Typhoon Morakot. We extended our service to the permanent settlements and newly developed communities in the disaster zones. Using visual Internet technology, we delivered educational resources in the form of private tutorship in rural villages for the unfortunate. We hope to give the children of the next generation a learning environment which is safe, dignified, and hopeful.

| Item | Description |
|-----------------------|---|
| Goal | By 2030, we hope to: <ul style="list-style-type: none"> Assist 5,000 students in the remote areas with network tutoring Accumulate more than 8,000 volunteers to participate in network tutoring Accumulate more than 150,000 training hours for tutoring volunteers training |
| Characteristic | <ul style="list-style-type: none"> Online education with one-on-one individual tutoring by university students helps pupils of junior high schools and primary schools in the rural villages to enhance their learning and provides equal learning opportunities. |
| Method | <ul style="list-style-type: none"> To realize the spirit of stakeholder engagement, we have cooperated with the Center of Care Services for Taiwan Rural Area Education at Fu Jen Catholic University. University students helped the cause with one-on-one tutoring to take care of the school children in the rural villages and disaster zones. Customized exclusive class supplements to care for the spiritual growth of schoolchildren through companionship, interaction and communication. |
| Participant | <ul style="list-style-type: none"> Taoyuan Dayuan Catholic Church, Taoyuan Guanyin Catholic Church, Chiayi Fu Jen High School, ihope Association of Tainan Assembly of God, Kaohsiung Daai Library, Pingtung Feng-Lin Church, Pingtung Chao Chou Boys Town, Hualien Yuli Library, Taitung Fukid Tribe, Taitung Luye Library, Taitung Kaulahan Association, Taitung Citong Library, Taitung Lanyu High School, and Matzu High School. |
| Major Result | <ul style="list-style-type: none"> University students improve the children’s learning outcomes with one-on-one individual tutoring of the school children in rural villages. They also took care of their need for personal communication and interaction. More than ten-years efforts by e-Tutor, it has helped several dozen students gain admission to national and private universities, including the National Yang Ming University and Taipei Medical University. Assistance to remote villages has really reduced the divide between the cities and counties, radically improved the opportunities available to the children and changed their lives. |

| Schoolchildren who have been Tutored | University Students as Tutors | Tutorial Hours | Participants in Summer and Winter Classes |
|--------------------------------------|-------------------------------|----------------|---|
| 3,152 | 4,863 | 97,105 | 2,980 |

1. The data period started from December 2009 to December 2020.
 2. The person-times and training hours for the mid- and long-term targets for volunteers were adjusted thanks to the early attainment of the program’s targets.

EYE Social Innovative Call Center—Innovative Technology for Hope

[Video](#)

Chunghwa Telecom has engaged in long-term cooperation with the Resource Center for the Visually Impaired at Tamkang University for more than 30 years and the EYE Social Innovative Call Center was set up in 2011. These joint efforts led to the unveiling of the first Total Solution in Taiwan. It includes research, development, and improvement of a computer-assisted telephone system, and its corresponding skill development, training, supervision for the needs of the visually impaired talents to offer the phone-services.

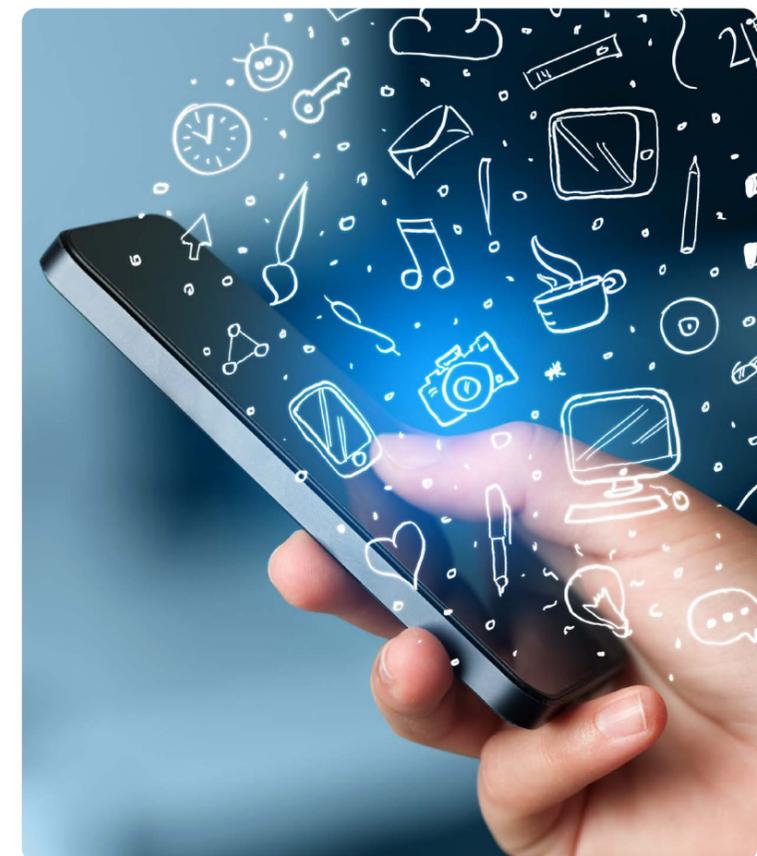
- In 2015, the Company completed an upgrade to the Taipei City 1999 hotline, making it user-friendly to the visually impaired. This upgrade included: a real-time notification system, a three-way call feature with voice recording, English/Japanese services, a verbal abuse referral feature, a call duration reminder, a health regulation inquiry feature, and a quick link to service sub-categories. These upgrades greatly improved the scope and efficiency of the service.
- By the end of 2018, the Total Solution had provided 8 working opportunities for the satisfaction surveyors of Chunghwa Telecom (including one visually impaired manager). And there were another 15 customer service personnel (12 visually impaired and 3 supervisors) for the Taipei City 1999 hotline.
- In 2020, we continued to supply job opportunities to CHT satisfaction survey personnel with “overall solutions”, producing approximately 5,500 valid questionnaires with a yield rate over 96% on a monthly basis. In average, the 1999 Citizen Hotline of Taipei City processed about 8,000 calls monthly with 10 external entities visiting the call center annually, which made it a model for the other call centers.
- We initiated new employment opportunities for persons with spinal injuries. Including one with severe injury serves as 4G visual assistance service personnel, i.e. assisting visually impaired people with image identification through 4G cloud services, which helps to promote the quality and independence for the visually impaired people’s daily life while providing employment opportunities for the severely disabled.

Assistance Application Development

We believe humanity to be the foundation of technology innovation. 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 both visually impaired and elders to face some of their difficulties. We also successfully developed “i4Blind” app in 2016 that makes a great assistant to the visually impaired and the elderly in life. In 2020, the number of logins hit 510,000 with over 52,679 downloads and over 20 million viewings accumulatively.

Automated Voice Donations

The automated voice system for donations developed by Chunghwa Telecom Laboratories has proved to be helpful for charities, social welfare, cultural, educational, and environmental protection institutions. It gives donors a more convenient means of donation. A donor simply needs to pick up their cell phones, dial the short code, and follow the voice prompts to contribute care to those in need. In 2020, there were 8,235 donations, totaling NT\$4 million.



06

Public Policy Participation

In 2020, Chunghwa Telecom donated about NT\$600 million in the participation of public policy items including joining national and international associations, supporting government popularization services and constructions and developing its prospective industries.

We have joined almost 100 associations and groups to upgrade its technology and stimulate the development of the industry through exchange and cooperation within the industry or across different industries. The following table presents the top three associations and other iconic associations Chunghwa Telecom involves in.

| Name of Association | Description | Allocated Amount Annually NTD | Name of Association | Description | Allocated Amount Annually NTD |
|--|--|-------------------------------|--|--|-------------------------------|
| Taiwan Telecommunication Industry Development Association | We care for the development of telecommunication industry in Taiwan while facilitate exchanges among peers and the healthy networking of the industry as a whole with the Association as the platform. | 8,014,000 | Taiwan Network Information Center | To facilitate and coordinate exchanges and integration among the national and international Internet organizations, promote the popularization of Internet application, and secure international Internet resources and opportunities for cooperation. | 441,000 |
| GSMA | Exchanges are carried out with mobile communication carriers worldwide, in software and hardware, to tap into the pulse of the global mobile communication ecosystem and facilitate the thriving development of the mobile communication industrial chains. | 2,600,175 | Intelligent Transportation Society of Taiwan | With resources of industries, governments, academia, and research communities, at home and abroad, we lead and facilitate development of intelligent technology in ICT and transportation to improve transportation safety, energy-saving, and emission reduction, as well as raise the efficiencies of energy and resources, so as to fulfill our social responsibility as a world citizen. | 200,000 |
| The Chinese Institute of Electrical Engineering | With a long-term support to the Institute's development in the fields of electricity, telecommunication, information, and electronics, we facilitate the academic exchanges among the relevant industries and talents domestically. | 2,530,000 | Pacific Telecommunications Council | The exchange and alliance with the professionals in the industries, the public sector, and academia related to the telecommunication and ICT industries in the Asian-Pacific region help in business promotion and publicity. | 140,085 |
| TM Forum | The knowledge of 5G operation and management, development strategies, and advanced technologies worldwide are gained to streamline with the international standards, create an integrated 5G ecosystem, offer quality ICT services, and innovate the digital transition of industries. | 1,906,629 | Taiwan Business Council for Sustainable Development (BCSD-Taiwan) | With the joint force of member businesses, we advocate and promote environmental protection and resource management while bridge the international trends and practices in sustainable development for the purpose of corporate's sustainable development. | 120,000 |
| Taiwan Media Watch | To support "safeguarding press freedom, realizing media justice, promoting media self-discipline, and protecting people's right to know". | 1,000,000 | APSCC (Asia-Pacific Satellite Communications Council) | To harness the application and technology in satellite communications as well as expand the satellite business and technological growth. | 90,000 |

Strategies and Goals for Material Topics

| Material Topics | Short-term Goals (2021) | Mid- and Long-term Strategies (2022-2026) |
|---|--|--|
| Innovative ICT products and services | <ul style="list-style-type: none"> Launch of “Rise on, Together 2021” transformation plan | <ul style="list-style-type: none"> Over 5 million 5G users Over 10,000 5G base stations |
| Climate change and energy management | <ul style="list-style-type: none"> Complete the first smart green-energy staff dormitory in Taiwan “5G Limitless Plastic Free Day” Campaign for the implementation of I Sharing and I Protecting | <ul style="list-style-type: none"> The capacity for renewable energy constructed from proprietary was 3,975.5 kWp by 2023 Taking 2017 as the base year, a 10% reduction of greenhouse gas emissions in our buildings Taking 2017 as the base year to cumulatively save 10% of the energy by 2023 pursuant to the facilities room energy-saving program |
| Competitive remuneration and benefits | <ul style="list-style-type: none"> Fosters talents and allows all employees to share the results of the operations, recruit and retain talent with a 3% salary increase | <ul style="list-style-type: none"> Workplace childcare support centers will start by 2022 To ensure that employees’ average salary is in the top 5% of the industry To maintain the collective agreement coverage rate at 99% To reach 100% in implementing general education courses |
| Fair and equal labor-management relations and employee engagement | <ul style="list-style-type: none"> Obtained the external third-party Certificate of Conformity for Code of Conduct (CoC) Maintain reward of senior employees | |
| Health and safety | <ul style="list-style-type: none"> Reach 99% in employees’ participation in the routine physical examination 100% branches receive ISO 45001 certification by 2021 | <ul style="list-style-type: none"> Maintain ISO 45001 management system certification valid for every branch |
| Accurate product labelling | <ul style="list-style-type: none"> 0 case of major unclear labelling or incidences of fraud | <ul style="list-style-type: none"> To ensure 100% complete compliance with laws and internal regulations in promotional information of products and services |
| Rigorous cybersecurity protection | <ul style="list-style-type: none"> 0 case of major cyber security and personal information leakage incidents Insure “data protection insurance” Obtained the external third-party SGS Certificate of Conformity for Privacy Policy | <ul style="list-style-type: none"> Regular examination and adjustment to the policies, regulations, and strategies for cyber and personal information security Conduct External and internal audits, pass the investigations of the competent authorities, and obtain third-party certifications |
| Corporate governance | <ul style="list-style-type: none"> 0 cases of major legal violations Proportion of independent directors on the Board maintain 35% and above 2 females directors on the Board of Directors | <ul style="list-style-type: none"> To ensure that no major violations of Taiwan’s economic, environmental and social regulations occur |
| Sustainable supply chain management | <ul style="list-style-type: none"> Maintain 100% of “tier 1 suppliers” CSR current status assessment in 2020 The number of suppliers responding to Chunghwa Telecom’s CDP Supply Chain Project questionnaire reaches 200 | <ul style="list-style-type: none"> Complete 100% of “critical tier 1 suppliers” ESG on-site visits and audits in 2023 Complete the sustainability rating of 140 suppliers and issue the certification mark by 2025 The green procurement amount reaches 50% in the total procurement |

GRI Standard Index

GRI 103 Management Approach

| Material Topics | How We Manage the Topic | Purpose of the Management Approach | Policy | Performance (Page) | Grievance Mechanism |
|---|--|--|---|--------------------|---|
| Economic Performance (Innovative ICT Products and Services) | We have a robust corporate governance system that involves independent directors and supervisors. The Audit Committee, the Strategy Committee and the Audit Department have been established for effective control of operating costs and business direction. | To ensure that the Company's operations conform to the requirements of the government and supervising authorities, and that shareholders' and stakeholders' interests are protected. | <ul style="list-style-type: none"> • "Business Integrity Principles" • "Behavioral Guidelines" • "Corporate Governance Principles" | P.22 | <ul style="list-style-type: none"> • Shareholder hotline: 2394-1845 • Investor hotline: 2344-5488 |
| Market Presence | We have established a compensation committee, which helps to ensure that we provide employees with competitive salaries. We're also able to adequately reward our employees through transparent salary policies. | Ensuring that the company's compensation policies, systemic standards, and structures comply with government regulations and labor rights. | <ul style="list-style-type: none"> • "Employment Contract" | P.71-72 | <ul style="list-style-type: none"> • Grievance hotline: 0800-080998 |
| Energy (Climate Change) | We perform annual greenhouse gas inventories & verifications and publicly disclose the related environmental information. We effectively keep track of environmental resources and energy saving performance through the self-developed EARTH system. | To improve the environmental management efficiency via the acquisition of international certifications. | <ul style="list-style-type: none"> • "Energy Saving Policy for A Sustainable Environment" | P.104 | - |
| Supplier Environmental Assessment | We enhance the sustainability of our overall supply chain every year through "questionnaire evaluation, education and training, third-party on-site audits and sustainability certification". | Construct a hierarchical green supply chain and build a sustainable ecosystem through extensive alliances. | <ul style="list-style-type: none"> • "Code of Corporate Social Responsibility for Suppliers" | P.112-117 | <ul style="list-style-type: none"> • Procurement Complaint Handling Team • Grievance hotline: 2344-4081 |
| Supplier Social Assessment | | | | | |
| Employment | CHT treats employees as its most important partners, and is committed to providing employees the utmost "assurance." For best protection of employees' work rights, Chunghwa Telecom has signed the "employment contracts" with individual employees and notifies them of changes regarding employment under the Labor Standards Act. Furthermore, we exploit various communication channels including seminars and labor management meetings to maintain a harmonious and mutually beneficial working relationship. | To ensure that employees' employment and work rights are protected. | <ul style="list-style-type: none"> • "Employment Contract" • "Business Integrity Principles" • "Codes of Conduct" • "Corporate Governance Principles" • "Collective Agreement" | P.71-73 | <ul style="list-style-type: none"> • Compliant Investigation Committee • Grievance hotline: 0800-080998 |
| Occupational Health and Safety | Chunghwa Telecom is the first telecom company in Taiwan to incorporate an Occupational Health and Safety Management System (OHSAS 18000). We ensure the effective management of employee health & safety through an institutional and systematic mechanism. In addition to complying with health & safety regulations and other related requirements, we also continue to improve the OHS facilities and measures of our working environment. | Chunghwa Telecom guarantees its employees a safe and healthy working environment to prevent occupational hazards. | <ul style="list-style-type: none"> • "Employee Contract" • "Collective Agreement" | P.83-85 | <ul style="list-style-type: none"> • Grievance hotline: 0800-080998 |
| Marketing and Labelling | In addition to providing relevant information and usage descriptions on all products and services offered, we also have a "Marketing Policy" in place to ensure that business activities are carried out in compliance with the authority's rules and requirements. Compliance with such policy constitutes part of senior managers' performance appraisal. | To protect consumers' rights to information and ensure the clarity and transparency of marketing information. | <ul style="list-style-type: none"> • "Distribution Sales Aid Management Guidelines" • "Marketing Policy" | P.24, 96-97 | <ul style="list-style-type: none"> • Telecom Service Center: 0800-080-123 |
| Customer Privacy | "Cybersecurity and Privacy Protection Steering Committee" has been established with the SEVP, appointed by Chairman, as the "CISO" to achieve the objective of zero toleration via regular meetings and third-party verification. | To ensure that customers' personal information is strictly protected. | <ul style="list-style-type: none"> • "Cybersecurity Policy" • "Privacy Policy" • "Personal Data Collection Notice" | P.55, 94-95 | <ul style="list-style-type: none"> • Telecom Service hotline: 0800-080123 |
| Socioeconomic Compliance (Corporate Governance) | Ethical management and legal compliance are the principles and guidelines that govern our operations. To ensure all operations comply with socioeconomic laws and regulations, all the departments as well as the level 1 and level 2 institutions of Chunghwa Telecom are operating in line with the laws and regulations pertaining to the businesses. | To ensure that the Company's operations are free from violations of socioeconomic regulations. | <ul style="list-style-type: none"> • "Business Integrity Principles" • "Codes of Conduct" • "Corporate Governance Principles" • "Distribution Sales Aid Management Guidelines" • "Marketing Policy" • NCC's "Regulations for Administration of Base Stations of Mobile Communications Network Businesses" | P.24 | <ul style="list-style-type: none"> • Compliant Investigation Committee • Grievance hotline: 0800-080998 |

2020 Evaluation of the Management Approach

| Material Topics | Mechanism for Evaluation | Result of the Evaluation (Page) | Adjustment |
|---|---|---------------------------------|------------|
| Economic Performance | Independent directors, supervisor system, internal audit, Board of Directors evaluation (self-evaluation: by the directors and functional committees; third-party evaluation: by the external professional institutes commissioned), evaluation by the relevant authority | P.22 | None |
| Market Presence | Compensation committee, internal audit, evaluation by relevant regulatory authorities | P.71 | None |
| Energy | ISO 14001, ISO 50001, ISO 14064-1 management system certificate, TWSE Governance Evaluation | P.106 | None |
| Supplier Environmental / Social Assessment | CSR Survey, CDP Supply Chain, external third-party audit, SALCE Sustainable Partner Certification, TWSE Corporate Governance Evaluation | P.115 | None |
| Employment | TWSE Corporate Governance Evaluation, Employment Contract, Collective Agreement | P.71, 74 | None |
| Occupational Health and Safety | Employment Contract, Collective Agreement | P.83 | None |
| Marketing and Labelling | NCC's telecom service quality survey, communication/consumer complaint report | P.24 | None |
| Customer Privacy | Grievance system, system certification (ISO 27001, BS 10012), internal auditor certification, TWSE Corporate Governance Evaluation | P.55, 94-95 | None |
| Socioeconomic Compliance | NCC's telecommunication service quality survey, communication/consumer complaint report, evaluation of Board of Directors' Performance by external third-party, TWSE Corporate Governance Evaluation, CoC by the external third party | P.24 | None |

| GRI 103 Management Approach | Disclosure Item | | Page |
|------------------------------------|-----------------|--|-----------|
| | 103-1 | Explanation of the material topic and its Boundary | P.36-37 |
| | 103-2 | The management approach and its components | P.138-139 |
| | 103-3 | Evaluation of the management approach | P.140 |

General Disclosure

| General Disclosure | Disclosure Items | Page / URL and Comment | Identified Omission and Explanation | External Assurance |
|-------------------------------|--|--------------------------|-------------------------------------|--------------------|
| Organizational Aspect | | | | |
| 102-1 | Name of the organization | Chunghwa Telecom | | V |
| 102-2 | Activities, brands, products, and services | P.14-15 | | V |
| 102-3 | Location of headquarters | P.14 | | V |
| 102-4 | Location of operations | P.14 | | V |
| 102-5 | Ownership and legal form | P.14 | | V |
| 102-6 | Market served | P.15 | | V |
| 102-7 | Scale of the organization | P.13-14, 18, 72 | | V |
| 102-8 | Information on employees and other workers | P.72-73 | | V |
| 102-9 | Supply chain | P.16-17 | | V |
| 102-10 | Significant changes to the organization and its supply chain | None | | V |
| 102-11 | Precautionary Principle or approach | P.44-55 | | V |
| 102-12 | External initiatives | P.24, 119-121 | | V |
| 102-13 | Membership of associations | P.134-135 | | V |
| Strategy | | | | |
| 102-14 | Statement from senior decision-maker | P.4-5 | | V |
| Ethics and integrity | | | | |
| 102-16 | Values, principles, standards, and norms of behavior | P.24 | | V |
| Governance | | | | |
| 102-18 | Governance structure | P.18 | | V |
| Stakeholder engagement | | | | |
| 102-40 | List of stakeholder groups | P.40-41 | | V |
| 102-41 | Collective bargaining agreements | P.74 | | V |
| 102-42 | Identifying and selecting stakeholders | P.40 | | V |
| 102-43 | Approach to stakeholder engagement | P.40-41 | | V |
| 102-44 | Key topics and concerns raised | P.40-41 | | V |
| Reporting practice | | | | |
| 102-45 | Entities included in the consolidated financial statements | 2020 Annual Report P.105 | | V |
| 102-46 | Defining report content and topic Boundaries | P.36-37 | | V |
| 102-47 | List of material topics | P.36-37 | | V |
| 102-48 | Restatements of information | None | | V |
| 102-49 | Changes in reporting | None | | V |
| 102-50 | Reporting period | 2020/1/1-2020/12/31 | | V |
| 102-51 | Date of most recent report | 2020/8/10 | | V |
| 102-52 | Reporting cycle | Annually | | V |
| 102-53 | Contact point for questions regarding the report | P.1 | | V |
| 102-54 | Claims of reporting in accordance with the GRI Standards | Core | | V |
| 102-55 | GRI content index | P.138-143 | | V |
| 102-56 | External Assurance | P.147-149 | | V |

Topic-Specific Disclosures

| Topic-Specific Disclosures | Disclosure Item (topics without years noted are of the 2016 edition of the GRI standards) | Page / URL and Comment | Identified Omission and Explanation | External Assurance |
|--|--|------------------------|-------------------------------------|--------------------|
| 201 Economic Performance | | | | |
| 201-1 | Direct economic value generated and distributed | P.22 | | V |
| 201-3 | Defined benefit plan obligations and other retirement plans | P.86-89 | | V |
| 202 Market Presence | | | | |
| 202-1 | Ratios of standard entry level wage by gender compared to local minimum wage | P.71-73 | | V |
| *205 Anti-corruption | | | | |
| 205-2 | Communications and training about anti-corruption policies and procedures | P.24 | | V |
| 205-3 | Confirmed incidents of corruption and actions taken | P.24 | | V |
| *206 Anti-competitive Behavior | | | | |
| 206-1 | Legal actions for anti-competitive behavior, anti-trust, and monopoly practices | None | | V |
| 302 Energy | | | | |
| 302-1 | Energy consumption within the organization | P.106 | | V |
| 302-4 | Reductions of energy consumption | P.103-109 | | V |
| 302-5 | Reductions in energy requirements of products and services | P.103-109 | | V |
| *305 Emissions | | | | |
| 305-1 | Direct (Scope 1) GHG Emissions | P.54 | | V |
| 305-2 | Energy Indirect (Scope 2) GHG Emissions | P.54 | | V |
| 305-3 | Other indirect (Scope 3) GHG Emissions | P.54 | | V |
| 305-5 | Reduction of GHG Emissions | P.53-54 | | V |
| *307 Environmental Compliance | | | | |
| 307-1 | Non-compliance with environmental laws and regulations | None | | V |
| 308 Supplier Environmental Assessment | | | | |
| 308-1 | New suppliers that were screened using environmental criteria | P.113-114 | | V |
| 401 Employment | | | | |
| 401-1 | New employee hires and employee turnover | P.72 | | V |
| 401-2 | Benefits provided to full-time employees that are not provided to temporary or part-time employees | P.84-89 | | V |
| 401-3 | Parental leave | P.88 | | V |
| *402 Labor / Management Relations | | | | |
| 402-1 | Minimum notice periods regarding operational changes | P.74 | | V |

Topics marked with * have been disclosed voluntarily, and are not part of the material topics identified in 2020.

| General Disclosure | Disclosure Item (topics without years noted are of the 2016 edition of the GRI standards) | Page / URL and Comment | Identified Omission and Explanation | External Assurance | |
|---|---|------------------------|-------------------------------------|--------------------|---|
| 403: 2018 Occupational Health and Safety | | | | | |
| 403-1 | Occupational health and safety management system | Link | | V | |
| 403-2 | Hazard identification, risk assessment, and incident investigation | | | V | |
| 403-3 | Occupational health services | | | V | |
| 403-4 | Worker participation, consultation, and communication on occupational health and safety | | | V | |
| 403-5 | Worker training on occupational health and safety | | | V | |
| 403-6 | Promotion of worker health | | | V | |
| 403-7 | Prevention and mitigation of occupational health and safety impacts directly linked by business relationships | | | V | |
| 403-8 | Workers covered by an occupational health and safety | | | V | |
| 403-9 | Work-related injuries | | P.83 | | V |
| 403-10 | Work-related ill health | | P.83 | | V |
| *405 Diversity and Equal Opportunity | | | | | |
| 405-1 | Diversity of governance bodies and employees | P.18, 72, 74 | | V | |
| 405-2 | Ratio of basic salary and remuneration of women to men | P.73 | | V | |
| 414 Supplier Social Assessment | | | | | |
| 414-1 | New suppliers that were screened using social criteria | p.113-114 | | V | |
| *415 Public Policy | | | | | |
| 415-1 | Political contributions | None | | V | |
| *416 Customer Health and Safety | | | | | |
| 416-2 | Incidents of non-compliance concerning the health and safety impacts of products and services | None | | V | |
| 417 Marketing and Labelling | | | | | |
| 417-2 | Incidents of non-compliance concerning product and service information and labeling | None | | V | |
| 417-3 | Incidents of non-compliance concerning marketing communications | None | | V | |
| 418 Customer Privacy | | | | | |
| 418-1 | Substantiated complaints concerning breaches of customer privacy and losses of customer data | None | | V | |
| 419 Socioeconomic Compliance | | | | | |
| 419-1 | Non-compliance with laws and regulations in the social and economic area | p.100 | | V | |

G 3.1 Telecommunication Sector Specific Indicators

| DMA and Indicators | Disclosure Items | Page / URL and Comment | Identified Omission and Explanation | External Assurance |
|--|------------------|--|-------------------------------------|--------------------|
| Sub-category: Internal Operations | | | | |
| Investment | | | | |
| DMA 118 | IO1 | Capital investment in telecommunication network infrastructure broken down by country/region | P.98 | V |
| | IO2 | Net costs for service providers under the Universal Services Obligation when extending service to geographic locations and low-income groups, which are not portable. Describe relevant legislative and regulatory mechanisms. | P.122, 134-135 | V |
| Health and Safety | | | | |
| DMA 89 | IO3 | Describe relevant legislative and regulatory mechanisms. | P.79-81 | V |
| | IO4 | Compliance with ICNIRP (International Commission on Non-Ionizing Radiation Protection) standards on exposure to radiofrequency (RF) emissions from handsets. | P.100 | V |
| | IO5 | Compliance with ICNIRP (International Commission on Non-Ionizing Radiation Protection) guidelines on exposure to radiofrequency (RF) emissions from base stations. | P.100 | V |
| | IO6 | Policies and practices with respect to Specific Absorption Rate (SAR) of handsets. | P.100 | V |
| Infrastructure | | | | |
| DMA 89 | 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. | P.100 | V |
| | IO8 | Number and percentage of stand-alone sites, shared sites, and sites on existing structures. | P.100 | V |
| Sub Category: Technology Applications | | | | |
| Resource Efficiency | | | | |
| DMA 58 | TA1 | Provide examples of the resource efficiency of telecommunication products and services delivered. | P.66 | 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) | P.66 | 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. | P.67-69 | 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. | P.66 | V |
| | TA5 | Description of practices relating to intellectual property rights and open-source technologies. | P.67-69 | V |

| DMA and Indicators | Disclosure Items | Page / URL and Comment | Identified Omission and Explanation | External Assurance |
|---|------------------|---|-------------------------------------|--------------------|
| Sub-category: Providing Access | | | | |
| Access to Telecommunication Products and Services: Bridging the Digital Divide | | | | |
| DMA 109 | 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. | P.98, 122 | 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. | P.122 | 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. | P.124 | 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. | P.124 | V |
| | PA5 | Number and types of telecommunication products and services provided to and used by low- and no-income sectors of the population. Provide definition selected. Included explanations 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. | P.124, 127 | V |
| | PA6 | Programs to provide and maintain telecommunication products and services. | P.99 | V |
| Access to Content | | | | |
| DMA 81 | PA7 | Policies and practices to manage human rights issues relating to access and use of telecommunications products and services. | P.90-91, 94-95 | V |
| Customer Relations DMA 84 PA8 | | | | |
| DMA 81 | PA8 | Policies and practices to publicly communicate on EMF related issues. Include information provides at points of sales material. | P.100 | V |
| | PA9 | Total amount invested in programs and activities in electromagnetic field research. Include descriptions of programs currently contributed to and funded by the reporting organization. | None | V |
| | PA10 | Initiatives to ensure clarity of charges and tariffs. | Link | V |
| | PA11 | Initiatives to inform customers about product features and applications that will promote responsible, efficient, cost-effective, and environmentally preferable use. | P.92 | V |

For corresponding information and page numbers, please refer to the 2020 CHT SASB Report. [↗](#)

Table 1. SASB Topics and Accounting Metric

| SASB Topic | SASB Code | Accounting Metric | Page/URL |
|---|--------------|---|----------|
| Environmental Footprint of Operations | TC-TL-130a.1 | 1. Total energy consumed, 2. percentage grid electricity, 3. percentage renewable | P.4 |
| | TC-TL-220a.1 | Description of policies and practices relating to behavioral advertising and customer privacy | P.4-5 |
| Data Privacy | TC-TL-220a.2 | Number of customers whose information is used for secondary purposes | P.5 |
| | TC-TL-220a.3 | Total amount of monetary losses as a result of legal proceedings associated with customer privacy | P.5 |
| | TC-TL-220a.4 | 1. Number of law enforcement requests for customer information, 2. number of customers whose information was requested, 3. percentage resulting in disclosure | P.5-6 |
| Data Security | TC-TL-230a.1 | 1. Number of data breaches, 2. percentage involving personally identifiable information (PII), 3. number of customers affected | P.7 |
| | TC-TL-230a.2 | Description of approach to identifying and addressing data security risks, including use of third-party cybersecurity standards | P.7-8 |
| Product End-of-life Management | TC-TL-440a.1 | 1. Materials recovered through take back programs, percentage of recovered materials that were 2. reused, 3. recycled, and 4. landfilled | P.9 |
| Competitive Behavior & Open Internet | TC-TL-520a.1 | Total amount of monetary losses as a result of legal proceedings associated with anti-competitive behavior regulations | P.9 |
| | TC-TL-520a.2 | Average actual sustained download speed of 1. owned and commercially-associated content and 2. non-associated content | P.9-10 |
| | TC-TL-520a.3 | Description of risks and opportunities associated with net neutrality, paid peering, zero rating, and related practices | P.10-11 |
| Managing Systemic Risks from Technology Disruptions | TC-TL-550a.1 | 1. System average interruption frequency and 2. customer average interruption duration | P.12 |
| | TC-TL-550a.2 | Discussion of systems to provide unimpeded service during service interruptions | P.12 |

Table 2. Activity Metrics

| SASB Code | Activity Metric | Page |
|-------------|---------------------------------|------|
| TC-TL-000.A | Number of wireless subscribers | P.13 |
| TC-TL-000.B | Number of wireline subscribers | P.13 |
| TC-TL-000.C | Number of broadband subscribers | P.13 |
| TC-TL-000.D | Network traffic | P.13 |



ASSURANCE STATEMENT

SGS TAIWAN LTD.'S REPORT ON SUSTAINABILITY ACTIVITIES IN THE CHUNGHWA TELECOM CO., LTD.'S CORPORATE ESG REPORT FOR 2020

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 ESG Report for 2020 (hereinafter referred to as the Report). The scope of the assurance, based on the SGS Sustainability Report Assurance methodology, included the sampled text, and data in accompanying tables, contained in the report presented during on-site verification (2021/04/20~2021/05/19). SGS reserves the right to update the assurance statement from time to time depending on the level of report content discrepancy of the published version from the agreed standards requirements.

INTENDED USERS OF THIS ASSURANCE STATEMENT

This Assurance Statement is provided with the intention of informing all CHT's Stakeholders.

RESPONSIBILITIES

The information in the CHT's Corporate ESG Report of 2020 and its presentation are the responsibility of the directors or governing body (as applicable) and the management of CHT. SGS has not been involved in the preparation of any of the material included in the Report.

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.

ASSURANCE STANDARDS, TYPE AND LEVEL OF ASSURANCE

The SGS ESG & Sustainability Report Assurance protocols used to conduct assurance are based upon internationally recognized assurance guidance, including the Principles contained within the Global Reporting Initiative Sustainability Reporting Standards (GRI Standards) 101: Foundation 2016 for report quality, and the guidance on levels of assurance contained within the AA1000 series of standards and guidance for Assurance Providers.

The assurance of this report has been conducted according to the following Assurance Standards:

| Assurance Standard Options | | Level of Assurance |
|----------------------------|---|--------------------|
| A | SGS ESG & SRA Assurance Protocols (based on GRI Principles and guidance in AA1000) | n/a |
| B | AA1000AS v3 Type 2 (AA1000AP Evaluation plus evaluation of Specified Performance Information) | High |

Assurance has been conducted at a high level of scrutiny.

SCOPE OF ASSURANCE AND REPORTING CRITERIA

The scope of the assurance included evaluation of quality, accuracy and reliability of specified performance information as detailed below and evaluation of adherence to the following reporting criteria:

| Reporting Criteria Options | |
|----------------------------|--|
| 1 | GRI Standards (Core) |
| 2 | AA1000 Accountability Principles (2018) |
| 3 | SASB -Technology & Communications Sector- Telecommunication Services Industry Standard Version 2018-10 |
| 4 | IIRC International <IR> Framework (Chinese version 2013) |

- evaluation of content veracity of the sustainability performance information based on the materiality determination at a high level of scrutiny for CHT and moderate level of scrutiny for subsidiaries, joint ventures, and applicable aspect boundaries outside of the organization covered by this report;
- AA1000 Assurance Standard v3 Type 2 evaluation of the report content and supporting management systems against the AA1000 Accountability Principles (2018);
- evaluation of the report against the requirements of Global Reporting Initiative Sustainability Reporting Standards (100, 200, 300 and 400 series) claimed in the GRI content index as material and in accordance with; and
- evaluation of the report against the IIRC International <IR> Framework (Chinese version 2013) requirements for content elements.

ASSURANCE METHODOLOGY

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.

LIMITATIONS AND MITIGATION

Financial data drawn directly from independently audited financial accounts and Task Force on Climate-related Financial Disclosures (TCFD) 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, RBA, 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 specified performance information included in the scope of assurance is accurate, reliable, has been fairly stated and has been prepared, in all material respects, in accordance with the reporting criteria.

We believe that the organisation has chosen an appropriate level of assurance for this stage in their reporting.

AA1000 ACCOUNTABILITY PRINCIPLES (2018) CONCLUSIONS, FINDINGS AND RECOMMENDATIONS

Inclusivity

CHT has demonstrated a good commitment to stakeholder inclusivity and stakeholder engagement. A variety of engagement efforts such as survey and communication to employees, customers, investors, suppliers, CSR experts, and other stakeholders are implemented to underpin the organization's understanding of stakeholder concerns. For future reporting, CHT may proactively consider having more direct two-ways involvement of stakeholders during future engagement.

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 includes coverage given to stakeholder engagement and channels for stakeholder feedback. CHT has responded in a way that address the needs, concerns and expectations of stakeholders.

Impact

CHT has demonstrated a process on identify and fairly represented impacts that encompass a range of environmental, social and governance topics from wide range of sources, such as activities, policies, programs, decisions and products and services, as well as any related performance.

GLOBAL REPORTING INITIATIVE REPORTING STANDARDS CONCLUSIONS, FINDINGS AND RECOMMENDATIONS

The report, CHT's Corporate ESG Report of 2020, is adequately in line with the GRI Standards in accordance with Core Option. The material topics 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 topics and boundaries, and stakeholder engagement, GRI 102-40 to GRI 102-47, are correctly located in content index and report. For future reporting, it is recommended CHT to align the selected SDGs' targets with its selected material topics on what efforts has been made and performance of where is possible with qualitative and quantitative of the result.

SASB CONCLUSIONS, FINDINGS AND RECOMMENDATIONS

CHT adopted SASB's TECHNOLOGY & COMMUNICATIONS SECTOR- TELECOMMUNICATION SERVICES INDUSTRY STANDARD, VERSION 2018-10 to communicate their sustainability accounting performance to their investors. CHT has determined which disclosure topics and associate metrics are financially material to its business and has responded in an appropriate manner in the content index. By using both GRI and SASB standards together, the efficiency of communication and the identification of material issues are substantially increased during the whole reporting preparation process.

Signed:

For and on behalf of SGS Taiwan Ltd.

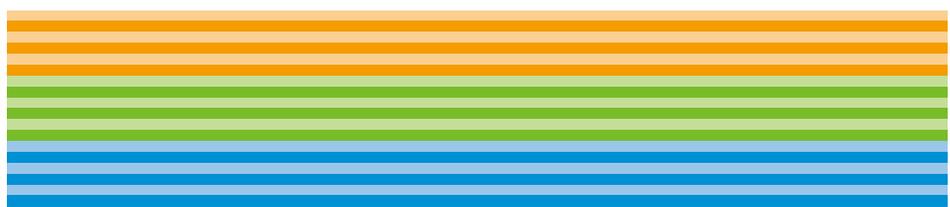
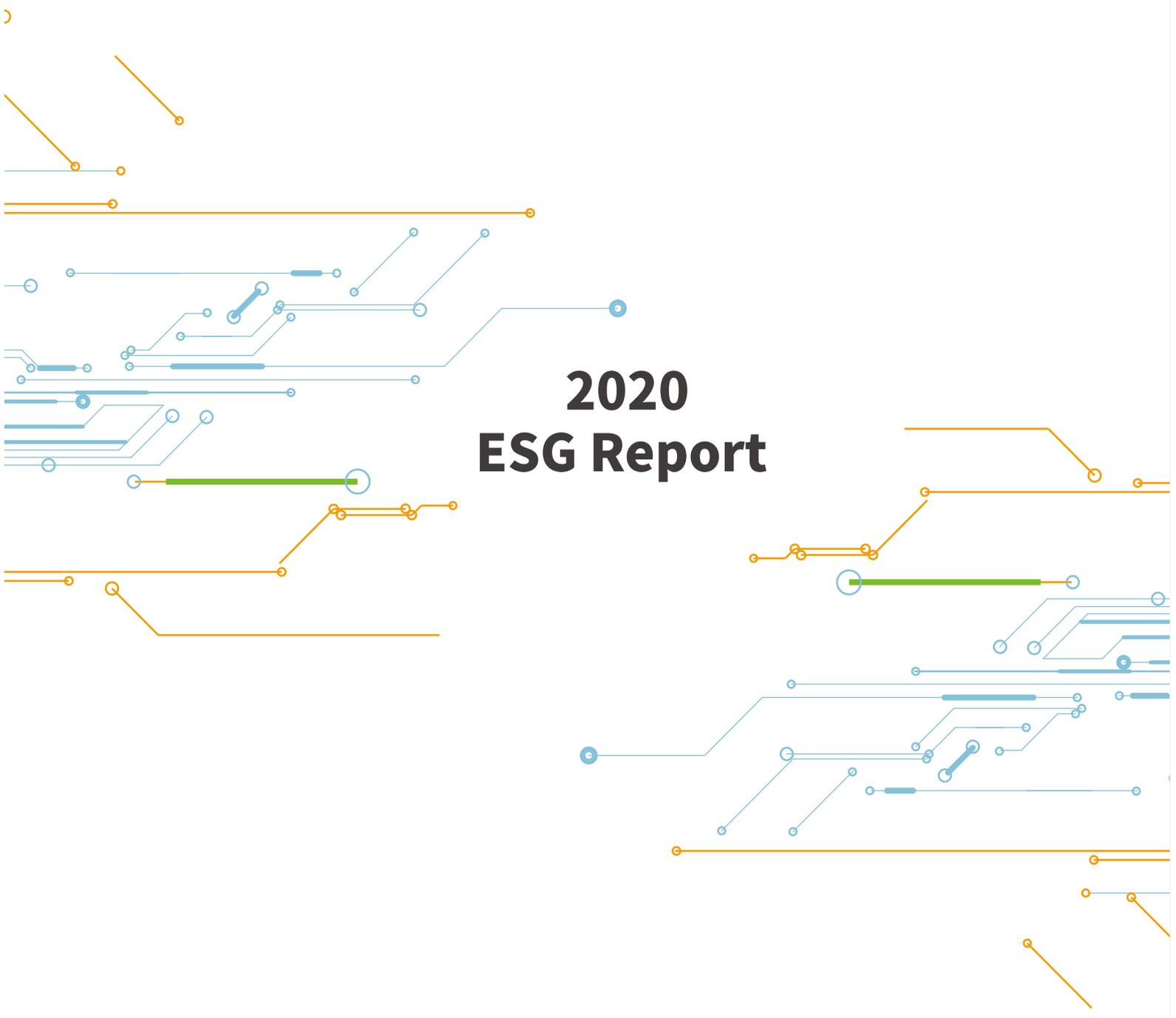


David Huang
Senior Director
Taipei, Taiwan
21 June, 2021
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2020 ESG Report



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