Taiwan Mobile

5G

OPEN POSSIBLE

能所不能

2019 Corporate Social Responsibility Report
About the Report
We are delighted that you are reading the 12th Corporate Social Responsibility (CSR) report issued by Taiwan Mobile.

Reporting Period
The period of information disclosure of this report is 2019 (January 1 to December 31, 2019).

Report Boundary and Scope
The report boundaries were defined in consideration of the nature of operations, industry linkage and the right to control. The financial data, verified by Deloitte Taiwan, is consistent with the figures in the consolidated financial statements, whose entities are revealed in the company's 2019 annual report. All environmental and social figures are of the same coverage from TWM, the Taiwan Mobile Foundation, and subsidiaries which TWM owns 50% or more of their shares, such as Taiwan Fixed Network Co., Ltd., Taiwan Digital Services Co., Ltd., Taiwan Teleservices & Technologies Co., Ltd., TWM Broadband (including Taiwan Fixed Network Media Co., Ltd., its subsidiaries and Win TV Broadcasting Co., Ltd.), Taiwan Kuro Times Co., Ltd., and Taihsin Property Insurance Agent Co., Ltd.. The scope of GHG Inventories is based on the boundaries published in the statement by SGS, a third party verification institution. Operational performance, corporate governance, environmental protection, and social participation represent the main subjects of this report pursuant to current international practices in the field of disclosure of information on corporate operations. Discrepancies in the measurement of categories and quantitative data compared to the previous version are specifically indicated in their respective paragraph. The statistical data provided in the report are derived from Taiwan Mobile's own statistics and surveys and are presented with conventional data description techniques.

Reporting Standard and Confirmation for Reliability of Public Information Disclosure
The CSR Report is compiled in accordance with GRI sustainability Reporting Standards published by the Global Sustainability Standards Board (GSSB) and in line with the Integrated Reporting structure from the International Integrated Reporting Council (IIRC). The content of the Report has been approved by the Chairman, and limited assurance has been obtained from the independent and credible KPMG in accordance with SAES No. 1 Assurance Engagements Other than Audits or Reviews of Historical Financial Information from the Accounting Research and Development Foundation (ARDF). It has been confirmed that the content disclosed in the Report is in line with ‘Comprehensive’ compliance option from the GRI Standards, and an Independent Limited Assurance Report has been issued from KPMG, which is also contained in this Report.

If you have any comments or questions about this report, please contact us:
Sustainability & Corporate Citizenship Department, Sustainability & Brand Development Division, Taiwan Mobile Co., Ltd.
Address: 11F, No. 88 Yanchang Rd., Xinyi District, Taipei, Taiwan
E-mail: spokesman2@taiwanmobile.com
Telephone: +886-2-66386888#16949
Fax: +886-2-66361133
Contents

To Stakeholders 02
Key Performance 06
Awards and Accolades 07
Stakeholder Communication

1. Zetta Connected 2030
   - Sustainable Management Strategies
     - CSR Operational Mechanism 11
     - Sustainable Strategy Map 12
     - Sustainable Strategic Vision Plan 14
     - International Sustainability Initiatives 20
     - Operating Environment and Risk Analysis 21
     - Quantification and Assessment of True Value 26
     - Identification of Material Topics 27
     - Stakeholder Communication 29
   - Responsible Business-Ethical operation 32
   - Responsible Business-Happy workplace 46
   - Creating Stakeholder-Sustainable partners 60
   - Elevating Future Experience-Innovative accomplishments 68
   - Minimizing Footprint-Environmental sustainability 80
   - Realizing Social Potential-Social inclusion 96

2. Excellent brand
   - Brand Image 114
   - Product Service and Responsibilities 117

3. Appendix 119-136
Chairman’s Message to the Stakeholders
Dear Stakeholders,

2020 has been a significant year for the technology industry as well as TWM, which is nothing short of a milestone. After the digital transformation from 2G, 3G and 4G, TWM announced the launch of 5G on June 30 this year. The signal was officially activated on July 1, which ushered in a major transformation in the history of communications in Taiwan, as well as technology and civilization. TWM has announced the brand re-engineering initiative at this vital turning point for development to be introduced through the brand-new brand identity system. The initiative also embodies the brand with a new and important core spirit: “Open Possible.” This is completed with integration of the Group while making good use of TWM’s artificial intelligence (AI), Big Data and Cloud capabilities to achieve smart connections (intelligence). At the same time, more emphasis has been laid on individuality (on-demand customization) to help provide more personalized products and experiences. Every action is also based on inspiration, adding a human touch to smart technology. I hope that all employees will base their thinking on these four “i”s and strive to open up infinite possibilities for the users’ world, as well as realizing a beautiful vision for the future with our eight major stakeholders.

TWM started preparing to welcome to the era of 5G, AI and IoT as early as 2019. On January 27, the Company took the lead in the industry and demonstrated “true 5G” in the 5G experimental network for the first time, presenting the network speed of more than 1Gbps to the world in a visible manner. In July, TWM established the “5G Super Alliance” with over a hundred business partners from various fields, such as 5G communications, smart stadiums, smart life, marking the beginning of Taiwan’s biggest 5G industry ecosystem. In the meantime, TWM took advantage of business opportunities in entertainment and smart home by combining mobile, fixed network and OTT audio-visual services. We further collaborated with Google to launch smart speakers, opening the first chapter of smart home applications. TWM has also partnered with industry leaders in other fields, such as the “National AI Team” established with the Ministry of Science and Technology, the National Center for High-Performance Computing and major technology companies such as AsusTek and Quanta. Followed by the outstanding performance of Taiwan 2 and “Taiwan Computing Cloud,” the team joined hands in May 2020 to announce that they will continue the effort of the national scientific research and establish a sustainable operating model. They will spare no effort in establishing Taiwan’s AI industry ecosystem while staying committed to creating the best future for the people of Taiwan.

In the post-pandemic era, TWM does not seek to benefit only itself but also strives for the common good. Adhering to the goal of participating in global sustainable development, we work towards the three major aspects of ESG to meet our stakeholders’ expectation in corporate governance, social participation and environmental sustainability. TWM officially launched “Zetta Connected 2030” in 2017 to fully address 17 Sustainable Development Goals (SDGs) of the United Nations, covering 5 main axes and visions for sustainability, including “responsible business,” “creating stakeholder synergy,” “elevating future experience,” “realizing social potential” and “minimizing footprint.” Furthermore, we have set clear review goals and encouraged the employees that their vision is as big as their heart is. They are encouraged to stretch their imagination in proposing technological applications for the future life, which will be achieved one by one with concrete actions.

As the leader of the ICT industry, TWM is well aware of the importance of energy saving and carbon reduction initiatives that are headed by the industry. In addition to establishing a common frequency, common network and common infrastructure for 5G as stipulated by the Telecommunications Management Act to reduce the environmental impact brought by the energy consumption of 5G technology, which is 9 times higher than 4G, we continued our active effort in the phase-out of 3G and 4G with reference to Taiwan’s 2G station, in the hopes of effectively utilizing our social and national resources. In addition, TWM conducted self-review and set high standards for itself by formulating an SBT carbon reduction roadmap. In June 2019, TWM became the first of the industry to pass the target review by the world’s most stringent Science-Based Targets Initiative (SBTi), which has made TWM the first telecommunications company in Taiwan and the second in Asia to pass the international review.

In 2020, we were given the highest grade “A” award in the category of “Climate Change” by CDP (formerly known as the Carbon Disclosure Project), becoming one of the three A-rated enterprises in Taiwan and the only one in the telecommunication industry to contribute in energy-saving and carbon reduction for Taiwan and the earth. In the same year, TWM hosted the “ICT Circular Economy Forum” for the first time, inviting members of the industry, government and academia from all over the world to participate in the grand event. TWM further called on 14 strategic partners to jointly publish the first “Declaration on Circular Economy Cooperation” to demonstrate TWM’s international standards for sustainable operations. TWM has been actively participating in international affairs and has put Taiwan in the international stage with our sustainable strategies. TWM joined the Global Enabling Sustainability Initiative (GeSI) in 2016 as the first corporate member in Taiwan and the third in Asia. We were further elected as a member of the board of directors in 2017 and re-elected three years later. TWM also participated in instructing GeSI’s Digital with Purpose: Delivering a SMARTer2030 research report in 2019, presenting the world with cases such as TWM myAir, base smart energy-saving system, and HomeSecurity services to demonstrate TWM’s contribution to the global sustainable development.

TWM’s sustainability actions have also been selected for three times in the “Dow Jones Sustainability Indices (DJSI) World Index.” In 2019, we are ranked second in the global telecommunications industry and first in Taiwan. Moreover, the Company has been awarded the DJSI-Emerging Markets for 8 consecutive years, “SAM Sustainability Yearbook” for 3 consecutive years and the “Silver Class Sustainability Award” reelected in 2020. Domestically, TWM has ranked within the top 5% in the “Corporate Governance Assessment” for six consecutive years and was awarded the 15th and 16th corporate social responsibility awards from Global Views Monthly. We have received the “Commonwealth Corporate Citizen Award” for 12 consecutive years and we are the only telecommunication company in Taiwan that has been awarded the “TCSA Top Ten Sustainability Model Award” for five times.

As we enter the new 5G era, TWM will make every effort to develop the blueprint for digital entertainment convergence and numerous innovative applications. We will also continue to actively collaborate with other industries to develop vertical fields in all directions, creating a new future and more possibilities for Taiwan’s industry with the help of 5G. At the same time, TWM will remain calm and humble to provide users with superior service experience. We aim at moving forward with the spirit of sustainable development to maximize value for shareholders, employees and the general public in all aspects. TWM is a brave pioneer that will stride forward in cloud technology with the Taiwanese society and international benchmark companies to “Open Possible” together.

Chairman
President’s Message
to the Stakeholders
Dear Stakeholders,

The 5G era has arrived! With the arrival of the new brand philosophy and corporate identity, TWM has officially entered a new 5G era on July 1, 2020. We will move forward at full speed with full momentum, helping TWM’s users to “Open Possible” based on “imagination”, “action”, “connection”, “technology” and “human touch.” We will work with our allies in the ecosystem to create “super 5G applications,” including smart stadiums, smart storage, cloud games, which will be launched in the second half of 2020. Looking back at the past six months, the world has been a chaos due to the pandemic. In this new norm of drastic changes to the environment and constant challenges, TWM still completed the first stage of transformation as planned. Moreover, we achieved YoY growth for both revenue and profit in the first quarter. We have continued to follow the “Super 5G Strategy” (Grit, Group, Grit, Green & GSEA) that we formulated last year as the guiding principle for progress as well as integrating applications. The overall performance in 2019 is as follows:

Grit & Group
TWM has established an ultra-5G ecosystem with a sound structure and long-term thinking. The telecommunications business actively responds to consumer trends in the industry, as well as combining group resources to launch differentiated products and services. Positive market feedback has been received for these service packages. Not only do we provide customers with excellent prices, we have also taken into account the revenue pressure brought by the reduction in mobile fees and the prolonged mobile phone replacement cycles. For corporate services, the cloud and information communications businesses performed well with an annual revenue growth of 9% and 63%, respectively. IoT users increased by 25% over the year. For the latest update on 4G operations, 4G users reached 7.17 million in 2019, an increase of 1.5% from 2018. The 4G network population coverage rate has also reached 99.32%. Since 2019, the annual growth rate of the telecom industry’s profit has turned positive, with an increase of 4.8% in the overall operating revenue compared with 2018. The Company has been named the “King of Profit in the Telecom Industries” for eight consecutive years, meeting stakeholder expectations based on actual operational performance and integrity.

Group & Gift
Not only has the telecommunications business grown steadily, the Company simultaneously increased the contribution of non-telecommunication businesses, as well as accelerating cross-domain integration between groups to help boost overall profitability. Since 2019, TWM has spared no effort to promote the win-win cooperation with its subsidiaries, including TWM Broadband, momo e-commerce, and the startup AppWorks. The cooperation has resulted in a synergy, including the joint launch of the “pick up in store” service offered myfone stores and “mo-money.” This type of diverse physical-virtual integration of service and marketing has brought positive changes in terms of quality and quantity to the overall operation.

Green
Not only has the telecommunications business grown steadily, the Company simultaneously increased the The love for mankind and the earth is also an element that TWM truly values. The Company has been actively responding to international initiatives, such as the United Nations SDGs, Science-Based Targets (SBT), and Task Force on Climate-related Financial Disclosures (TCFD). We have also clearly formulated 16 KPIs for environmental sustainability. In 2019, the Company achieved remarkable results by reaching 15 goals, 12 of which exceeded the target, with a completion rate of nearly 95%. The Company further formulated strict SBT carbon reduction path in 2019 with the targets receiving approval from SBTi in 2019, as the first telecommunication company in Taiwan to pass this international review. In 2020, we were given the highest grade “A”award in the CDP “Climate Change” evaluation, becoming one of the three A-graded enterprises in Taiwan and the only one in the telecommunication industry on the list. In the meantime, TWM continues to promote various social participation projects starting from the enterprise core of technology. The scope covers social welfare, technology education promotion, film and television talent cultivation and other aspects.

GSEA
Looking forward to the next 10 to 15 years, TWM will continue to develop Taiwan’s super 5G applications with the core spirit of “Open Possible,” by accelerating the transformation of differentiated products and services with a complete digital convergence blueprint and group synergy. At the same time, the Company will also accelerate the pace of internationalization and regionalization, targeting GSEA’s large market with the ultra-5G strategy.

Think Sustainable, Act Responsible. The spirit of sustainability is an important guide as we stride forward. TWM’s Zetta Connected 2030 has developed short, medium and long-term goals corresponding to SDGs. We have made full use of our innovation and technological capacity combined with public welfare to promote ESG, including projects on environmental sustainability, social inclusion, and ethical governance. The target completion rate for 2019 is as high as 92%, demonstrating our determination and motivation to devote ourselves to sustainability. In the future, we will continue to strive to become the best model for sustainable operations in the ICT industry, opening endless possibilities for the eight major stakeholders and breaking records that are considered impossible.

President

[Signature]
Once again awarded Sustainable Leader-Silver Class, 451,000 hours, achieved the 2020 target in advance. The average education and training of Taiwan Mobile Telecom employees was 63.8 hours, achieved the 2020 target in advance.

Provided Internet and myBook Live service population in rural areas reached 97.65%, showing an 805% increase compared to 2017. potato students from rural areas with training in coding was 63,000 people. The number of disadvantaged people who benefited from discounted rates for telecommunications services grew by 110% compared with 2017. The number of disadvantaged people who benefited from discounted rates for telecommunications services grew by 110% compared with 2017. The average education and training of Taiwan Mobile Telecom employees was 63.8 hours, achieved the 2020 target in advance.

The theme song of the original musical "The Bookstore After 10pm" being performed on stage at Taipei Arena. The number of disadvantaged people who benefited from discounted rates for telecommunications services grew by 110% compared with 2017. The average education and training of Taiwan Mobile Telecom employees was 63.8 hours, achieved the 2020 target in advance.

The absolute reduction in electricity consumption was 33.98%, compared with 2016, saving nearly 33.98 million kWh and more than NT$112 million in electricity bill. The tap water consumption was reduced by 8.6% compared to 2017. A 6.44% reduction in Scope 1 & 2 GHG emissions from 2016, and a 3.82% reduction in Scope 3 emissions from 2018. 26 million people, 8% satisfaction rate for a friendly working environment, achieved the 2020 target in advance. 339 kW of Green Power for Charity for public welfare NPOs.

451,000 hours, achieved the 2020 target in advance.

Sponsoring gold award and Long-term Sponsorship Award from the Sports Activist Awards. Taiwan Mobile Telecom to social welfare totaled at NT$850 million.

The theme song of the original musical "The Bookstore After 10pm" being performed on stage at Taipei Arena. The number of disadvantaged people who benefited from discounted rates for telecommunications services grew by 110% compared with 2017. The average education and training of Taiwan Mobile Telecom employees was 63.8 hours, achieved the 2020 target in advance.

The theme song of the original musical "The Bookstore After 10pm" being performed on stage at Taipei Arena. The number of disadvantaged people who benefited from discounted rates for telecommunications services grew by 110% compared with 2017. The average education and training of Taiwan Mobile Telecom employees was 63.8 hours, achieved the 2020 target in advance.

The theme song of the original musical "The Bookstore After 10pm" being performed on stage at Taipei Arena. The number of disadvantaged people who benefited from discounted rates for telecommunications services grew by 110% compared with 2017. The average education and training of Taiwan Mobile Telecom employees was 63.8 hours, achieved the 2020 target in advance.

The average education and training of Taiwan Mobile Telecom employees was 63.8 hours, achieved the 2020 target in advance.

The average education and training of Taiwan Mobile Telecom employees was 63.8 hours, achieved the 2020 target in advance.

The average education and training of Taiwan Mobile Telecom employees was 63.8 hours, achieved the 2020 target in advance.
Awarded Sustainable Leader-Silver Award, Global Telecommunication Services Group in the SAM 2020 Sustainable Yearbook.

Selected as a constituent stock of the FTSE4Good TIP Taiwan ESG index.

Passed the SBT Science-based Targets in carbon reduction target.

TOP 2 in the global telecommunications industry in DJISI World Index, Dow Jones Sustainability Indexes DJISI Emerging Market Index.

Received the titles of Best Investor Relations Best CEO and Best CFO from the Asian Excellence Award by the Corporate Governance Asia.

Rated A, the highest ranking in Climate Change by CDP.

Awarded Sustainable Leader-Silver Class, Global Telecommunication Services Group in the SAM 2019 Sustainable Yearbook.

Award of Excellence in Information Security Management by SGS.

Received the Sponsorship Gold Award and Long-term Sponsorship Award from the Sports Activist Awards by the Sports Administration, Ministry of Education.

Rated A, the highest ranking in Climate Change by CDP.

Awarded the Outstanding Award for Voluntary Energy Saving by the Bureau of Energy, MOEA.

Won 10 prizes in Taiwan Corporate Sustainability Awards (TCSA), including the Most Prestigious Sustainability Awards Top Ten Domestic Corporate.


2019

FEB

Awards and Accolades

APR

Won first prizes in Telecommunications Services and Excellent Public Welfare Project from the CSR Annual Survey by the CommonWealth Magazine’s “Corporate Citizenship Award.”

MAY

Ranked Top 5% in the Corporate Governance Assessment.

JUN

Award of Excellence in Information Security Management by SGS.

AUG

Received the Sponsorship Gold Award and Long-term Sponsorship Award from the Sports Activist Awards by the Sports Administration, Ministry of Education.

SEP

Honored with the Award of Excellence Water-Saving Improvement Counseling for the Non-Industry Group by the Water Resources Agency, MOEA.

NOV

Awarded the Outstanding Award for Voluntary Energy Saving by the Bureau of Energy, MOEA.

DEC

2020

FEB

Taiwan Mobile Co., Ltd. was established in February 1997. In the same year, it obtained the license for Type I Telecommunications Enterprise from the government, as well as setting up headquarters, branch offices and other business sites in Taiwan. Among them, the physical channel service stores are located all over Taiwan. Between 2007 and 2008, TWM acquired and merged with Taiwan Fixed Networks, Taiwan Telecom, TransAsia Telecom and MOBITAI Communications with framework spanning across mobile communications, fixed networks, broadband Internet and the cable TV industry. It is domestic provider with the most comprehensive range of telecom and media service in the fields of T (telecommunications), I (Internet), M (media & entertainment) and E (e-commerce). The main businesses and service scope of Taiwan Mobile Group are as follows.

### Company Profile

<table>
<thead>
<tr>
<th>Business System</th>
<th>Brand name</th>
<th>Business</th>
<th>Main Service Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Users</td>
<td>TWM</td>
<td>Mobile</td>
<td>Mobile telecommunication services for individual users mainly include monthly rental, prepaid and value-added services.</td>
</tr>
<tr>
<td>Business Users</td>
<td>Taiwan Mobile Business Services</td>
<td>Mobile</td>
<td>Integration services of information and communication for enterprise users included fixed network (voice/data/Internet), Cloud, mobile enterprise, etc.</td>
</tr>
<tr>
<td>Home Users</td>
<td>TWM Broadband</td>
<td>Cable TV</td>
<td>Household user’s video (CATV / DTV) and broadband Internet access (Cable Broadband / FTTx) service</td>
</tr>
<tr>
<td>Retail</td>
<td>momo</td>
<td>Retail</td>
<td>E-commerce, TV home shopping</td>
</tr>
</tbody>
</table>

### TWM board Members

Chairman Daniel M. Tsai  
Director Richard M. Tsai  
Director Jamie Lin  
Director Cheng-Ju, Tsai  
Independent Director Hsueh-Jen Sung  
Independent Director Char-Dir Chung  
Independent Director Drina Yue  
Independent Director Hsi-Peng Lu  
Independent Director Tong Hai Tan
Overview for Recent Years

Customer satisfaction (%)

- 85% in 2017
- 86% in 2018
- 90% in 2019

Energy consumption (MWh)

- 2017: 465,406.74
- 2018: 438,057.18
- 2019: 437,890.04

Turnover (NT$ billion)

- 2017: 117.17
- 2018: 118.73
- 2019: 124.42

EBIT (NT$ billion)

- 2017: 19.09
- 2018: 18.16
- 2019: 17.19

Profit after tax (NT$ billion)

- 2017: 14.19
- 2018: 13.64
- 2019: 12.48

Free cash flow (NT$ billion)

- 2017: 20.52
- 2018: 21.28
- 2019: 19.19

No. of 4G subscribers (10,000)

- 2017: 552.59
- 2018: 707.10
- 2019: 847.82

4G population coverage (%)

- 2017: 99.18%
- 2018: 99.27%
- 2019: 99.32%

4G downloading speed (Mbps)

- 2017: 57.8
- 2018: 84.7
- 2019: 97.7

Note: The results are national fixed-point average values measured by Telecom Technology Center (TTC), commissioned by NCC.
Chapter 1
Sustainable Operations Strategies
1.1 CSR Operational Mechanism

CSR Guiding Principles
In January 2011, the Board of Directors adopted the “Corporate Social Responsibility Policy” to internalize corporate social responsibility in its operations strategy and management. In 2015, the CSR Code of Practice was formulated as the guiding principles for long-term CSR promotion.

CSR Dedicated Unit
The Social Responsibility Department was established under the Public Relations and Brand Management Division in 2007. In 2019, the Public Relations and Brand Management Division was renamed as the Sustainability and Brand Development Division, and the Social Responsibility Department was renamed as the Sustainability & Corporate Citizenship Department. The department serves as the executive secretary to the CSR Committee with dedicated staff as well as independent budget, responsible for integrating inter-departmental CSR tasks in addition to planning and carrying out CSR strategies and projects.

CSR Committee
The CSR Committee was officially formed under the Board of Directors in 2014. The Committee is chaired by the Chairman of the Board, and the President serves as the Deputy Chairman. The senior management from each business group serves as members of the Committee to identify risks and opportunities relevant to environmental, social, and governance issues. Sustainability strategies are formed by integrating operations with core resources, enhancing the levels of accountability, participation, and governance of the senior management to achieve circular performance.

Communication mechanism between the CSR committee and other committees
The Company has developed a comprehensive communication mechanism for sustainable development management. In addition to the CSR Committee, a Risk Management Committee and an Innovation Management Committee have been established under the Board of Directors respectively in 2015 and 2017. The CSR Committee reports to the two committees on issues related to business risks and social innovation from time to time, in order to join hands in promoting the Company’s sustainable development. Please refer to Chapter P.44 for details on risk management.

Frequency and number of meetings
The CSR Committee convenes on a quarterly basis and reports to the Board of Directors. A total of 4 committee meetings were held in 2019 with 14 resolutions passed, of which 9 proposals were submitted to the Board of Directors. The Silver Class Sustainability Award in the “Sustainable Yearbook” of SAM for 2019 was reported to the Annual Shareholders’ Meeting.

CSR Internalization
The CSR performance has been included in the Board of Directors’ self-evaluation since 2017. Moreover, the Taiwan Corporate Governance Association has been tasked to evaluate the effectiveness of the Board of Directors every three years since 2019. To strengthen CSR implementation, the compensations of the President and Vice Presidents have been tied to their CSR performance since 2016. Please refer to Chapter P.37 Compensations for Senior Management for details.

Educational training is held sporadically on an annual basis, in which key CSR strategies and methods of implementation are explained to the senior managers and staff, so that all employees can stay focused on fulfilling TWM’s vision for sustainable operations.

Major Resolutions of the CSR Committee in 2019
- New members on the CSR Committee and title adjustment of representatives
- Passing the SBT review and scope 3 carbon reduction strategy planning
- GeSI E-TASC supply chain management platform introduction progress and scheduling
- Revision of the Environmental and Energy Policy
- Revision of renewable energy targets
- Analysis of CSR material topics
- Identification of risks and opportunities
- Result of stakeholder communication
1.2 Sustainable Strategy Map

We have invested six categories of capital in the diversification strategy blueprint of “T.I.M.E.”, namely telecom, Internet, Media & Entertainment and E-Commerce, combining the new Super 5G strategy with 6C operating core, corresponding to 17 UN SDGs, identifying 22 material topics and formulating Zetta Connected 2030 as the highest standard for sustainable operations, thereby creating the value of seven brand highlights in order to fully respond to the eight stakeholders.

### 6 Categories of Capital Input

<table>
<thead>
<tr>
<th>Capital Type</th>
<th>Investment Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intellectual capital</td>
<td>NT$163 million</td>
</tr>
<tr>
<td>Financial capital</td>
<td>NT$44.9 billion</td>
</tr>
<tr>
<td>Social capital</td>
<td>NT$167 million</td>
</tr>
<tr>
<td>Natural Capital</td>
<td>NT$169 million</td>
</tr>
<tr>
<td>Manufactured capital</td>
<td>NT$6.13 billion</td>
</tr>
<tr>
<td>Human capital</td>
<td>NT$6.17 billion</td>
</tr>
</tbody>
</table>

### Sustainable strategy integration

Please refer to Chapter 1.5 on P.21 for details on the operational management and risk analysis.

- **Intellectual capital**
  - Research and development: NT$163 million
- **Financial capital**
  - Operating cost: NT$44.9 billion
- **Social capital**
  - Employee compensations & benefits: NT$6.17 billion
- **Natural Capital**
  - Green procurement: NT$189 million
- **Manufactured capital**
  - Telecommunications construction and maintenance: NT$6.13 billion
- **Human capital**
  - Investment in human capital: NT$6.17 billion
Create 7 key brand values

Please refer to Chapter 1.3 on P.14 for details on the values internalized in Zetta Connected 3030.

Response to 8 stakeholders

Please refer to Chapter 1.3 on P.14 for details on the values internalized in Zetta Connected 3030.
In addition to inclusive and sustainable economic growth, the Company focuses on corporate government that is evenly developed in ESG and provides our employees a happy workplace and participation in international sustainable businesses with a holistic perspective, making honor and sense of achievement to become the new attitude toward life in the future.

Making use of the latest IoT and AI technology and implementing green policies and reducing carbon footprint of our supply chains will not only reduce environmental impact but also proactively create a better and more ideal universal ecosystem. the new attitude toward life in the future.

Making use of 5G and IoT technology to establish connections between human, objects, and time and space so that we can create a future beyond our imagination with innovative vision.

Creating stakeholder synergy is our biggest momentum to stride to the future of sustainability. In the era of 5G IoT, we will exert our positive influence and energize our global partner relationship in sustainable development.

The mode and application of innovative technology are able to surmount the obstacles brought forth by the long-standing value system constructed since time immortal, including issues such as poverty, inequality and unfair distribution of resources.
1.3.1. Zetta Connected 2030: How Big Your Heart Is; Then How Great Your Vision Will Be!

We have selected the word “Zetta (1021)”, a pun for “a very big heart” in Mandarin Chinese, as the theme for our vision plan for the next decade (2020-2030). Thus, “Zetta Connected 2030” will be our attempt in achieving the UN SDGs and our aspiration for everyone at TWM to bravely hypothesize and to actively set their own goals. The purpose is to review our current actions from the standpoint of 2030, which seems so far into the future, while we aspire TWM to become the center of connectivity for everything—besides establishing connections between human, objects, and time and space, the most important is to have heart-to-heart connections among people—by 2030, and to bring visions that encompass five major aspects to our stakeholders. Founded on the vision of being a “Responsible Business”, TWM will lead suppliers in “Creating Stakeholder Synergy”, two fundamental aspects to achieve three accomplishments of “Elevating Future Experience,” “Realizing Social Potential,” and “Minimizing Footprint.” The five aspects are closely connected to TWM’s seven key brand values, and step by step, we aim to work toward an unlimited future with our eight major stakeholders to achieve our fundamental goal of sustainable development.

We have selected the word “Zetta (1021)”, a pun for “a very big heart” in Mandarin Chinese, as the theme for our vision plan for the next decade (2020-2030). Thus, “Zetta Connected 2030” will be our attempt in achieving the UN SDGs and our aspiration for everyone at TWM to bravely hypothesize and to actively set their own goals. The purpose is to review our current actions from the standpoint of 2030, which seems so far into the future, while we aspire TWM to become the center of connectivity for everything—besides establishing connections between human, objects, and time and space, the most important is to have heart-to-heart connections among people—by 2030, and to bring visions that encompass five major aspects to our stakeholders. Founded on the vision of being a “Responsible Business”, TWM will lead suppliers in “Creating Stakeholder Synergy”, two fundamental aspects to achieve three accomplishments of “Elevating Future Experience,” “Realizing Social Potential,” and “Minimizing Footprint.” The five aspects are closely connected to TWM’s seven key brand values, and step by step, we aim to work toward an unlimited future with our eight major stakeholders to achieve our fundamental goal of sustainable development.

Note: Taking into consideration the difficulty of obtaining renewable energy in the short term, the 2019-2020 target values have been adjusted pursuant of the resolution of the 2019/12 CSR Committee. However, the long-term target of 2030 remains unchanged.
We held two inter-departmental workshops to identify key and secondary SDGs of the company through employee voting. TWM developed 51 Zetta Connected 2030 goals that correspond to 11 key SDGs, with annual progress check for each goal. The target achievement rate for 2019 was 92% with the following performance:

### The Main Themes of Zetta Connected 2030 and the Corresponding Key and Secondary SDGs

<table>
<thead>
<tr>
<th>Key SDGs</th>
<th>Secondary DGs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsible Business</td>
<td>Creating Stakeholder Synergy</td>
</tr>
<tr>
<td>Elevating Future Experience</td>
<td>Minimizing Footprint</td>
</tr>
<tr>
<td>Realizing Social Potential</td>
<td></td>
</tr>
<tr>
<td>Minimizing Footprint</td>
<td></td>
</tr>
<tr>
<td>Creating Stakeholder Synergy</td>
<td></td>
</tr>
<tr>
<td>Social inclusion</td>
<td></td>
</tr>
<tr>
<td>Innovative accomplishments</td>
<td></td>
</tr>
<tr>
<td>Excellent brand</td>
<td></td>
</tr>
<tr>
<td>Sustainable partners</td>
<td></td>
</tr>
<tr>
<td>Ethical operation</td>
<td></td>
</tr>
<tr>
<td>Happy workplace</td>
<td></td>
</tr>
</tbody>
</table>

Appendix

Zetta Connected Strategies
## 1.3.2 Goals and Performance of Zetta Connected 2030

### Major aspect of sustainability

<table>
<thead>
<tr>
<th>SDGs</th>
<th>Dimension of strategies</th>
<th>2019 Strategic target</th>
<th>2020 Strategic target</th>
<th>2030 Strategic target</th>
<th>Corresponding material topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renewable energy</td>
<td>Total installed capacity of renewable energy reaches 2,300kW</td>
<td>316.8kW</td>
<td>277 million people</td>
<td>380 million people</td>
<td>Climate change mitigation and adaptation</td>
</tr>
<tr>
<td></td>
<td>Total renewable energy usage reaches 0.09%</td>
<td>0.123%</td>
<td>0.09%</td>
<td>0.09%</td>
<td>Green operations</td>
</tr>
<tr>
<td>Energy efficiency</td>
<td>Emissions intensity decreased by 48% compared with 2018</td>
<td>54.1%</td>
<td>56%</td>
<td>86.7%</td>
<td>Climate change mitigation and adaptation</td>
</tr>
<tr>
<td></td>
<td>The energy consumption of the computer room decreased by 7.5% compared with 2016</td>
<td>17.83%</td>
<td>10%</td>
<td>15%</td>
<td>Green operations</td>
</tr>
<tr>
<td>Sustainable usage of natural resources</td>
<td>Total tap water consumption decreased by 2% compared to 2017</td>
<td>8.6%</td>
<td>3%</td>
<td>15%</td>
<td>Climate change mitigation and adaptation</td>
</tr>
<tr>
<td></td>
<td>The amount of paper used for application forms to be saved each year increased by 10%</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
<td>Green operations</td>
</tr>
<tr>
<td>Sustainable recycling</td>
<td>4% reduction of total un-recoverable business waste compared with 2017</td>
<td>40.2%</td>
<td>6%</td>
<td>15%</td>
<td>Green operations</td>
</tr>
<tr>
<td>Minimizing Footprint</td>
<td>The number of recycled cell phones in stores reaches 10,000 per year</td>
<td>Nearly 20,000 phones</td>
<td>10,000 phones</td>
<td>10,000 phones</td>
<td>Green Application and Loop Economy</td>
</tr>
<tr>
<td>Resilience and adaptation</td>
<td>Promote at least one material climate issue or policy proposal and action every year</td>
<td>At least once a year</td>
<td>At least once a year</td>
<td></td>
<td>Climate change mitigation and adaptation</td>
</tr>
<tr>
<td></td>
<td>TWM computer and equipment rooms are built with 100% resilient infrastructure</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>The submarine cable commissioning operations have not yet been completed. The transmission system can be built after the submarine cable is completed.</td>
</tr>
<tr>
<td>Low carbon footprints</td>
<td>Reduce total carbon emissions by 4.2% compared with 2018</td>
<td>6.44%</td>
<td>5.7%</td>
<td>30%</td>
<td>Climate change mitigation and adaptation</td>
</tr>
<tr>
<td></td>
<td>The carbon emissions of the outourced logistics fleet are reduced by 9% compared with 2016</td>
<td>10%</td>
<td>12%</td>
<td>40%</td>
<td>Green operations</td>
</tr>
<tr>
<td>Digital healthcare</td>
<td>The coverage rate of digital healthcare services reaches 76%</td>
<td>80%</td>
<td>90%</td>
<td>100%</td>
<td>Technology innovation &amp; application</td>
</tr>
<tr>
<td>Mobile health management</td>
<td>Mobile healthcare products or services generate revenues of NT$40 million</td>
<td>NT$70 million</td>
<td>NT$100 million</td>
<td></td>
<td>Digital inclusion and social innovation</td>
</tr>
<tr>
<td>Communications infrastructure</td>
<td>Advanced telecommunication users account for 90% of total users</td>
<td>100%</td>
<td>95%</td>
<td>99%</td>
<td>Technology innovation &amp; application</td>
</tr>
<tr>
<td></td>
<td>The coverage rate of wired high-speed network service reaches 75% of the operating areas</td>
<td>75%</td>
<td>90%</td>
<td>98%</td>
<td>Customer experiences</td>
</tr>
<tr>
<td></td>
<td>The revenues from the fixed-network users changing into &quot;advanced integrated telecommunications services&quot; reached NT$60 million</td>
<td>NT$63 million</td>
<td>NT$120 million</td>
<td>NT$180 million</td>
<td>Technology innovation &amp; application</td>
</tr>
<tr>
<td>Smart innovation and application</td>
<td>Innovative products or services generate revenues of NT$8 billion</td>
<td>NT$6.6 million</td>
<td>NT$17.7 million</td>
<td></td>
<td>Customer experiences</td>
</tr>
</tbody>
</table>

Note 1: Since 2017, the TWG Green Energy Initiative has reached a total of 2.9 million people, and 26 million people have been reached.

Note 2: Total renewable energy usage reaches 0.09%.

Note 3: The number of recycled cell phones in stores reaches 10,000 per year.

Note 4: The transmission system can be built after the submarine cable is completed.

Note 5: The submarine cable commissioning operations have not yet been completed. The transmission system can be built after the submarine cable is completed.
## Goals and Performance of Zetta Connected 2030

<table>
<thead>
<tr>
<th>Major aspect of sustainability</th>
<th>SDGs</th>
<th>Dimension of strategies</th>
<th>2019 Strategic target</th>
<th>2020 Strategic target</th>
<th>2030 Strategic target</th>
<th>Corresponding material topics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Elevating Future Experience</strong></td>
<td><strong>Smart living</strong></td>
<td>The number of users of home security products reaches 27,000 households</td>
<td>27,000 households</td>
<td>34,000 households</td>
<td>100,000 households</td>
<td>Customer experiences, Service impact management, Technology innovation &amp; application, Digital inclusion and social innovation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Digital multimedia products and services generate an income of NT$1.4 billion</td>
<td>NT$1.59 billion</td>
<td>NT$1.5 billion</td>
<td>Reached NT$2.2 billion</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>The sum of mobile commerce service transactions reach NT$1.51 billion</td>
<td>NT$1.52 billion</td>
<td>NT$2 billion</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>The revenue generated from the Internet of Vehicles reach NT$53.7 million</td>
<td>NT$80 million</td>
<td>NT$1.6 billion</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Sustainable city</strong></td>
<td>Base station service operation rate reached 99.79%</td>
<td>99.88%</td>
<td>99.8%</td>
<td>99.9%</td>
<td>Customer experiences, Technology innovation &amp; application</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The coverage rate of village image surveillance or river hydrology flood image surveillance reaches 10%</td>
<td>30%</td>
<td>30%</td>
<td>78%</td>
<td>Giving back to society, Transparent and fair marketing, Customer experiences</td>
</tr>
<tr>
<td><strong>Fundraising events</strong></td>
<td></td>
<td>The total amount of funds raised through TWM channels since 2006 reaches NT$110 million</td>
<td>NT$113 million</td>
<td>NT$120 million</td>
<td>NT$200 million</td>
<td>Giving back to society, Technology innovation &amp; application, Digital inclusion and social innovation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The sponsorships and donations for public interest since 2003 amount to NT$770 million</td>
<td>NT$850 million</td>
<td>NT$820 million</td>
<td>NT$1.2 billion</td>
<td></td>
</tr>
<tr>
<td><strong>Service affordability</strong></td>
<td></td>
<td>The coverage rate of the mobile broadband internet service in rural areas reaches more than 96%</td>
<td>97.65%</td>
<td>Over 97%</td>
<td>Over 99%</td>
<td>Social emergency responses, Climate change mitigation and adaptation, Technology innovation &amp; application</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The number of disadvantaged people (students, the elderly) who benefited the rate discount grow by 25% compared with 2017</td>
<td>110%</td>
<td>35%</td>
<td>50%</td>
<td></td>
</tr>
<tr>
<td><strong>Reinforce resilience to disasters</strong></td>
<td></td>
<td>Over 96% of the population living in remote areas receives emergency warning service within 5 seconds after a disaster happens</td>
<td>97.65%</td>
<td>Over 97%</td>
<td>Over 99%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Established a 4G mobile positioning system</td>
<td>Completed</td>
<td>Complete the Advanced Mobile Location (AML) service development for Android phones</td>
<td>The coverage rate of the positioning services for victim location tracking in disaster areas reaches 99.83% of the communications population</td>
<td></td>
</tr>
<tr>
<td><strong>Realizing Social Potential</strong></td>
<td><strong>Accessibility to remote healthcare</strong></td>
<td>The number of people benefiting from telehealth products or services reaches 11,000 persons</td>
<td>16,000 people</td>
<td>70,000 people</td>
<td></td>
<td>Digital inclusion and social innovation, Technology innovation &amp; application</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Installed 5,000 smart street lights</td>
<td>31,000 street lights</td>
<td>10,000 street lights</td>
<td>200,000 street lights</td>
<td>Technology innovation &amp; application</td>
</tr>
<tr>
<td></td>
<td></td>
<td>More than 10,000 air quality monitoring devices in Taiwan with relevant applications provided</td>
<td>Over 20,000 devices</td>
<td>Over 20,000 devices</td>
<td>Over 100,000 devices</td>
<td>Technology innovation &amp; application</td>
</tr>
<tr>
<td></td>
<td><strong>Environmental quality monitoring</strong></td>
<td>The number of users benefiting from TWM digital education resources reaches 48,000</td>
<td>63,000 people</td>
<td>62,000 people</td>
<td>150,000 people</td>
<td>Digital inclusion and social innovation, Technology innovation &amp; application</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Since 2012, the Equal Opportunities for Education Initiative has reached a total of 2.3 million people³⁴</td>
<td>2.37 million people</td>
<td>2.35 million people</td>
<td>3.85 million people</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Equal opportunities</strong></td>
<td>The number of people reached by external CSR-related activities and events increases by 2% from that of 2017</td>
<td>805%</td>
<td>3%</td>
<td>13%</td>
<td>Talent development and retention, Supply chain management</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The total number of online visits to the category or special section of sustainability has amounted to 60,000 since 2018</td>
<td>83,000 visits</td>
<td>100,000 visits</td>
<td>500,000 visits</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Knowledge and skills education for sustainable development</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Notes
1. SDGs: Sustainable Development Goals
2. Exceeding the target: Indicates that the target has been exceeded.
3. Target achieved: Indicates that the target has been met.
4. Target not achieved: Indicates that the target has not been met.
5. Data from 2018 to 2020 shows an average annual growth rate of 2% (highlighted in blue).
6. The number of users benefiting from TWM digital education resources has amounted to 60,000 since 2018.
7. The total number of online visits to the category or special section of sustainability has amounted to 83,000 since 2018.
8. The number of users of home security products has amounted to 27,000 since 2018.
9. The number of people benefiting from telehealth products or services has amounted to 11,000 since 2018.
We have selected nine material indicators and targets from the five major aspects of sustainability and tracked the performance over the past three years (2017-2019). Please refer to Appendix P.121 for details.
1.4 International Sustainability Initiatives: Joining Hands with the World to Amplify the Positive Impact

GeSI (Global Enabling Sustainability Initiative)
TWM joined GeSI in 2016 and was elected as a board director since 2017 to oversee the Climate Change Committee and participate in the operation of the Industry Responsibility Committee. TWM sponsored the preparation of the research report “Digital With Purpose: Delivering a SMARTer 2030” in 2019 and co-chaired the Steering Committee of the report with AT&T and Telstra, published in New York in September of the same year. The report cited many of the Company’s IoT applications as examples, including myAir PM2.5 detector, base station smart energy-saving system and HomeSecurity services, affirming TWM’s concrete contribution to global sustainable development.

GSMA (GSM Association)
In response to the Digital Declaration initiative launched by the GSMA, in 2019, TWM combined the core of the company and the global benchmark to exert the role of international leadership for responsible business in the digital age, making concrete contribution to the global sustainable development and well-being.

CDP (formerly known as Carbon Disclosure Project)
We responded to the “Climate Change” of CDP, the world’s largest carbon disclosure organization, and won the highest rating “A” in 2019. In addition, CDP introduced the Task Force on Climate-related Financial Disclosures (TCFD) structure in 2018. We responded positively by introducing TCFD at the end of the same year. Please refer to Chapter 1.5.3 on P.23 for details on the Company’s TCFD results.

SBT (Science Based Targets)
We are committed to formulating SBT, which has been validated by SBTi. Please refer to Chapter 2.5.3 on P.85 for details on the Company’s SBT.
### 1.5 Operating Environment and Risk Analysis

#### 1.5.1 Industry Analysis and Countermeasures: Maximizing Operating Synergy to Enhance Industry Competitiveness

In response to the development of new technologies such as 5G, Big Data, AI, IoT, etc., services can become more diverse, personalized, faster and stronger, bringing new demands and new threats. The continuous innovation of technology has brought players from new categories to the market, coupled with the existing players catching up, the competition is increasingly intense. Looking into the future of the 5G era, we must upgrade in every aspect by analyzing the global/local development trends and the opportunities and threats of our main business activities, so as to plan specific innovation strategies as follows:

<table>
<thead>
<tr>
<th>Business activity</th>
<th>Global industry development trends</th>
<th>Taiwan’s domestic industry development trends</th>
<th>TWMO’s current market position</th>
<th>Opportunities</th>
<th>Threats</th>
<th>Innovative strategy/services</th>
<th>Corresponding company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile services</td>
<td>The output of mobile business has risen, especially the market size of e-commerce transactions.</td>
<td>Personalized e-commerce, Digitalized services</td>
<td>Leading position in Taiwan’s domestic post-paid audio-visual OTT. Leading position in Taiwan’s music service market.</td>
<td>Recommend content in a timely and accurate manner to increase usage and stickiness.</td>
<td>Consumers are concerned with personal information protection.</td>
<td>Continuous optimization of product recommendation mechanisms. Device connection service and network stability.</td>
<td>Taiwan Mobile, Taiwan Kuro, TPN Media</td>
</tr>
<tr>
<td>IoT and platform products</td>
<td>Consumer IoT and data application value unhealthy IoT ecosystem</td>
<td>Consumer IoT device products are increasingly diversified, Wearable device market is gaining popularity.</td>
<td>Exclusive mySports and promote fitness among employees. Exclusive launch of PM2.5 detector and support related research.</td>
<td>Integrate related types to increase the number of users who work with professional institutions to create data value. Integrate devices and telecommunications services and charge a monthly fee.</td>
<td>Unique-quality products from suppliers at a lower price for competition. Competitors have launched similar services and charged a monthly fee.</td>
<td>Combine innovative services such as mySports, and other industries to form an alliance to develop a consumer health IoT ecosystem. Combine TWMO’s unique network advantages, app UX/UI development capabilities and IoT device ODM experience.</td>
<td>Taiwan Mobile</td>
</tr>
<tr>
<td>Mobile advertising business</td>
<td>Connect with technology, the birth of mobile Internet in Taiwan, offering more accurate and efficient analysis of consumer profiles, automatic optimization of advertising efficiencies, etc.</td>
<td>Digital advertising is automated with programmatic buying to achieve more precise advertising delivery.</td>
<td>The exclusive telecommunications database helps customers analyze the target audience profile and various behaviors.</td>
<td>The exclusive telecommunications database helps advertisers target recipients precisely. There are many competitors in the advertising display network, causing the cost of splitting the proceeds to increase.</td>
<td>Launch a data analysis system to help advertisers find their target audience for accurate delivery.</td>
<td>Taiwan Mobile</td>
<td></td>
</tr>
<tr>
<td>Personal users services</td>
<td>Low-cost airlines allow individuals to travel freely, and the demand for mobile Internet access continues to increase. Digital transformation Global declining birthrates</td>
<td>Travel-related service platforms have also become more convenient and attract more people travel their own. Taiwan operators continue to promote the usage of mobile Internet. One plan includes mobile Internet, broadband Internet or OTT service. The age at which children gain access to mobile devices continue to decrease.</td>
<td>Continue to launch diversified services and the most diverse roaming services in order to become the leading brand in the telecommunications industry. Combine mobile, fixed Internet, and audio-visual services to stay on top of business opportunities regarding digital convergence and smart home. Launch more innovative Internet services.</td>
<td>Continue to collaborate with telecommunications companies in other countries to obtain cost advantage and high-quality Internet access. Integrate group resources to provide converged services. Provide parents with all-you-can-use Internet plans at different speeds and offer different packages depending on their children’s age.</td>
<td>Taiwan Mobile</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business users services</td>
<td>Artificial Intelligence (AI) Internet of Everything (IoE) Cloud economy 5G deployment.</td>
<td>Information and communication integration, IoT ecosystem, Cloud-based services. Mobile office.</td>
<td>A total of 147 partners in the IoT ecosystem. Vertical and horizontal fields of communications solutions by collaborating with various industry partners to develop innovative services, with annual revenue growth of 14%.</td>
<td>Business opportunities have greatly increased with the development of 5G. New economy drives the demand for cloud and information security.</td>
<td>Security risks of the Internet of Everything. Many international cloud platform competitions.</td>
<td>Internet of Things platform. State Grid AI Cloud. Information security police. Cloud/TPX switchboard.</td>
<td>TPN Media</td>
</tr>
<tr>
<td>Household customer services</td>
<td>Diversified audiovisual content services. Emerging online audiovisual and OTT services. The rise of the global AI smart speaker market.</td>
<td>The rise of OTT services and the diversification of emerging online platforms. Taiwanese telecommunication manufacturers have launched smart speakers.</td>
<td>Smart home with digital TV and OTT services. The rise of multiple audiovisual services with an open platform of international companies. The rise of voice AI technology with the hardware and technology of international companies.</td>
<td>The rise of multiple audiovisual services with an open platform of international companies. The rise of voice AI technology with the hardware and technology of international companies.</td>
<td>Various OTT services are taking the market of home audiovisual entertainment. The voice assistant connection technology is not complete, and the use scenario is incorrect.</td>
<td>A1 BOX open platform. TV housekeeper AOG voice control service.</td>
<td>TPN Media</td>
</tr>
<tr>
<td>Telecommunication services.</td>
<td>Diversified application services drive mobile network traffic growth. International telecommunications companies have successively commercialized 5G services.</td>
<td>Energy conservation, low carbon and sustainable development form the energy policy of telecommunications network. Taiwan held the 5G spectrum bidding in December 2019.</td>
<td>Ranked as the second largest domestic operator in mobile service revenue.</td>
<td>In a network bandwidth increases, as does the demand for equipment energy consumption. 5G technology development poses threats to the existing 3G/4G services.</td>
<td>Introduce smart grid-saving technology to reduce energy consumption of network equipment.</td>
<td>Taiwan Mobile</td>
<td></td>
</tr>
</tbody>
</table>

---

**New media services**

- **myVideo**
  - Personalized video/audio recommendation services.
  - Service extension device integration.
- **myHome**
  - Personalized e-commerce.
  - Internet access.
- **myOTT**
  - Leading position in Taiwan's domestic post-paid audio-visual OTT.
  - Leading position in Taiwan's music service market integration.
- **mySports**
  - Improving forecasting ability with telecommunications and e-commerce big data.
  - Own real-name user data, a large amount of user behavior data, and low user-communication.
- **myHealthy**
  - Consumers are concerned with personal information protection.
  - The price competition is intense and the gross profit is low.
  - Threats from non-telecommunications companies such as Line.

**Mobile business services**

- **Consumer IoT and data application value**
  - Healthy IoT ecosystem
  - MySports device products are increasingly diversified.
  - Wearable device market is gaining popularity.
- **MyTraffic**
  - Exclusive launch of PM2.5 detector and support related research.
- **myHomes**
  - The exclusive telecommunications database helps customers analyze the target audience profile and various behaviors.
  - The exclusive telecommunications database helps advertisers target recipients precisely.
- **myData**
  - Launch a data analysis system to help advertisers find their target audience for accurate delivery.
In view of the changes in the business model of the industry trends, we will strive to respond to various challenges and opportunities, but the risks are not only competition from the business activities. Therefore, the risk management system is not only to compete for the business activities, but also conduct a comprehensive review of the risks that may be faced by the Company. In particular, we established a Risk Management Committee in 2015, which will be responsible for risk issues of the operation and the business attributes are discussed by the business attributes, opportunities and countermeasures. The risk management process is detailed in the risk management chapter P.44.

With reference to the enterprise risk management framework published by the United States COSO (Committee of Sponsoring Organizations of the Treadway Commission) organization, the Board of Directors, Risk Management Committee, and dedicated Risk Management unit have identified 19 major risks based on the International Research Report, Industry Trend Analysis and Internal and External Investigation of Enterprises and Corporate Decision-making and Judgment, which can be grouped into 7 risk categories including “Regulation”, “Internet Bandwidth Resources”, “Information Security”, “Business”, “Market”, “Talent Cultivation” and “Innovation Management”. The team then formulated the Company’s map of risks considering the probability and extent of the impact. With reference to recent trends, the risk level of a total of five issues in 2019 has increased from the previous year, including telecommunications technology innovation, bandwidth resource planning, hacker attacks, occupational safety and new technology training needs, etc., which have been approved by the CSR committee.

We have further selected 11 key (including 5 emerging risks) risks and assessed the potential impacts, countermeasures taken (to reduce risks and seize opportunities), and actual projects.
1.5.3 Managing Climate Risks and Opportunities: Inventory of Climate and Financial Impacts to Effectively Take Advantage of Business Opportunities

According to the risk map analysis in 2019, climate change risks belong to the Company’s material risks. Considering its material financial impact on business operations, therefore, according to the TCFD framework, the inventory and disclosure of climate change risk and opportunity management are carried out, enabling relevant stakeholders to grasp the climate change risks and opportunities as well as financial impact more systematically.

1. Climate Change Governance

The identification and management of climate change risks and opportunities are handled by the Environmental Management Committee, and the climate risk issues and environmental risk issues are reported to the Risk Management Committee on a regular basis in accordance with the Company’s risk management system, and then relevant mitigation and adaptation projects are assessed and approved by the Risk Management Committee.

In addition, the Risk Management Committee reports the Company’s risks (including climate risks) to the Board of Directors on a regular basis to allow the Board of Directors to understand and monitor the risks faced by the Company. Please refer to the Risk Management Chapter P.44 for detailed risk management procedures.

2. Climate Change Risk Management

In 2019, a total of 12 major climate risks were identified, four of which belonged to high-risk impacts on operations, namely increased frequency and severity of typhoons/hurricanes, increased costs of greenhouse gas emissions, increase in demand and regulations relating sustainability, and increase in the cost of transformation to low-carbon technology. For the management of climate-related risks, the Company’s various levels of accountability are internalized into its risk management procedures. Please see the risk management chapter on P.44 for details.

Note: After the two axes of the matrix are normalized, the diagram is prepared with the average of all risks as a midpoint.
1.5.3 Managing Climate Risks and Opportunities: Inventory of Climate and Financial Impacts to Effectively Take Advantage of Business Opportunities

3. Climate Change Strategy

For the impact of 12 major climate risk factors on TWM’s strategy, operations and financial planning, and the description of relevant response measures, please refer to Appendix P121 for details. A more in-depth climate scenario analysis is conducted in terms of 4 high climate risks to understand the impact of climate risks in different scenarios for TWM. The path of high-risk factor impact under the 2°C scenario is detailed in Appendix P122.

TWM selects 2 major risks as risk quantification targets. The impact on TWM is evaluated based on the hypothesis of climate change, with the total loss due to typhoons in 2019-2030 estimated to reach up to NT$58 million, while investment in low-carbon technology transformation is estimated to be NT$2.05 billion for the same period.
1.5.3 Managing Climate Risks and Opportunities: Inventory of Climate and Financial Impacts to Effectively Take Advantage of Business Opportunities

4. Climate change indicators/goals

In order to effectively manage the impact of climate change-related risks and opportunities on TWM, we have worked on scope 3 greenhouse gas inventory in addition to completing scope 1 and 2, as well as setting short-, medium-, and long-term goals for greenhouse gas reductions, renewable energy use and climate change resilience. The relevant climate risk and opportunity management objectives are as follows please refer to Chapter 1.3.2 Goals and Performance of Zetta Connected 2030 on P.17

- Scope 3 Inventory
  Conducted inventory of all 15 categories since 2018

- Task Force on Climate-Related Financial Disclosures (TCFD)
  Introduced since 2018

- Green energy consumption through substitute transmission
  Green energy use reaches 20% by 2030

- Smart energy conservation in equipment rooms and base stations
  7.31% more of electricity saved in 2019 compared to 2016

- Green energy installation for self-use
  Generate 6,000kW by 2030

- 5 core strategies

- Innovative accomplishments
  Excellent brand
  Ethical operation Happy workplace

- Environmental sustainability
  Social inclusion

- Sustainable partners
  Responsible Business

- Ethical operation Happy workplace
  Realizing Social Potential
  Creating Stakeholder Synergy
  Minimizing Footprint
  Elevating Future Experience
  Sustainable Operations Strategies

- Zetta Connected
1.6 Quantification and Assessment of True Value

We continue to evaluate the true value of our operations generated for the environmental, social, and governance aspects. In 2019, the actual surplus of the Company increased by NT$ 10.2 billion compared with traditional financial performance. However, the environmental externalities caused by the operations cannot be ignored. Therefore, we have actively increased the use of renewable energy, introduced smart energy-saving systems, as well as strengthening resource recycling. We have planned to continuously introduce true value into the business model to enhance the Company's ability to respond to risks and grasp business opportunities.

<table>
<thead>
<tr>
<th>Calculation index</th>
<th>2019</th>
<th>2017</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waste recycling</td>
<td>$2,234</td>
<td>$1,531</td>
<td>$2,180</td>
</tr>
<tr>
<td>Renewable energy consumption</td>
<td>$542</td>
<td>$3,358</td>
<td>$986</td>
</tr>
<tr>
<td>Recycling cell phones &amp; power supplies</td>
<td>$2,300</td>
<td>$1,601</td>
<td></td>
</tr>
<tr>
<td>Buyback &amp; reuse of used cell phones</td>
<td>$936</td>
<td>$4,797</td>
<td></td>
</tr>
<tr>
<td>Rainwater recycling</td>
<td>$12</td>
<td>$26</td>
<td>$270</td>
</tr>
<tr>
<td>Greenhouse gas emissions(^{1})</td>
<td>$1,197,675</td>
<td>$456,996</td>
<td>$448,275</td>
</tr>
<tr>
<td>Water consumption</td>
<td>$29,480</td>
<td>$22,732</td>
<td>$82,843</td>
</tr>
<tr>
<td>Air pollution emissions</td>
<td>$9,205</td>
<td>$18,317</td>
<td>$22,134</td>
</tr>
<tr>
<td>Waste management</td>
<td>$137</td>
<td>$128</td>
<td>$103</td>
</tr>
<tr>
<td>Employee compensation &amp; benefits</td>
<td>$6,812,645</td>
<td>$7,248,538</td>
<td>$5,832,447</td>
</tr>
<tr>
<td>Public expenditure (national economic development &amp; infrastructure)</td>
<td>$3,535,198</td>
<td>$3,901,518</td>
<td>$2,717,030</td>
</tr>
<tr>
<td>Public expenditure (national economic development &amp; infrastructure)</td>
<td>$204</td>
<td>$167,372</td>
<td></td>
</tr>
<tr>
<td>Digital inclusion</td>
<td>$994,359</td>
<td>$266,971</td>
<td>$101,325</td>
</tr>
<tr>
<td>Digital Wings(^{2})</td>
<td>$22,526</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Green Power for Charity(^{2})</td>
<td>$17,765</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Call phone donation channels</td>
<td>$7,572</td>
<td>$6,161</td>
<td>$7,208</td>
</tr>
<tr>
<td>Microfilm fundraiser</td>
<td>$1,188</td>
<td>$721</td>
<td>$6,887</td>
</tr>
<tr>
<td>Employee training</td>
<td>$8,744</td>
<td>$7,136</td>
<td></td>
</tr>
<tr>
<td>Work-related injuries</td>
<td>$734</td>
<td>$959</td>
<td>$5,150</td>
</tr>
</tbody>
</table>

Note 1: The calculation of greenhouse gas emissions in 2019 includes 13 categories in scope 3. Please refer to the carbon emission management chapter on P.87 for further details.
1.7 Identification of Material Topics

1.7.1 Identification Process of Material Topics: 5 Steps for Focusing on the Core of Sustainability

<table>
<thead>
<tr>
<th>Step</th>
<th>Task</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Compile sustainability topics (SASB Sustainability Accounting Standards Board/NAMM2019 Sustainability Yearbook for the Telecommunications Industry/Industry benchmarking topics)</td>
</tr>
<tr>
<td>2</td>
<td>Investigate stakeholders’ level of concern/degree of influence of the Company on the society (239 copies of online questionnaires/one physical seminar)</td>
</tr>
<tr>
<td>3</td>
<td>Analyze the importance of the topics to the Company’s operations/degree of influence of the Company on the society</td>
</tr>
<tr>
<td>4</td>
<td>Decide material topic matrix</td>
</tr>
<tr>
<td>5</td>
<td>Identify key topics</td>
</tr>
</tbody>
</table>

Based on the five-step identification process, 22 topics concerning sustainability were selected in the first step (the number of topics remained the same as last year). With surveys through the online questionnaires and physical seminar, the level of influence of the topics on stakeholders’ assessment and decision-making (Y-axis) and the degree of impact (bubble size) of TWM on the society in each topic considered by external stakeholders were understood. In addition, the CSR Committee confirmed the importance of each topic to the Company’s operations (X-axis) and the impact of the Company on the society (bubble size) via resolution. Finally, we identified the Company’s material concerned topics based on the scores on the X-axis, Y-axis, and the bubble size for each topic.

1.7.2 Material Topic Matrix: Assisting the Enterprise to Reflect on Threats, Opportunities and Challenges Regarding Sustainability

Based on the results of the material topic matrix, we further identified the most important topics for the Company. We gave priority to the topics that were more important to the Company’s operations, concerned stakeholders more, and in which the Company had high impact on ESG, including green application and circular economy, network quality and coverage, information security and privacy protection, digital inclusion and social innovation, climate change mitigation and adaptation, information security and privacy protection, technology innovation and application and climate change mitigation and adaptation. We also consider the topics that the Company would manage internally in an autonomous manner. The Company confirmed that it should invest in long-term sustainable management with its supply chain, so supply chain management was included in the key topics. There are a total of seven key topics for the Company in 2019, please refer to the diagram on the right. Please see Appendix on P.123 for the detailed description of the material topic boundaries.

The bubble size represents the level of impact of TWM in the ESG aspects on the society.

<table>
<thead>
<tr>
<th>Importance to TWM</th>
<th>High</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green application and circular economy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network quality and coverage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information security and privacy protection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Digital inclusion and social innovation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Climate change mitigation and adaptation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technology innovation &amp; application</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate governance and operating performance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Giving back to the society</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethical operation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respect for and protection of human rights</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employees’ physical and mental health</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talent development and retention</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer experiences</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supply chain management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transparent and fair marketing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication mechanism</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legitimacy/legal compliance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social emergency responses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electromagnetic field safety</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service impact management</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Text in red: key topics

The level of influence on stakeholders’ assessment and decision-making

Appendix
### 1.7.3 Key Topics and Strategies: Proactively Formulating Sustainability Strategies to Respond to the Impact

We conducted an impact analysis of the seven key topic for 2019 to explore how to respond to the impacts and set strategic targets, as well as continuing to track the progress of implementing the targets.

<table>
<thead>
<tr>
<th>Key topics</th>
<th>Impact on the Company</th>
<th>Corresponding major aspects of Delta Connected 2030</th>
<th>Response</th>
<th>Strategic objectives</th>
<th>Progress for 2019</th>
<th>Target Year</th>
</tr>
</thead>
</table>
| Climate change mitigation and adaptation        | 1. Carbon emissions are claimed to be the culprit for warming, and TWM may, therefore, be positioned as a non-eco-friendly company. 2. The phenomenon of global warming has resulted in extreme climate events, causing intensified windstorms to increase damage to outdoor base stations. Therefore, the risk of not being able to provide stable services increases. 3. Please refer to Chapter 1.5.3. on P23 for relevant climate risks and impacts. | Minimizing Footprint                                                                                                     | • Carbon emissions reduction  
• Infrastructure resilience enhancement                                                                                                    | Total carbon emissions are reduced by 30% compared with 2016  
Service rooms are built with 100% resilient infrastructure                                                                                      | 2030  
6.44% reduction  
100%                                                  | 2030 |
| Green application and circular economy          | We have recognized the impact of extreme climate on operations, so we plan to enhance resource utilization efficiency, process industrial waste properly, reduce the losses caused by climate change, and mitigate the negative impact on the Company's image. | Minimizing Footprint                                                                                                     | Waste management                                                                                                                          | 15% reduction of total unrecoverable industrial waste compared with 2017          | 2030  
40.2% reduction |
| Network quality and coverage                   | Problems with the network or poor network coverage have direct impact on the connection quality or even lack of access, which will affect users' satisfaction towards the Company brand. | Responsible Business                                                                                                    | • Continue to improve network coverage, including that in rural areas.  
• Continue to increase network capacity.  
• Modify the user parameters and conduct work early in the morning.                                                                      | Network infrastructure coverage for population in remote areas reaches 90%                                                             | 2030  
Reached 97.65% |
| Information security and privacy protection     | The telecommunications industry owns a large amount of users' personal information. Legal reliability is implicated with accidental leaks as well as severe damage to the Company's image. | Responsible Business                                                                                                    | Implement and continuously improve the ISO/IEC27001 Information Security Management System,* pass the new version of BS 10012 and ISO/IEC 29100 privacy protection certification by integrating it into business procedures. | The number of cases of unauthorized personal information leaks is reduced by 10% year on year  
Ranked top 5% of the industry through third-party evaluation of information security management survey | 2019  
Decreased by 10%  
2030  
Top 1% |
| Technology innovation & application             | In response to the development of new technologies such as 5G, Big Data, AI, IoT, etc., services can become more diverse, personalized, faster and stronger, bringing new demands and new threats to the revenue. 2. The continuous innovation of technology has brought players from new categories to the market, coupled with the existing players catching up, the competition is increasingly intense. | Elevating Future Experience                                                                                             | • Integrate the advantages of companies in the group, including cable TV, e-commerce, and startup AppWorks.  
• Building a sustainable super 5G ecosystem with five major aspects including Gift, Group, Grit, Green and Greater South East Asia.  
• Continue to cultivate talents in new businesses and integrate value chain capabilities, expand business. | Revenues from innovative products/services reached NT$17.7 billion                                                                 | 2030  
About NT$4.83 billion |
| Supply chain management                         | Management of supplier human rights and labor rights and interests, environment, and other actions concerning sustainability are significantly linked to the Company's commitment to sustainability. 2. Supply chain management has a material impact on TWM's brand and operations. | Creating Stakeholder Synergy                                                                                             | • Sustainable supply chain management  
• Supply chain ESG assessment                                                                                                                 | Carbon emissions of the supply chain decreased by 20% from that of 2020                                                               | 2030  
carbon inventory education and training for suppliers |
| Digital inclusion and social innovation         | Create a non-discriminatory and barrier-free inclusive society with the Company's core technologies. Lack of an active response to social needs might have an impact on the Company's goodwill. | Elevating Future Experience                                                                                             | Provide products and services that are accessible to diverse social groups or that can solve social problems.                                                                 | • The coverage rate of digital healthcare services reaches 100%  
• The number of users of home security products reaches 100,000                                                                 | 2030  
•Digital healthcare coverage reaches 80%  
•Home security products reached 27,000. |

* ISO/IEC27001 Information Security Management System
We have identified eight types of stakeholders based on the AA1000 principles and internal assessment and identification and set up dedicated communication channels to accept and respond to stakeholders’ needs. We hold physical seminars to communicate with stakeholders face-to-face regularly to respond to their expectations specifically, which serves as the basis for us to strive for economic, social and environmental sustainability, so as to lay a foundation for sustainable development for TWM.

We value and prudently respond to stakeholders’ concerned issues. Two incidents violating customer interests took place in 2019. The description and improvement measures are as follows:

<table>
<thead>
<tr>
<th>Time</th>
<th>Incident</th>
<th>Improvement measures</th>
</tr>
</thead>
</table>
| 5/24  | In the area of Minquan East Road and Chenggong Road, Neihu District, Taipei City, some base stations were interrupted by the Taipei City Government’s outsourced road construction at 10:51 pm on May 24. The Company’s transmission cable was cut, resulting in unstable signals. After the construction division made full efforts on site, everything returned to normal at 1:59 am on the 25th. | • Increase the construction of backup cables and strengthen communication with external construction units.  
• Although this incident was caused by the road construction work commissioned by the Taipei City Government, the Company still provided a 5% discount on the monthly bill as compensation for affected users. |
| 11/27 | Due to equipment abnormalities in the computer room, some users in unspecified areas experienced slow connection at 11:30 am on November 27. The construction division made repairs and restored the connection at 12:05 pm. | • Strengthen the inspection mechanism SOP to ensure the normal operations of the equipment.  
• Optimize the process of equipment inspection and repair to shorten downtime. |

Our communication methods with stakeholders are detailed in Appendix on P.125.
Chapter 2

Zetta Connected 2030
Appendix

Environmental sustainability

Social inclusion

Innovative accomplishments

Excellent brand

Sustainable partners

Ethical operation

Happy workplace

7 key brand values

Elevating Future Experience

Minimizing Footprint

Realizing Social Potential

Creating Stakeholder Synergy

Responsible Business

Zetta Connected

Sustainable Operations Strategies
2.1 Ethical Operation

Vision:
Achieving corporate governance that promotes inclusive and sustainable economic growth while taking into account the balanced ESG development, providing employees with a happy workplace and the possibility to participate in sustainable international business from a bigger perspective, making honor and sense of achievement a new life philosophy in the future.

Corresponding to material topics:
Corporate governance and operating performance/Risk management/Respect for and protection of human rights/Ethical operation/Legality and legal compliance/Information security and privacy protection

Corresponding to 8 major stakeholders:
Employees/Customer/Competent authorities/Shareholders/investor/Ratings agencies/Media/Suppliers
- Maintain the top 5% rating in Corporate Governance Assessment
- Elect the minimum of one female director
- Zero tolerance of any violation of Ethical Corporate Management Best Practice Principles
  - Top 10% in information security management in the same industry globally
  - Top 10% in human rights management in the same industry globally

2019

- NTS 124.4 billion of consolidated total revenue
- EPS in the telecommunications industry for 8 consecutive years
- Ranked top 5% in the Corporate Governance Assessment for 6 years since 2015
- Ranked top 1% in information security management in the same industry globally
- Nomination for female independent directors in 2020
- 37.5% of female senior executives

2020 Targets

- Maintain the top 5% rating in Corporate Governance Assessment
- Elect the minimum of one female director
- Zero tolerance of any violation of Ethical Corporate Management Best Practice Principles
  - Top 10% in information security management in the same industry globally
  - Top 10% in human rights management in the same industry globally

Company with the highest EPS in the telecommunications industry for 8 consecutive years

- NTS 12.5 billion in net profit after tax
- NTS 17.19 billion of EBIT

Ranked top 5% in information security management in the same industry globally

37.5% of female senior executives

2030 Targets

- Maintain the top 5% rating in Corporate Governance Assessment
- Increase board seats of female directors (by at least 1 seat)
- Zero tolerance of any violation of Ethical Corporate Management Best Practice Principles
  - Top 5% in information security management in the same industry globally
  - Top 5% in human rights management in the same industry globally

NT$17.19 billion of EBIT

Innovative achievements

Elevating Future Experience

Minimizing Footprint

Realizing Social Potential

Creating Stakeholder Synergy

Responsible Business Zetta Connected

Environmental sustainability

Social inclusion

Excellent brand

Sustainable partners

Ethical operation

Happy workplace
2.1.1 Business Strategy and Performance: Maximizing Value for Eight Major Stakeholders

- The average annual salary of employees exceeds NT$1 million as the best in the industry
- Won the 2019 Technology Industry Happy Enterprise Award
- Listed as a constituent stock in the “Taiwan Employment 99 Index”
- The average annual salary of employees exceeds NT$1 million as the best in the industry
- Won the 2019 Technology Industry Happy Enterprise Award
- Listed as a constituent stock in the “Taiwan Employment 99 Index”
- Winning the CSEA Customer Service Excellence Awards for 3 consecutive years in the categories of “Best Customer Service Team” and “Best Telemarketing Team”
- Awarded the “National Store Excellent Store Manager Award” and “Outstanding Store Manager Election” by the TCFA Taiwan Franchise Association
- Successfully lobbied the promotion of “common frequency, common network, co-construction” policy for 5G network infrastructure in the Telecommunications Management Act, which is unique in Taiwan
- 99.32% of population coverage rate for 4G network, 97.65% of population coverage rate for 4G network in rural areas

- 95.77% of local procurement out of the total global purchase amount of NT$28.5 billion
- Working with 14 strategic partners to issue the “Statement of Circular Economy Cooperation” to build a zero waste circular society
- Working with 20 suppliers on “Green Power for Charity”
- Partnering with 4 publishers to initiate the “Digital Wings” project

- Rated A, the highest level of rating for CDP Climate Change
- Included in the DJSI World Index for 3 consecutive years, DJSI Emerging Markets Index for 8 consecutive years
- SAM 2018-2020 Sustainable Yearbook Global Telecommunication Services Group Sustainable Leader-Silver Award
- Certified Prime level of the ISS-oekom Corporate Rating
- Actively respond to domestic rating agencies, including the Global Views Monthly, CommonWealth Magazine, TAISE and so on
- Sponsored and donations to social welfare totaled at NT$850 million
- NT$113 million raised through TWMA channels
- Over NT$70 million of resources invested in public welfare, providing mobile Internet access and myBook interactive “Live English” for free, with a total of 13 organizations applied for resource-matching, to benefit 2,288 disadvantaged students
- Promote “Green Power for Charity” to create NT$7.8 million of revenue for NPOs in the next 20 years
- Benefiting 15,000 children with Eye-Comm, a social welfare initiative based on technology. Benefiting 280 students from 11 schools located in remote rural areas with Coding Fun.
- Help the media understand the latest trends in the telecommunications industry through continuous communication, jointly promote positive development of Taiwan’s telecommunications industry, as well as improving the quality of services and operational performance through media supervision
- A total of 230 press releases and 21 press conferences

- Winner of the Best Investor Relations from the Asian Excellence Award organized by the Magazine of The Asian Corporate Governance Association (ACGA)
- Selected as a constituent stock of the FTSE4Good TIP Taiwan ESG index
- Selected as a constituent stock of the Taiwan Sustainability Index
- Winner of the Best Investor Relations from the Asian Excellence Award organized by the Magazine of The Asian Corporate Governance Association (ACGA)
- Selected as a constituent stock of the FTSE4Good TIP Taiwan ESG index
- Selected as a constituent stock of the Taiwan Sustainability Index
2.1.1 Business Strategy and Performance: Maximizing Value for Eight Major Stakeholders

1. Financial Performance, Strategy and Objectives

In response to consumption trends, TWM has launched differentiated products and services by combining the Group’s resources, easing the pressure on revenue by reducing tariff and the extension of the mobile phone replacement cycle, while increasing the proportion of non-telecom business to help growth rate turn positive for the second half of year.

As the telecommunications industry is about to enter the 5G era, TWM will continue to focus on shareholder rights and consumer experience by integrating technology into life based on the human value, as well as improving information security and leading the way for smart corporate transformation, comprehensively enhancing the profits of the consumer, household, enterprise and retail business groups.

Looking forward to the future, TWM aims at establishing itself as a company that combines telecommunications with technology.

<table>
<thead>
<tr>
<th>Business (NT$ million)</th>
<th>Telecommunications</th>
<th>Cable TV</th>
<th>Retail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market presence</td>
<td>The second largest company in terms of mobile telecommunications users in Taiwan with 25% of market share</td>
<td>Covering 11% of Taiwan's households</td>
<td>Largest B2C e-commerce in Taiwan</td>
</tr>
<tr>
<td>2019 revenue Note</td>
<td>67,385</td>
<td>6,090</td>
<td>51,830</td>
</tr>
<tr>
<td>2019 EBIT Note</td>
<td>13,257</td>
<td>2,092</td>
<td>1,656</td>
</tr>
</tbody>
</table>

Note 1: Data sources are financial information of departments listed in financial reports, and the difference between the sum and the consolidated number are resulted from inter-departmental write-offs and adjustments.

Note 2: In 2019, the main revenue and net operating profit came from domestic sources, of which domestic revenue and operating profit accounting for 97% and 96% respectively, and the foreign revenue and net operating profit accounting for 3% and 4% respectively.

2. Dividend Policy and Shareholders’ Rights

In terms of dividend policy, TWM adopts residual dividend policy and dividend policy with high earnings distribution rate. Every year, it distributes earnings according to the Articles of Incorporation and current laws. The dividend distribution in the most recent four years is as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Cash dividend</th>
<th>Dividend amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>5.6/per share</td>
<td>$15,244</td>
</tr>
<tr>
<td>2017</td>
<td>5.6/per share</td>
<td>$15,244</td>
</tr>
<tr>
<td>2018</td>
<td>5.5/per share</td>
<td>$15,366</td>
</tr>
<tr>
<td>2019</td>
<td>4.75/per share</td>
<td>$13,350</td>
</tr>
</tbody>
</table>

In addition, the shareholders’ meeting of the Company has adopted the system of case-by-case voting and electronic voting since 2012, and the voting results of all motions in the proceedings will be disclosed in the minute book, on the Company website and MOPS, providing multiple channels for shareholders to fully exercise their rights. In 2019, electronic voting rights accounted for 98.70% of the attendance, which showed the results of corporate governance implementation.
2.1.1 Business Strategy and Performance: Maximizing Value for Eight Major Stakeholders

2. Tax Policy and Government Subsid

The following are excerpts of our tax policies, which are regularly reported to the Board of Directors and relevant committees. The Board of Directors has the responsibility of supervision to ensure the effective operation of the tax management mechanism:

- Following the tax laws and regulations of various countries and international taxation standards, formulating profit allocation in accordance with the general rules and avoiding improper taxation planning, reporting honestly and paying taxes.
- Financial reporting is transparent and tax disclosure has been handled in accordance with relevant regulations and standards.
- Establish a relationship of mutual trust and honest communication with tax authorities, and conduct timely communication on tax issues.
- Important decisions and transactions take into account the risk and impact of taxation.
- Promoting the quality of tax profession and personnel training, facing the changes of relevant tax laws and regulations, we can quickly assess the impact and respond to changes.
- In addition to tax exemption for domestic investment dividends and preferential tax deduction for investment, the remaining shall pay the income tax for profit-making undertakings at the statutory tax rate of 20%.
- 100% of income taxes was paid to the Government of the Republic of China. The effective tax rates for 2019 and 2018 are 19.84% and 18.11% respectively, and the income tax rates for payment are 24.44% and 15.08% respectively. Relevant data are detailed in the following table:

<table>
<thead>
<tr>
<th>Description</th>
<th>2019</th>
<th>NT$ thousand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payment of Income Tax</td>
<td>4,052,247</td>
<td></td>
</tr>
<tr>
<td>Tax Concession</td>
<td>43,053</td>
<td></td>
</tr>
<tr>
<td>Government Subsidy Income</td>
<td>18,299</td>
<td></td>
</tr>
</tbody>
</table>

Source: The Company’s Consolidated Financial Statement

2.1.2 Governance Structure: Setting Target to Become a World-Class Corporate Governance Benchmark

1. Board of Directors

The Directors actively participated in courses on corporate governance and CSR, with the list of courses in 2019 listed below. Big Data Analysis and Corporate Fraud Detection and Prevention, Information Security Strategy, Board Performance Evaluation, Corporate Governance Seminars, Corporate Governance and Criminal Risk Management, Corporate Governance and Corporate Development, etc.

<table>
<thead>
<tr>
<th>Title</th>
<th>Name</th>
<th>Training Situation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chairman</td>
<td>Daniel M. Tsai</td>
<td></td>
</tr>
<tr>
<td>Director</td>
<td>Richard M. Tsai</td>
<td></td>
</tr>
<tr>
<td>Director</td>
<td>Howard Lin</td>
<td></td>
</tr>
<tr>
<td>Director</td>
<td>Cheng-Ju, Tsai</td>
<td></td>
</tr>
<tr>
<td>Director</td>
<td>Jamie Lin</td>
<td></td>
</tr>
<tr>
<td>Independent Director</td>
<td>Jack J.T. Huang</td>
<td></td>
</tr>
<tr>
<td>Independent Director</td>
<td>Hsueh-Jen Sung</td>
<td></td>
</tr>
<tr>
<td>Independent Director</td>
<td>Char-Dir Chung</td>
<td></td>
</tr>
<tr>
<td>Independent Director</td>
<td>Hsi-Peng Lu</td>
<td></td>
</tr>
</tbody>
</table>

The average score of the board performance self-evaluation exceeds 4.75 points.

Note: Age of Directors: 22% between 30-50 years old, 78% Above 50 years old.

For details of the relevant information, please refer to P.13-16 and P.35 of the 2019 Annual Report.

Board Composition

The Board of Director is the highest governance body. The Chairman does not hold any executive positions in order to ensure Company’s independent operations. The Directors come from various backgrounds, such as legal, financial, telecommunications industry and information technology, equipped with sufficient knowledge, skills and qualities required to perform their duties. The number of seats for Independent Directors is set at 4 seats, which is superior to the legal requirement. Independent directors also form the Audit Committee and Remuneration Committee to reinforce the system and its effective operations.

Functions of the Board of Directors

Supervising the Company’s legal compliance, timely disclosure of important information and ethical operation. Maintaining good communication and interaction with the management team, guiding the business execution and major decision-making to ensure the Company’s development and safeguard shareholders’ interests.

Rules for Nomination of Directors and Avoidance of Conflict of Interest

According to Rules for Election of Directors and Corporate Governance Best Practice Principles, a nomination system and principle of diversity are adopted for the board composition. Factors such as the scale of the Company, nature of business and diversity of the Board (including gender, age, nationality and culture, etc.), should be taken into consideration when recommending candidates. The nomination, review and announcement of the Directors shall follow relevant regulations and procedures.

According to the Rules of Procedure for Board of Directors’ Meetings, when the interest of a resolution is in conflict with a director who is a stakeholder or his/her represented legal person, such director shall abstain from voting and not exercise voting rights on behalf of any other director. The resolutions for which relevant Directors should have recused themselves in 2019 included the Annual Board Remuneration, Personnel Transfer, Exemption of Directors’ Non-competition Obligation, Asset Acquisition and Disposal and so on. Everything was executed in accordance with the rules (for more information, please refer to the Company’s website and the chapter related to Corporate Governance of the Annual Report from P.27-28).
2.1.2 Governance Structure: Setting Target to Become a World-Class Corporate Governance Benchmark

2. Remuneration to Senior Management

Compensation for the Board Directors and Independent Directors is based on the regulations set forth in the Articles of Incorporation and the Rules for Setting Directors’ Remuneration. In addition, the appropriateness of the remuneration for Board Directors, Independent Directors, Presidents and Vice Presidents (variable pay of Presidents and Vice Presidents makes up around 50% of personal annual salaries) is regularly reviewed by the Remuneration Committee, which is composed of Independent Directors based on the degree of contribution to the Company operations including future operating risks and level of involvement in CSR related matters.

According to the Regulations Governing the Evaluation of the Performance of the Board of Directors, the operation, participation and contributions and participation in CSR of the members of the Board shall be included in the evaluation. The performance shall be evaluated at the end of the year, analyzed and summarized by the Remuneration Committee, and the report and recommendations shall be submitted to the Board of Directors. The Company entrusted the Taiwan Corporate Governance Association to execute external evaluation on the effectiveness of the Board of Directors in January, 2018. The Taiwan Corporate Governance Association believed that the Board of Directors of the Company was highly disciplined and abided by the duties of the Board. The Company shall continue to improve the functions of the Board based on the recommendations brought by the Taiwan Corporate Governance Association. The Board of Director’s performance evaluation was completed as self-evaluation in 2019 with an average score of more than 4.75 points (out of 5 points). The operations are considered to be sound and comprehensive.

Furthermore, the performance and remuneration of President and Vice Presidents were set to be related to CSR. The annual targets were set in consideration of CSR indicators that were related to their duties, such as customer satisfaction, customer complaint, energy conservation and carbon reduction, employee turnover rate and corporate volunteer. Besides their personal operational targets and CSR indicators, when evaluating the achieving rate of annual targets of President and Vice Presidents, indicators related to risk management, such as audit and information security management, shall also be considered. The annual remuneration of President and Vice Presidents shall be submitted by the Human Resources Department to the Remuneration Committee for reviewing the reasonableness of their remunerations regularly. Please refer to Appendix on P.126 for the salary structure of our senior managers in 2019.

<table>
<thead>
<tr>
<th>Date</th>
<th>Agenda</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>4/30</td>
<td>Winning the SAM 2019 Sustainable Yearbook Global Telecommunication Services Group Sustainable Leader-Silver Award</td>
<td>Informed</td>
</tr>
<tr>
<td>7/25</td>
<td>2018 Corporate Social Responsibility Report and CSR Report</td>
<td>Informed</td>
</tr>
<tr>
<td>11/8</td>
<td>Scientific-based Target (SBT) Report / Results and recommendations for the Dow Jones Sustainability Index (DJSI) and CSR report</td>
<td>Informed</td>
</tr>
<tr>
<td>2020/1/21</td>
<td>Report of the revision to the Environmental and Energy Policy and Renewable Energy Targets</td>
<td>Informed</td>
</tr>
</tbody>
</table>
2.1.3 Supervision Mechanism: Enhancing Internal Control to Implement Corporate Governance

1. Internal Control Mechanism

The Internal Audit office reports to the Board of Directors with dedicated auditors.
- Audit targets: the Company and its subsidiaries.
- Scope of audits: covering all the operations and management functions including finances, business, etc. The top ten cycles shall be audited in accordance with the law.
- Audit method: regular audits are performed according to the annual audit plan, and additional project audits are executed when necessary to make timely discoveries of possible deficiencies in the internal control system and propose suggestions for improvement. All departments and subsidiaries of the Company are urged to perform self-assessment, establish the Company's self-supervision mechanism, with the results serving as the basis for recommendations to the Board of Directors and President for the issuance of the Internal Control Statement.
- Audit result communication: an audit report is submitted to the Chairman of the Board, and the audit supervisor shall regularly report the status and results at the Audit Committee meetings and the Board meetings. Furthermore, a communication channel and mechanism between the Audit Committee and the audit supervisor have been established. The convener of the Audit Committee is responsible for reporting the communication with the internal audit supervisor to the shareholders' meeting in order to implement the spirit of corporate governance.

2. Remuneration and Nomination Committee

The Committee is composed of all four independent directors in accordance with the "Remuneration and Nomination Committee Charter," responsible for formulating and regularly reviewing the policies, systems, standards and structure of Directors' and managers' salary and remuneration, as well as seeking, reviewing and nominating director candidates.

3. Audit Committee

The Audit Committee is composed of 4 independent directors, whose powers include the fair expression of financial reports, effective implementation of audits and internal control, matters involving the Directors' own interests, major asset or derivative commodity transactions, major capital loans and endorsements or guarantees, fundraising or issuance of securities, appointment and dismissal of financial, accounting and internal audit managers, corporate risk management, appointment or dismissal of CPA or remuneration and performance evaluation, merger and acquisition and regulatory compliance, etc. The Audit Committee reviews or appraises the financial reports and audit reports every quarter, as well as engaging in in-depth individual communications with the accountants and audit supervisors. Major capital expenditure or investments are also reviewed by the Audit Committee.

2.1.4 Ethical Corporate Governance: Abiding by the Core Value of Ethics to Respond to Social Needs

1. Ethical Corporate Management Best Practice Principles

**Strategies**

In January 2011, the "Ethical Corporate Management Best Practice Principles of Taiwan Mobile" was formulated. Its scope of application includes subsidiaries, consortium legal persons with direct or indirect donation funds totaling more than 50% and other organizations or legal persons with substantive control ability. It clearly regulates the behavior and interests of dishonesty, preventive programs and handling procedures.

**Control Measures**

Through three measures of detection, improvement and prevention, we implement the Ethical Corporate Management Best Practice Principles and regularly announce and notify all Employees, Managers and Directors of relevant regulations every year. At the same time, we report to all members of the board of directors on the status of implementation. In 2019, we communicated on anti-corruption issues such as ethical operation, covering 100% of the board members.
Performance in 2019

- No employee violated the Ethical Corporate Management Best Practice Principles in 2019.
- Since January 1, 2014, 100% of employees sign the Declaration of Integrity every year and attend ethical operation training courses.
- In 2019, the total number of people attending ethical operation courses increased by 93% compared with the previous year, and the total number of study hours also increased by 7.4% compared with the previous year.

2020 Targets

In 2020, there will be zero tolerance for violations of the Ethical Corporate Management Best Practice Principles.
2.1.4 Ethical Corporate Governance: Abiding by the Core Value of Ethics to Respond to Social Needs

2. Code of Ethics / Procurement Rotation System

**Code of Ethics**

"Code of Ethics" training is a compulsory course for all employees. 100% of the Company’s existing and new employees complete the training and pass the exam. Case studies are used to illustrate and strengthen employees’ understanding of the provisions of the Code of Ethics, and to show correct behavior and abide by ethical norms in their daily work, strengthening business ethics and legal compliance. In addition to online courses, there are also learning resource documents and courses on relevant topics, such as the group work code, legal requirement for your information, education on rule of law for employees, information security, etc.

The Company establishes an employee complaint system to provide a rigorous and safe reporting mechanism so that employees can convey their opinions in a safe and confidential manner.

**Procurement Rotation System**

In order to strengthen the internal control mechanism, a comprehensive inventory of the group’s purchase and acceptance business is regularly conducted for repetitive large quantity requisition, acceptance and procurement functions above a certain amount. Relevant personnel will be regularly rotated to different positions, and the restrictions on not returning to their original positions within a certain period of time has also been stipulated. Each year, continuous inspection and inventory of requisitions, acceptance and procurement functions is carried out in accordance with this standard, and new duties are included in the management. The Human Resources Division is responsible for the filing and management of the aforementioned persons in charge and their immediate supervisors to regularly review their seniority and arrange mandatory rotations for those who meet the regulated length of service.

3. Political Donation

The Company strictly abides by the government’s “Political Donations Act” of the government and the internal "Ethical Corporate Management Best Practice Principles." It prohibits illegal political donations directly or indirectly to political parties or organizations or individuals involved in political activities. We have never provided political donations.

4. Legal Compliance

We strictly abide by the administrative guidance and relevant regulations of the competent authorities.

Three penalties were imposed for violations of laws and regulations with regards to Internet and base stations, showing a significant decrease by 13 incidents compared with the 16 in 2018. The amount also reduced from NT$12.3 million to NT$2.8 million, showing a significant improvement both in the number of incidents and amount of penalties. Violation types, number of cases, amount of penalty and improvement countermeasures for 2019 are as follows:

<table>
<thead>
<tr>
<th>Violation type</th>
<th>Number of violations</th>
<th>Amount of violation</th>
<th>Improvement measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base station</td>
<td>2</td>
<td>NT$1 million</td>
<td>The Company took the penalty seriously by finding a new site in order to provide consumers with good communication services. In the future, we will continue to communicate with stakeholders to protect consumer rights.</td>
</tr>
<tr>
<td>Internet</td>
<td>1</td>
<td>NT$1.8 million</td>
<td>Make improvements in compliance with regulatory requirements to comply with the competent authorities. This case has been improved on July 26, 2019 after obtaining the approval of the competent authorities to modify the business plan.</td>
</tr>
</tbody>
</table>

There were no major violations of social, economic and environmental laws in 2019.

Note: Major violations refer to cases with fines amounting to NT$ 300,000 or more.
5. Respect for and Protection of Human Rights

Human Rights Due Diligence
We strengthen and promote human rights awareness of our employees and stakeholders through due diligence such as human rights assessment. The survey procedure consists of five steps:

**Step 1  Guidance on Human Rights Risk Issues**
We adjust the Company’s way of addressing human rights issues in accordance with the requirements of international norms and domestic laws and regulations.

**Step 2 Human Rights Risk Assessment**
Convening senior representatives of the company (1 to 2 per department) in a special task force to review the human rights issues and risks that may occur in the Company’s operations and the entire value chain, as well as producing a “Human Rights Risk Assessment Questionnaire”. Each member of the special task force fills out the questionnaire based on the situation of each department. A total of 17 questionnaires were recovered, covering 100% of the Company’s business groups and subsidiaries. We have adjusted the policy implementation according to the risk assessment results, as well as requiring all departments to list these risks as key tracking targets for implementation. The human rights risk matrix is as follows:

- Personal freedom and security
- Privacy protection: The procedure of personal data collection does not meet the regulations, resulting in a breach
- Privacy protection: The employees’ personal data is not protected by appropriate measures, resulting in improper use or breach
- Privacy protection: Improper handling or use of customer data
- The right to equality and non-discrimination before the law
- The right to participate in public life
- The right to social security: the Company has not taken out relevant insurance in accordance with the law
- Right to social security: Insufficient safety and health training leads to industrial safety incidents
- Right to work
- The right to fair and favorable working conditions
- Right to health: The company fails to follow the statutory norms, causing employees to work long hours and causing adverse physical and mental impact
- Restriction of Hazardous Substances is not included in the purchasing requirements
- Freedom of speech and expression
- Freedom of assembly and association
- The right to family protection
- Child protection
- Technological inclusiveness, digital equality: The company fails to provide products and services that can be easily used by diverse social groups
- Technological inclusiveness, digital equality: The company fails to provide products and services that can successfully address social phenomena
- Environmental and cultural property protection

**Probability of occurrence**

![Risk Matrix Diagram]

**Influence level**

1. Personal freedom and security
2. Privacy protection: The procedure of personal data collection does not meet the regulations, resulting in a breach
3. Privacy protection: The employees’ personal data is not protected by appropriate measures, resulting in improper use or breach
4. Privacy protection: Improper handling or use of customer data
5. The right to equality and non-discrimination before the law
6. The right to participate in public life
7. The right to social security: the Company has not taken out relevant insurance in accordance with the law
8. Right to social security: Insufficient safety and health training leads to industrial safety incidents
9. Right to work
10. The right to fair and favorable working conditions
11. Right to health: The company fails to follow the statutory norms, causing employees to work long hours and causing adverse physical and mental impact
12. Restriction of Hazardous Substances is not included in the purchasing requirements
13. Freedom of speech and expression
14. Freedom of assembly and association
15. The right to family protection
16. Child protection
17. Technological inclusiveness, digital equality: The company fails to provide products and services that can be easily used by diverse social groups
18. Technological inclusiveness, digital equality: The company fails to provide products and services that can successfully address social phenomena
19. Environmental and cultural property protection
Human Rights Policy

We believe that creating a work environment that fully protects human rights is inseparable from the sustainable development of an enterprise. TWM's Human Rights Policy is divided into four main axes, including support for international human rights conventions, respect for human rights in the workplace, full implementation of information security and responding to the needs of society with core resources.

Step 3 Human Rights Issues Management Measures

Review the Company's operations from the perspective of the value chain (suppliers, employees, customers), conduct comprehensive investigations of the potential risks of each department and the management measures taken, as well as compiling human rights risk due diligence reports. Inventory relevant human rights aspects of various departments, note management and improvement measures and track implementation results. According to the human rights risk assessment results, the Company's important risks include information security (Item 4), customer personal data protection (Items 2 and 4), protection of occupational safety and health (Item 8), labor safety (Item 8), equipment safety (Item 12) and so on. Conduct a systematic annual questionnaire survey on suppliers from the upstream of the value chain, including compliance with labor practices and human rights issues, and conduct on-site audits of key suppliers to review labor practices and human rights compliance. See Chapter 2.3 Sustainable Partners for details. The downstream of the value chain may come in contact with ordinary and vulnerable groups. In addition to personal data protection, we provide a number of measures (such as barrier-free facilities, online applications, etc.) to ensure access to our services. The Company did not engage in major investments in 2019. Therefore, no human rights review was conducted prior to making an important investment. It will be considered in the future. If it cannot be implemented for any reason, it will be implemented at an appropriate time to ensure that human rights at all stages of the value chain are protected.

Step 4 Annual Review and Improvement

Review existing goals and progress on an annual progress and note new potential problems to evaluate the effectiveness of our corrective measures. We hope to effectively manage human rights issues through this continuous evolutionary process.

Step 5 Information Disclosure

The Company publicly discloses the process of identifying human rights issues, the major human rights issues identified, the impacted parties and countermeasures on a yearly basis.

Human Rights Policy

We believe that creating a work environment that fully protects human rights is inseparable from the sustainable development of an enterprise. TWM's Human Rights Policy is divided into four main axes, including support for international human rights conventions, respect for human rights in the workplace, full implementation of information security and responding to the needs of society with core resources.
6. Personal Information Security and Privacy Protection

The company introduced the "ISO/IEC 27001 Information Security Management System" in order to protect the security of consumers' personal data, as well as passing the new version of BS 10012 and ISO/IEC 29100 privacy protection certification.

Set up the Information Security and Personal Data Protection Committee, with a senior executive above the level of Vice Presidents as the Chairman, continue to invest a large amount of resources to strictly implement various management and control requirements, conduct internal and external audits every six months, review the implementation, and ensure the management standards. Its operations are as follows:

1. Committee member configuration: the CEO can assign Chairman of Committee and the Chief Executive Officers of each functional organization shall assign committee members.
2. Meeting frequency: At least once every quarter. In case of major issues, a meeting is convened with the consent of the Chairman.
3. The operation of all groups subordinate to the committee: Operation maintenance team implements and researches and develops the personal information and information security measures, and holds a meeting at least quarterly. Internal audit team is composed of the colleagues with the audit certificate and carries out internal audit every six months. Emergency response team is composed of the related personnel convened by the Chairman of Committee according to the nature of the incident.

Planning of the four aspects - external defense of hackers-establishment of intrusion prevention, internal defense of loss-handling of data loss prevention surveillance, absorbing system planning establishment into security evaluation-establishment of system development security specification, system operating maintenance and monitoring precaution personnel information and information security incident-establishment of information security monitoring and control center in order to implement the user personnel data and internal sensitive information protection.

The three measures completed in 2019 are as follows. The total number of 66 cases regarding customer's sensitive data in the event of non-compliance were detected and blocked, achieving 100% blocking rate. A total of 52 cases of suspected customer personal data breach were reported in 2019. They were all investigated and clarified with no violation of customer privacy.

<table>
<thead>
<tr>
<th>Safety Issues</th>
<th>Protection measures</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer personnel information is stolen or</td>
<td>1. Take out &quot;Data Protection Liability Insurance&quot;</td>
<td>1. Reduces the risk of compensation in case of personal data breach</td>
</tr>
<tr>
<td>inappropriately used</td>
<td>2. Upgrade EMAIL APT and other systems</td>
<td>2. Continue to strengthen the defense against attacks by adopting PCI-DSS to certify payment security</td>
</tr>
<tr>
<td>Cloud services are not protected</td>
<td>Introduced cloud services protection management system</td>
<td>Obtained ISO/IEC 27017 certification, fulfilling the responsibilities of good administration</td>
</tr>
<tr>
<td>Continuous monitoring and improvement</td>
<td>Establish and track various security KPIs</td>
<td>Regularly review the information security KPIs to ensure all items are gradually improved</td>
</tr>
</tbody>
</table>

Note: The scope of information security management mechanism includes Taiwan Mobile, Taiwan Fixed Network, Taiwan Digital Service, Taiwan Teleservices & Technologies and Taiwan Kuro Times Co., Ltd.

The scope of the personnel information privacy management mechanism includes Taiwan Mobile and Taiwan Teleservices & Technologies.
2.1.5 Risk Management: Comprehensive Risk Management System for Strengthening Management Practices

The Company actively plans risk management policies, the organizational structure and risk management system; potential risks in the operation of the Company are dealt with beforehand for prevention. The risk management policy was established in 2011. In order to summarize the current risk management framework and control mechanism, the risk management framework was adjusted in 2015, and the Risk Management Committee was set up after the approval of the Board of Directors. The Chairman of the Board is the Committee Chair, and the President is the Deputy Chair. The Committee reports to the Board of Directors to reinforce the risk management mechanism of the organization.

The Internal Audit Office conducts annual year-end risk assessments, and rates the importance and possibility of each risk, then calculates the risk value according to the results of the rating. The risk value will become the basis of next year’s audit plan.

In 2019, the audit results did not show any internal control deficiencies and abnormalities. Nevertheless, 68 concrete suggestions for operational procedures were proposed as reference for enhancing management quality. The improvement and suggestions would be followed up on a quarterly basis until they have been completely improved.

Risk Management Policy

1. Continue to promote the operation model with risk management as the direction.
2. Establish a risk management mechanism with early identification, precise measurement, effective monitoring and strict control.
3. Build a risk management system for the overall company, and control the risks within an acceptable level or a range of control.
4. Introduce the latest risk management guidelines and improve continuously.

Risk Management Operations

To implement the Company’s risk management policies, relevant control mechanisms are compiled by the Risk Management Committee.

Appointment of committee members

- Committee Chairman: The Committee is chaired by the Chairman of the Board or a person designated by the Chairman.
- Committee Members: Members of the Committee are selected from the heads of departments responsible for the relevant risk management areas or their designated proxy and coordinated by the Committee Chairman.
- Executive Secretary: Selected and appointed by the Committee Chairman.

Frequency of meeting

- Regular: At least once every six months
- Non-scheduled: When a risk management issue arises, a meeting is proposed by members of the Risk Management Committee and the Executive Secretary, and then the meeting is convened upon approval by the Committee Chairman.

Communication mechanism with the CSR Committee

- The Risk Management Committee reports any CSR-related issues to the CSR Committee. Issues proposed to be discussed in 2019 were as follows:
  - In response to the Company’s internal task adjustments and strengthening of personal data/information security protection levels, the inclusion of a verification unit will be reassessed.
  - The CSR Committee reports issues associated with operating risks to the Risk Management Committee. The issues proposed to be discussed in 2019 were as follows:
    - The Company provides risk analysis results on the basis of international standards for risk identification.
    - Perform analysis and provide results on the Task Force on Climate-related Financial Disclosures (TCFD) to respond to CDP/DJSI requirements.

Communication mechanism with the Innovation Management Committee

- The Risk Management Committee reports issues associated with innovations and digital competitions to the Innovation Management Committee.
- The Innovation Management Committee reports issues associated with operating risks to the Risk Management Committee.

Appendix

Sustainable Operations

Realizing Social Potential

Minimizing Footprint

Elevating Future Experience

Creating Stakeholder Synergy
2.1.6 Communication Mechanism: Smooth Communication Channels for Protecting the Rights and Interests of Stakeholders

We set up a complete internal and external communication channel on the official website to accept and respond to the needs of stakeholders in order to protect the rights and interests of internal staff and external customers.

1. Employee Complaints
   The Company has formulated the "Employee Appeals Process" and established the following complaint and appeal channels, which shall be handled exclusively by the Internal Audit Office. The appeal can be sent to the Internal Audit Office in writing or through fax line (02) 66361600. Employees can also make complaints or appeals through a dedicated internal e-mail. A total of 4 employee appeals were accepted in 2019, all of which have been closed. For the cases accepted, the investigations have been carried out in accordance with the Company’s procedures.

2. Sexual Harassment Complaints
   The company is committed to building a friendly environment with no harassment and discrimination by following the laws and regulations to formulate relevant standards for preventing sexual harassment complaints, as well as setting up an appeal hotline and mailbox. We continue to promote sexual harassment prevention and strengthen human rights awareness to internal and external personnel through onboard training, compulsory courses for all staff, instant messaging software, intranet, computer startup screen and recruitment website. No sexual harassment complaints were registered in 2019.

3. Complaints of Unlawful Infringement of Duty
   In order to protect all employees from physical or mental violations that could lead to illnesses in the course of performing their duties, we formulated the "Prevention and Control Measures and Operational Guidelines for Unlawful Violation in the Performance of Duties" as well as the "Statement on Prohibiting Workplace Violence" to prevent and address such matters. The operational guidelines have been promoted during onboard training, with the scope covering identifying workplace violence, how to seek assistance in the face of workplace violence, employee consultation and appeal channels. One appeal has been settled in 2019.

4. Customer Complaint
   There were no major environmental, social or human rights complaints in 2019. Please refer to Customer Service Commitment/Mechanism on P.75 for details.
   We commissioned T-Cat for goods delivery. Goods or application information that are damaged or lost due to negligence will be reissued immediately. We also regularly review the procedures and cases to identify quality observation indicators, continuously optimizing service quality. All 11 reported cases have been investigated while no violation of customer privacy was identified.

5. Supplier Communication and Exchange
   Our supplier related communication mechanism is detailed in Chapter 2.3 Sustainable Partners on P.60.
2.2 / Happy Workplace

Vision:
Achieving corporate governance that promotes inclusive and sustainable economic growth while taking into account the balanced ESG development, providing employees with a happy workplace and the possibility to participate in sustainable international business from a bigger perspective, making honor and sense of achievement a new life philosophy in the future.

Corresponding to material topics:
Employees’ physical and mental health/Talent development and retention

Corresponding to 4 major stakeholders:

Photo courtesy of Casey Peng
**2020 Targets**

- Average number of training hours per person exceeds 50 hours
- 75% of employee satisfaction rate with the friendly work environment
- The number of employees who have received CSR training increases at least 3% compared to 2017
- Continue to recruit externally to create more employment opportunities for the physically-challenged
- Continue to promote Online Sports Competition
- Complete prenatal health education for 90% of the pregnant employees
- Complete congratulatory phone calls for 90% of the postnatal employees

**2030 Targets**

- Average number of training hours per person exceeds 55 hours
- 83% of employee satisfaction rate with the friendly work environment
- The number of employees who have received CSR training increases at least 13% compared to 2017
- Continue to recruit externally to create more employment opportunities for the physically-challenged
- Continue to promote Online Sports Competition
- Complete prenatal health education for 95% of the pregnant employees
- Complete congratulatory phone calls for 95% of the postnatal employees

---

**Key Results and Performance of Happy Workplace**

- **88.6%** of postnatal employees received congratulatory phone calls
- **64,866 employees** received CSR education, showing an **805%** increase compared with 2017
- **4,028 people** participated in health promotion, an increase of **16.79%** from 2018
- **3,665 employees** participated in the Online Sports Competition, burning a total of **11.97 million calories**
- **64,866 employees** received CSR education, showing an **805%** increase compared with 2017
- **76% friendly working environment satisfaction rate**, achieving the 2020 target in advance
- **The hiring rate of the disabled is 1.78 times higher than the legal requirement**
- **The average education and training of TWM employees was 63.8 hours**, reaching the 2020 target in advance
- **90%** of prenatal health education for pregnant employees, reaching the 2020 target ahead of schedule
- **Listed as a constituent stock in the Taiwan Employment 99 Index**
- **Won the 2019 Happiness Enterprise Award in the Technology Industry**
- **Listed among the Top 10 high-tech companies new graduates want to join the most**

---

**Innovative Achievements**

- **Excellent brand**
- **Sustainable partners**
- **Ethical operation**
- **Happy workplace**
- **7 key brand values**
  - Elevating Future Experience
  - Minimizing Footprint
  - Realizing Social Potential
  - Creating Stakeholder Synergy
  - Responsible Business
  - Sustainable Operations
  - Strategies

---

**Appendix**
2.2.1 Prioritizing Talent Cultivation to Maintain Core Competitiveness

As a new-generation technology and telecommunications company, we understand that talent is the key to maintaining core competitiveness. We see employees as partners for sustainable growth, grow together with the company, and move towards regional and world-class success, creating a sustainable future.

With respect to our employees, TWM adheres to the principles of "integrity as a way of life, pursuing goals with enthusiasm, innovative thinking, and make hard things simple" as our core values.

- We emphasize integrity and enthusiasm when hiring employees. Integrity is the cornerstone of interpersonal interactions. Moreover, enthusiasm for services and learning is the key to fulfilling the spirit of Excel Customer Experience.
- We firmly believe that innovation is the driving force for continued Company growth and thus encourage employees to implement the concept of make hard things simple and propose innovative or improvement solutions to help the Company become the leader in digital convergence.
- We have formulated talent training programs in response to industry trends and corporate development strategies, with the goal of enhancing employees’ workplace competitiveness and career development opportunities.

1. Talent Recruitment and Diversity

As of the end of 2019, the majority of the employees are 31-50 years old with 48% of female and 48% of males in management positions. The Company mainly hires local employees, including 2 foreign employees and 19 indigenous employees (53% are female). To provide better services, approximately 20% of non-employees assist in business execution, such as retail sales services.

We implement performance-oriented promotion and salary policies based on performance-differentiated and competitive rewards.

Please refer to the Appendix P.126 for the statistical table of employee structure.
2.2.1 Prioritizing Talent Cultivation to Maintain Core Competitiveness

New talents specialized in AI, big data and IoT were hired through open recruitment to help the company become a technology and telecommunications company of the new era. Most of the newly recruited employees are under 30 years old. The Company hopes to drive its digital transformation by attracting new generation talents. After an employee submits a resignation letter, the supervisor will conduct an interview followed by an interview and career development consultation offered by the Human Resources Department after the reason for resignation as well as feedback for the company is clarified through the exit questionnaire. Some employees have chosen to stay after the interview. The turnover of 2019 was lower than that of the previous year. We implement performance-oriented promotion and salary policies based on performance-differentiated and competitive rewards.

The Company promotes the employment of the disabled with no upper limit.
- The hiring of the disabled is 1.8 times higher than the legal requirement, with the most senior employee serving for 27 years, 1 manager and 2 assistant managers.
- We have provided professional jobs, equal promotion channels, generous remuneration and benefits, and a friendly workplace to promote job opportunities for the disabled.
- Various disabilities: severe visual impairment, severe organ impairment, limb impairment, epilepsy, hearing impairment and facial impairment, etc.
- Various positions: Network Optimization, System Development, Legal Affairs, Sales, Market Survey, etc.
- Friendly environment: exclusive parking spaces, spacious seats and dedicated equipment.

Campus talent cultivation shortens the gap between learning and application.
We have continued our partnerships with institutions of higher education. In 2019, a total of 23 students participated in industry-university cooperative internship programs. The students received comprehensive training in addition to salary. Students with outstanding performance were given hiring priority. We will continue to maintain the relationship with higher education institutions and early contact with potential talent through internship, campus recruitment, and employees serving as lecturers and other means, further helping students combine studies with practice.

► Note: Please refer to the Appendix P.127 for the analysis of the statistical table of new/resigned employees.
2.2.1 Prioritizing Talent Cultivation to Maintain Core Competitiveness

2. Remuneration and Benefits

The Company will also uphold the principle of “employees as the most important asset of the Company” to provide competitive remuneration that attracts and retains talents. Our standard starting salary is higher than the basic wages prescribed by the Government and competitive enough to be ranked as a constituent stock of the 2019 Taiwan HC 100 Index for four consecutive years. According to the 2019 statistics published by the Directorate General of Budget, remuneration in telecommunications industry was 1.8 times the market average.

To maintain competitiveness, the Company will evaluate the market remuneration standards, performance and future development of the Company to formulate remuneration plans on a yearly basis. Realization of the performance-oriented remuneration policy by conducting periodic performance evaluations for all employees. Salary for starting professional personnel of the same category shall be the same. For professional personnel with work experience, the salary will be determined according to their education and work experiences, expertise and professional certifications. There will be no discrimination in remuneration, benefits, promotion, training, employment rights, etc., due to gender, sexual orientation, age, marriage, race or disability.

Note 1: Comparison is based on individual employee’s basic monthly salary only.
Note 2: Salaries of workers who are not employees are higher than the monthly minimum wage in Taiwan.
Note 3: TWM plastics group salary ratio analysis please refer to Appendix P127

Differences in the number of full-time employees who are not managers, average salary and the median in 2019 are listed in the table below

<table>
<thead>
<tr>
<th>Disclosed items for full-time employees in non-management positions*</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of employees</td>
<td>3,703</td>
<td>3,597</td>
</tr>
<tr>
<td>Average Salary (NT$1,000)</td>
<td>1,039</td>
<td>1,054</td>
</tr>
<tr>
<td>Median Salary (NT$1,000)</td>
<td>890</td>
<td>909</td>
</tr>
</tbody>
</table>

*Employees in "management positions" refer to the same scope of disclosure of insiders (managers) by the annual report of the shareholders’ meeting. Note: According to the "Operating Procedures for the Preparation and Filing of Corporate Social Responsibility Reports by Listed Companies" published by the Taiwan Stock Exchange, the information of the professional auditor of the Company in 2019 was audited by Deloitte & Touche.
### 2.2.1 Prioritizing Talent Cultivation to Maintain Core Competitiveness

Holidays and diverse benefits are provided to motivate and attract talents. Besides standard benefits, employee benefits include free group insurance for employees and their dependents, employee stock ownership trust (market value: NT$ 602 million), high subsidy for phone bills, preferential value-added service with family members, purchase discount for company products, comfortable working environment, emergency aids, rewards for long-term employees and so on. Please visit our website for further details. In 2019, employee salaries and consolidated expenses of the benefits totaled NT$6.17 billion. The final version of funding plan for labor pension is available on page 60 of the consolidated financial statement for 2019 Q4.

**Encouraging employees to get married and have children**
- The shifts for employees who are pregnant or breast-feeding will be adjusted so that they will not work night shifts.
- Maternity leave superior to what is provided by law
- Our regulations clearly stipulate that the performance evaluation shall be conducted for the actual duty period of the employees who have applied for maternity leaves or unpaid leaves, so that their evaluation results may not be adversely affected.
- With 205 newborns, the crude birth rate was 35.66 per thousand, which was higher than the crude birth rate in Taiwan (7.5 per thousand).

#### 2019 Statistics on 2019 Unpaid Parental Leave

<table>
<thead>
<tr>
<th>Category</th>
<th>TWM+Taiwan Fixed Network+</th>
<th>TWM Digital Service+</th>
<th>Taiwan Teleservices &amp; Technologies+</th>
<th>TWM Broadband</th>
<th>Taiwan Kuro Times</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of people eligible to apply for unpaid parental leave</td>
<td>285</td>
<td>293</td>
<td>14</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>95</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Number of people expected to return from unpaid parental leave (A)</td>
<td>13</td>
<td>85</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Number of people who returned from unpaid parental leave as expected (B)</td>
<td>9</td>
<td>67</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Number of people who returned from unpaid parental leave in 2017 (C)</td>
<td>19</td>
<td>87</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Continued to work for more than one year after returning from unpaid parental leave in 2017 (D)</td>
<td>12</td>
<td>60</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Return rate (B/A)</td>
<td>69.23%</td>
<td>78.82%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Retention rate (D/C)</td>
<td>63.16%</td>
<td>68.97%</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
</tr>
</tbody>
</table>
We conduct career development surveys and performance evaluations for all employees on a regular basis. The supervisors organize performance and career development interviews with the employees to discuss target achievement, give recommendations for capacity that merits further development and feedback. Multidimensional evaluation: The employees fill out a career development plan to which the supervisors offer feedback in terms of work, capacity development and career path. The employees can better understand their strengths and weaknesses through supervisor appraisals by supervisors as well as evaluations of superiors by subordinates and peers. The results will become the basis of their personal development, and this approach will hopefully help the employees learn work with others in an efficient manner to improve performance as a team. After the grades of performance evaluation have been finalized, supervisors will officially notify their subordinates of the results and recommendations. The communication effectiveness is also examined through survey.

Corporate Social Responsibility: The employees are assigned CSR goals according to their jobs, the number of hours for CSR courses and volunteer work are provided. Risk Management: If the employees propose the innovation or improvement plans for mitigating risks, they will be able to achieve better performance and reward. In contrast, violation of information security will have a negative impact on performance evaluation.

Learning development is in association with strategy.

- We have planned the direction for next year’s training in association with business strategic development, tendency analysis, interviews with high-level officers and colleague training requirements.
- For all employees from new ones to high-level ones, we have set up complete and diversified training to cater to the various development needs by employees in different stages.

### 4. Career Development and Training

Learning development is in association with strategy:

<table>
<thead>
<tr>
<th>100% of employees participated in training, with the training hours in 2019 listed as follows:</th>
<th>TWM</th>
<th>Taiwan Fixed Network</th>
<th>Taiwan Teleservices &amp; Technologies</th>
<th>TWM Digital Service</th>
<th>TWM insurance agent</th>
<th>TWM Broadband</th>
<th>Taiwan Kuro Times Co., Ltd.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assistant manager or above</td>
<td>54.2</td>
<td>66.2</td>
<td>40.4</td>
<td>48.2</td>
<td>52.5</td>
<td>52.0</td>
<td>53.3</td>
</tr>
<tr>
<td>Assistant manager or below</td>
<td>67.8</td>
<td>60.3</td>
<td>47.1</td>
<td>47.4</td>
<td>49.9</td>
<td>51.4</td>
<td>56.4</td>
</tr>
<tr>
<td>Average by gender</td>
<td>66.4</td>
<td>60.6</td>
<td>45.9</td>
<td>47.4</td>
<td>50.1</td>
<td>51.5</td>
<td>56.4</td>
</tr>
<tr>
<td>Average training hours per employee</td>
<td>63.8</td>
<td>46.7</td>
<td>51.2</td>
<td>55.8</td>
<td>17.5</td>
<td>11.7</td>
<td>2.6</td>
</tr>
</tbody>
</table>
2.2.1 Prioritizing Talent Cultivation to Maintain Core Competitiveness

Learning development is in association with strategy. Our supervisors discuss and set the Individual Development Plan with each employee based on each department strategic goals, employee performance, career intention and multiple feedback. Employees are able to enrich the knowledge and skills needed for their current positions or the next stage through training, learning by working, self-study, etc. The percentage of positions (including external recruitment) filled by internal recruitment is 18%.

The Company will summarize key positions and potential candidates for succession. The program will be established and followed up. The IDP achievement rate is 100%, the completion rate is 86.1% and 27 people have taken over key positions.

The Company invests in the development of employees’ knowledge and skills in response to its transformation. In 2020, we will continue to assist employees to internalize Data DNA in work scenarios and decision-making.

- Launch courses such as practice change, deliberate practice, innovative workflow improvement, and training leadership skills from global competition and cooperation.
- 25.0% of the courses are related to Agile Response, 15.2% of people participated in relevant training, and 50.0% of the courses are combined with follow-up implementation plans.
- "Self-study Movement," "Supervisor Book Club" and so on.
- 83.4% of employees participated in the new learning model.

- HR acted as a guide to watch the short clip with all employees in different units and discuss countermeasures to overcome difficulties. After-class evaluation scored 94 points (3.4% increase from the target).
- New scholarships and grants are given to "Digital Talents".
- We partnered with external organizations to help employees develop the professional skills required to engage in innovative services with 4 months of full pay during the training period. Trainees are assigned new positions upon the completion of the course with 100% of completion rate.
2.2.1 Prioritizing Talent Cultivation to Maintain Core Competitiveness

Ensure learning results
Understanding and planning the course in accordance with actual needs, implementing in-class management and after-class follow-up, as well as improving courses that do not meet the standards. Course completion satisfaction increased to 94 points year on year (3.4% higher than target).

Training and development category and its specific results in 2019 as shown in the chart below.
2.2.2 Unimpeded Employee Communication and Diverse Inclusive Culture

The Company values two-way communication and is committed to providing a transparent communication channel between the supervisors and employees for them to fully express opinions and ideas. We have respected the employees’ rights as endowed by law. Therefore, we have never blocked or impeded their freedom of association. There is no employment discrimination against local employees and indigenous people. No child labor or forced labor has been engaged, nor has the violation of human rights or discrimination. When an employee is appointed, the labor contract will be reviewed and signed by the employee in advance to protect the rights and interests of both the employer and employee. TWM believes that the labor-management consultation mechanism is very important. Labor representatives are elected directly by employees and regular labor-management meetings based on fifty-fifty representation are convened to ensure free and unobstructed communication.

Focusing on leading indicators for employee communication
In addition to understanding issues the employees are concerned with through regular employee feedback surveys, quarterly communication meetings are organized by supervisors with the opportunities to raise questions in order to promptly understand the Company’s status quo at all levels and make adjustments accordingly.

Explanation

Once every two years Outsourced survey for all staff members
→ Cohesion indicator
→ Four types of employee effectiveness
→ 10 aspects

Quarterly executive communication meeting and employee questions
→ Executive communication meeting
→ Operating status/Key targets/Interactive discussion
→ Cross-level communications: Employee raised questions or provided suggestions

Results of 2019 Survey
• An internal survey was conducted to track and improve the effectiveness based on the results of the survey in 2018. Relevant topics on "diverse environment and respect for differences" were added.
• 88% of effective response rate.
• Compared with the previous survey results, this time the overall approval increased by 11%, with the highest approval in "diverse environment and respect for differences."

Results and Performance

The overall employee approval
-11%

Diversity and inclusion learning YOY
+136.6%

100% employee question processing rate

Improvement and follow-up
• We formulated improvement plans according to the survey results, as well as tracking the implementation progress and results on a quarterly basis. The implementation rate of the improving plan reached 100%.
• An investigation will be outsourced in 2020.

Strengthened dialogue
The Company proactively addresses frequently-asked questions to explain and strengthen communication with the supervisors and employees.

100% employee question processing rate

305 questions (+23% from the previous year)

2019 Implementation Performance
• Four executive communication meetings.
• 100% of question processing rate with a total of 305 questions (+23% from the previous year).

Elevating Future Experience
Minimizing Footprint
Realizing Social Potential
Creating Stakeholder Synergy
Responsible Business Zetta Connected

Environmental sustainability
Social inclusion
Innovative accomplishments
Excellent brand
Sustainable partners
Ethical operation
Happy workplace
7 key brand values

Appendix
2.2.2 Diverse Cultural Inclusion

The Company creates the environment for diverse cultural inclusion which learns to respect differences and be aware of unconscious bias. The results of creating a diverse and friendly workplace in 2019 are listed in the table below:

<table>
<thead>
<tr>
<th>Learning Activities</th>
<th>Opinion survey</th>
<th>Promotion</th>
<th>Maternal Care</th>
<th>Gratitude E Card</th>
</tr>
</thead>
<tbody>
<tr>
<td>Win Win Lectures:</td>
<td>Add the dimension of &quot;Diverse Environment and Respect for Differences&quot;</td>
<td>The promotion of female employees to management positions accounted for 49% of the total, which is consistent with the proportion of women in the company</td>
<td>Female employees can apply for tocolysis leave or maternity leave to dedicate their time to caring for the newborn baby.</td>
<td>Encouraging employees to express their gratitude or well wishes for their colleagues.</td>
</tr>
<tr>
<td>Environmental sustainability</td>
<td>Social inclusion</td>
<td>Innovative accomplishments</td>
<td>Excellent brand</td>
<td>Sustainable partners</td>
</tr>
<tr>
<td>Social inclusion</td>
<td>Environmental sustainability</td>
<td>Innovative accomplishments</td>
<td>Excellent brand</td>
<td>Sustainable partners</td>
</tr>
<tr>
<td>Innovative accomplishments</td>
<td>Environmental sustainability</td>
<td>Sustainable partners</td>
<td>Ethical operation</td>
<td>Happy workplace</td>
</tr>
<tr>
<td>Ethical operation</td>
<td>Happy workplace</td>
<td>Sustainable partners</td>
<td>Zetta Connected</td>
<td>Elevating Future Experience</td>
</tr>
<tr>
<td>Zetta Connected</td>
<td>Elevating Future Experience</td>
<td>Sustainable partners</td>
<td>Responsible Business</td>
<td>Minimizing Footprint</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Results</th>
<th>Results</th>
<th>Results</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>85% approval</td>
<td>100% achievement</td>
<td>100% female members</td>
<td>25,704 hours of tocolysis leave; 61,592 hours of maternity leave</td>
</tr>
<tr>
<td>11,000 participants (Y0Y+136.6%)</td>
<td>Equal opportunities for promotion</td>
<td></td>
<td>9,753 cards sent</td>
</tr>
</tbody>
</table>
2.2.3 Keeping the Employees Healthy by Providing a Good Working Environment

We work on the goal of creating a work-life balance for employees, a healthy body and mind, and a family-friendly workplace based on the four major aspects of “health promotion, mental health, safe environment, and family care,” creating a future value goal for sustainable development.

1. Sound and diverse health promotion and care programs

<table>
<thead>
<tr>
<th>Year</th>
<th>Health Promotion Particpation Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>6,558</td>
</tr>
<tr>
<td>2018</td>
<td>9,064</td>
</tr>
<tr>
<td>2019</td>
<td>10,586</td>
</tr>
</tbody>
</table>

### Statistical histogram of health promotion participation rate in the past three years

- **mySports Online Sports Competition**
  - In 2019, TWM held a company-wide individual and departmental sports competitions in spring and autumn through the mySports App for the fourth consecutive year. During the period of about 90 days, employees use the mySports App developed by the Company to upload their sports records to the cloud to accumulate points for individuals and department teams. With the encouragement of the Company and the sense of competitiveness of various departments, the number of participants this year reached another new high. The friendships from the sports and habits built during the event also enabled many employees to continue their fitness engagement, enhancing the general trend of fitness and health.

- **Handling of human hazards**
  - In addition to case management for high-risk groups based on the results of the “Musculoskeletal Symptoms Questionnaire,” human factors health lectures and individual consultations with physical therapists are arranged as improve measures.

- **Weight control competition**
  - Overweight employees with BMI≥25kg/m² participate a 12-week health improvement program through diet control and regular exercise. They lost an average of 2.23 kilos with the incentive of group participation and prizes.

- **Vocal cords and hearing protection**
  - Course management and grading management for customer service employees.

- **Cancer prevention**
  - Hosting health lectures on colorectal cancer, lung cancer, cervical cancer and breast cancer.

- **Brain and cardiovascular disease prevention and management**
  - Organize bone density testing to detect relevant problems in advance, preventing musculoskeletal injuries.

- **Prevention and treatment of infectious diseases**
  - Vaccination is arranged to prevent influenza from spreading in the office.

- **Handling of infectious diseases**
  - Follow-up and re-examination for abnormalities were arranged based on the 2018 health examinations, with tests including the ultrasound (abdomen, breast, pelvic cavity, thyroid), blood test, electrocardiogram, etc. For some abnormalities, full-time occupational health-care personnel will conduct one-to-one follow-up or medical consultation arrangements and referrals.

- **Employees who remain seated**
  - Abnormal workload scale and physician evaluation based on the annual health examination data combined with analysis results of working hours data. When necessary, individual health guidance, work adjustment, and other measures are taken to reduce the risks for the specific group.

- **Weight control competition**
  - Weight control competition
  - Vocal cords and hearing protection
  - Cancer prevention
  - Brain and cardiovascular disease prevention and management
  - Prevention and treatment of infectious diseases
  - Handling of human hazards
  - Employees who remain seated

### mySports Online Sports Competition

In 2019, TWM held a company-wide individual and departmental sports competitions in spring and autumn through the mySports App for the fourth consecutive year. During the period of about 90 days, employees use the mySports App developed by the Company to upload their sports records to the cloud to accumulate points for individuals and department teams. With the encouragement of the Company and the sense of competitiveness of various departments, the number of participants this year reached another new high. The friendships from the sports and habits built during the event also enabled many employees to continue their fitness engagement, enhancing the general trend of fitness and health.
2.2.3 Keeping the Employees Healthy by Providing a Good Working Environment

2. Mental Health - Stress Management
- The “Stress-Relief Massage Service” provides free massage with a total of 22,154 people were served and a satisfaction rate of 98.4%.
- Employee assistance program: Both “internal consultation” and “EAPs external consultation” services are provided, serving 110 people with a total of 353 sessions. The utilization rate accounts for 4.8% internally and 1.2% externally.
  - a. Internal consultation service: 4.8 points of satisfaction and 4.76 points of parent-child reading club satisfaction (out of 5.0).
  - b. EAPs external consultation services: provides a 24-hour consultation hotline with a satisfaction score of 5.0 (out of 5.0).
  - c. Mental health functional training for the workplace is arranged for front-line service staff, the head of self-operated stores and heads of the maintenance department, with topics including "well-intentioned workplace communication achieves top interpersonal relations. A total of 8 sessions were organized with 411 participants at 4.6 points of satisfaction (out of 5.0)."

3. Family-friendly
- Maternal health protection and management: In 2019, the identification and assessment of 183 workplace environmental hazards were completed and deemed as harmless to maternal, fetal or infant health by doctors. They were classified for level 1 management.
- Comfortable and independent breastfeeding rooms: We have provided professional breast pumps to encourage breastfeeding. Providing health education such as childcare and breastfeeding consultations. Allowing female employees with children to work with ease.
- Providing a comprehensive range of health services for female employees according to their needs at different stages:
  - Preventing menstrual cramps from the perspective of Chinese medicine.
  - Health-promoting activities for International Women’s Day.
  - How to eat healthy during pregnancy & tips for breastfeeding in the workplace.
  - The breastfeeding room is well-equipped and thoughtful, with a breastfeeding rate of 91.3%.
  - Parent-child parenting reading club.
2.2.3 Keeping the Employees Healthy by Providing a Good Working Environment

4. Safe and quality work environmen

- We obtained OHSAS 18001 certification and implemented safety and health management through systematic mechanisms and a management model of P-D-C-A. We will promote the ISO 45001 occupational safety and health management system in 2020.
- We have assembled the first-grade supervisors of relevant units to set up the Occupational Safety and Health Committee, of which the proportion of labor representatives is one third. The committee holds a regular meeting every three months.
- The AED has been set up at each office building, which is superior to that regulated by the law.
- We have regularly conducted CPR training courses and training and re-training courses for the first aide personnel in the workplace, as well as organizing fire-fighting training and flood drills in the equipment room in order to enhance the employees’ abilities to cope with disasters and emergencies and reduce the severity of injuries.

Statistics on occupational hazard are calculated according to the statistical indicators of major disabling injury statistics announced by the Ministry of Labor. The statistics does not include traffic accidents outside the workplace. Analysis of occupational hazards in 2019: 5 injuries caused by falls, 1 burn, and 1 injury from falling item. The contractors had no occupational hazard in 2019. Please refer to Appendix P.128 for the analysis of the 2019 occupational hazards.
2.3 Sustainable Partners

Vision:
Take Creating Stakeholder Synergy as the greatest driving force towards sustainability, creating positive influence in the era of the 5G and IoT to activate sustainable development of global partnership.

Corresponding to 4 major stakeholders:
- Employees
- Customers
- Shareholders/Investor
- Suppliers

Corresponding to material topics:
supply chain management
A total of 147 suppliers conducted GHG inventory programs and provided carbon emission data, with on-site GHG audits completed for 10 suppliers. Circular economy topics were incorporated in the supplier CSR self-assessment questionnaire, and a circular economy forum was held with 144 suppliers and nearly 300 people in attendance.

Visited 40 suppliers and achieved an 80% on-site audit coverage rate on corporate sustainability for the critical tier-1 suppliers, reaching the 2020 goal one year in advance. Circular economy topics were incorporated in the supplier CSR self-assessment questionnaire, and a circular economy forum was held with 144 suppliers and nearly 300 people in attendance.

Held a supplier forum and training on sustainability and carbon inventory with a total of 196 participants, awarding 6 suppliers with outstanding CSR performance and 2 with the most progress. Circular economy topics were incorporated in the supplier CSR self-assessment questionnaire, and a circular economy forum was held with 144 suppliers and nearly 300 people in attendance.

Reviewed the CSR self-assessment questionnaire of 384 suppliers with the target achievement rate of 153%. Collaborating with 20 suppliers on Green Power for Charity.

2020 Targets
- 100% implementation of the CSR threshold for major tenders
- Review CSR self-assessment questionnaire of 250 suppliers
- Continue to carry on the on-site audits of critical tier-1 suppliers
- Maintain an audit rate of over 80% within three years
- Encourage suppliers to conduct GHG inventory, provide carbon emission data, and carry out on-site carbon audits of 10 suppliers
- Maintain 100% signing rate of the “Declaration of Integrity in Business Conduct” and the “Safety and Health Protection Declaration for Contractors”
- 70% of risk assessment coverage of tier-1 suppliers
- 90% of CoC outreach for suppliers

2030 Targets
- -20% GHG emissions reduction from the supply chain compared to 2020
2.3.1 Supply Chain Overview: Practicing Sustainability as the Core of Supply Chain Management

TWM is a company that provides integrated service in "T.I.M.E.," namely telecom, Internet, media & entertainment, and e-commerce. We worked with over 500 suppliers in 2019 in 6 categories based on the type of procurement, amount, criticality and so on. Our annual global procurement amount reaches NT$28.5 billion on a yearly basis, including mobile phone products, telecommunications / communications and network equipment. Among them, consumer electronics takes up the highest percentage in terms of procurement expenses.

In order to achieve the supply chain management goal of "Implementing Sustainability," TWM has focused on reducing the environmental impact caused by its value chain. We have set up the Environmental Management Committee and defined different types of procurement projects, as well as setting relevant environmental standards to maximize our purchase of products and services with less impact on the environment. The total amount of green procurement in 2019 reached NT$189.35 million.

TWM’s supply chain management focuses on local procurement and supply risk reduction. In 2019, TWM’s local procurement totaled at 27.3 billion, accounting for 95.77% of the total annual procurement. The distribution of procurement by region is shown in the figure below. Strengthening the flexibility of supply chain allocation is our number one strategy in reducing supply risks. In the meantime, we continue to optimize the transportation of supply to take into account transportation cost management, as well as reducing carbon emission from logistics operations.
### 2.3.2 Supply Chain Management Framework: Establishing a Sustainable Performance Threshold for Participating in Tenders to Keep the Supply Chain Quality under Control

The suppliers and TWM are jointly responsible for fulfilling their corporate social responsibilities and responding to the needs of stakeholders. To this end, we have integrated topics related to three aspects including environmental, social and governance (ESG) to build a supply chain management framework, thereby encouraging partners to respond to sustainable integration strategies and help TWM to control potential supply chain risks. As of the end of April 2020, six suppliers have joined the GeSI supply chain management platform.

#### Sustainable supply chain management framework

<table>
<thead>
<tr>
<th>Selection of new suppliers</th>
<th>Supplier maintenance</th>
<th>Supplier CSR score threshold</th>
<th>Sustainability performance is included in the technical evaluation for major tenders</th>
</tr>
</thead>
<tbody>
<tr>
<td>New supplier guidelines signing and data review</td>
<td>CSR assessment&lt;br&gt;• Supplier CSR self-assessment questionnaire&lt;br&gt;• Desk (off-site) review&lt;br&gt;• On-site audit</td>
<td>Risk assessment&lt;br&gt;Identifying and evaluating risks in supply chain sustainability</td>
<td>Improvement and suggestions&lt;br&gt;• Supplier CSR assessment report and suggestions for improvement&lt;br&gt;• Demand improvement from high-risk suppliers</td>
</tr>
<tr>
<td>• Basic information review&lt;br&gt; (corporate governance, finance, on-site visits)&lt;br&gt;• Sign the agreements on Integrity in Business Conduct, Safety, Health and Environmental Protection&lt;br&gt;• Promote the &quot;Guidelines for TWM Suppliers&quot;&lt;br&gt;• Fill out the ESG performance self-assessment form for new suppliers</td>
<td>Supplier carbon reduction</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Supplier educational training & annual supplier conference

Taking the e-purchasing platform as a foundation, TWM has built the key management of suppliers’ sustainable management as follows:

**Sustainable governance for suppliers**

- In addition to formulating relevant internal procurement regulations, TWM has set rules and regulations on corporate sustainability for the suppliers to abide by in business conduct. The regulations include: Guidelines on Corporate Social Responsibility for Suppliers, Code of Information Security Management, Regulations on Safety, Health and Environmental Protection, Confidentiality and Protection of Intellectual Property Rights as well as the rewards and penalties. Among them, Guidelines on Corporate Social Responsibility for Suppliers are built on the conventions of International Labor Organization and applies to all suppliers, which cover:

- Please refer to Appendix P.130 for the five major aspects
2.3.3 Promoting a Sustainable Supply Chain Integration Strategy and Working with Suppliers to Implement Carbon Reduction

TWM is committed to achieving responsible and sustainable procurement management, as well as building a comprehensive and complete sustainable supply chain through constant improvement and innovation. To this end, we have identified four key strategic objectives for supplier management:

1. Carbon Management

Based on Zetta Connected 2030, TWM has set the goal of reducing 20% of carbon emissions from the supply chain to become more eco-friendly. In addition to organizing training for suppliers on greenhouse gas and carbon management, we ran a pilot program for carbon inventory in 2019. The desk review of 2018 GHG data for 147 suppliers and on-site GHG emission audits for 10 suppliers were completed. TWM will continue to help partners conduct comprehensive inventory for sources of greenhouse gas emissions and improve the quality of the GHG emission data, so as to review the actual carbon emissions of the supply chain as a reference for the subsequent reduction plan and performance tracking.

2.3.4 Supply Chain Selection and Evaluation: Strict Assessment of Supply Chain Management to Support Industry-Wide Investment in Sustainability

1. New suppliers review

TWM started to implement "Self-Evaluation form for ESG Performance for New Suppliers" since October 2017, focusing on the environmental protection, labor conditions, compliance in ethical operation, energy/resource management, waste and pollution management, and human management protection policy. All suppliers that are for sure going to collaborate with TWM and TWM can effectively track and review their ESG performance are required to fill in the initial ESG self-evaluation form. In 2019, 154 suppliers meet the standard with 100% of recovery rate. All suppliers passed the evaluation.

TWM started to implement "Self-Evaluation form for ESG Performance for New Suppliers" since October 2017, focusing on the environmental protection, labor conditions, compliance in ethical operation, energy/resource management, waste and pollution management, and human management protection policy. All suppliers that are for sure going to collaborate with TWM and TWM can effectively track and review their ESG performance are required to fill in the initial ESG self-evaluation form. In 2019, 154 suppliers meet the standard with 100% of recovery rate. All suppliers passed the evaluation.

### Table: Supplier Review and Assessment

<table>
<thead>
<tr>
<th>Audit Items</th>
<th>Applicable to</th>
<th>Number of suppliers audited in 2019</th>
<th>Achievement Rate in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signing &quot;Declaration of Integrity in Business Conduct&quot;</td>
<td>All Suppliers</td>
<td>1,097</td>
<td>100% signing rate</td>
</tr>
<tr>
<td>Signing &quot;Safety and Health Protection Declaration for Contractors&quot;</td>
<td>Engineering suppliers</td>
<td>84</td>
<td></td>
</tr>
<tr>
<td>Fill in the ESG initial self-assessment form</td>
<td>All New Suppliers</td>
<td>154</td>
<td>100% collected</td>
</tr>
</tbody>
</table>

Please refer to Appendix P.130 for the four strategic objectives.
2.3.4 Supply Chain Selection and Evaluation: Strict Assessment of Supply Chain Management to Support Industry-Wide Investment in Sustainability

2. Supplier sustainability performance management and evaluation

- On-site review
- Desk/off-site review
- Supplier CSR evaluation
- Identifying and evaluating risks in supply chain sustainability
- Identify high-risk suppliers and risk types
- Supplier risk assessment
- Supplier CSR and risk assessment report
- CSR/risk improvement suggestions
- Requiring suppliers to improve
- Improve behavioral and capacity building

3. Handing out CSR questionnaire

TWM included 12 categories of sustainability topics in the CSR Self-Assessment Questionnaire, covering the economic, environmental, and social aspects. Circular economy topics also made their debut in the questionnaire to clarify the suppliers’ perception and actions. Before the questionnaire is handed out, education and training will be provided to the procurement staff and suppliers to clarify the management focus, questionnaire content and key points of the year.

4. Desk review

Suppliers must give answers about their management situations as well as providing supporting documentations, before a third-party agency entrusted by TWM conducts a desk review and gives an objective score. A total of 384 questionnaires were given desk review this year. We also regularly evaluate non-tier-1 suppliers to enlarge the scale of sustainable supply chain cooperation. A total of 6 suppliers were audited in 2019.

Number of Supplier’s CSR Self-assessment Questionnaire Received

<table>
<thead>
<tr>
<th>Year</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020 (target)</th>
</tr>
</thead>
<tbody>
<tr>
<td>268</td>
<td>305</td>
<td>Recycling 384</td>
<td>Target 250</td>
<td>250</td>
</tr>
</tbody>
</table>

Over target
2.3.4 Supply Chain Selection and Evaluation: Strict Assessment of Supply Chain Management to Support Industry-Wide Investment in Sustainability

5. On-site visit
We selected 40 critical suppliers for on-site visits to gain an in-depth understanding of the supplier’s sustainable management practices, as well as understanding their difficulties in implementing ESG in order to propose precise suggestions for improvement. We have reached the target of 80% critical tier-1 supplier visits in advance in 2019. We will continue to select important suppliers for on-site visits in the future, further our relationship with suppliers to promote sustainability. 40 critical suppliers will be selected for on-site visits in 2020.

<table>
<thead>
<tr>
<th>Selection method</th>
<th>Environmental Impact Assessment</th>
<th>Social Impact Assessment</th>
<th>Economic Impact Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of assessment</td>
<td>315</td>
<td>315</td>
<td>315</td>
</tr>
<tr>
<td>Number of suppliers (supply chain) with negative impact</td>
<td>0</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Proportion of suppliers with negative impact included in improvement plan</td>
<td>-</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Proportion of cooperation with suppliers with negative impact terminated</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

6. Sustainable risk assessment and improvement action plan
In addition to evaluating the CSR implementation of existing suppliers, we hope to identify and track changes in the supply chain sustainability risks (such as the probability of threat, potential impact, warnings in advance, etc.) through the sustainability management of the suppliers, in order to assess the threat and impact of these risks on TWM in advance.

In 2018, we incorporated regulatory data in the supply chain risk assessment model and identified 19 with high environmental risks. We designated them into the priority list for visits. A coaching program was formulated and the suppliers were given a deadline for improvement. We have completed 11 follow-up visits in 2019 with 100% of improvement. A 100% of follow-up visit rate is scheduled in 2020. Therefore, no supplier contract was terminated due to potential environmental or social impact in 2019. In 2019, we identified 5 high-risk suppliers among 315 tier-1 suppliers, with one of them deemed to have high economic and social risks.
2.3.5 Supply Chain Capacity Building and Communication: Leading the Supply Chain to Implement Corporate Social Responsibility

TWM has established a strategy to coach suppliers on sustainability by understanding the current status of the implementation of their sustainability practices through the aforementioned evaluation mechanism. TWM further integrates the evaluation results, sustainable development goals and trends in global sustainable development to organize training, forums and other events to provide partners with sustainable development improvement action plans, while assisting suppliers to learn independently and cultivate relevant capacity. In addition to implementing supply chain assessment and management, TWM looks forward to integrating the industrial capacity of all partners to achieve sustainable economic, social and environmental development goals through mutual efforts.

TWM started implementing the Scope 3 carbon management in 2018, setting the goal of reducing supply chain carbon emissions by 20% by 2030 from 2020 level. Therefore, strengthening supply chain carbon management, assisting suppliers in understanding climate change risks, and developing suppliers’ capacity in the environmental aspect of sustainability management will become the focus in the future.

1. Supplier CSR Forum

TWM holds an annual CSR forum for suppliers to share the key management points of corporate social responsibility management for suppliers, announce the results of annual CSR evaluation and risk assessment, and invite leading suppliers in sustainability, scholars and experts to share and exchange information with the participants. 196 sub-suppliers participated in the Supplier CSR Forum in 2019 with 6 suppliers achieving excellent CSR performance and CSR making the most progress. They were invited to share management practices on how to improve performance in sustainability and corporate social responsibilities.

2. Circular Economy Forum Event

TWM has spared no effort in promoting environmental sustainability. In addition to hosting a supplier conference in July to encourage the industry supply chain to respond to carbon reduction, the first large-scale "ICT Industry Circular Economy Forum" was held in August 2019 to build a "zero waste" circular society. The industry, government and academia were all invited with 300 people from 144 TWM suppliers in attendance. Moreover, 14 major strategic partners were called on to issue the first "Statement of Cooperation in Circular Economy" with commitments in reducing the use of virgin raw material, extending and enhancing efficiency as well as cycling to demonstrate TWM's determination in scaling circular economy strategies.
2.4 / Innovative Accomplishments

Vision:
Create a connection among people, things, time and space with 5G and IoT, build a future that is beyond imagination with forward-looking vision.

Corresponding to material topics:
Technology innovation & application / Service impact management / Customer experiences / Network quality and coverage

Corresponding to 3 major stakeholders:
Employees / Customers / Rating Agencies / Suppliers / Communities / NGO / Competent authorities / Media / Shareholders / Investors
Generate revenue of NT$6.6 billion from innovative products and services

Reach NT$1.52 billion in the sum of mobile commerce service transactions

The annual income from the fixed-network users changing into "advanced integrated telecommunication service" reaches NT$120 million

IoV generates an annual revenue of NT$80 million

Cooperate with the National Health Institute to closely monitor air quality at home and children’s allergies

Innovative products and services generate revenues of NT$17.7 billion

The sum of e-commerce service transactions reaches NT$2 billion

The annual income from the fixed-network users changing into "advanced integrated telecommunication service" reaches NT$800 million

IoV technology generates a revenue of NT$1.6 billion

2020 Targets

- Generate revenue of NT$6.6 billion from innovative products and services
- Reach NT$1.52 billion in the sum of mobile commerce service transactions
- The annual income from the fixed-network users changing into "advanced integrated telecommunication service" reaches NT$120 million
- IoV generates an annual revenue of NT$80 million
- Cooperate with the National Health Institute to closely monitor air quality at home and children’s allergies

2030 Targets

- Innovative products and services generate revenues of NT$17.7 billion
- The sum of e-commerce service transactions reaches NT$2 billion
- The annual income from the fixed-network users changing into "advanced integrated telecommunication service" reaches NT$800 million
- IoV technology generates a revenue of NT$1.6 billion
2.4.1 Annual Innovation Highlights: Comprehensive Launch of AI Soft Power

Our innovation energy grew exponentially once again in 2019; through multi-faceted and large-scale cooperation among business, government, and academia, the new blue ocean of 5G was explored, in addition, important innovative technology applications, including AI, big data, cloud, and IoT were developed with the aim of disrupting the market and bringing endless possibilities for future life.

Nearly one hundred partners joined forces to found the "Greater Smarter application Ecosystem" in Taiwan.

Partnering with InSynerger to introduce the Cloud-based AI Energy Management System

Built TAIWANIA 2 along with ASUS and Quanta Computer to further the national AI development
TWM gathered nearly a hundred top partners at the Xinzhuang Baseball Stadium to announce the formal establishment of 5G Super Alliance, with a record-breaking scale in the telecommunications history. Under the guidance of the Industrial Development Bureau, Ministry of Economic Affairs, TWM partnered with the Industrial Research Institute to integrate 5G technology and innovative commercial services. The on-site demonstrations included smart parking, smart home care, smart retail, 3D face recognition and skeleton tracking, smart eye tracking, real-time preview of the stadium seat vision and 360-degree seat selection, AR/VR retail guide, holographic projection interaction and other application technologies to create the first comprehensive “5G smart demonstration area” combining the stadium and adjacent commercial districts to provide people with all-round innovative experience.

We have joined hands with ASUS and Quanta to announce yet another joint project based on the AI Big Data Supercomputer Project led by the National Center for High-Performance Computing, National Applied Laboratories. In addition to expanding the big data processing capacity of Taiwania 2, we will further enhance big data computing and analysis, as well as data management platform services shared by AI training and inferential calculation to meet the industry’s requirements for AI technology applications. Once completed, Taiwania 2 can provide AI machine learning service to accelerate the development of artificial intelligence tools, resources and applications for all walks of life.

The “Cloud-based AI Energy Management System” introduced the Internet of Things (IoT) with AI, allowing companies to remotely monitor power consumption in multiple locations using computers and mobile App, providing companies with 24-hour energy monitoring and visualization of power consumption information, achieving smart energy-saving management. In the future, the system will continue to develop with more features, such as the smart management of air quality monitoring, electricity safety, and indoor lighting, helping companies move toward energy management automation.
2.4.2 Innovative Management Structure: Continuing to Expand Innovative Capacity and Implement Company-Wide Participation

1. Expanding Innovation Management Committee
   1. To expand innovation items/scopes, the supervision of all product and operation process units have been incorporated in the Committee.
   2. The structure of the committee has been divided into product innovation and process innovation in order to increase sales percentage from innovation, as well as reducing costs/expenses.
   3. Organizational Chart:

2. Setting Business Group Innovation KPIs
   Continue to enhance innovation by involving everyone in the Company by setting innovation KPIs for each business group and keeping track of the performance. In 2019, there was a total of 43 innovative products and 73 process innovation projects.

3. Launching the "Innovation Proposal Program"
   In order to encourage our staff to innovate, we launched the "Innovation Proposal System" in January, 2018. We established the Incubation Ecosystem to support our staff by bringing their creative ideas into fully feasible projects. All parties involved are entitled to unlimited bonus rewards. For the first time in 2019, the annual net benefits of innovation projects exceeded NT$10 million. In addition to the staged bonuses for filing and completion of the project, the benefits can be effectively distributed.

---

2.4.3. Innovation Management Process: Building a Systematic Innovation Management Mechanism for the Enterprise

<table>
<thead>
<tr>
<th>Business strategy requirements analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Innovation planning - market aspects</strong></td>
</tr>
<tr>
<td>(Market position) Defender innovation</td>
</tr>
<tr>
<td>Generating &amp; sitting through creative ideas and actual creativity development</td>
</tr>
<tr>
<td>Assessments of the timing of adoption, financial benefits and risks</td>
</tr>
<tr>
<td>Innovative products specific development</td>
</tr>
<tr>
<td>Innovative products market launch</td>
</tr>
</tbody>
</table>
2.4.4 Product and Service Innovation: Creating a New Experience With Smart Products and Services Based on a People-Oriented Approach

In 2019, the number of product/service innovation projects totaled at 43 with a 23% YOY growth with the following highlights:

**Project process Innovation highlights**
- The featured articles section was added in May 2019, followed by the addition of a web reader in November 2019 to lower the threshold for digital reading and support for reading on mobile phone/tablet/computer.
- The development started in 2018 and was launched on January 9, 2019. It is still a best-selling product by January 2020.
- The industry’s first portable PM2.5 measuring instrument that can be used as a stand-alone or a connected device.
- The industry’s smallest and lightest PM2.5 measuring instrument with the longest battery life.

**ESG achievements**
- Reduced CO2 emissions by 910,963 kilograms.
- Donated “Live English” for one year to assist 10,000 disadvantaged students, promoting equal learning opportunities.
- E-book revenue increased by 34%.
- More than 21,000 air quality monitoring stations have been built in Taiwan.
- Recording the air quality for more than 21,000 users.
- Revenue target achievement rate of 94%.
- More than 1,700 new users per month
- Effectively extending the device service life, providing maintenance guarantee and replacement services to lesson the burden on the environment.
- The insurance has covered accidental damage costs for 350,000 users, offering peace of mind.
- Revenue target achievement rate of 82%.
- Gross profit target achievement rate of 80%.
- The target number of users achievement rate of 103%.

**myAir is a service consisting of “myAir Portable PM2.5 Detector” and “myAir App,” which automatically measures and records the PM2.5 around the user and provides health advice.**

**Tai-Fu Cloud Platform**

- **Cloud Database**
  - 8.2 million pieces of data

- **myAir app**
  - The number of partners in the IoT ecosystem has grown by 179%
  - Launched the “myAir Portable PM2.5 Detector” and “myAir App.”
  - First portable PM2.5 measuring instrument that can be used as a stand-alone or a connected device.
  - The industry’s smallest and lightest PM2.5 measuring instrument with the longest battery life.

**Tai-Fu Cloud Platform**

- **Sales volume**
  - 350,000 users
- **Target achievement rate of 102%**

**IoT Business Service**

- **Expanding Taiwan’s IoT ecosystem and collaborating with more partners in various fields.**
- **Telemedicine solves the lack of medical resources for 700,000 people.**
- **Assisting enterprises/authorities to introduce IoT technologies, including smart parking, smart meters, smart street lights and other projects.**
- **Assisting enterprises/authorities to introduce IoT technologies, including smart parking, smart meters, smart street lights and other projects.**
- **The SIM card management mechanism can offer remote diagnosis to reduce the number of vehicles dispatched for maintenance and 9,060 kilograms of CO2 emissions.**
- **The IoT smart healthcare solution solves the problem of lack of healthcare access for approximately 700,000 people in 48 mountainous areas and offshore islands across Taiwan.**
- **Y19 revenue achievement rate of 201%**

**E-book revenue increased by 34%**

**Building a localized public cloud platform in the computer room of a high-reliability data center.**

**Tai-Fu Cloud Platform**

- **Over NT$72 million in revenue.**
- **Reducing 1.68 million kWh of electricity and 900,000 kilograms of carbon emissions.**

**Tai-Fu Cloud Platform**

- **Provide disadvantaged secondary school students and above each year**

**Tai-Fu Cloud Platform**

- **The program was officially launched in 2019 to provide mobile Internet access and myBook Live English for free, partnering with 4 publishers with over 400 multi-lingual multimedia online learning resources.**

**Tai-Fu Cloud Platform**

- **The application is open to over 10,000 disadvantaged secondary school students and above each year.**
- **A total of 13 organizations applied for resource-matching, benefiting 2,288 disadvantaged students**
2.4.5 Process Innovation: Demonstrating the Value of Environmental and Social Innovation With Process Optimization

Incorporating supervisors of the business process unit in the “Innovation Management Committee,” formulating KPIs and progress tracking, rewarding environmental and social welfare innovation. There were 73 projects in 2019, including 6 highlight projects.

Strategy/purpose
- Electronic real-time reading can improve learning efficiency, increase e-book utilization for both urban and rural areas. E-books benefit the environment by reducing carbon emissions.
- Supply education resources for disadvantaged students and students in rural areas to enhance competitiveness.
- Elevating user experience. Originating from internal innovation proposals and based on the business model, myBook calls on suppliers to pitch in by donating the audio version of “Live English” to 10,000 disadvantaged children from May 2019. The online reading mechanism assists potential clients who will become adults with spending capacity, bringing greater business value while contributing to public welfare, simultaneously promoting public welfare and creating business opportunities in a sustainable manner.

Highlights
- Initiate sustainable circular learning and expand business opportunities with an innovative model while promoting public welfare, creating brand awareness and elevating user experience.

ESG achievements
- myBook is committed to promoting digital learning, effectively reducing the urban-rural gap, and reducing paper, logistics, manpower, transportation, etc. to effectively reduce carbon emissions, create a sustainable learning model as well as business opportunities.
- Taiwan Mobile Foundation solicited resources from 4 well-known publishers to provide “Live English” for free for 1 year, providing 10,000 disadvantaged students with high-quality digital learning content and reducing the gap between urban and rural areas.

Solving various problems with one single process

- Improving the login process of the customer service app, allowing the elderly with limited tech know-how to take advantage of the service.
  - The customer service app provides users with a self-service channel that is open everywhere all year round. However, many users limited tech know-how cannot take advantage of the app, with 76% giving up during the stage of account and password input.
  - Data mining was conducted on 380,000 people, and the typical issues that caused login failure were summarized to develop a new service process of “single account password acquisition.”
  - After the introduction of a new login process, the number of failed logins per month decreased by about 68%.

- Constructing 4G network rural areas with a discount on NCC frequency fee to make mobile broadband available for all.
  - In order to strengthen the perception of major infrastructure and provide better broadband services in Eastern Taiwan, TWM carried out several optimization projects (such as launching the new function of Power Booster, replacing base station equipment, adjusting the antenna direction, etc.) to achieve the win-win situation between user quality and costs.

- Universal mobile broadband service increasing user
  - 68 new base stations were built a year for Y19 in rural townships, strengthening the coverage of residential areas in remote towns and making mobile broadband services available in remote areas.
  - In line with the Directorate General of Highway and the major construction of Taiwan Railway Y19, TWM has actively invested in the construction of the 4G base stations along the Suhua Improvement Project, the TRA East Trunk Line and the TRA South Link Line.
  - A 95% of coverage rate has been achieved in the rural network that is entitled to the frequency usage fee saving requirements, effectively reducing the digital gap between urban and rural areas.

- Saving electricity and reducing carbon emission by introducing energy management system and greenhouse gas inventory with the following adjustments:
  1. Separate power switches are installed by area in the stores to effectively save power.
  2. Regularly check KPIs for the implementa-
tion of the updated store TQM

- Actively complying with the government’s and the Company’s energy conservation policies by introducing an energy management system and greenhouse gas inventories. We have learned that the greenhouse gas emissions from stores are mainly resulted from power consumption.
  - In the meantime, to implement the ISO50001 and ISO14001 energy saving and carbon reduction goals, we will use information data management and store electricity consumption analysis to formulate store energy saving specifications, adjust and replace equipment, set store management goals, organize store power saving competitions, etc., and promote electricity-saving measures.
2.4.6 Network Quality: Deploying High-Quality Network Infrastructure to Improve 4G Network Coverage Everywhere

Since the launch of 4G, TWM has continued to build high-quality network infrastructure to offer 99% of network coverage, providing complete 4G network coverage. In order to provide users with higher speed Internet services, TWM has actively deployed 2CA (700/1800) dual-band carrier aggregation mobile broadband network. In 2019, in TWM continued to deploy 3CA (700/1800/2100) Tri-band carrier aggregation mobile broadband network in order to provide users with faster Internet speed.

Not only providing metropolitan areas with mobile broadband network. In June 2019, we completed the project of the highest mobile communication base station in Northeast Asia on the North Peak of Yushan. As of the end of 2019, the 4G population coverage rate in remote areas has reached 97.65%.

---

Strategy/purpose

Various power saving methods are planned in accordance with site environment of the base stations to reduce the overall power consumption in the whole region.

NPO uses green electricity it produces, and TWM has guaranteed the purchase of green electricity certificates for 20 years above the market price.

- Sharing the idea that "a small amount of donation can do good while protecting the environment," saving electricity consumption for NPO and creating a healthy training environment for the injured.
- For each item sold by the supplier, NT$2 will be donated to help the NPO and participate in the subscription of renewable energy.
- Gathering athletes and industry celebrities to take the initiative of promoting kind treatment of the injured through the project campaign film, helping them start a new life.

ESG achievements

Develop customized hardware and software with outstanding local suppliers to turn equipment on/off based on big data analysis, understanding the base stations’ time and quantity for power consumption to save electricity, reduce the overall energy consumption, adjust the electricity needed for backup batteries to reduce the waste of physical resources.

Achievements:
- Achieving the goals set by the Environmental Management Committee
- Reducing GHG emissions
- Addressing communication needs, disaster prevention, and rescue services in rural areas for longer periods of time
- Diversified cooperation with social enterprises to promote low-threshold green energy initiatives
- The Taoyuan Spinal Cord Injury Potential Development Center uses green electricity it produces, and TWM has guaranteed the purchase of green electricity certificates for 20 years above the market price (with environmental and public welfare value). Not only does this double the contribution, it responds to the government’s green power policy.
- Gathering 20 companies and 2,649 donors

Diversified power saving methods

Various power saving methods are planned in accordance with site environment of the base stations to reduce the overall power consumption in the whole region.

NPO uses green electricity it produces, and TWM has guaranteed the purchase of green electricity certificates for 20 years above the market price.
2.4.7 Customer Experience: Tracking and Improving Customer Service Quality and Satisfaction With a Smart Management Platform

1. Customer Behavioral Analysis-CEM

When addressing signal problems encountered by the users, CEM (Customer Experience Management) allows the staff to understand the signal strength before and after the problem reflected by the user in a faster and smarter way with quantitative indicators, pinpointing the problem with less time.

2. Customer Service Commitment/Mechanism

Creating the best experience for customers and continuing to implement the five commitments of comprehensive service.

Customer Service Commitment
Carefully listen to customer's needs and demonstrate our profers
Handle customer complaints with enthusiasm and offer solutions that are timely and effective
Safeguard customer's rights and interests in a reasonable manner and establish a trusting, harmonious and friendly relationship
Pay attention to and respect customer's special needs and formulate refined, personalized and quality services on their behalf
Work wholeheartedly to resolve complaints satisfactorily and create a win-win atmosphere for customer satisfaction

Service Quality Assurance
We actively introduce the SGS (Societe Generale Surveillance) service quality verification system. Having been endorsed by the most recognized verification agency in the world for the service provided for 7 consecutive years proves that our service quality and standards maintain a certain level and are closely in line with international standards.

Service Processing and Customer Complaint Reporting
Handled by dedicated personnel. Systematic management and tracking are implemented to ensure prompt response and proper resolution of customer complaints.
2.4.7 Customer Experience: Tracking and Improving Customer Service Quality and Satisfaction With a Smart Management Platform

The President personally oversees the improvement of major customer complaints by regularly calling cross-departmental meetings to develop work plans for improving service quality. The number of customer complaints has dropped significantly from the year before according to NCC and the Taipei City Government in 2019, demonstrating an outstanding track record.

The customer complaint caused by the user paying in the store but restoring the line has been solved by adding a reminder in the system so that store personnel can offer customers clear explanations. The number of customer complaints in 2019 dropped by 50% compared to the year before.

Service Upgrade Plan
We formulate four key indicators which are evaluated and tracked each month to improve our customers’ service experience and satisfaction in all aspects.

Cases of Actively Improving Customer Service

Service response Self-service voice system Answering speed Problem solving

<table>
<thead>
<tr>
<th>Year</th>
<th>National Communications Commission (NCC)</th>
<th>Taipei City Government</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>1,800</td>
<td>193</td>
</tr>
<tr>
<td>2018</td>
<td>1,974</td>
<td>167</td>
</tr>
<tr>
<td>2019</td>
<td>1,181</td>
<td>85</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>National Communications Commission (NCC)</th>
<th>Taipei City Government</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>87.9%</td>
<td>87.9%</td>
</tr>
<tr>
<td>2018</td>
<td>66.7%</td>
<td>66.7%</td>
</tr>
<tr>
<td>2019</td>
<td>88.3%</td>
<td>68.1%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>National Communications Commission (NCC)</th>
<th>Taipei City Government</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>66.7%</td>
<td>67%</td>
</tr>
<tr>
<td>2018</td>
<td>67%</td>
<td>86.3%</td>
</tr>
<tr>
<td>2019</td>
<td>88.3%</td>
<td>88.3%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>National Communications Commission (NCC)</th>
<th>Taipei City Government</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>66.7%</td>
<td>86.3%</td>
</tr>
<tr>
<td>2018</td>
<td>86.3%</td>
<td>68.1%</td>
</tr>
<tr>
<td>2019</td>
<td>68.1%</td>
<td>86.3%</td>
</tr>
</tbody>
</table>
2.4.7 Customer Experience: Tracking and Improving Customer Service Quality and Satisfaction With a Smart Management Platform

3. Customer Satisfaction

Customer satisfaction increased in 2019 over the previous year with an average of 90% of satisfaction rate for personal, family and enterprise users.

Songyan Cultural and Creative Park is an emerging leisure area in Taipei City. In addition to housing cultural and creative industries, the shopping mall and other park facilities have gathered people of all ages. The LED wall outside the Taipei digital living store is the most effective digital media for achieving exposure. Providing a rotation of public welfare activities to promote the most important public welfare issues of today and raise awareness. A total of 4 time slots were provided in 2019, equivalent to NT$3.3 million in sponsorship.

4. LED Wall Public Benefit Period

<table>
<thead>
<tr>
<th>Content</th>
<th>Time</th>
<th>Fixed rate for exposure (NT$)</th>
<th>Preferential rate for exposure (NT$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 films from the Life Conservation Association</td>
<td>In rotation for a week</td>
<td>200,000</td>
<td></td>
</tr>
<tr>
<td>2 2 films for the 13th myfone action creation awards</td>
<td>In rotation for three three weeks in 3 months</td>
<td>2,400,000</td>
<td></td>
</tr>
<tr>
<td>3 Taiwan Fund for Children and Families</td>
<td>In rotation for two weeks</td>
<td>200,000</td>
<td></td>
</tr>
<tr>
<td>4 Sun Moon Lake International Fireworks-Music Festival</td>
<td>In rotation for two three weeks in a month</td>
<td>500,000</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>3,300,000</td>
<td></td>
</tr>
</tbody>
</table>

Note 1: The customer satisfaction survey index is the “satisfaction with telephone customer service”.
Note 2: Customer satisfaction rate % refers to the percentage of users who said that they are very satisfied and satisfied when being interviewed.
Note 3: Survey was conducted through telephone interviews, Internet surveys, etc. at least seven times a year.
Note 4: The survey tools are interviewed by telephone; at least one survey is held every year.
Note 5: The survey was conducted through online questionnaires at least once a year.
2.4.7 Customer Experience: Tracking and Improving Customer Service Quality and Satisfaction With a Smart Management Platform

5. Content Improvement of the Product and Service Platform

Result:
- Crossover collaborations enhanced brand value, optimized sharing feature and improved user adhesiveness and participation
  - In 2019, TWM continued to cooperate with Garena for the Garena Speed Drifters movie game, provide authorized playlists for game players, and obtaining the live broadcast authorization of the South Korean pop music MMA2019 again. In addition, TWM has collaborated with TikTok and Warner Records on 2019WTNewStars, raising brand awareness and promoting the MyMusic playlist sharing feature.
  - In November 2019, TWM collaborated with Google Nest Mini to support voice playback of smart speakers and making music services a part of smart home.
  - About 2,000 user playlists have been added after the sharing feature was made available, increasing the diversity of MyMusic playlists and allowing users to build their music profiles, effectively enhancing user adhesiveness and identification.

Plan:
- Continuing to collaborate with various industries, optimizing smart speaker playback, increasing the feature of playing one’s own music library playlists while optimizing user experience of MyMusic products, and realizing the vision of listening to music anytime, anywhere.

Result:
- Launched “4K movies” with ultra-high image quality, leading the way for an OTT audio-visual revolution to significantly enhance the customers’ sensory experience. To share sustainable value, myVideo recommends videos related to environment and conservation, such as Beyond Beauty: Taiwan from Above, Fly, Kite Fly, Twelve Nights, etc. As of the end of 2019, the films have been viewed more than 9,000 times.

Plan:
- Committed to elevating user experience with the smart recommendation system, and promoting local cultural and creative content.

Result:
- Launched the “Articles” section that allows readers to read single articles. There is no need to download the entire magazine. You can read single articles online that you choose. The new “Articles” section has increased the number of visitors to over 80,000 per month. In 2019, the number of annual visitors exceeded one million.

Plan:
- TWM will offer subscription agent services and recommend applicable services to users. Offering audio content services with smart speakers to increase promotion channels.

Result:
- Customers can choose to make electronic payments with their phone numbers, covering paid software downloads from the App Store or Google Play Store, pay-per-view movies, music subscriptions, and game purchases, which is convenient for users with no credit card. To improve customer interactions, more than 200 marketing activities have been executed online in the year, with online registration directly delivering awards to effectively grow membership.

Plan:
- Continue to increase members, build experience areas in physical channels and create positive service value.
MINIMIZE THE COMPANY’S AND THE VALUE CHAIN’S FOOTPRINT WITH LATEST TECHNOLOGIES OF IOT AND AI ARTIFICIAL INTELLIGENCE, NOT ONLY REDUCING ENVIRONMENTAL IMPACT BUT ALSO ACTIVELY CREATING A COSMIC ECOSYSTEM THAT IS MORE COMFORTABLE AND BEAUTIFUL.

CORRESPONDING TO MATERIAL TOPICS:
Climate change mitigation and adaptation, green operations, green applications and circular economy

CORRESPONDING TO 7 MAJOR STAKEHOLDERS:
Employees, Customers, Competent authorities, Communities, NGOs, Media, Investors, Suppliers

PHOTO COURTESY OF IRIS LIU
2020 Targets

- According to the SBT carbon reduction path, Scope 1 and Scope 2 emissions should decrease by 5.65% compared to 2016 while Scope 3 emissions should reduce by 2.5% compared to 2018.
- A 7% reduction of electricity consumption compared to 2016.
- Total installation capacity of renewable energy reaching 280kW.
- Emission intensity from energy decreasing by 56% compared to 2016.
- A 6% reduction of total un-recyclable business waste compared to 2017.

2030 Targets

- According to the SBT carbon reduction path, Scope 1 and Scope 2 emissions should decrease by 30% compared to 2016 while Scope 3 emissions should reduce by 15% compared to 2018.
- The total renewable energy installation capacity reaching 6,000kW.
- Emission intensity from energy decreasing by 86.7% compared to 2016.
- A 15% reduction of total un-recyclable business waste compared to 2017.
2.5.1 History Of Environmental Management: Continuing To Focus On Corporate Sustainable Development

CDP Leadership (A-) rating
• Set environmental management goals for water, electricity and waste reduction
• Launched the Green Energy Initiative of “buy a mobile phone to support green energy”
• Joined the Global e-Sustainability Initiative (GeSI)
• Built green energy infrastructure for a total of 80kW of electricity and subscribed to 1.4 million kWh of green power
• Passed the ISO 14001 environmental management certified
• Reached the goal of 1% of absolute reduction of greenhouse gas
• Launched Green Power for Charity with 99.8kW of installation capacity
• Elected as the Chairman of the GeSI Board
• Purchased and generated 3.39 million kWh of green electricity
• Expanded the scope of the ISO 14001 Environmental Management System

CDP rating of Leadership (A)
• Set the non-business waste target (for self-operated stores and Dunnan Building)
• Add renewable energy applications
• Continue to promote Green Power for Charity
• Complete verification of the new version of ISO 14064 and ISO50001

Passed Science-based Targets (SBT) for carbon reduction
• Enlarged the scope of non-business waste inventory
• Planned the construction of 2MW photovoltaic system and green power conversion
• Revised the Environmental and Energy Policy
• Built 71kW of capacity for Green Power for Charity
• Continued to promote the verification for 15 items of scope 3 GHG emission under ISO 14064-1
• Included water resources in the ISO14001 Environmental Management System

2008

2011

2012

2013

2014

2015

2016

2017

2018

2019

2020

2021

Environmental sustainability
Social inclusion
Innovative accomplishments
Excellent brand
Sustainable partners
Ethical operation
Happy workplace
7 key brand values
Elevating Future Experience
Minimizing Footprint
Realizing Social Potential
Creating Stakeholder Synergy
Responsible Business
Appendix
Zetta Connected
Sustainable Operations
Strategies
2.5.2 Environmental and Climate Change Management Strategies: Implementing Environmental Management Targets and Performance Review

The Environmental Management Committee formulates environmental objectives and strategies, promotes the Company's eco-friendly policies and integrates the four major tasks of ISO14001 (Environmental Management), ISO14064-1 (GHG Examination), ISO50001 (Energy Management) and the promotion of intelligent energy-saving strategies. The Committee meets every six months to assess performance and identify improvements, and the executive secretaries of each group regularly track progress.

1. Environmental and Energy Management Objectives and Strategies

<table>
<thead>
<tr>
<th>Objective</th>
<th>2030 Targets</th>
<th>2019 Targets</th>
<th>2020 Strategies and Plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy Conservation</td>
<td>A 1% reduction of electricity consumption compared to 2016</td>
<td>2% reduction</td>
<td>The annual power saving responsibility of each unit is allocated as 1% of the electricity consumption in 2016 with a plan drawn up and performance tracked every 6 months</td>
</tr>
</tbody>
</table>
| Water Conservation                             | Total tap water consumption decreases by 15% compared with 2017 | 1% absolute reduction of water consumption | 1. IDC: Equipping the cooling water tower fan with an inverter and adjusting the amount of water circulation in the evaporator chiller  
2. Office: Regular statistics of water use on the office floor and promote of water saving  
3. Further inspect and manage water use          |
| Waste Reduction                                | A 15% reduction of total un-recyclable business waste compared to 2017 | 4% reduction | 1. Using environmentally-friendly lithium batteries  
2. Optimizing routing of cables to reduce the amount of rubber cable placement  
3. Selling telecommunication equipment that is scrapped but still useful  
4. Domestic waste from the Shihue building reduced by ≥ 0.48% in 2020 compared with 2019  
5. Domestic waste from direct-operated stores reduced by ≥0.3% in 2020 compared with 2019 |

2. Environmental and Energy Policy

TWM abides by the core concept of “Think Sustainable, Act Responsible” by introducing the ISO14001 environmental management system in 2015, formulating four environmental sustainability policies, promising to establish systems and formulating measurable environmental goals, setting and implementing specific plans or actions to achieve the goal of a smart low-carbon society. In the meantime, we take into consideration the risks and opportunities that may arise from daily operations, existing or new products and services at all stages of the life cycle, and lead our own operation bases, suppliers, logistics distributors, contractors and partners (including joint ventures), etc. to continue to reduce the negative impact on the environment.
2.5.2 Environmental and Climate Change Management Strategies: Implementing Environmental Management Targets and Performance Review

3. ISO Verification Results and Plans

**ISO14001**

Scope: Incorporating 100% of the income from telecommunications and cable TV to cover the environmental certification of 8 scopes including Taipei New Horizon headquarters, IDC cloud-based machine room, Taipei Jui Kuang 480 Building, Taipei Dunnan Tower, main computer room in Kaohsiung Hsin Ya and Kaohsiung Po Ai Building, Taichung Peiping and MOMO cable TV Building to include information/communications, network, multimedia, entertainment-related services and office activities, etc.

**Targets and Achievements for 2019:**
- 2% power saving: 9.3 million kWh of power saving target, 16.75 million kWh of actual power consumption reduction with 180% of achievement rate
- 1% of absolute reduction of water consumption: 3,274 cubic meters of water consumption reduction goal with 28,000 cubic meters of water saved at the achievement rate of 861%
- 0.09% of renewable energy utilization rate: 388,000 kWh of renewable energy acquisition rate with 529,000 kWh of actual acquisition at the achievement rate of 136%
- Renewable energy application: 230kW of accumulated photovoltaic power installation target with 316.8kW of actual installation at the achievement rate of 137%.

**Plans:**
In addition to the power and water saving (included in IDC) initiative in 2020, we also set targets for renewable energy applications (constructed the Fangshan solar energy and green power conversion) and non-business waste (directly-operated stores and Shieuefu building).

**ISO50001**

Category: IDC room, Guangdian Service Center, 2 directly-operated stores

**2019 Targets:**
New locations added in 2015: EUi/PUE (Note 1) of each site decreases by 3% in three years based on the baseline of starting year

**Existing locations:** According to routine target management, the energy baseline will be reviewed when it cannot truly reflect energy performance

**Achievements in 2019:** All locations are up to standard:

<table>
<thead>
<tr>
<th>Category</th>
<th>IDC room</th>
<th>Guangdian Service Center</th>
<th>Directly-operated store</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Office</td>
<td>Computer room A + B</td>
</tr>
<tr>
<td>Energy Baseline</td>
<td>1.95</td>
<td>30.65</td>
<td>1.85</td>
</tr>
<tr>
<td>PUE/EUi (Note 3)</td>
<td>1.79</td>
<td>27.98</td>
<td>1.70</td>
</tr>
<tr>
<td>Energy performance</td>
<td>-8.1%</td>
<td>-8.7%</td>
<td>-8.3%</td>
</tr>
</tbody>
</table>

Note 1: EUi (power consumption) / office and store; PUE (energy efficiency) / computer room. In November 2019, the Environmental Management Committee decided to change the performance index of store B based on electricity cost (unit price per kWh of electricity) to reflect energy performance.

Note 2: Store A closed in June 2017.

Note 3: Since 2019, the energy efficiency values of all machine rooms in the Guangdian Service Center will be combined.

**ISO14064-1**

Category: Taiwan Mobile (including Taiwan Mobile Foundation), Taiwan Digital Service, Taiwan Teleservices & Technologies, Taiwan Fixed Network, TNF Media and its broadcasting channels, Win TV Broadcasting, Taiwan Kuro Times Co., Ltd., Tai Hsin Integrated Digital and Tai Hsin Insurance Agent

**Types of inventory:**
- Office building, computer room, base station and direct stores

**Types of greenhouse gases:**
- Including CO2, CH4, N2O, HFCs, PFCs, SF6, CFCs, HCFCs and other substances

**2019 Results:**
Major sources of emissions: Electricity (i.e. Scope 2 direct emissions)
Scope 3 inventory: all 15 items

**Types of inventory:**
- Office building, computer room, base station and direct stores

**Types of greenhouse gases:**
- Including CO2, CH4, N2O, HFCs, PFCs, SF6, CFCs, HCFCs and other substances

**2019 Results:**
Major sources of emissions: Electricity (i.e. Scope 2 direct emissions)
Scope 3 inventory: all 15 items
2.5.3 Carbon Emission Management: Achieving Excellent Energy-Saving and Carbon-Reduction Results

1. GHG Management Targets and Strategies

Since the introduction of ISO14064-1 greenhouse gas inventory in 2012, third-party verification has been adopted to ensure data quality each year. The new version of ISO 14064-1: 2018 was completed in 2019. The main emission source is electricity (97%), the remaining sources include company vehicles, generators, refrigerants, fire extinguishers, septic tanks, etc.

- **Scope 1&2 emissions in 2019 to decrease by 4.23% compared with 2016**
  - Absolute reduction of 3.82%
  - Absolute reduction of 6.44%

- **Scope 3 emissions in 2019 to decrease by 1.25% compared with 2018**
  - Absolute reduction of 3.82%

- **Scope 1&2 emissions in 2030 to decrease by 30% compared with 2016**
  - Absolute reduction of 5.65%

- **Scope 3 emissions in 2030 to decrease by 15% compared with 2018**

- **Scope 3 emissions in 2020 to decrease by 2.5% compared to 2019 according to the SBT carbon reduction path**

GHG increment and reduction factors are taken into account in the annual monitoring of GHG emission trend.

Scope 1 & 2 emissions in 2020 to decrease by 5.65% compared to 2016 according to the SBT carbon reduction path.

Scope 3 emissions in 2020 to decrease by 2.5% compared to 2018 according to the SBT carbon reduction path.

Greenhouse gas reduction goals

- **Short-term**
  - Scope 3 emissions in 2019 to decrease by 1.25% compared with 2018
  - Absolute reduction of 3.82%

- **Long-term**
  - Scope 1 & 2 emissions in 2030 to decrease by 30% compared with 2016
  - Absolute reduction of 5.65%

- Scope 3 emissions in 2030 to decrease by 15% compared with 2018

Scope 3 emissions in 2019 to decrease by 4.23% compared with 2016.

Scope 1 & 2 emissions in 2020 to decrease by 5.65% compared to 2016 according to the SBT carbon reduction path.

Scope 3 emissions in 2020 to decrease by 2.5% compared to 2019 according to the SBT carbon reduction path.

GHG increment and reduction factors are taken into account in the annual monitoring of GHG emission trend.

Since the introduction of ISO14064-1 greenhouse gas inventory in 2012, third-party verification has been adopted to ensure data quality each year. The new version of ISO 14064-1: 2018 was completed in 2019. The main emission source is electricity (97%), the remaining sources include company vehicles, generators, refrigerants, fire extinguishers, septic tanks, etc.
2.5.3 Carbon Emission Management: Achieving Excellent Energy-Saving and Carbon-Reduction Results

### Greenhouse gas inventory (Scope 1/2)

<table>
<thead>
<tr>
<th>Item</th>
<th>2017</th>
<th>2018¹</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scope 1 (Direct Emissions) (ton-CO₂e)</td>
<td>4,846.90</td>
<td>4,940.26</td>
<td>6,327.10</td>
</tr>
<tr>
<td>Scope 2 (Indirect Emissions)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(ton-CO₂e)-Location Based²</td>
<td>247,829.57</td>
<td>229,672.62</td>
<td>229,792.43</td>
</tr>
<tr>
<td>(ton-CO₂e)-Market Based²</td>
<td>-</td>
<td>226,973.51</td>
<td>229,611.74</td>
</tr>
<tr>
<td>Total Carbon Emissions (Scope 1+2)</td>
<td>252,676.47</td>
<td>234,612.88</td>
<td>236,119.53</td>
</tr>
<tr>
<td>(ton-CO₂e)-Location Based²</td>
<td>-</td>
<td>231,913.77</td>
<td>235,938.84</td>
</tr>
<tr>
<td>Total Carbon Emissions (Scope 1+2)</td>
<td>-</td>
<td>236,612.88</td>
<td>236,119.53</td>
</tr>
</tbody>
</table>

Emission intensity\(^{3}\) = total carbon emissions geographically/combined revenue (ton-CO₂e/ NTD million)

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018¹</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.02</td>
<td>3.07</td>
<td>3.21</td>
<td></td>
</tr>
</tbody>
</table>

Note:
1. Scope 2 carbon emissions for 2018 was retrospectively revised according to the 2018 Electricity Factor announced by the Energy Bureau of the Ministry of Economic Affairs.
2. From 2018, according to the GHG Protocol Scope 2 Guidance, the certificate of renewable energy purchase for category 2 should be calculated according to "Location Base" and "Market Base."
3. Revenue from Momo was deducted from the consolidated revenue in 2019, and the emission intensity values for 2017 and 2018 was retroactively revised.

### Analysis of Renewable Energy

<table>
<thead>
<tr>
<th>Target and Actual green energy installation capacity (kWp)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
</tr>
<tr>
<td>50</td>
</tr>
<tr>
<td>61</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Target and Actual annual power generated from green energy construction (Kw)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
</tr>
<tr>
<td>32,280</td>
</tr>
</tbody>
</table>

Please refer to Appendix P.128 for detailed Analysis of Non-renewable Energy.
2.5.3 Carbon Emission Management: Achieving Excellent Energy-Saving and Carbon-Reduction Results

15 categories of scope 3 GHG inventories have been disclosed.

Scope 3 emissions decreased by 15,869.24 metric tons of CO$_2$e compared with 2018 at 3.82% of reduction proportion.

<table>
<thead>
<tr>
<th>Type of inventory</th>
<th>Carbon emissions in 2018(tCO$_2$e)</th>
<th>Carbon emissions in 2019(tCO$_2$e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.1 Purchased goods and services</td>
<td>191,116.68</td>
<td>222,787.98</td>
</tr>
<tr>
<td>No.2 Capital goods</td>
<td>133,609.15</td>
<td>82,222.53</td>
</tr>
<tr>
<td>No.3 Fuel- and energy-related activities</td>
<td>56,533.65</td>
<td>60,852.50</td>
</tr>
<tr>
<td>No.4 Upstream transportation and distribution</td>
<td>2,413.90</td>
<td>1,149.34</td>
</tr>
<tr>
<td>No.5 Waste generated in operations</td>
<td>744.20</td>
<td>701.22</td>
</tr>
<tr>
<td>No.6 Business travel</td>
<td>417.77</td>
<td>330.40</td>
</tr>
<tr>
<td>No.7 Employee commuting</td>
<td>2,845.61</td>
<td>2,576.68</td>
</tr>
<tr>
<td>No.8 Upstream leased assets</td>
<td>3,549.68</td>
<td>3,334.74</td>
</tr>
<tr>
<td>No.9 Downstream transportation and distribution</td>
<td>893.05</td>
<td>786.45</td>
</tr>
<tr>
<td>No.10 Processing of sold products</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>No.11 Use of sold products</td>
<td>12,393.28</td>
<td>12,283.54</td>
</tr>
<tr>
<td>No.12 End-of-life treatment of sold products</td>
<td>740.82</td>
<td>2,547.66</td>
</tr>
<tr>
<td>No.13 Downstream leased assets</td>
<td>2,962.58</td>
<td>2,701.90</td>
</tr>
<tr>
<td>No.14 Franchises</td>
<td>6,728.59</td>
<td>6,804.77</td>
</tr>
<tr>
<td>No.15 Investments</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

Note: No intermediate products are processed and remanufactured, so NO.10 is not applicable. Since they have been included in the scope 1 and 2 GHG greenhouse gas, NO.15 is not applicable.
2.5.3 Carbon Emission Management: Achieving Excellent Energy-Saving and Carbon-Reduction Results

2. Energy Saving Effects of Office
1. Air-conditioners have been replaced at Taipei Dunnan, Guangdian Center and Taichung Yuanchien, saving a total of 515,853 kWh, the equivalent to reducing carbon emissions by 274.9 metric tons.
2. Taipei Dunnan Tower: Equipped with 8.6kW solar energy and 9kW green power generation facilities for wind power for public area electricity use.
3. Taipei New Horizon Building: A large area of transparent glass enhances lighting.

Carbon reduction: 274.9 tons

2.5.3 Carbon Emission Management: Achieving Excellent Energy-Saving and Carbon-Reduction Results

3. Energy Saving Effects of Computer Room
In 2019, computer room service integration and environment optimization were completed for systems under TNF Media, saving a total of 267,173 kWh, the equivalent to a reduction of 142.4 metric tons of carbon emissions.

Carbon reduction: 142.4 tons

3. Energy Saving Effects of Computer Room
In 2019, computer room service integration and environment optimization were completed for systems under TNF Media, saving a total of 267,173 kWh, the equivalent to a reduction of 142.4 metric tons of carbon emissions.

Carbon reduction: 142.4 tons

4. Energy Saving Effects of Stores
The stores have formulated equipment database energy surveys and implemented energy-saving measures through daily maintenance operations. In 2019, the stores replaced lighting and inverters for air-conditioners, saving 1,093,255 kWh of power, the equivalent of a reduction of 582.7 metric tons of carbon emissions.
1. Inverter air conditioning replaced constant air-conditioning
2. Lighting replacement
3. Adjustment to the time of turning on signboard light
4. Indoor temperature maintained at 26 degrees Celsius
5. Install shades or heat insulation paper at selected stores

Carbon reduction: 582.7 tons

5. Stores Go Paperless
1. Provided more users (such as foreigners/minors) with the option for paperless transactions
2. Built an automatic identifications system for paperless files and documents. The printed version is no longer required for customer applications
3. We continue to optimize the application process and system to reduce the amount of paper used in the process. The paperless policy reduced 3.18 million copies of paper in 2019, saving more than 10.73 million sheets of paper.

Paper reduction: 10.73 million sheets

5. Stores Go Paperless
1. Provided more users (such as foreigners/minors) with the option for paperless transactions
2. Built an automatic identifications system for paperless files and documents. The printed version is no longer required for customer applications
3. We continue to optimize the application process and system to reduce the amount of paper used in the process. The paperless policy reduced 3.18 million copies of paper in 2019, saving more than 10.73 million sheets of paper.
2.5.3 Carbon Emission Management: Achieving Excellent Energy-Saving and Carbon-Reduction Results

6. Energy Saving Effects of IDC

In 2019, the average total energy consumption of IT equipment in the IDC room increased by 130%, from 1309KW in December 2018 to 1700KW in December 2019. The PUE of computer rooms went from the average of 1.87 in 2018 to 1.79 in 2019 through the existing energy-saving design of the computer room with use of cold and hot aisle isolation, natural air cooling, high-efficiency air-conditioning and power equipment, LED lights installed in all computer rooms and supplemented with ISO50001 system for energy consumption management and control.

7. Energy Saving Effects of Information Machine Room

Reduce the number of hosts with hyper-converged hosts and virtualization. Replace high-efficiency UPS host to reduce power loss by 15%. The number of hosts has been reduced from 65 to 13 with hyper-converged hosts with virtual technology. The replacement of high-efficiency UPS hosts saved 782,684 kWh of electricity throughout the year, which is equivalent to a reduction of 417.2 metric tons of carbon emissions.

8. Energy Saving Effects of Telecom Room and Base Station

According to statistics, the base stations and the computer rooms saved a total of 14.3 million kWh of electricity in 2019.

<table>
<thead>
<tr>
<th>Telecommunications equipment for smart energy saving</th>
<th>Big data analysis of customer use behavior to adjust telecommunications equipment load</th>
<th>The carbon reduction in 2019 reached 7,621.9 metric tons with smart management and multiple energy-saving measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diversified energy-saving for base stations</td>
<td>Big data analysis mainly uses energy-consuming equipment and imports various smart energy-saving</td>
<td></td>
</tr>
<tr>
<td>Air-conditioning efficiency improved for telecom rooms</td>
<td>Replaced old equipment, set up cold aisles, balance water and air volume</td>
<td></td>
</tr>
</tbody>
</table>

9. Industry-academia Research of Climate Change

In 2019, we will continue to partner with academic institutions and by commissioning Taipei University of Technology to improve carbon emissions management and carbon performance tracking.

<table>
<thead>
<tr>
<th>Explanation</th>
<th>Carbon reduction performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>New version of ISO14064-1 (2018) introduced</td>
<td>Inventory and verification were conducted based on the latest version of ISO14064-1: 2018</td>
</tr>
<tr>
<td>ISO14064-1 Indirect GHG Inventory Verification</td>
<td>Strengthening indirect greenhouse gas emissions management</td>
</tr>
<tr>
<td>SBT target performance review</td>
<td>Tracking and reviewing greenhouse gas emissions in 2019</td>
</tr>
</tbody>
</table>


We actively invest in renewable energy construction and surpassed the target set in 2019. In addition, the Company’s self-built solar power generation produced a total of 190,000 kWh in 2019 as well as purchasing 339,000 kWh (339 T-REC) of renewable energy certificates to offer practical support to the country’s renewable energy policy.

<table>
<thead>
<tr>
<th>Explanation</th>
<th>Carbon reduction performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>230kWp target of renewable energy installation capacity and 318 Wp of 2019 installation capacity</td>
<td>Reaching the 2020 target of 280kWp in advance</td>
</tr>
<tr>
<td>0.09 of renewable energy utilization rate target with 1.23% of utilization rate reached in 2019</td>
<td>A total of 529,000 degrees of renewable energy usage</td>
</tr>
</tbody>
</table>
2.5.4 Green Energy Initiatives: Extending Green Energy Applications to Social Welfare for the Disadvantaged

The green energy initiative integration project was proposed in 2015, with the TWM Green Energy for Sustainable Future as the theme in 2016. From 2017 to 2019, the Company launched the Green Energy for Charity project that combined green energy and public welfare sponsorship for three consecutive years. The project will encourage the public to donate funds in order to build solar photovoltaic devices on the roofs of charity organizations. Not only will they be able to generate more green power for Taiwan, the proceeds from the sales of electricity will also be a stable income for the charity organizations for 20 years.

### Green Power for Charity
Project for Generating Green Power:

<table>
<thead>
<tr>
<th>Year</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raised</td>
<td>5.7 million</td>
<td>8.95 million</td>
<td>3.89 million</td>
</tr>
<tr>
<td>Solar energy systems</td>
<td>99.8kW</td>
<td>168.3kW</td>
<td>7kW</td>
</tr>
<tr>
<td>Degrees of electricity</td>
<td>2.32 million degrees</td>
<td>3.45 million degrees</td>
<td>1.45 million degrees</td>
</tr>
<tr>
<td>Electricity sales revenue</td>
<td>9.69 million</td>
<td>10 million</td>
<td>7.8 million</td>
</tr>
<tr>
<td>Amplified love</td>
<td>1.76 times</td>
<td>1.7 times</td>
<td>2 times</td>
</tr>
</tbody>
</table>

### Bringing Enterprise’s Calling Power into Play:

<table>
<thead>
<tr>
<th>Year</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vendors</td>
<td>8</td>
<td>11</td>
<td>13</td>
<td>26</td>
<td>20</td>
</tr>
</tbody>
</table>

1. The Environmental management committee review all the environment KPIs twice a year.

2. Green energy construction:

<table>
<thead>
<tr>
<th>Year</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>28 kW</td>
<td>62 kW</td>
<td>50 kW</td>
<td>50 kW</td>
<td>50 kW</td>
</tr>
</tbody>
</table>

3. Green Parent-Child Day:

<table>
<thead>
<tr>
<th>Year</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Person</td>
<td>724 person</td>
<td>276 person</td>
<td>158 person</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Policy engagement:

   After shut down 2G and 3G telecom infrastructure, "Telecommunications Management Act" paving the way for telecoms to share 5G networks and frequency bands, this will save more energy and bring more innovation and cross-industry cooperation.

2. Supporting Green Energy Policy:

<table>
<thead>
<tr>
<th>Year</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renewable energy evidence</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>5 million Kwh</td>
<td>4.51 million Kwh</td>
</tr>
<tr>
<td>Green Electricity Subscription</td>
<td>1 million degree</td>
<td>1.4 million degree</td>
<td>3.36 million degree</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Responding to International Green

- Dow Jones Sustainability Indexes
- Carbon disclosure project
- Join the Global Sustainability Initiative
- ISS-oekom Corporate Rating Report
2.5.4 Green Energy Initiatives
Extending Green Energy Applications to Social Welfare for the Disadvantaged

Green Power for Charity Program initiated since 2017

2015/2016
NT$3.89 million raised (with 3.92 million in excess)
862 people and 13 suppliers participated
Approximately 2.32 million kWh of green electricity generated in 20 years
Power generation shown on electric meter in 2018:
266,000 kWh of power generated between March 2018 and March 2020
Electricity sales revenue reaches NT$1.41 million
99.8 kW of installation capacity
Proceeds from electricity sales reached about NT$9.65 million in 20 years, with the benefits enlarged 1.76 times

2016/2017
NT$8.95 million raised (with 9.09 million in excess)
3,371 people and 26 suppliers participated
Approximately 3.45 million kWh of green electricity generated in 20 years
Power generation shown on electric meter between December 2018 and March 2019:
224,000 kWh of power generated between January 2019 and March 2020
Electricity sales revenue reaches NT$1.28 million
68.3 kW of installation capacity
Proceeds from electricity sales reached about NT$16 million in 20 years, with the benefits enlarged 1.7 times

Green Power for Charity Program in 2019 and Taoyuan Spinal Injury Potential Development Center

Partners:
Proceeds from electricity sales reached about NT$7.8 million in 20 years
Benefits enlarged Twice
71 kW of installation capacity
Power generation by 2020
2.5.5 Creating a Zero-Waste Circular Society Based on Circular Economy

1 Hosting the First Circular Economy Forum for ICT Industries to Create a Zero-Waste Circular Society
The “ICT Industry Circular Economy Forum” was hosted for the first time in 2019 with nearly 300 people in attendance. Experts from the industry, government, and academia were invited to share. In the meantime, the “Circular Economy Cooperation Declaration” was announced jointly with 14 strategic partners. Please refer to 2.3.5 Sustainable Partners (P.67).

2 Extend The Service Life of SMR
The Company extended the service life of the power supply system (SMR) from 10 years to 15 years with good maintenance. In 2019, a total of 2,559 SMRs were retained, reducing approximately 25 metric tons of scrapped materials.

3 Reduce Spare Parts Procurement
A total of 2,356 faulty cards were generated in 2019. A supplier was entrusted to take care of equipment maintenance and faulty product processing, which can reduce TWM’s waste generation by 10%, equivalent to 24,000 kilograms of waste materials.

4 In-Store Recycling for Unwanted Phones and Batteries
Myfone stores effectively combine the concept of “convenience” with “recycling” to make waste mobile phones/battery recycling as convenient as consumption in stores. 19,837 waste mobile phones were recycled from the stores in 2019, with 1.23 metric tons of waste batteries recycled to promote recycling.

5 Exchanging Old Devices for New Ones
As opposed to our competitors, TWM not only launches new discounts with the most favorable plan and a new phone, but also provides discounts for replacing old phones with an international telecommunications company, Brightstar, so as to recycle resources effectively. Results of the phone replacement in 2019:
1. 1,7051 used phones recycled in 2019
2. The revenue of NT$54 million was generated from recycled phones sold to Brightstar in 2019

6 Paper Recycling
The company ships shredded documents to the processing plant each season, which are crushed and added water before being compressed into paper bricks. The bricks are subsequently made into recycled paper products, reducing pollution and doing our best for the earth.
2.5.6 Green Operations: Waste Reduction and Energy/Resource Management

1 Statistics of Waste Recycled, Incinerated and Landfilled

<table>
<thead>
<tr>
<th>Types of waste disposal in 2019 (metric tons)</th>
<th>Recycled</th>
<th>Incinerated</th>
<th>Landfill</th>
<th>Total amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial Waste-Waste Optical Cable</td>
<td>109.781</td>
<td>130.842</td>
<td>2.793</td>
<td>243.416</td>
</tr>
<tr>
<td>Industrial Waste-Waste Copper Cable</td>
<td>124.001</td>
<td>28.294</td>
<td>0.604</td>
<td>152.899</td>
</tr>
<tr>
<td>Industrial Waste-Waste Lead acid battery</td>
<td>183.089</td>
<td>219.075</td>
<td>4.676</td>
<td>406.821</td>
</tr>
<tr>
<td>Industrial Waste-Waste telecom equipment</td>
<td>275.924</td>
<td>11.962</td>
<td>0.255</td>
<td>288.141</td>
</tr>
<tr>
<td>General waste-domestic waste</td>
<td>149.517</td>
<td>353.99</td>
<td>7.556</td>
<td>511.063</td>
</tr>
<tr>
<td>Total</td>
<td>842.292</td>
<td>744.163</td>
<td>15.885</td>
<td>1602.340</td>
</tr>
</tbody>
</table>

Achievement and Objective of Electronic Waste Reduction

According to statistics, a total of 1091.277 metric tons of business waste was generated in 2019 (including Taiwan Broadband), and the total amount of non-recyclables waste was reduced by 40.2% compared with the baseline of 2017.

Office/Domestic Waste Management and Video System Promotion

Office waste management

Maximize sorting for office waste and recycling Promote electronic documents and double-sided printing to reduce waste of photocopying paper and waste paper. For details on office waste,

Promotion of Video Conference System

At present, the Company has 15 large, 13 small and 450 basic video conference equipment, which was used 46,835 times in 2019.

Store Waste Statistics, Management and Reduction

The main source of store waste is domestic garbage. The Company regularly promotes the concept of waste reduction and classification to the store staff. From November 2018, the waste from directly-operated stores is included in the statistics, measured and estimated based on types of stores (categorized as large, medium and small depending on the number of employees). For 2019, store waste is estimated to be 148 metric tons of general waste and 90 metric tons of recyclable waste. In 2020, specific waste reduction targets for general waste from the stores have been set to continue promoting waste reduction.

In addition to educating store associates on the importance of waste reduction, recycling and reuse, the Company also encourages them to reuse paper, bring their own tableware, implement electronic sign-off procedures and video conferencing measures as part of the recycling policy.

Note:
1. The ratio of recyclable material from waste optical cable is 45.1%
2. The ratio of recyclable material from waste copper cable is 81.1%
3. The ratio of recyclable material from waste lead batteries is 45%
4. 95.76% can be recycled and reused with the most environmentally-friendly physical treatment for processing and decomposition of the waste
5. According to EPA’s Solid Waste Incinerator Management System, all 24 large-scaled waste incinerators in Taiwan are equipped with energy recovery system and supply electricity to the national grid.
6. According to the EPA database (https://reurl.cc/Xwup8M), the proportion of incinerated power generation and landfill in urban waste in 2019 was 97.91% and 2.09% respectively, after excluding recyclable waste and waste that requires special treatment (the 2019 statistics was available till November)
2.5.6 Green Operations: Waste Reduction and Energy/Resource Management

2. Achievement and Objectives of E-bill Services
Paperless bills reached 77% in 2019, saving 170 million A4 sheets and reducing carbon emissions by 601 tons. In 2024, 180 million A4 prints are expected to be saved with 662 metric tons of reduction in carbon emissions.

3. Green Logistics - Logistics vehicle management mechanism
Outsourcing Logistics, a total of 796 tons of carbon emissions have been saved in the past year:
1. Service provider is required to turn off the engine if the wait exceeds 60 seconds, saving about 266.73 tons of carbon emissions.
2. Adjust the vehicle deployment while maintaining operation, saving about 318.24 tons of carbon emissions.
3. Logistics operations on Saturday are carried out on Monday, saving about 117 tons of carbon emissions.
4. The motorcycle fleet was cancelled and merged into the logistics fleet for distribution, saving about 94 tons of carbon emissions.

4. Green Transportation - Engineering Vehicle Oil Management System
Since 2016, the fleet management system has been introduced to analyze vehicle usage and management, setting fuel reduction targets. The results are as follows:
   - Please refer to Appendix P.129.

5. Water Resource Management
Office water saving measures: promoting water saving reducing the amount required for flushing. Water-saving measures in directly-operated stores:
1. Reduce the amount required for flushing
2. Monthly report inquiry and review, notifying of any abnormality
   - Computer room base station (including TNF Media/cloud/information computer room):
     - Cooling tower temperature control and installation of frequency converter
     - Adjust the height of the overflow pipe of the cooling tower to avoid wasting water resources
   - Please refer to Appendix P.129.

6. Green Family Day
A walk, park cleaning and parent-child eco-friendly fashion show was organized for the 2019 TWM Green Family Day. A total of 158 employees and their family members participated to do good for the environment while getting some exercise, killing two birds with one stone.
2.5.7 Green Services: Developing Green Products and Services Based on Digital Technology

The monthly developer invoicing system automatically sends automatic notifications without the need to manually go through the system to retrieve the statement, saving power consumption of the office by reducing employee working hours and reducing carbon emissions. Saving 512 hours per year, the equivalent to reducing carbon emissions by 51.7 kilograms of CO₂e.

The carbon footprint label was obtained in 2017. Consumers using myVideo generate 0.55 gram of carbon emissions for every 1MB of transmission. The carbon emissions of watching films online only account for 4.5% of that of the traditional consumption model.

myVideo Online Music and Video Festival saves a large volume of physical disk production and paper printing, as well as recommending films based on user preferences to reduce search energy consumption, all to implement the common global development goals of energy saving, carbon reduction and land sustainability.

In 2019, 68% of the paper bills belonged to only one bill in the current period is sent in a stamped envelope, which could reduce 9.82 million A4 sheets per year.

In 2019, 68% of the paper bills belonged to only one bill in the current period is sent in a stamped envelope, which could reduce 9.82 million A4 sheets per year.

Reducing 577 kilograms of carbon emissions. Showing the discount screen, and the clerk clicks to apply the discount.

myVideo

- The carbon footprint label was obtained in 2017. Consumers using myVideo generate 0.55 gram of carbon emissions for every 1MB of transmission. The carbon emissions of watching films online only account for 4.5% of that of the traditional consumption model.
- Since May 2019, the free article section has attracted more than 500,000 digital readers. In 2019, a total of 1.15 million e-books were downloaded, reducing paper used for printing. In 2019, we participated in the Digital Wings public welfare project to help 10,000 disadvantaged young people improve their foreign language skills through digital learning.

myBook

- The carbon footprint label was obtained in 2017. Consumers using myBook generate 0.8 gram of carbon emissions for every 1MB of transmission. The carbon emissions of reading books online only account for 3.4% of that of the traditional consumption model.
- Since May 2019, the free article section has attracted more than 500,000 digital readers. In 2019, a total of 1.15 million e-books were downloaded, reducing paper used for printing. In 2019, we participated in the Digital Wings public welfare project to help 10,000 disadvantaged young people improve their foreign language skills through digital learning.

myMusic

- The carbon footprint label was obtained in 2017. Consumers using myMusic generate 0.55 gram of carbon emissions for every 1MB of transmission. The carbon emissions of listening to music online only account for 4.2% of that of the traditional consumption model.
- Since May 2019, the free article section has attracted more than 500,000 digital readers. In 2019, a total of 1.15 million e-books were downloaded, reducing paper used for printing. In 2019, we participated in the Digital Wings public welfare project to help 10,000 disadvantaged young people improve their foreign language skills through digital learning.

M+Messenger

- M+ red envelope: reducing carbon emissions by 11,034 kilograms. Linking bank accounts allows users to send red envelopes.
- Mandatory watermarking (M+): reducing 460 kilograms of carbon emissions. Enterprise customers send pictures with watermarks to track the sender.

Online insurance application for products bought online from myfone.

Innovative billing service

- The IDN room design adopts methods such as separation of cooling and heating channels, natural cooling, etc., as well as using high-efficiency air conditioning equipment, LED lighting control systems, etc. The overall energy efficiency can reach PUE 1.5 when fully loaded.
- Compared with the average PUE 2.0 electricity efficiency of the general computer room, electricity consumption can be reduced by about 25%.

IDC room

- The IDC room design adopts methods such as separation of cooling and heating channels, natural cooling, etc., as well as using high-efficiency air conditioning equipment, LED lighting control systems, etc. The overall energy efficiency can reach PUE 1.5 when fully loaded.
- Compared with the average PUE 2.0 electricity efficiency of the general computer room, electricity consumption can be reduced by about 25%.

WAII Limited time offer coupon

- Innovative cross-field integration with Fubon Property & Casualty Corporation. Insurance can be activated online for purchased goods with a signature. In 2019, the number of online insurance applications reached 26,000, saving 52,000 sheets of paper (374,400 grams of carbon emissions).
- Reducing 577 kilograms of carbon emissions. Showing the discount screen, and the clerk clicks to apply the discount.
2.6 Social inclusion

Vision:
Breaking down obstacles caused by long-standing value systems, including poverty, inequality, unequal resource distribution and so on with innovative technology models and applications.

Corresponding to material topics:
Giving back to the society, digital inclusion and social innovation, social emergency responses

Corresponding to 5 major stakeholders:
Employees, Customers, Competent authorities, Media, Rating agencies, Suppliers, Communities/NGO

Photo courtesy of Laura Chen
Mobile Composition Award supports OTT audiovisual talents

- A total of NT$6.25 million of funds were granted in 2019, with a total of 379,505 entries in the last 13 years and over NT$63.89 million of awards and grants

- The theme song for The Bookstore After 10pm, the first original musical short in Mandarin, made it to the stage of Taipei Arena

Promoted technology education to benefit

- Coding fun
- Digital Learning centers
- Digital Wings

2020 Targets

- NT$130 million raised through TWM Channel
- NT$850 million raised by TWM for sponsorship and charity donation

2030 Targets

- NT$120 million raised through TWM channels
- 35% growth in the number of disadvantaged groups (students/the elderly) benefiting from the discount compared to 2017
- Free large-scale outdoor concerts: The number of participants reached 720,000 over 12 consecutive years, helping 22 charitable organizations raise a total of NT$2.96 million
- The number of people benefiting from the discount for disadvantaged groups (students/the elderly) grew by 110% compared to 2017
- 99% of population coverage for mobile broadband Internet in rural areas

Key Results and Performance of Social inclusion

- NT$1.2 billion for TWM sponsorship and charitable donation
- NT$200 million raised through TWM channels
- 50% growth in the number of disadvantaged groups (students/the elderly) benefiting from the discount compared to 2017
- 150,000 people benefiting from the TWM digital education
- 97.65% of population coverage for mobile broadband Internet in rural areas

2019

- NT$820 million for TWM sponsorship and charitable donation
- NT$120 million raised through TWM channels
- 35% growth in the number of disadvantaged groups (students/the elderly) benefiting from the discount compared to 2017
- 62,000 people benefiting from the TWM digital education
- 97% of population coverage for mobile broadband Internet in rural areas
TWM Social Inclusion Concept Map

With technological social welfare as the core, we have focused on five major aspects including “encourage cultural and innovative arts,” “promote technology inclusion,” “emergency responses,” “enable welfare with technology” and “cultivate social care.” More than 20 social welfare projects have been developed with social inclusion as the goal, interlinked, extended and integrated.
2.6.1 Supporting Cultural and Creative Industries: Giving Audio-Visual Specialists the Opportunity to Unleash Their Creativity and Make Their Dreams Come True

1. myfone Mobile Composition Awards

Taiwan Mobile Foundation founded the myfone Mobile Composition Award in 2007 with the goal of fostering digital creations. Text compositions and original ring tones are solicited to encourage the public to unleash their creativity in everyday life. With the evolution in technology and the shift in mobile compositions, the Mobile Composition Award started soliciting text compositions, original songs, original stickers and micro-film submissions. “Rebellion, Retrospection” was chosen as the theme for the 2019 edition, encouraging creators to establish their own brands. A total of 33,589 works were submitting, breaking the record in terms of volume for any single year. A winner said that the award allowed her to get creative again after becoming a mother, and now she has an outlet for the inspiration she once had.

In addition to offering award money, the Mobile Composition Award is dedicated to cultivating creators by integrating Group resources to provide exposure on commercial platforms for winning works, joining forces with the Foundation’s i-Infinity project to match winning teams to film projects that promote public welfare, as well as offering audiovisual talents the opportunity to make it on stage with Dare to Dream.

In the future, we will continue to provide a digital creation platform that is friendly to creators, as well as exploring more opportunities for the winners to boost the competitiveness of domestic cultural and creation industries.
2.6.1 Supporting Cultural and Creative Industries: Giving Audio-Visual Specialists the Opportunity to Unleash Their Creativity and Make Their Dreams Come True

2. Dare to Dream

Taiwan Mobile’s (TWM) 4th “Dare to Dream” supports people with creative talent in music as well as videos, which are rare in Taiwan. Sean Li, the first person to win both the first prize in the 12th micro-film project and the first prize in the 7th ring tone competition of myfone Mobile Composition Award, received support to make his dream come true by making the first original musical short in Mandarin, The Bookstore After 10pm, a reality. Wang Shaudi, the winner of the Golden Bell Awards, was hired as a mentor and producer. The musical short features Darren Chiu and Janice Yan as protagonists, allowing Li to maximize his potential. Faced with the upcoming 5G era and future uncertainties, TWM will continue to dream along with the younger generation as well as allowing them to dream bigger!
Seeing the lack of educational resources and teachers in the rural areas, as well as the gap in information technology between urban and rural areas, TWM has trained corporate volunteers to participate in programming camps since 2017. The volunteers help the students learn through games, allowing them to grasp the concept since an early age. TWM has since then invested in teacher training resources for year and a half after the camp, equipping local teachers with the teaching capacity as well as assisting schools nearby. For the second stage, more talents will be cultivated to change education in rural areas with programming.

1. Coding Fun

Sponsored the programming camp at rural schools
11
184 Total volunteers for long-term cooperation
280 Total students participate
12
Estimate number of 4,860 students by 2021

Taoyuan Dongan Junior High School
Tongan Elementary School, Changhua
Liyu Elementary School, Nantou
Zhongzheng Elementary School, Nantou
Zhengmin Elementary School, Yunlin
Niao Song Elementary School, Yunlin
( Sponsored to host the camp for 2 consecutive years)
Guangfu Elementary School, Yunlin

Partner Schools
Sanmin Elementary School, Hualien
Taoyuan Elementary School, Taitung
Kangle Elementary School, Taitung

2017/2018 partner schools
2019 partner school

Participant from Tongan Elementary School, Changhua:
I am intrigued by software design and I would like to become a software design engineer in the future. I would like to come back to Fenyuan and contribute what I have learnt.

Participant from Kangle Elementary School, Taitung:
I want to study in Taitung like my parents so that I can help out here. Taitung is a relatively rural area. That’s why I would like to stay and help.
2.6.2 Promoting Technological Integration: Diminishing the Digital Gap Between Urban and Rural Areas

Digital Wings started out as an innovation proposal from our employees. An incubation team was formed in 2018 for an annual program in reviewing internal service resources, as well as finding out what NPOs, local governments and schools needed. The program was officially launched in 2019 to provide mobile internet access and myBook Live English for free, partnering with 4 publishers with over 400 multi-lingual multimedia online learning resources. The application is open to over 10,000 disadvantaged secondary school students and above each year, helping them fly high with digital wings with digital learning opportunities.

Recipient:
The English-learning resources in the magazine are down to earth and more practical, unlike the standardized courses taught at school. This is more interesting, and my listening and reading abilities have significantly improved.
2.6.2 Promoting Technological Integration: Diminishing the Digital Gap Between Urban and Rural Areas

Since 2007, the Taiwan Mobile Foundation has integrated core telecommunications technologies and fixed-line services with the goal of reducing the digital gap. With that in mind, non-profit organizations have been assisted to set up “Digital Learning centers” in remote areas with sponsored network access, software and hardware. Local organizations have also been coached to take advantage of e-learning resources, giving regular classes and making digital learning accessible to local residents. At present, a total of 16 locations continue to operate.

We look forward to further collaborating with communities, enabling more disadvantaged groups to benefit from digital education and increasing their access to digital technology.

Note: Seats are defined by computer equipment sponsored by TWM (including desktop computers, notebook computers and tablets)

3. Rural Broadband Construction

In line with NCC’s “Broadband to Every Village” and “Broadband to Every Indigenous Community,” policies in popularizing telecommunications services, we have completed 15.5 kilometers of fiber construction to provide Shanmeli, Chashan, Shizi Village in Ali Mountains, Jingying Village, Renai Township, Nantou and Yixing Village, Jiashih Town, Hsinchu County with broadband access. The subsidy and maintenance cost for NCC policies reached NT$1,695,000 in 2019.

To provide infrastructure for broadband access in rural areas in line with NCC’s Forward-looking Infrastructure Development Program, TWM submitted an application to NCC for construction approval of 14 base stations in rural areas to increase broadband coverage and reduce the digital gap. In 2019, the population coverage reached 97.65%. In addition, an application for building 100 Mbps fixe-line broadband network in 6 villages was submitted to NCC for approval to increase coverage in rural areas.
2.6.3 Social Welfare Through Technology: Launching Digital Initiatives Based on Technological Leverage

1.i-Infinity Digital Welfare

The effort has been concentrated on 2 major programs focusing on “public welfare micro-film” and “mobile application” since 2012, using technology to break through bottlenecks and exert leverage. This project helps NPO launch new digital and fundraising initiatives, while cultivating talents for the local entertainment business, supporting social enterprises and revitalizing public welfare with technology!

The winners of the myfone Mobile Composition Award were matched with NPOs for creating micro-films. Marketing bonus was given over a 3-month period after the films were uploaded to YouTube. The Taiwan Mobile Foundation donates NT$1 for each view (with the limit of NT$100,000). Three micro-films were launched in 2019 with a total of bonus of NT$245,000. The marketing period also raised over NT$550,000 of fund with a 2.38% increase. Two micro-films were created for NPOs in 2019:

Partnering with the social enterprise “Sense Innovation”, the Eye-Comm early-stage treatment game combined with eye tracking patents was released in 2019 to help children with congenital severe illness and physical disabilities who cannot communicate with the outside world. They learn to express their thoughts with their eyes. The game has been provided to 34 private and public institutions for free, benefiting 15,000 children.

Super Guest
Director: Pei-Wei Wu
Homeless Taiwan
Topic: Human Rights of the Homeless

The Dream is Clear
Director: Jing-Yi Lin
Nantou County Youth Association for Karate Promotion
Topic: Rural Education/Athlete Cultivation

The mother of a child:
The colors are very bright, and each level is interesting. The coloring with eyes feature surprised us. When he glanced like this, the range became larger, indicating the range of his eye movement. Afterwards, I did notice the range of his eye movement has been enlarged. Disadvantaged groups are not the priority of every enterprise. I am very grateful to Sense Innovation. The fact that TWM is willing to dedicated resources to help these targeted groups also leaves everyone a good impression.

The mother of a child:
She pays a lot of attention when she is playing games. She focuses better than when I read her a story or play games with her!
2.6.3 Social Welfare Through Technology: Launching Digital Initiatives Based on Technological Leverage

2.5 Sharing Volunteer Platform

The iSharing Volunteer Platform is a charity matching platform (with a website and an app) that was developed in 2014 with the i-Infinity Digital Welfare project. It integrates the needs of charity groups and the general public to find volunteers, raise materials and donations so that everyone can contribute to charity anytime, anywhere. It is possible to match the good intention in an accurate and timely manner. TWM invests funds in its development and promotion each year to keep the platform relevant and maximize the technological leverage. The "Volunteer Zone" can help the general public, public welfare organizations, and enterprises to find volunteers. The "Material Section" has a shopping cart feature to facilitate the selection of multiple items at a time. The "Donation Section" allows both audio and credit card donations.

In addition to software development, TWM continues to launch large-scale initiatives to call for materials and volunteers with iSharing Volunteer Platform. The target is to bring more participants together, doing whatever they can to bring the society a lot of joy.

3.5180 Mobile Donation

"5180 Mobile Donation," the first mobile phone small donation platform was launched in December 2015. The platform takes advantage of the convenience of mobile phones, combined with the core technology of the telecommunications industry, IVR (Interactive Voice Response), APP and back-end services, to provide users with donation options of 100, 200, 300, 500, 1,000, 1,500, 2,000, 3,000 to 6,000 in New Taiwan Dollars. Users can make donations with telecom bills, and can also request donation receipts online, which is safe, fast and convenient. Since March 2016, the service charge for collection of bills was cancelled to give back to all social welfare groups that participated in the 5180 Mobile Donation.

4. Mobile Health

We have partnered with Taitung Christian Hospital over the years in services for rural areas by sponsoring communications equipment on the mobile medical vehicles, ensuring medical care for disadvantaged groups and reducing the gap between urban and rural areas.
2.6.4 Enhancing Community Care: Taking Care of Rural Areas and Disadvantaged Groups With our Core Business

Since 2008, we have joined hands with A Kernel of Wheat Foundation to co-organize this event for 13 consecutive years, gathering on more than 120 employees and family members from all over Taiwan to serve as corporate volunteers in Hualien, giving 100 elders living alone the best company for one day. The activities include purchasing daily necessities (with TWM providing NT$1,000 in gift voucher each), the reunion luncheon, performance, the New Year gift lottery and scavenger hunt, giving them happy New Year's celebrations!

Grandma Lin:
I have participated in the TWM New Year's Eve dinner for more than 10 times along with Grandpa Lin, who is 93 years old. I remember each and every one of them clearly. I always ask about the event at the end of the year. I really enjoy them as well as the volunteers' company. It's nice to share and talk with people so that I can temporarily forget about the stress of taking care of Grandpa Lin. He also remains happy for days on end after the event!

Grandpa Dong:
The social workers learned that New Year's Eve dinner and encouraged Grandpa Dong to attend. At first, he was not interested, as he has to stick to a liquid diet after his throat cancer surgery. He thought that he wouldn't be able to eat anything at a dinner at a big hotel. He didn't want people to go through any extra trouble or cause any displeasure. The social workers told Grandpa Dong that a food processor would be available, and the volunteers would offer one-on-one company as well as assistance. After a lot of persuasion, Grandpa Dong finally agreed to take part in the event.
Margaret, corporate volunteer:
It is always the busiest time before the New Year’s. I always ask myself if I really want to attend this year. However, these doubts always disappear the moment I get on the train, and they are replaced by anticipation of the day ahead. It’s been this way since the first year! Over the years, in addition to enthusiasm, I feel a sense of responsibility. On this day, we are just like their children and grandchildren. I feel so happy when I see the smiles on their faces!

Joan, corporate volunteer:
Volunteers for this event plays a small role. We are supported by all our colleagues, the company’s dedication to public welfare, event planning and gift donation. . . A lot of love is shared with the grandpas and grandmas through our smiles and hugs. All we need to do is to continue the company’s dedication to the society and help more grandpas and grandmas celebrate the new year!

Ben, corporate volunteer:
I am grateful to the company for giving me this opportunity and the continuous support from the organizer. This is why I have been doing this every year. What I can offer is limited, but it is the right thing to do. I might not be able to offer timely assistance when they need, so I would like to share a little love so that they feel they are cared for.
2.6.4 Enhancing Community Care: Taking Care of Rural Areas and Disadvantaged Groups With our Core Business

2. Diversified Rate Plan

The family plan was launched in January 2019. The plan offers a minimum monthly fee of NT$100 with free phone calls and unlimited high-speed Internet access at 1Mbps. This plan allows parents to keep in touch with their children through smartphones/devices anytime to ensure their safety, as well as allowing children to use the Internet for communications and learning needs. A total of 58,983 people have benefited as of the end of 2019.

Digital convergence provides integrated services for mobile and optical fiber Internet access at home. The actual number of applications and revenue is 20% higher than the target numbers, and it is well-received by users. It also merges the bills for mobile Internet and optical fiber Internet services, facilitating management for users.

3. Television Subsidies for Low-income Households

TWM Broadband has complied with the government's policy of caring for low-income households. For registered low-income households, as long as relevant documents are submitted at the counter, the fee for basic channels will be waived and a discount will be given on the installation fee. This gives them the opportunity to stay updated with new knowledge and the society through TV. In 2019, a total of 5,671 low-income households have enjoyed the basic channel viewing discounts from the operators, with a total of NT$32.81 million of fee waived in the discount and installation fee.

4. Outstanding Store Manager Election

TWM has participated in the "National-wide Outstanding Store Manager Selection" organized by the TCFA for six consecutive years, participating in over 141 public welfare activities across Taiwan, including elderly and orphan care, blood donation, government outreach, community cleaning, etc. Several hundred hours have been invest by 3,100 people, supporting disadvantaged groups and paying back to the society as a good corporate citizen. 47 employees have been selected as "Nation-wide Excellent Store Managers," with 8 of them winning the "Nation-wide Outstanding Store Managers" award and becoming the best examples of staff in the service industry in Taiwan. We will continue our dedication to public welfare activities in the future, encouraging employees to join the community welfare effort, realize the joy in helping others, and realize the value of TWM's local participation in daily life.
2.6.4 Enhancing Community Care: Taking Care of Rural Areas and Disadvantaged Groups With our Core Business

5. Little Anchor Camp

TWM’s cable TV station has hosted the "Little Anchor Program" to give back to local communities for many years. School children participating in activities can learn about the evolution of cable TV and news production among other things. At the end, they get to act as anchors to experience how it feels to be in this role. The program cultivates the verbal expression skills and self-confidence, allowing them to learn and expand their horizons in a more diverse way. In the past, the program was organized by schools. This year the neighborhoods were also targeted, with neighborhood chiefs extending an invitation to school children during the summer holidays to create beautiful memories. A total of 12 activities were held in 2019 with 230 school children from 15 schools and 1 neighborhood participating.

6. Corporate Volunteer

The Corporate Volunteer Guidelines were put into effect in 2007 to carry on corporate core values and fulfill social responsibilities. The Guidelines offer 2 paid leave for volunteer services per year, transportation allowance, training and so on. Spouses of the employees and contracted personnel are also encouraged to participate, transforming corporate initiatives into employee actions.
2.6.5 Developing Social Emergency Response Capabilities: Building a Reliable Disaster Prevention and Response Mechanism

1. Mobile Base Station

Mobile base stations were set up in disaster-stricken areas in the case where base stations were no longer functioning, providing voice calls and mobile Internet access. 20 mobile broadband system (UMTS/LTE) base stations have been completed.

<table>
<thead>
<tr>
<th>Total 20 Mobile broadband system (UMTS/LTE) base station</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keelung county, Taipei city, Yilan county, Hualien county, Lienchiang county X 5</td>
</tr>
<tr>
<td>New Taipei City, Taoyuan city, Hsinchu city, Haihchu county X 5</td>
</tr>
<tr>
<td>Miaoli county, Taichung city, Changhua county, Yunlin county, Nantou county X 5</td>
</tr>
<tr>
<td>Chiayi city, Chiayi county, Tainan city, Kaohsiung city, Pingtung county, Taitung county, Penghu county, Kinmen county X 5</td>
</tr>
</tbody>
</table>

The implementation and results of supporting social emergency responses with mobile base stations in 2019:

1. Communication needs of the general public and command were supported for the collapse of the Nanfang’ao Bridge
2. Supported emergency response drills in different locations
2.6.5 Developing Social Emergency Response Capabilities: Building a Reliable Disaster Prevention and Response Mechanism

2. Disaster Prevention SMS

For the "921 National Disaster Prevention Day" in 2019, the drill for disaster prevention alerts was completed. 14,550 alerts were sent during the same year in partnership with relevant authorities. We will continue to work with the government’s "Applying Science and Technology to Disaster Reduction" in the future to expand the application of disaster prevention service platform. We are committed to providing users with excellent Internet experience and maintaining their maximum rights and interests. The cell message alert contributes to enhancing the efficiency of Taiwan's disaster prevention and aid.

3. Respond to Changes in Disasters Drill

Tasked with the responsibility of maintaining national communications, TWM upholds its professionalism and makes safeguarding the public interest as its biggest goal in line with government policies. The drill mobilized nearly 200 people from the company and integrated a 16 relevant units from the central and local authorities, including 125 people from the military, police, firefighters, medical care, environmental protection, utilities and so on at over 40 meetings. Various natural and man-made disasters as well as information security incidents were simulated in every detail in order to fully understand all potential risks and weaknesses of the communications system, as well as devising the most pragmatic and effective disaster prevention measures and response mechanisms.

4. Disaster Prevention Mobile Communication Platform

TWM built 32 fixed disaster prevention and mobile communications platforms with more than 72 hours of power backup in case of a power outage in 2019 in line with NCC’s Communication Infrastructure Construction Plan for Strengthening Disaster Prevention and Relief Operations of the Forward-looking Infrastructure Development Program. In case of power outage, mobile communication services can still be provided. In addition, 3 mobile off-road vehicles were approved by NCC in 2019. In the event of power outage or equipment damage, we can effectively assist the disaster-stricken area with emergency mobile communication services, allowing normal operations of disaster relief, offering people a way to ask for help and a certain degree of normalcy. Recovery work can also be executed where necessary.
Chapter 3  Excellent Brand

Corresponding to the four material topics:
- Service impact management/Customer experiences/
- Electromagnetic field safety/Transparent and fair marketing

Corresponding to 4 major stakeholders:
- Customers
- Employees
- Communities
- NGOs/Ratings

The "Highest Photovoltaic Base Station in Taiwan" on the North Peak of Yushan
The base station on the North Peak of Yushan is the highest mobile communication base station in Northeast Asia. In order to overcome challenges posed by the mountainous terrain, TWM engineers delivered a total of more than 24 metric tons of equipment on foot, traveling a total distance of 13 kilometers with the height drop of 1,200 meters. 902 trips were completed before the project was completed, which greatly improved the coverage and quality of network communication, as well as effectively improving the overall disaster prevention and relief capabilities.

Photo courtesy of Dick Wei
Selected by the DJSI World Index for 3 consecutive years, ranking **TOP 2** in the global telecommunications industry.

Offering long-term support for athletes with the investment in sports and sponsorship exceeding **740 million**.

The brand new “Moving Forward 2019” campaign was selected as the **Top 5 Most Successful Advertising Campaign on YouTube in Taiwan, 2019**.

Honored with the **Silver Class Sustainability Award** by the SAM global telecommunications industry between 2018-2020.

Selected as one of the constituent stocks of the **FTSE4Good TIP Taiwan ESG Index** and **Taiwan Sustainability Index**.

Received a total of **10 awards** from the Taiwan Corporate Sustainability Awards, including the “Top Ten Sustainable Model Awards”.

Winning the Corporate Social Responsibility Awards of the CommonWealth Magazine for **13 times**.

Winning the Corporate Citizen Awards of the CommonWealth Magazine for **12 times**.

Received the Sponsorship Gold Medal and Long-term Sponsorship Award from the “Sports Activists Award”

Supports arts and cultural events in Taiwan as well as original works.

- Sponsored the Taipei Lantern Festival, Kaohsiung Christmas “Season of Light”, “TTV Super Star,” large-scale outdoor concerts, etc.

- Integrated audiovisual technology with **MOMOTV** to realize the potential of the Group’s resources.

Large free outdoor concerts

- Organized a total of **48 concerts** over **12 years** with **720,000 people** attending.

- Helped **22** charitable organizations between 2011 and 2019 by raising over NT$**2.96 million**.
3.1 Brand Image: Bringing Stakeholders Maximized Value and a Beautiful Life

3.1.1 Brand Value
To usher in the beginning of the 5G era in 2020, TWM dedicated 2019 to integrating its core capabilities and resources. TWM established a sustainable smart value chain by combining smart technologies with Zetta Connected 2030, creating 7 value highlights for 8 major stakeholders, including ethical operation, sustainable partners, excellent brand, innovative accomplishments, environmental sustainability, happy workplace and social inclusion.

3.1.2 Brand Sponsorship

1. Moving Forward 2019
TWM launched the “Moving Forward 2019” campaign in 2019, with the new star rapper PoeTeK reinterpreting the 1990 classic, Lim Giong’s “Moving Forward” in the innovative Taiwanese rock style. The song encourages people from different generations to believe in themselves, have firm faith and bravely move forward. In addition to attracting 4.7 million online views, the clip was awarded as the “Top 5 Most Successful Advertising Campaign on YouTube in Taiwan, 2019.”

2. TWM Ladies Open
TWM has invested over NT$740 million in sports since 2003. In recent years, it has rendered its full support to basketball, baseball, golf, tennis and marathon events. TWM is the only company to host a domestic golf tournament in the telecommunications industry, with four people achieving the hole in one for the same hole in the same game. This was recognized by the Guinness World Records in 2019.

3. Sponsoring athletes
TWM has equally sponsored world-class tennis player Latisha Chan for 6 years in a role, Angel Chan, the top tennis player Jason Jung for 3 years in a role, as well as the female golf players Wei-Ling Hsu and Min Lee. By taking actions to show the Company’s determination in encouraging an active lifestyle, TWM continues to help excellent local players focus on winning, becoming world-class players, and allowing the world to see Taiwan. This effort has been acknowledged by the Sports Administration, Ministry of Education, receiving the Sponsorship Gold Medal from the “Sports Activists Award” for three consecutive years.

4. Combining our resources to offer long-term support to local arts and cultural events as well as original works
TWM has sponsored the Taipei Light Festival for 3 years, TTV Super Star for 6 years, as well as the following events for the first time in 2019, including Kaohsiung Christmas “Season of Light,” the Global Science & Technology Leaders Forum (the grandest technology event hosted by the Ministry of Science and Technology for the first time), MobileHCI 2019 (the first event hosted by ACM SIGCHI in Taiwan), Asiahub New Media Summit and Taiwan Corporate Venturing Forum. Moreover, TWM integrated audiovisual technology with MOMOTV to realize the potential of the Group’s resources, painting a picture of the 5G era.
NT$85 million invested in branding projects in 2019.

The brand new "Moving Forward 2019" campaign was selected as the Top 5 Most Successful Advertising Campaign on YouTube in Taiwan, 2019.

Broke the Guinness World Records with four athletes of the Taiwan Mobile Ladies Open achieving the hold in one at the same hole.

WIN TV was officially rebranded as MOMOTV, becoming the first group of 4K TV channels in Taiwan.

Organized the Fubon Guardians Theme Day, attracting 11,238 people to the venue, the first time Fubon Guardians had over 10,000 supporters on the home field.
5. TWM Concerts

TWM is currently the only company in Taiwan that hosts free large-scale outdoor concerts. We have changed the meaning and positioning the corporate promotion of community arts and cultural events, transforming the traditional role of sponsor into a creative initiator and leader, demonstrating the professional capacity of integrating concept-based creativity and resources, as well as helping culture take root and developing everyone’s "soft power."

TWM has been hosting concerts since 2005. The 5180 Mobile Donation platform was integrated in 2011, successfully helping social welfare organizations raise funds and publicize initiatives, becoming a model of promoting social welfare and artistic events for all companies.

The only corporation in the country to offer free large-scale outdoor concerts to the general public

A successful example in the amalgamation of art and public interest

48 concerts were organized between 2005 and 2019 with 720,000 people attending

Helped 22 charitable organizations between 2011 and 2019 by raising over NT$2.96 million
3.2 Product Service and Responsibilities: Watching Over Consumer Health and Contributing to an All-Around Sound Development

3.2.1 Electromagnetic field and customer health safety promotion

Our base stations have been strictly verified by NCC and passed the measurement standards of the International Commission on Non-Ionizing Radiation Protection (ICNIRP). Moreover, a dedicated area has been set up at NCC to offer the 0800-580010 toll-free measurement service. A "base station electromagnetic wave knowledge service network" was also established to provide information on its effect on human health. To date, 58 promotional videos have been launched on the YouTube channel with up to 1.04 million of visitors. In 2019, 75 measurement requests were accepted, all of which met the NCC electromagnetic wave standard. We have partnered with professional scholars and instructors to provide training seminars, with 113 sessions organized in 2019.

3.2.2 User Use Promotion and Assistance

Porn Guard
The Porn Guard Value-added Service was launched on December 30, 2014. This Internet safety protection service can automatically block websites containing pornography, nudity, erotic content and photos that are not suitable for children and young people to access. As of the end of 2019, the number of applicants has reached 3,213.

Internet Butler
In view of the convenience and popularity of mobile Internet access, TWM launched the Internet Butler service on December 10, 2015 to prevent youth Internet addiction. This service shuts mobile Internet off between 00:00 to 06:00, benefiting 2,118 people as of the end of 2019.

Cyber Bullying Prevention
The Taiwan Mobile Foundation published teaching-oriented digital teaching materials in 2009, hoping to meet the needs of teachers as well as children with topics such as Internet literacy. We have partnered with Cyber Angel's Pick and the National National Chengdu University on an online security campaign film, "Letter of War". Focusing on the issue of cyberbullying, this film is provided free of charge to schools, libraries and other cultural and educational organizations. As of 2019, the film continues to be promoted on the myBook e-book platform and the platforms of other authorized groups.
Independent Limited Assurance Report

To Taiwan Mobile Co., Ltd.

We were engaged by Taiwan Mobile Co., Ltd. ("the Company") to provide limited assurance on the Corporate Social Responsibility Report ("the Report" or "the subject matter") of the Company for the year ended December 31, 2019.

Reporting Criteria of the Subject Matter

The Company shall prepare the Report in accordance with the Comprehensive option of Global Sustainability Standards Board's ("GSSB") Global Reporting Initiative Standards ("GRI Standards") as set forth in "About This Report" of the Report.

Management's Responsibility for the Report

The Company is responsible for determining its goals with respect to sustainable development. The performance and reporting criteria, including the identification of stakeholders and material aspects, and the reporting criteria to fairly present and present the information included in the Report. The Company is also responsible for establishing and maintaining internal controls adequate to the preparation and presentation of the Report to the effect and presentation of the Report that is free from material misstatement, whether due to fraud or error.

Our Responsibilities

We performed our work in accordance with the Standard on Assurance Engagements No. 1 "Assurance Engagements Other than Audits or Reviews of Historical Financial Information" issued by the Accounting Research and Development Foundation and to obtain an independence limited assurance engagement conclusion on whether the Report is free from material misstatement. As a result, we have considered appropriate limited assurance procedures according to the understanding of relevant internal controls in the circumstances, but not for the purpose of expressing an opinion or conclusion as to the effectiveness of the internal control over the design or implementation of the Company.

Accordingly, the isolated disclosures of the Greenhouse Gas Emissions (Scope 1, 2 and 3) in the Report, which are verified by the other party engaged by the Company, are out of our assurance scope.

Independent, professional standards and quality control

We have complied with the independence and other ethical requirements of the Code of Professional Ethics for Certified Public Accountant in the Republic of China, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior. In addition, we applied “Guidance to Auditing Standard No. 46 - Quality Control” of the profession.

Control for Public Accounting Firms" in the Republic of China. Accordingly, we maintained a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements and professional standards as well as applicable legal and regulatory requirements.

Summary of Work Performed

Our work on the Report included:

- Obtaining and reviewing the Report;
- Evaluating the Company's internal controls over the design and implementation of the Company;
- On the basis of the understanding obtained from the above matters, perform analytical procedures on the Report and if necessary, select samples to test for gaining sufficient and appropriate evidence.

The work described above are based on professional judgment and consideration of the level of assurance and the assessment of the risk of material misstatement of the Report, whether due to fraud or error. We believe that the work performed and evidence we have obtained are sufficient and appropriate to provide a basis for our opinion. However, the work performed in a limited assurance engagement varies in nature and timing from, and is less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained but a reasonable assurance engagement was performed.

Inherent Limitations

The Report for the year ended 2019 includes the disclosure of non-financial information that involved subjective judgments, estimations and interpretations by the management of the Company. Therefore, the different stakeholders may have different interpretations of such information.

Conclusions

Based on the work we have performed and the evidence we have obtained, we, if we had no reason to believe that the Report has not been properly prepared, in all material aspects, in accordance with the Reporting Criteria.

Other Matters

The management of the Company is responsible for the maintenance of its records, which according to its report, we shall not be responsible for any further changes in the information or its applicable reporting criteria, we are responsible for reconciling any assurance work after the issuance date of this report.

KPMS2

Taipei, Taiwan (Republic of China)
July 17, 2020

Notification

The limited assurance report is the English translation of the Chinese version prepared and used in the Republic of China. If there is any material difference, or our difference in the interpretation of the English and Chinese language, limited assurance report, the Chinese version shall prevail.
Chapter 4  Appendix

Photo courtesy of Iris Liu
Statistics of ESG data

<table>
<thead>
<tr>
<th>Item</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>GRI indicators</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Economic dimension</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consolidated revenue (NT$'000)(^1)</td>
<td>117,171,107</td>
<td>118,732,328</td>
<td>124,420,913</td>
<td>201-1</td>
<td></td>
</tr>
<tr>
<td>Operating costs (NT$'000)(^1)</td>
<td>81,445,116</td>
<td>84,315,734</td>
<td>91,612,178</td>
<td>201-1</td>
<td></td>
</tr>
<tr>
<td>Net income (NT$'000)(^1)</td>
<td>14,948,787</td>
<td>14,485,788</td>
<td>13,291,867</td>
<td>201-1</td>
<td></td>
</tr>
<tr>
<td>EPS (NT$(^2))</td>
<td>5.21</td>
<td>5.01</td>
<td>4.51</td>
<td>201-1</td>
<td></td>
</tr>
<tr>
<td>Total assets (NT$'000)(^3)</td>
<td>154,522,754</td>
<td>147,867,028</td>
<td>153,919,959</td>
<td>102-7</td>
<td></td>
</tr>
<tr>
<td>Total liabilities (NT$'000)(^3)</td>
<td>89,011,153</td>
<td>79,673,332</td>
<td>79,743,684</td>
<td>102-7</td>
<td></td>
</tr>
<tr>
<td>Total equity (NT$'000)(^3)</td>
<td>65,511,601</td>
<td>67,993,696</td>
<td>74,176,275</td>
<td>102-7</td>
<td></td>
</tr>
<tr>
<td>Financial Capital (NT$100 million)(^4)</td>
<td>518</td>
<td>466</td>
<td>449</td>
<td>Voluntary disclosure</td>
<td>P.12</td>
</tr>
<tr>
<td>Manufactured Capital (NT$100 million)(^5)</td>
<td>58.0</td>
<td>72.0</td>
<td>61.3</td>
<td>Voluntary disclosure</td>
<td>P.12</td>
</tr>
<tr>
<td>Intellectual Capital (NT$100 million)(^6)</td>
<td>0.96</td>
<td>1.34</td>
<td>1.63</td>
<td>Voluntary disclosure</td>
<td>P.12</td>
</tr>
<tr>
<td>No. of 4G subscribers (10,000)</td>
<td>552.59</td>
<td>707.10</td>
<td>717.81</td>
<td>Voluntary disclosure</td>
<td></td>
</tr>
<tr>
<td>Local procurement (%)</td>
<td>96.07</td>
<td>95.82</td>
<td>95.77</td>
<td>204-1</td>
<td>P.62</td>
</tr>
<tr>
<td>Supplier CSR performance assessment (no. of reports)</td>
<td>268</td>
<td>305</td>
<td>384</td>
<td>Voluntary disclosure</td>
<td>P.65</td>
</tr>
<tr>
<td><strong>Environmental dimension</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electricity Consumption (100 million kWh)</td>
<td>4.47</td>
<td>4.30</td>
<td>4.31</td>
<td>302-1</td>
<td>P.128</td>
</tr>
<tr>
<td>GHG emissions (ton-CO2e) Location-based</td>
<td>252,676.47</td>
<td>234,612.88</td>
<td>236,119.53</td>
<td>305-1/305-2</td>
<td>P.86</td>
</tr>
<tr>
<td>GHG emissions (ton-CO2e) Market-based</td>
<td>–</td>
<td>240,856.44</td>
<td>235,938.84</td>
<td>Voluntary disclosure</td>
<td>P.86</td>
</tr>
<tr>
<td>Scope 3 emissions (ton-CO2e)(^7)</td>
<td>31,688</td>
<td>414,948.95</td>
<td>399,079.71</td>
<td>305-3</td>
<td>P.87</td>
</tr>
<tr>
<td>Water consumption (m3)(^8)</td>
<td>327,435</td>
<td>321,978</td>
<td>299,237</td>
<td>Voluntary disclosure</td>
<td>P.94</td>
</tr>
<tr>
<td>Domestic waste recycled (metric ton)(^7)</td>
<td>47.0</td>
<td>53.3</td>
<td>149.5</td>
<td>Voluntary disclosure</td>
<td>P.93</td>
</tr>
<tr>
<td>Office copy/printer paper consumed (no. of sheets)</td>
<td>8,804,780</td>
<td>7,979,996</td>
<td>7,246,968</td>
<td>Voluntary disclosure</td>
<td>P.93</td>
</tr>
<tr>
<td>Waste optical/copper cable processed (metric ton)(^9)</td>
<td>822.31</td>
<td>289.68</td>
<td>396.32</td>
<td>Voluntary disclosure</td>
<td>P.93</td>
</tr>
<tr>
<td>Electronic bills (thousand copies)</td>
<td>114,624</td>
<td>150,756</td>
<td>166,311</td>
<td>302-5</td>
<td>P.94</td>
</tr>
<tr>
<td>Natural Capital (NT$100 million)(^4)</td>
<td>1.72</td>
<td>2.21</td>
<td>1.89</td>
<td>Voluntary disclosure</td>
<td>P.12</td>
</tr>
<tr>
<td><strong>Social dimension</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total staff (no. of people)</td>
<td>5,991</td>
<td>5,819</td>
<td>5,749</td>
<td>402-8</td>
<td>P.48</td>
</tr>
<tr>
<td>The average employee training hours (Hours)(^1)</td>
<td>55.6</td>
<td>68.4</td>
<td>63.8</td>
<td>404-1</td>
<td>P.52</td>
</tr>
<tr>
<td>Injury rate (IR)(^1)</td>
<td>0.077</td>
<td>0</td>
<td>0.0817</td>
<td>403-2</td>
<td>P.59</td>
</tr>
<tr>
<td>Occupational disease rate (ODR)(^1)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>403-2</td>
<td>P.59</td>
</tr>
<tr>
<td>Lost day rate (LDR)(^1)</td>
<td>1.67</td>
<td>0</td>
<td>0.0299</td>
<td>403-2</td>
<td>P.59</td>
</tr>
<tr>
<td>Absentee rate (AR)(^1)</td>
<td>2,840.24</td>
<td>2,964.78</td>
<td>3,014.73</td>
<td>403-2</td>
<td>P.59</td>
</tr>
<tr>
<td>Human Capital (NT$100 million)(^1)</td>
<td>63</td>
<td>61</td>
<td>62</td>
<td>Voluntary disclosure</td>
<td>P.12</td>
</tr>
<tr>
<td>Social Capital (NT$ thousand)(^2)</td>
<td>143,209</td>
<td>147,275</td>
<td>167,506</td>
<td>203-2</td>
<td>P.12</td>
</tr>
<tr>
<td>Customer satisfaction surveys (%)</td>
<td>85</td>
<td>86</td>
<td>90</td>
<td>102-43~102-44</td>
<td>P.78</td>
</tr>
<tr>
<td>Corporate volunteer hours (Hours)</td>
<td>6,287</td>
<td>4,294</td>
<td>5,297</td>
<td>203-2</td>
<td>P.109</td>
</tr>
<tr>
<td>5180 donations (NT$ Ten thousand)</td>
<td>924</td>
<td>1062</td>
<td>1136</td>
<td>203-2</td>
<td>P.105</td>
</tr>
</tbody>
</table>

**Note 1:** Source of data: Consolidated financial statements of the Company.
**Note 2:** Operating costs.
**Note 3:** Telecommunications construction and maintenance costs.
**Note 4:** Research and development expenses: the scope of research and development has been updated to be consistent with the financial statements. The amount of the past two years (2017-2018) has been revised retrospectively.
**Note 5:** All 15 categories of scope 3 have been included in the inventory since 2018.
**Note 6:** Due to business growth and continuous optimization of the water consumption statistics system, the 2017 water consumption was revised retrospectively.
**Note 7:** Included in the recycled volume from directly-operated stores since 2019.
**Note 8:** Including the total of recycling, incineration and burial of waste optical cable and waste copper cable.
**Note 9:** Green procurement.
**Note 10:** Data on the average employee training hours and statistics of occupational injuries only include staff from TWM, the parent company. For information on the subsidiaries, please refer to page 52 and page 59, respectively.
**Note 11:** Employee remuneration and benefits.
**Note 12:** Social investment.
Creating Stakeholder Synergy

Major indicators, objectives and performance tracking

<table>
<thead>
<tr>
<th>Major aspect of sustainability</th>
<th>KPI</th>
<th>Unit</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2030 target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimizing Footprint</td>
<td>The proportion of total carbon emission reduction compared with 2016</td>
<td>%</td>
<td>3.96</td>
<td>3.45</td>
<td>6.44</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>The proportion of IDC renewable energy consumption</td>
<td>%</td>
<td>17.15</td>
<td>24.82</td>
<td>-</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>Installed Capacity of renewable energy</td>
<td>kW</td>
<td>80</td>
<td>215</td>
<td>316.8</td>
<td>6,000</td>
</tr>
<tr>
<td>Realizing Social Potential</td>
<td>The total amount of fundraising through the TWM channels accumulatively since 2006</td>
<td>NT$100 million</td>
<td>0.92</td>
<td>1.02</td>
<td>1.13</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>The growth rate of disadvantaged people (students/the elderly) who benefited from discounted rates for telecommunications services compared with 2017</td>
<td>%</td>
<td>-</td>
<td>32</td>
<td>110%</td>
<td>50</td>
</tr>
<tr>
<td>Responsible Business</td>
<td>The average employee training hours</td>
<td>Hours</td>
<td>55.6</td>
<td>68.4</td>
<td>63.8</td>
<td>55</td>
</tr>
<tr>
<td>Creating Stakeholder Synergy</td>
<td>Signing rate of ‘Declaration Letter for Environmental and Occupational Health and Safety Policy for Contractors’</td>
<td>%</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Elevating Future Experience</td>
<td>Percentage of advanced telecommunications users account</td>
<td>%</td>
<td>78</td>
<td>96</td>
<td>100</td>
<td>99</td>
</tr>
<tr>
<td></td>
<td>Base station service operation rate</td>
<td>%</td>
<td>99.9</td>
<td>99.9</td>
<td>99.9</td>
<td>99.9</td>
</tr>
</tbody>
</table>

The impact of major climate risk factors on strategy, operations, and financial planning

<table>
<thead>
<tr>
<th>Type of risk</th>
<th>Aspect of risk</th>
<th>Risks</th>
<th>Description of financial impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulations and policies</td>
<td>Increased demand and regulations related to sustainability</td>
<td>In response to the direction of the amendments to the Renewable Energy Development Act, the operating locations may have an increased cost of installed capacity of renewable energy and subscription of green power certificates.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Increase in cost of GHG emissions</td>
<td>In response to Taiwan’s Greenhouse Gas Reduction and Management Act, the Company shall upgrade the energy efficiency of the equipment rooms/operating locations, the Company may face increased operating costs due to the potential carbon tax and carbon trading system.</td>
<td></td>
</tr>
<tr>
<td>Transformation risk</td>
<td>Increase in cost and expenses of transformation to low-carbon technology</td>
<td>The progress of global low-carbon transformation technology will prompt Taiwan to accelerate the replacement of equipment rooms/equipment/vehicles to improve energy efficiency, resulting in increased operating costs.</td>
<td></td>
</tr>
<tr>
<td>Technology</td>
<td>Technology upgrades or innovations that do not support low-carbon transformation</td>
<td>As the smart services and solutions of the ICT industry are the keys to assisting other industries in reducing carbon emissions, there lies many business opportunities; there is a need to collaborate with external partners and invest a great deal of resources in research and development.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Replacement of the existing products and services with low-carbon alternatives</td>
<td>The replacement of existing products and services with lower-carbon products and services may result in significant damage to revenues and may also lead to a decline in sustainability ratings, affecting the Company’s reputation.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Failure of new technology investments</td>
<td>The services we provide mainly rely on the technological progress of equipment manufacturers in the telecommunications industry. In the context of low-carbon transformation, it is less likely to invest in high-carbon technology (compared with our own telecommunications equipment suppliers) in terms of new technology investment. Therefore, it is not possible that there is no return on a large investment; the financial impact is relatively insignificant.</td>
<td></td>
</tr>
<tr>
<td>Market</td>
<td>Changes in customer behavior</td>
<td>As customers’ awareness of sustainability is rising, the demand for low-carbon products and services increases, and it is likely for them to shift to lower-carbon services, impacting the revenues.</td>
<td></td>
</tr>
<tr>
<td>Goodwill</td>
<td>Customer preferences transfer</td>
<td>High-carbon emissions and low-climate resilience will affect the customers’ trust in the Company, damage the Company’s goodwill and further affect the Company’s revenue.</td>
<td></td>
</tr>
<tr>
<td>Extreme risks</td>
<td>Increase in frequency and severity of typhoons/hurricanes</td>
<td>Extreme physical risks may damage telecommunications equipment, which will accelerate asset depreciation and increase equipment maintenance costs, while inducing complaints due to network instability, affecting the brand image.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Increase in frequency and severity of rainstorms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical risks</td>
<td>Changes in rainfall patterns and the drastic changes in weather patterns</td>
<td>The long-term drought caused by changes in rainfall patterns will affect the water stability of the equipment rooms, causing operational disruption. Dramatic changes in temperature, such as the increase in the number of extreme-high-temperature days, will also change customers’ consumption patterns and even cause the Company to invest a certain amount of resources to change its business models.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Increase in average temperature</td>
<td>The increase in the average temperature will increase the electricity costs related to air-conditioning in the equipment rooms, which will also affect the customers’ consumption patterns and even cause the Company to invest a certain amount of resources to change its business models.</td>
<td></td>
</tr>
</tbody>
</table>
The impact path of high-risk factors in the 2°C scenario

Climate Risk Path

Sources of Climate Change Scenarios → Climate Risks → Impact and Influence on TWM

- CCPI 2DS Path
- IEA ETP 2DS Scenario
- LCTPi carbon pricing forecast
- IIASA low carbon investment scenario
- IPCC AR5 RCP 2.6 scenario
- IPCC 1.5DC Report

Climate Risks

- Transformation risk
  - Regulations and policies
  - Increased cost of GHG emission
- Transformation risk
  - Technology costs to transition to lower emissions technology
- Physical risks
  - Extreme weather (increased frequency and severity of typhoon/hurricane)

Affected Financial Items

- Operating Costs
- Operating Costs Value of Assets
- Operating Costs Value of Assets
- Operating Revenue Operating Costs

Analysis procedure for climate risk matrix

Compilation
Referring to TCFD's risk list and recommended risk sources and benchmark companies in the same industry to compile 22 climate risks.

Identification
Review the 22 climate risks in the value chain to examine whether the risks will have an impact on each node of the value chain before selecting 12 climate risks.

Evaluation
With reference to TCFD's and standard enterprises' lists of risks, the Company invited all business units in the Company to attend a TCFD workshop to discuss and prioritize climate risks in terms of significance and distributed a questionnaire about the identification of the significance of climate risks after the workshop to prioritize the risks in terms of potential impact, potential vulnerability and likelihood.

Ranking
The final values of the three dimensions mentioned above are comprehensively calculated to determine the risk value, with the first 20% of the risk value considered as high risk, and the last 20% as low risk, forming the TWM climate risk matrix.
<table>
<thead>
<tr>
<th>Responsible Business</th>
<th>Material Topics</th>
<th>Materiality to TWM</th>
<th>GRI Standards Indicators</th>
<th>TVM's involvement with the impacts</th>
<th>Score of the impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate governance and operating performance</td>
<td>Operating performance reflects on how TWM performs in achieving the greatest benefits for all stakeholders.</td>
<td>201-1 201-4</td>
<td>206-1</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Risk management</td>
<td>Understanding the level of risks and their impacts, establishing responses to individual risks, and seizing opportunities for business growth while maintaining adequate risk levels.</td>
<td>102-15 201-2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethical operation</td>
<td>Ethical conduct and anti-corruption management for employees to maintain the Company's reputation.</td>
<td>205-1~205-3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legality / legal compliance</td>
<td>Emphasis on equal opportunities and respecting employees' basic human rights are the foundations to organizational growth.</td>
<td>412-1~412-3</td>
<td>TWM has caused the impacts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respect and protection of human rights</td>
<td>Legal compliance for business operations, products, and services to maintain Company reputation.</td>
<td>307-1 307-2~307-3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creating Stakeholder Synergy</td>
<td>Network quality and coverage</td>
<td>Our excellent services are founded on our stable and solid network infrastructure.</td>
<td>417-1~417-2</td>
<td>TWM has contributed to the impacts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Communication mechanism</td>
<td>TVM provides diverse grievance channels and listens to voices from various channels and aspects to enhance our governance and to seize market trends.</td>
<td>103-2 103-2 103-2</td>
<td>TWM has caused the impacts</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sustainable Partners</td>
<td>Supply chain management</td>
<td>Effective supply chain CSR management can help to enhance CSR management and promote the sustainable development of our value chain.</td>
<td>308-1~308-2 204-1</td>
<td>TWM is directly linked to the impacts through its business relationships</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elevating Future Experience</td>
<td>Innovative Accomplishments</td>
<td>Innovative technological applications</td>
<td>Can improve internal processing, reduce environmental impacts, and lead to new market opportunities.</td>
<td>203-1~203-2</td>
<td></td>
</tr>
</tbody>
</table>

**Material Topics and Boundaries**

- **Elevating Future Experience**
  - Innovative Accomplishments
    - Innovative technological applications

- **Creating Stakeholder Synergy**
  - Communication mechanism
    - Effective supply chain CSR management can help to enhance CSR management and promote the sustainable development of our value chain.

- **Sustainable Partners**
  - Network quality and coverage
    - Our excellent services are founded on our stable and solid network infrastructure.

- **Responsible Business**
  - Corporate governance and operating performance
    - Operating performance reflects on how TWM performs in achieving the greatest benefits for all stakeholders.
  - Risk management
    - Understanding the level of risks and their impacts, establishing responses to individual risks, and seizing opportunities for business growth while maintaining adequate risk levels.
  - Ethical operation
    - Ethical conduct and anti-corruption management for employees to maintain the Company’s reputation.
  - Legality / legal compliance
    - Emphasis on equal opportunities and respecting employees’ basic human rights are the foundations to organizational growth.
  - Respect and protection of human rights
    - Legal compliance for business operations, products, and services to maintain Company reputation.

**GRI Standards Indicators**

- 201-1
- 201-2
- 102-15
- 205-1~205-3
- 412-1~412-3
- 307-1
- 307-2~307-3
- 415-1
- 415-2~415-3
- 419-1
- 417-1~417-2
- 103-2
- 103-2
- 103-2
- 308-1~308-2
- 204-1
- 414-1~414-2
- 203-1~203-2
<table>
<thead>
<tr>
<th>Major Aspect of Sustainability</th>
<th>Key Brand Values</th>
<th>Material Topics</th>
<th>Materiality to TWM</th>
<th>GRI Standards Indicators</th>
<th>TWM's Involvement with the Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimizing Footprint</td>
<td>Environmental Sustainability</td>
<td>Climate change mitigation and adaptation</td>
<td>Actively establish carbon reduction strategies and mitigate the impacts to the environment.</td>
<td>305-1~305-7</td>
<td>TWM has caused the impacts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Green operations</td>
<td>Environmental management system can reduce internal operational and external environmental costs.</td>
<td>302-1~302-5</td>
<td>TWM has caused the impacts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Green application &amp; circular economy</td>
<td>Besides strategizing from a risk-hedging and cost-reduction perspective, we should also plan to develop relevant products and applications in dealing with climate change so that our climate change strategies can be even more well-rounded.</td>
<td>305-3/305-5</td>
<td>TWM has contributed to the impacts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Information security and privacy protection</td>
<td>Implement personal information management to enhance customer loyalty and satisfaction.</td>
<td>306-2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Service impact management</td>
<td>Be held liable for products and the contents on our service platforms to minimize the social impacts from our products and services.</td>
<td>203-1~203-2</td>
<td>TWM is directly linked to the impacts through its business relationships</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Customer experiences</td>
<td>Be responsible to our clients by providing detailed information on our products and services.</td>
<td>102-43~102-44</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Electromagnetic field safety</td>
<td>Enhance network coverage while conveying accurate knowledge regarding electromagnetic fields to achieve peaceful coexistence with communities.</td>
<td>416-1~416-2</td>
<td>TWM has contributed to the impacts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Transparent &amp; fair marketing</td>
<td>Brand value management, marketing, information disclosure, and explanations/communications for product and service fees all pose considerable influences on our brand image.</td>
<td>417-1~417-3</td>
<td>TWM has contributed to the impacts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Employees’ physical and mental health</td>
<td>The physical and mental well-being of our employees is an intangible asset to TWM. Creating a healthy work environment will enhance productively.</td>
<td>403-1~403-4</td>
<td>TWM has caused the impacts</td>
</tr>
<tr>
<td>Responsible Business</td>
<td>Excellent Brand</td>
<td>Talent cultivation &amp; retention</td>
<td>By providing comprehensive compensations system, well-rounded benefits and incentives, comprehensive education training and career training, while also paying attention to creating workplace equity, we can lead employees to co-create a sustainable, valuable future.</td>
<td>202-1~202-2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>401-1~401-3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>402-1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>404-1~404-3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>405-1~405-2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>406-1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>407-1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>408-1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>409-1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Giving back to the society</td>
<td>TWM sees community service and giving back to the community as part of our responsibilities. We aspire to bring positive influence on the society through promoting local arts and cultural development, caring for disadvantaged groups, and social participation.</td>
<td>203-1~203-2</td>
<td>TWM has contributed to the impacts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Digital inclusion &amp; social innovation</td>
<td>We aspire to bring positive influence on the society through providing products and services that help to solve social problems (such as aging society, home security, and digital gap), and by making it easier for diverse social groups (e.g. senior citizens and disadvantaged groups) to access our products and services.</td>
<td>203-1~203-2</td>
<td>TWM has contributed to the impacts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Social emergency responses</td>
<td>We are empathetic in the face of disasters, and actively provide career resources or funds to fill the community with warmth.</td>
<td>203-1~203-2</td>
<td></td>
</tr>
</tbody>
</table>
Methods of Stakeholder Communications

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Importance to TWM</th>
<th>Communication Strategy</th>
<th>Communication frequency / 2019 performance</th>
<th>Response to the issues of concern</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees</td>
<td>Talent is the key to maintaining an organization’s sustainable competitiveness. We aim to create a safe and stable working environment for our employees.</td>
<td>Labor Relations Meeting</td>
<td>At least once per quarter, 4 meetings were convened in 2019</td>
<td>Multidimensional Evaluation, Talent development and retention Communication mechanism</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Special offers from the Welfare Committee’s authorized stores</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Welfare Committee events</td>
<td>At least once or twice a year: A total of 4 were organized in 2019, including parent-child day, year-end party, sports day, speech contest, etc.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Management-level communications meeting and pre-meeting employee survey research mechanism</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Communications meeting among business groups and department internal communication mechanism</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Employee feedback survey</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Multi-faceted feedback mechanism, career development survey, performance evaluation interview and feedback on career development</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Training and personal development plan</td>
<td>Formulated each year with the process tracked quarterly</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Appointments with top management (exchange between the President and high-potential employees)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>President’s mailbox, grievance mailbox</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Internal/external website, internal community communication software, email</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suppliers</td>
<td>Suppliers are an important part of enterprise sustainability. Only through the support of the value chain are we able to provide our customers with comprehensive products and services.</td>
<td>Green energy initiative</td>
<td>Once to twice a year with one session organized in 2019.</td>
<td>Sustainable partners, Communication mechanism</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Communication mechanism with vendors</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Email</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Complaint hotline</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Survey/Conference (norms promotion)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competent authority</td>
<td>Responsible for improving the practices and systems of the telecommunications industry in Taiwan</td>
<td>Meetings, Visits</td>
<td>As needed</td>
<td>Legal Compliance, GRI tables</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Official document</td>
<td>As needed</td>
<td></td>
</tr>
<tr>
<td>Communities/NGOs</td>
<td>We have adopted the expression “The larger the business, the more responsibilities. Genuine care is the beginning of taking action” in the hopes of bringing positive influence to the society</td>
<td>Toll-free electromagnetic wave detection line: 0800-580010</td>
<td>As needed</td>
<td>Stakeholder Engagement, Electromagnetic field safety, User Usage Promotion and Assistance Social inclusion</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Social welfare activities</td>
<td>We engage in social welfare activities by focusing on the five main axes of “supporting cultural and creative arts”, “promoting the integration of science and technology”, “social emergency responses”, “social welfare through technology” and “community care.” More than 20 public welfare projects and activities were organized in 2019</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Foundation website, store information</td>
<td>24 hours</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Questionnaire/Forum</td>
<td>As needed</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Discount telecom charges for specific groups</td>
<td>As needed</td>
<td></td>
</tr>
<tr>
<td>Customers</td>
<td>Customer feedback is the impetus for our growth. We are committed to providing “five hearts” class customer service and to create the best smart mobile experiences for our customers.</td>
<td>Customer service hotline and email box</td>
<td>24 hours</td>
<td>Network reliability and customer experiences, Product and service innovation, Communication mechanism</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Marketing activity</td>
<td>As needed</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Customer satisfaction survey</td>
<td>At least 9 times per year. 9 surveys were organized in 2019.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Open information/text messages</td>
<td>As needed</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Official website/customer service App</td>
<td>24 hours</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Questionnaire/Forum/Official document</td>
<td>As needed</td>
<td></td>
</tr>
<tr>
<td>Shareholders / Investors</td>
<td>We are committed to maximizing the profitability of our shareholders through business performance</td>
<td>Organization of and participation in important international/continental investor, general shareholders’ meeting, institutional investors’ conference, and roadshow investor meeting, etc.</td>
<td>224 sessions were organized in 2019.</td>
<td>Operational Strategies and Performance, Ethical Operation and Legal Compliance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Investor section</td>
<td>24 hours</td>
<td></td>
</tr>
<tr>
<td>Media</td>
<td>The media is the most direct and effective medium for conveying the Company’s brand image</td>
<td>Press release</td>
<td>4.7 stories a week with 230 published in 2019</td>
<td>Stakeholder Engagement, Excellent brand</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Press conference</td>
<td>18-20 per year; 21 sessions were held in 2019</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Forum/vivast</td>
<td>17-20 per year; 18 sessions were held in 2019</td>
<td></td>
</tr>
<tr>
<td>Rating agencies</td>
<td>Rating agencies represent the standards against which our performance is evaluated</td>
<td>Major Domestic Sustainability Awards - Third prize</td>
<td>3-5 times a year; 2 awards were won in 2019, including the CSR Award from Global Views Monthly, Corporate Governance Assessment, Corporate Citizenship Award from the Commonwealth Magazine, Sports Administration, Ministry of Education Sports Award, TCSA Taiwan Corporate Sustainability Awards, etc.</td>
<td>Key Performance and Awards</td>
</tr>
<tr>
<td></td>
<td></td>
<td>International sustainability assessment/review response</td>
<td>At least twice per year with 3 responses in 2019, including DJSI, CDP, SBT, etc.</td>
<td></td>
</tr>
</tbody>
</table>
### Salary structure of the Company's senior managers in 2019

<table>
<thead>
<tr>
<th>Title</th>
<th>Name</th>
<th>Salary/termination &amp; retirement pension ratio</th>
<th>Bonus and extra compensation ratio</th>
<th>Employee salary ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>President</td>
<td>Jamie Lin</td>
<td>41.3%</td>
<td>29.6%</td>
<td>29.1%</td>
</tr>
<tr>
<td>Executive VP &amp; CFO</td>
<td>Rosie Yu</td>
<td>47.5%</td>
<td>25.5%</td>
<td>27.0%</td>
</tr>
<tr>
<td>Senior VP &amp; CTO</td>
<td>Tom Koh</td>
<td>47.2%</td>
<td>26.6%</td>
<td>26.3%</td>
</tr>
<tr>
<td>VP &amp; General Counsel</td>
<td>Ariel Hwang</td>
<td>49.1%</td>
<td>26.6%</td>
<td>24.2%</td>
</tr>
<tr>
<td>VP &amp; CIO</td>
<td>James Chang</td>
<td>55.7%</td>
<td>24.0%</td>
<td>19.4%</td>
</tr>
<tr>
<td>VP &amp; CDO</td>
<td>Eddie Chan</td>
<td>54.9%</td>
<td>26.0%</td>
<td>19.1%</td>
</tr>
<tr>
<td>Vice President</td>
<td>Jay Hong</td>
<td>52.4%</td>
<td>21.8%</td>
<td>25.8%</td>
</tr>
<tr>
<td></td>
<td>Iris Liu</td>
<td>50.1%</td>
<td>27.1%</td>
<td>22.8%</td>
</tr>
<tr>
<td></td>
<td>Naomi Lee</td>
<td>56.1%</td>
<td>25.9%</td>
<td>18.0%</td>
</tr>
</tbody>
</table>

### Employee structure

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of employees</th>
<th>Ratio</th>
<th>Number of employees</th>
<th>Ratio</th>
<th>Number of employees</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td></td>
<td>Male</td>
<td>Female</td>
<td></td>
</tr>
<tr>
<td>President (Vice President or above)</td>
<td>&lt; 30 years old</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>31-50 years old</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0.2%</td>
</tr>
<tr>
<td></td>
<td>&gt; 51 years old</td>
<td>11</td>
<td>7</td>
<td>4</td>
<td>1</td>
<td>0.8%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>12</td>
<td>8</td>
<td>5</td>
<td>1</td>
<td>1.0%</td>
</tr>
<tr>
<td>Employees</td>
<td>&lt; 30 years old</td>
<td>541</td>
<td>587</td>
<td>23</td>
<td>18</td>
<td>0.07%</td>
</tr>
<tr>
<td></td>
<td>31-50 years old</td>
<td>1,856</td>
<td>1,820</td>
<td>273</td>
<td>203</td>
<td>0.79%</td>
</tr>
<tr>
<td></td>
<td>&gt; 51 years old</td>
<td>195</td>
<td>66</td>
<td>64</td>
<td>23</td>
<td>0.14%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2,592</td>
<td>2,473</td>
<td>360</td>
<td>244</td>
<td>1.0%</td>
</tr>
</tbody>
</table>

**Total Number of Employees (Senior Managers + Employees):**
- **5,085**
- **610**
- **54**

**Employment status**
- **Full-time:** 2,595, 2,467, 99.55%
- **Part-time:** 365, 245, 100%, 15, 22, 68.52%

**Average Seniority:**
- **9**, 13.4, 3.5

**Educational background**
- PhD: 0.24, 0.16, 1.85
- MA: 16.01, 10.98, 27.78
- University: 61.47, 40.50, 66.67
- College: 16.22, 26.56, 3.70
- Senior High School and below: 6.06, 21.80, 0.00

**Note:** All employees are based in Taiwan.
### Analysis of new/resigned employees

<table>
<thead>
<tr>
<th>Category</th>
<th>TWM+Taiwan Fixed Network+TWN Digital Service+Taiwan Teleservices &amp; Technologies+Taihsin Property Insurance Agent</th>
<th>TWM Broadband</th>
<th>Taiwan Kuro Times</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>New</td>
<td>Resigned</td>
<td>New</td>
</tr>
<tr>
<td>Age</td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>&lt; 30 years old</td>
<td>141</td>
<td>111</td>
<td>2.77%</td>
</tr>
<tr>
<td>31-50 years old</td>
<td>76</td>
<td>47</td>
<td>1.49%</td>
</tr>
<tr>
<td>&gt; 51 years old</td>
<td>0</td>
<td>2</td>
<td>0.00%</td>
</tr>
<tr>
<td>Total</td>
<td>217</td>
<td>160</td>
<td>4.26%</td>
</tr>
</tbody>
</table>

Note: All employees are based in Taiwan (excluding employee from affiliated companies). * Denominator is the total number of employees.

### Analysis of salary ratio

<table>
<thead>
<tr>
<th>Basic salary ratio based on the ratio of the gender (female being 1)</th>
<th>TWM</th>
<th>Taiwan Fixed Network</th>
<th>Taiwan Teleservices &amp; Technologies</th>
<th>TWN Digital Service</th>
<th>Talhsin Property Insurance Agent</th>
<th>TWM Broadband</th>
<th>Taiwan Kuro Times</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assistant manager or above</td>
<td>0.97</td>
<td>1.05</td>
<td>0.93</td>
<td>-</td>
<td>-</td>
<td>0.99</td>
<td>-</td>
</tr>
<tr>
<td>Assistant manager or below</td>
<td>1.14</td>
<td>1.00</td>
<td>0.98</td>
<td>1.07</td>
<td>-</td>
<td>1.06</td>
<td>1.19</td>
</tr>
<tr>
<td>Average annual salary (including performance incentives) in 2019 based on the ratio of the gender (female being 1)</td>
<td>Assistant manager or above</td>
<td>0.95</td>
<td>1.04</td>
<td>0.94</td>
<td>-</td>
<td>-</td>
<td>0.98</td>
</tr>
<tr>
<td>Assistant manager or below</td>
<td>1.17</td>
<td>1.01</td>
<td>1.03</td>
<td>1.08</td>
<td>-</td>
<td>1.07</td>
<td>1.21</td>
</tr>
<tr>
<td>Ratio of TWM’s standard starting salary to Taiwan’s minimum wage in 2019</td>
<td>1.38-1.58</td>
<td>1.30-1.39</td>
<td>1.05</td>
<td>1.18</td>
<td>1.38</td>
<td>1.26-1.38</td>
<td>1.07</td>
</tr>
</tbody>
</table>

In 2019, the ratio of the highest individual annual income to the average individual income of other employees was 20.99 : 1

In 2019, the median ratio of percentage increase of the highest individual annual income to the percentage increase of other employees’ individual income was 1.63 : 1

Note: Comparison is based on individual employee’s basic monthly salary only. Salaries of workers who are not employees are higher than the monthly minimum wage in Taiwan.
### Analysis of occupational injuries

<table>
<thead>
<tr>
<th>Company</th>
<th>Item</th>
<th>Injury resulted from fall</th>
<th>Injury resulted from fallen Items</th>
<th>Burns</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Reason</strong></td>
<td></td>
<td>Case 1: The employee, who was avoiding other chairs at the counter due to the small counter area, slipped and fell as he accidentally stepped on one of the chair wheels.</td>
<td>Case 2: The employee accidentally fell on the stairs while going to the second floor from the third floor in the office building.</td>
<td>0</td>
</tr>
<tr>
<td><strong>Improvement Measures</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Taiwan Mobile</strong></td>
<td></td>
<td>1. Operating environment improvement: counter adjustment</td>
<td>Space configuration adjustment</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Announcement on precautions for walking safety</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Number</strong></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Reason</strong></td>
<td></td>
<td>Case 1: The employee fell due to dizziness while walking in the office.</td>
<td>Case 2: The employee accidentally fell on the stairs while going to the second floor from the third floor</td>
<td>1</td>
</tr>
<tr>
<td><strong>Taiwan Fixed Network</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Reason</strong></td>
<td></td>
<td>The employee suffers from polio with the right leg aided with hand-held crutches. The crutches are old and unstable, which caused the accident</td>
<td>Burnt by boiling water in the pantry</td>
<td></td>
</tr>
<tr>
<td><strong>Taiwan Teleservices &amp; Technologies</strong></td>
<td></td>
<td></td>
<td>The Company recommended using cups with lids that can be properly screwed on when taking boiling water</td>
<td></td>
</tr>
</tbody>
</table>

**Total** | 5 | 1 | 1 |

### Analysis of Non-renewable Energy

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Direct energy consumption</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gasoline</td>
<td>Litre</td>
<td>797,819.26</td>
<td>721,163.79</td>
<td>670,741.55</td>
</tr>
<tr>
<td>Diesel fuel</td>
<td>Litre</td>
<td>80,374.46</td>
<td>59,487.49</td>
<td>65,890.72</td>
</tr>
<tr>
<td><strong>Indirect energy consumption</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electricity</td>
<td>kWh</td>
<td>447,345,792.95</td>
<td>430,905,484.87</td>
<td>431,130,258.97</td>
</tr>
<tr>
<td><strong>Total energy consumption</strong></td>
<td>Million joules</td>
<td>1,639,461,959.59</td>
<td>1,577,003,797.54</td>
<td>1,576,402,195.06</td>
</tr>
<tr>
<td></td>
<td>MWh</td>
<td>455,406.74</td>
<td>438,057.18</td>
<td>437,890.04</td>
</tr>
<tr>
<td><strong>Total expenditure on energy consumption</strong></td>
<td>NT$</td>
<td>1,498,866,513.00</td>
<td>1,444,815,250</td>
<td>1,443,589,396</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Energy Intensity</th>
<th>Million joules / Consolidated Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy Consumption</td>
<td>Million joules / NT$ million</td>
</tr>
<tr>
<td>Power consumption / information flow per unit</td>
<td>MWh/Pb</td>
</tr>
</tbody>
</table>

**Note:**
2. Source: Oil Price Analysis and Management System from the Energy Bureau, Ministry of Economic Affairs
3. Source of information for message flow: the Company and NCC
### Analysis of Renewable Energy

<table>
<thead>
<tr>
<th>Item</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green energy installation target volume (kWp)</td>
<td>50</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>The actual amount of green energy installation (kWp)</td>
<td>51.3</td>
<td>84.3</td>
<td>101.2</td>
</tr>
<tr>
<td>Annual power generated from green energy installation (Kw)</td>
<td>32,280</td>
<td>78,285</td>
<td>189,935</td>
</tr>
<tr>
<td>Green power subscription (Kw)</td>
<td>3,360,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Renewable Energy Certificate (Kwh)-TREC</td>
<td>4,000</td>
<td>64,000</td>
<td>451,000</td>
</tr>
<tr>
<td>Renewable Energy Certificate (kWh)-IREC</td>
<td>-</td>
<td>5,000,000</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: The voluntary green electricity subscription has been discontinued since 2018.

### Electronic Waste Statistics

<table>
<thead>
<tr>
<th>Item</th>
<th>Waste (tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial Waste - Waste Optical Cable</td>
<td>676.420</td>
</tr>
<tr>
<td>Industrial Waste - Waste Copper Cable</td>
<td>145.890</td>
</tr>
<tr>
<td>Industrial Waste - Waste lead acid battery</td>
<td>804.085</td>
</tr>
<tr>
<td>Industrial Waste - Waste telecom equipment</td>
<td>259.693</td>
</tr>
<tr>
<td>Total</td>
<td>1,886.088</td>
</tr>
</tbody>
</table>

### Office Waste Management

<table>
<thead>
<tr>
<th>Item</th>
<th>Waste (tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office Waste</td>
<td>225.527</td>
</tr>
<tr>
<td>Office Waste</td>
<td>203.737</td>
</tr>
<tr>
<td>Office Waste</td>
<td>189.337</td>
</tr>
</tbody>
</table>

### Engineering Vehicle Oil Management System

<table>
<thead>
<tr>
<th>Item</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estimated total oil consumption (L)</td>
<td>503,427</td>
<td>443,016</td>
<td>412,810</td>
<td>387,639</td>
<td>377,570</td>
</tr>
<tr>
<td>Oil reduction target (%)</td>
<td>Baseline year</td>
<td>12.0%</td>
<td>18.0%</td>
<td>23.0%</td>
<td>25.0%</td>
</tr>
<tr>
<td>Actual total oil consumption (L)</td>
<td>503,427</td>
<td>434,908</td>
<td>398,622</td>
<td>358,559</td>
<td>-</td>
</tr>
<tr>
<td>Actual achievement rate (%)</td>
<td>Baseline year</td>
<td>13.6%</td>
<td>20.8%</td>
<td>28.8%</td>
<td>-</td>
</tr>
<tr>
<td>Fuel costs reduction (annual)</td>
<td>-</td>
<td>1,726,688</td>
<td>1,008,749</td>
<td>1,073,688</td>
<td>-</td>
</tr>
<tr>
<td>Carbon emissions reduction (ton)</td>
<td>-</td>
<td>155</td>
<td>82</td>
<td>91</td>
<td>-</td>
</tr>
</tbody>
</table>

### Water Resource Management

<table>
<thead>
<tr>
<th>Item</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual water consumption (m3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office</td>
<td>87,810</td>
<td>87,743</td>
<td>84,569</td>
</tr>
<tr>
<td>Direct stores</td>
<td>54,458</td>
<td>53,985</td>
<td>48,702</td>
</tr>
<tr>
<td>Computer room base station (including Taiwan media/dw主教练/important computer room)</td>
<td>185,167</td>
<td>180,250</td>
<td>165,966</td>
</tr>
<tr>
<td>Total</td>
<td>327,435</td>
<td>321,978</td>
<td>299,237</td>
</tr>
<tr>
<td>Rainwater recovery</td>
<td>342.4</td>
<td>102.3</td>
<td>150.6</td>
</tr>
</tbody>
</table>

Water saving measures: Water saving promotion and reducing flushing volume
1. Reducing the flushing volume
2. The monthly report is reviewed for abnormal incidents to be notified and repaired

1. Cooling tower temperature control and installation of frequency converter
2. Adjust the height of the overflow pipe of the cooling tower to avoid wasting water resources
**Five major aspects of Guidelines on CSR for Suppliers**

<table>
<thead>
<tr>
<th>Classified management of suppliers</th>
<th>According to the procurement type, amount and key conditions, the suppliers are classified into six categories. In each category, the suppliers are classified into critical suppliers and general suppliers for differentiated management to ensure the appropriateness and effectiveness of the management resources.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selection of new suppliers</td>
<td>New vendors are required to pass corporate governance review, sign Declaration of Integrity Operation, pass credit financial review and on-site audit, and fill in Self-Evaluation form in ESG Performance for new suppliers. Suppliers will be qualified suppliers of the Company in the future after the suppliers implement sustainable management. Suppliers must sign the Declaration Letter for Environmental and Occupational Health and Safety Policy for Contractors when undertaking orders.</td>
</tr>
<tr>
<td>Supplier maintenance</td>
<td>Suppliers need to fill out the CSR self-assessment form for review to help TWM identify the risks of individual vendors and the overall supply chain sustainability, keep abreast the current status of supply chain sustainability management, and further propose differentiated improvement plans to track the improvement results of partner vendors every year. TWM started conducting a carbon inventory review in 2019 to further understand carbon emissions of the supply chain, which is used for reference when formulating the supply chain carbon reduction system.</td>
</tr>
<tr>
<td>Threshold for major tenders</td>
<td>TWM has officially listed the quantitative ESG score as the supplier’s major bidding threshold since 2019. The Company hopes to enhance management measures of suppliers through procurement, as well as encouraging suppliers to be proactive through the requirements of sustainable performance evaluation in response to TWM's sustainable actions. Both new and existing suppliers must reach a certain sustainable performance threshold before they can participate in TWM's major bids.</td>
</tr>
</tbody>
</table>
| Training programs | 1. Procurement personnel training program: regular education and training on the internal procurement personnel is conducted to ensure the awareness and familiarity of sustainable supply chain management.  
2. Cooperative supplier education and training: organize supplier sustainability education and training, and hold annual supplier conference to praise and share high-performance suppliers. |

**Four key strategic objectives for supplier management**

<table>
<thead>
<tr>
<th>Quality management</th>
<th>The technical evaluation mechanism confirms whether the equipment or service meets the needs. The supplier's quality management mechanism is kept in check through the economic performance of supply chain sustainability issues.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stable service</td>
<td>Suppliers are required to commit to complete service and delivery at the time of quotation. Unqualified suppliers failed to deliver products on time will be eliminated.</td>
</tr>
<tr>
<td>Risk control</td>
<td>The suppliers are required to sign the &quot;Declaration of Integrity in Business Conduct&quot; as a measure for supervising supplier integrity. They are also required not to violate laws and regulations regarding fair competition, environmental protection laws, copyrights and the Labor Standard Act. Risk analysis is conducted based on the supplier sustainable management review system to identify supplier risks and assess their impact, as a reference for future cooperation.</td>
</tr>
<tr>
<td>Sustainability implementation</td>
<td>Achieve sustainable supply chain integration through enhancing supply chain information transparency and capacity. TWM enhances its responsibility and accountability for the supply chain by disclosing the status of supplier management practices. At the same time, the Company enhances the sustainability awareness of internal and external personnel and supplier through regular staff and supplier training.</td>
</tr>
</tbody>
</table>
### GRI (Global Reporting Initiative) Standards Index

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Description</th>
<th>Chapter</th>
<th>Reasons for Non-disclosures</th>
<th>SGS External Assurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>102-1</td>
<td>Name of the organization</td>
<td>Company Profile</td>
<td></td>
<td></td>
</tr>
<tr>
<td>102-2</td>
<td>Activities, brands, products, and services</td>
<td>Company Profile</td>
<td></td>
<td></td>
</tr>
<tr>
<td>102-3</td>
<td>Location of headquarters</td>
<td>Company Profile</td>
<td></td>
<td></td>
</tr>
<tr>
<td>102-4</td>
<td>Location of operations</td>
<td>Company Profile</td>
<td></td>
<td></td>
</tr>
<tr>
<td>102-5</td>
<td>Ownership and legal form</td>
<td>Company Profile</td>
<td></td>
<td></td>
</tr>
<tr>
<td>102-6</td>
<td>Markets served</td>
<td>Company Profile</td>
<td></td>
<td></td>
</tr>
<tr>
<td>102-7</td>
<td>Scale of the organization</td>
<td>Company Profile - Appendix (Statistics of ESG data/Economic dimension) 2.2.1.1 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>102-8</td>
<td>Information on employees and other workers</td>
<td>2.2.1.1 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>102-9</td>
<td>Supply chain</td>
<td>Company Profile 2.3.1 Supply Chain Overview: Practicing Sustainability as the Core of Supply Chain Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>102-10</td>
<td>Significant changes to the organization and its supply chain</td>
<td>—</td>
<td>No significant change</td>
<td></td>
</tr>
<tr>
<td>102-11</td>
<td>Precautionary Principle or approach</td>
<td>1.5 Operating Environment and Risk Analysis 2.1.3 Risk Management: Comprehensive Risk Management System for Strengthening Management Practices</td>
<td></td>
<td></td>
</tr>
<tr>
<td>102-12</td>
<td>External initiatives</td>
<td>2.5.4 Green-Energy Initiatives: Extending Green-Energy Applications to Social Welfare for the Underprivileged</td>
<td></td>
<td></td>
</tr>
<tr>
<td>102-13</td>
<td>Membership of associations</td>
<td>Refer to appendix</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1 CSR Operational Mechanism</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.2 Governance Structure: Setting Target to Become a World-Class Corporate Governance Benchmark</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.2.1 Board of Directors</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.2.2 Remuneration to Senior Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.3 Supervision Mechanism: Enhancing Internal Control to Implement Corporate Governance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.4 Ethical Corporate Governance: Alleviating the Core values of Ethics to Respond to Social Needs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.5 Risk Management: Comprehensive Risk Management System for Strengthening Management Practices</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.6 Communication Mechanism: Smooth Communication Channels for Protecting the Rights and Interests of Stakeholders</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.7 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.1 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.3 Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.5 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.6 Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.7 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.8 Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.9 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.10 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.11 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.12 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.13 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.14 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.15 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.16 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.17 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.18 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.19 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.20 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.21 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.22 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.23 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.24 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.25 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.26 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.27 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.28 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.29 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.30 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.31 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.32 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.33 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.34 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.35 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.36 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.37 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.38 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.39 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.40 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.41 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.42 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.43 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.44 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.45 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.46 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.47 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.48 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.49 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.50 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.51 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.52 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.53 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.54 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.55 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.56 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.57 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.58 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.59 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.60 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.61 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.62 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.63 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.64 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.65 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.66 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.67 Talent Recruitment and Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indicators</td>
<td>Description</td>
<td>Chapter</td>
<td>Reasons for Non-disclosures</td>
<td>SGS External Assurance</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>GRI 307: Environmental Compliance</td>
<td></td>
<td>Appendix _ Material Topics and Boundaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>103-1</td>
<td>Explanation of the material topic and its Boundary</td>
<td>Appendix _ Material Topics and Boundaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>103-2</td>
<td>The management approach and its components</td>
<td>Appendix _ Material Topics and Boundaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>103-3</td>
<td>Evaluation of the management approach</td>
<td>Appendix _ Material Topics and Boundaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>307-1</td>
<td>Non-compliance with environmental laws and regulations</td>
<td>Appendix _ Material Topics and Boundaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRI 308: Supplier Environmental Assessment</td>
<td></td>
<td>Appendix _ Material Topics and Boundaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>103-1</td>
<td>Explanation of the material topic and its Boundary</td>
<td>Appendix _ Material Topics and Boundaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>103-2</td>
<td>The management approach and its components</td>
<td>Appendix _ Material Topics and Boundaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>103-3</td>
<td>Evaluation of the management approach</td>
<td>Appendix _ Material Topics and Boundaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRI 401: Employment</td>
<td></td>
<td>Appendix _ Material Topics and Boundaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>103-1</td>
<td>Explanation of the material topic and its Boundary</td>
<td>Appendix _ Material Topics and Boundaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>103-2</td>
<td>The management approach and its components</td>
<td>Appendix _ Material Topics and Boundaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>103-3</td>
<td>Evaluation of the management approach</td>
<td>Appendix _ Material Topics and Boundaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>401-1</td>
<td>New employee hires and employee turnover</td>
<td>Appendix _ Material Topics and Boundaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>401-2</td>
<td>Benefits provided to full-time employees that are not provided to temporary or part-time employees</td>
<td>Appendix _ Material Topics and Boundaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>401-3</td>
<td>Parental leave</td>
<td>Appendix _ Material Topics and Boundaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRI 402: Labor/Management Relations</td>
<td></td>
<td>Appendix _ Material Topics and Boundaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>103-1</td>
<td>Explanation of the material topic and its Boundary</td>
<td>Appendix _ Material Topics and Boundaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>103-2</td>
<td>The management approach and its components</td>
<td>Appendix _ Material Topics and Boundaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>103-3</td>
<td>Evaluation of the management approach</td>
<td>Appendix _ Material Topics and Boundaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>402-1</td>
<td>Minimum notice periods regarding operational changes</td>
<td>Appendix _ Material Topics and Boundaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRI 403: Occupational Health and Safety</td>
<td></td>
<td>Appendix _ Material Topics and Boundaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>103-1</td>
<td>Explanation of the material topic and its Boundary</td>
<td>Appendix _ Material Topics and Boundaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>103-2</td>
<td>The management approach and its components</td>
<td>Appendix _ Material Topics and Boundaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>103-3</td>
<td>Evaluation of the management approach</td>
<td>Appendix _ Material Topics and Boundaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRI 404: Training and Education</td>
<td></td>
<td>Appendix _ Material Topics and Boundaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>103-1</td>
<td>Explanation of the material topic and its Boundary</td>
<td>Appendix _ Material Topics and Boundaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>103-2</td>
<td>The management approach and its components</td>
<td>Appendix _ Material Topics and Boundaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>103-3</td>
<td>Evaluation of the management approach</td>
<td>Appendix _ Material Topics and Boundaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRI 405: Diversity and Equal Opportunity</td>
<td></td>
<td>Appendix _ Material Topics and Boundaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>103-1</td>
<td>Explanation of the material topic and its Boundary</td>
<td>Appendix _ Material Topics and Boundaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>103-2</td>
<td>The management approach and its components</td>
<td>Appendix _ Material Topics and Boundaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>103-3</td>
<td>Evaluation of the management approach</td>
<td>Appendix _ Material Topics and Boundaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>405-2</td>
<td>Ratio of basic salary and remuneration of women to men</td>
<td>Appendix _ Material Topics and Boundaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRI 406: Non-discrimination</td>
<td></td>
<td>Appendix _ Material Topics and Boundaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>103-1</td>
<td>Explanation of the material topic and its Boundary</td>
<td>Appendix _ Material Topics and Boundaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>103-2</td>
<td>The management approach and its components</td>
<td>Appendix _ Material Topics and Boundaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>103-3</td>
<td>Evaluation of the management approach</td>
<td>Appendix _ Material Topics and Boundaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>405-1</td>
<td>Incidents of discrimination and corrective actions taken</td>
<td>Appendix _ Material Topics and Boundaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>103-1</td>
<td>Explanation of the material topic and its Boundary</td>
<td>Appendix _ Material Topics and Boundaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indicators</td>
<td>Description</td>
<td>Chapter</td>
<td>Reasons for Non-disclosures</td>
<td>SGS External Assurance</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------</td>
<td>---------</td>
<td>-----------------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>103-1</td>
<td>GRI 103:Management Approach</td>
<td>1.1.4 Communication Mechanism: Smooth Communication Channels for Protecting the Rights and Interests of Stakeholders</td>
<td>2.1.6.4 Ethical Corporate Governance: Abiding by the Core Value of Ethics to Respond to Social Needs</td>
<td>2.1.6.4 Ethical Corporate Governance: Abiding by the Core Value of Ethics to Respond to Social Needs</td>
</tr>
<tr>
<td>103-2</td>
<td>The management approach and its components</td>
<td>1.1 CSR Operational Mechanism: Smooth Communication Channels for Protecting the Rights and Interests of Stakeholders</td>
<td>2.1.4 Communication Mechanism: Smooth Communication Channels for Protecting the Rights and Interests of Stakeholders</td>
<td>2.1.4 Communication Mechanism: Smooth Communication Channels for Protecting the Rights and Interests of Stakeholders</td>
</tr>
<tr>
<td>103-3</td>
<td>Evaluation of the management approach</td>
<td>1.1.4 Communication Mechanism: Smooth Communication Channels for Protecting the Rights and Interests of Stakeholders</td>
<td>2.1.6.4 Ethical Corporate Governance: Abiding by the Core Value of Ethics to Respond to Social Needs</td>
<td>2.1.6.4 Ethical Corporate Governance: Abiding by the Core Value of Ethics to Respond to Social Needs</td>
</tr>
<tr>
<td>407-1</td>
<td>Operations and suppliers in which the risk to freedom of association and collective bargaining may be at risk</td>
<td>2.3.4 Supply Chain Selection and Evaluation: GRI 418: Customer Privacy</td>
<td>Non-compliance with laws and regulations in the supply chain</td>
<td>Appendix</td>
</tr>
<tr>
<td>408-1</td>
<td>Operations and suppliers at significant risk for incidents of child labor</td>
<td>2.3.4 Supply Chain Selection and Evaluation: GRI 418: Customer Privacy</td>
<td>Non-compliance with laws and regulations in the supply chain</td>
<td>Appendix</td>
</tr>
<tr>
<td>409-1</td>
<td>Operations and suppliers at significant risk for incidents of forced or compulsory labor</td>
<td>2.3.4 Supply Chain Selection and Evaluation: GRI 418: Customer Privacy</td>
<td>Non-compliance with laws and regulations in the supply chain</td>
<td>Appendix</td>
</tr>
<tr>
<td>410-1</td>
<td>Operations and suppliers that have been subject to human rights reviews or impact assessments</td>
<td>2.1.4.7 Respect for and Protection of Human Rights</td>
<td>Non-compliance with laws and regulations in the supply chain</td>
<td>Appendix</td>
</tr>
<tr>
<td>411-1</td>
<td>Employee training on human rights policies or procedures</td>
<td>2.1.4.7 Respect for and Protection of Human Rights</td>
<td>Non-compliance with laws and regulations in the supply chain</td>
<td>Appendix</td>
</tr>
<tr>
<td>412-1</td>
<td>Significant investment agreements and contracts that include human rights clauses or that undermine human rights screening</td>
<td>2.1.4.7 Respect for and Protection of Human Rights</td>
<td>Non-compliance with laws and regulations in the supply chain</td>
<td>Appendix</td>
</tr>
<tr>
<td>413-1</td>
<td>GRI 414:Supplier Social Assessment</td>
<td>2.1.6 Communication Mechanism: Smooth Communication Channels for Protecting the Rights and Interests of Stakeholders</td>
<td>2.1.6 Communication Mechanism: Smooth Communication Channels for Protecting the Rights and Interests of Stakeholders</td>
<td>2.1.6 Communication Mechanism: Smooth Communication Channels for Protecting the Rights and Interests of Stakeholders</td>
</tr>
<tr>
<td>414-1</td>
<td>Non-compliance with laws and regulations in the supply chain and actions taken</td>
<td>2.1.6 Communication Mechanism: Smooth Communication Channels for Protecting the Rights and Interests of Stakeholders</td>
<td>2.1.6 Communication Mechanism: Smooth Communication Channels for Protecting the Rights and Interests of Stakeholders</td>
<td>2.1.6 Communication Mechanism: Smooth Communication Channels for Protecting the Rights and Interests of Stakeholders</td>
</tr>
</tbody>
</table>

**GRI 408: Child Labor**

**GRI 103: Management Approach**

103-1 Explanation of the material topic and its boundary | Appendix | Material Topics and Boundaries |

**GRI 406: Forced or Compulsory Labor**

103-1 Explanation of the material topic and its boundary | Appendix | Material Topics and Boundaries |

**GRI 412: Human Rights Assessment**

103-1 Explanation of the material topic and its boundary | Appendix | Material Topics and Boundaries |

**GRI 414: Supplier Social Assessment**

103-1 Explanation of the material topic and its boundary | Appendix | Material Topics and Boundaries |
# Participation of Taiwan Mobile in Various Associations and Societies

<table>
<thead>
<tr>
<th>Association/Institute</th>
<th>Cloud Computing &amp; IoT Association in Taiwan</th>
<th>Taiwan Multimedia Production Association</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asia Business Council</td>
<td>Cloud Computing &amp; IoT Association in Taiwan</td>
<td>Taiwan Multimedia Production Association</td>
</tr>
<tr>
<td>Bridge Mobile Pte Ltd</td>
<td>Taiwan Communications Society</td>
<td>Taiwan Stock Affairs Association</td>
</tr>
<tr>
<td>Chief Executives Organization</td>
<td>Cross-Strait CEO Summit</td>
<td>Computer Audit Association</td>
</tr>
<tr>
<td>Global Enabling Sustainability Initiative (GeSI)</td>
<td>M&amp;A and Private Equity Council</td>
<td>Taiwan Network and E-Commerce Industry Development Association</td>
</tr>
<tr>
<td>GSM Association (GSMA)</td>
<td>Digital Transformation Association</td>
<td>Taiwan Network and E-Commerce Industry Development Association</td>
</tr>
<tr>
<td>Taiwan Telecommunications Industry Development Association</td>
<td>Chinese International Economic Cooperation Association</td>
<td>Taiwan Digital Publishing Forum (TDPF)</td>
</tr>
<tr>
<td>Business Council for Sustainable Development of Taiwan</td>
<td>Chinese National Association of Industry and Commerce, Taiwan (CNAIC)</td>
<td>Taipei Electrical Appliance Association</td>
</tr>
<tr>
<td>Taiwan Institute for Sustainable Energy</td>
<td>Taiwan Chain Stores and Franchise Association</td>
<td>Taiwan Telecommunication Engineering Industry Association</td>
</tr>
<tr>
<td>Taiwan Corporate Governance Association</td>
<td>Taiwan Contact Center Development Association</td>
<td>Satellite Television Broadcasting Association R.O.C.</td>
</tr>
<tr>
<td>Cable Broadband Institute in Taiwan</td>
<td>The Institute of Internal Auditors - Chinese Taiwan</td>
<td>Taiwan Digital Media and Marketing Association</td>
</tr>
<tr>
<td>Taiwan Association of Information and Communication Standards</td>
<td>Chinese Non-store Retailer Association</td>
<td>Taiwan OTT Association</td>
</tr>
<tr>
<td>Taiwan Telematics Industry Association</td>
<td>Taipei Computer Association</td>
<td>Taiwan YMJ</td>
</tr>
<tr>
<td>Taiwan Network Information Center (TWNIC)</td>
<td>Taiwan Electrical and Electronic Manufacturer's Association</td>
<td>Taiwan Telecommunication Engineering Industry Association</td>
</tr>
</tbody>
</table>

## 2019 Corporate Social Responsibility Report

**Publisher:** Daniel M. Tsai  
**Chief Editor:** Iris Liu  
**Text Editor:** Jessica Chou / Ya-Ru Li / Ashley Chen  
**Art Design Editor:** Yumin Tsai / Celine Cheng