

# Big Data · Al · IoT

# 2018 Far EasTone Integrated Report

# **Guide to Reading This Report**

In accordance with the information you would like to obtain, we suggest that you read the following chapters first:

- If you want to learn about the company information of FET and the value we create  $\rightarrow$  CH1. FET Overview
- If you want to find out about FET's operational strategy and our performance highlights  $\rightarrow$  CH2. Sustainable Development Strategy and Performance
- If you want to find out how FET responds to the changing operating environment and to key stakeholders  $\rightarrow$  CH3. Operating Environment Analysis and Performance
- If you want to find out FET's management approach to corporate governance  $\rightarrow$  CH4. Responsible Governance
- If you need to further learn about FET's management approach to employees, customers, and suppliers  $\rightarrow$  CH5. Stakeholder Management
- If you want a comprehensive understanding of the influence of FET's operations on society and the environment, and how we manage and transform these impacts -> CH6. Environmental and Social Protection

By scanning the QR code, interactivity between the report and the official website, videos, and the annual report can be enjoyed. We recommend the use of mobile phone for the best reading experience.

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# **Message from**

# the Chairman and the President

Douglas Hsu, Chairman

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Looking back in 2018, despite the highly competitive market and the telecommunications industry's changing income structure, FarEasTone Telecommunications (FET) continued to strengthen its 4G business and expand new economy in 5G market, and produced outstanding and concrete results by working together with its employees efficiently. Last year, FET was the first to have completed its NB-IoT network deployment across Taiwan. Since FET established the country's first "IoT Ecosystem" in 2017, more than 300 companies have initiated testing; moreover, "FET 5G Pioneer Team" was officially launched at the end of last year, the first in Taiwan to have led and driven development of 5G Internet of Vehicles (IoV) supply chain. FET not only won the top spot in 5G and IoT, but also continued to expand its digital services by launching the "FET Smart Speaker" with a distinctive Taiwanese Mandarin accent hitting the markets. In addition, FET also collaborated with NTT DOCOMO, Japan's largest telecom operator, and launched a brand new "friDay Photobook," providing photobook service and creating high-value consumer experiences and services.

FET's 2018 consolidated revenue reached NT\$86.6 billion, and the consolidated earnings before interest, taxes, depreciation and amortization (EBITDA) was NT\$26.7 billion; the annual growth of total Information and Communication Technology (ICT) contract amount reached 89%, and its performance in the new economy's sector was impressive. Furthermore, FET continues to maintain a stable dividend policy, with a dividend payout ratio exceeding 100% of its earnings, continuing to create the maximum value for its shareholders.

Nevertheless, in the era of the lightning-fast pace of technological advancement, the capability in big data, cloud computing and IoT not only drive the growth of the global economy but also exacerbate competitions in the markets. Meanwhile, over-consumption of the Mother Earth's resources by mankind has caused extreme climate anomalies as well as resulted in a lot of disasters; therefore, "high-speed evolution of technology,"" intensified global competition," and "natural disaster and extreme climate" have become the three major forces affecting the world.

In view of this, FET, as a leading ICT brand and a sustainability benchmark enterprise, while pursuing operational growth, we pay even more attention to the practice of CSR. Our enterprise cannot continue to grow and prosper unless we have sustainable management, satisfied customers, high-quality employees and a harmonious society. In response to the advent of 5G digital convergence era, FET constantly pursues innovation and breakthroughs. We achieved these goals by evaluating its opportunities and risks in 2018 and re-positioned its operational policies, brand statement and sustainable development strategies.

FET has adopted a new operational policy of "Fit, Transform, and Grow." Internally, FET strives to become the best aid in consumers' digital life and the best partner for enterprise smart innovation and transformation through the "Fit" operational experiences of the new management team to lead FET's digital "Transform" and go beyond the role of a traditional telecom operator. Meanwhile, FET will also cultivate its soft power by recruiting new technical talents, deepening the application of "B.A.I." (Big Data, Artificial Intelligence, and IoT) and cloud technology. Externally, we will continue to expand the ecosystem through alliances, investments, and by means of cross-industry and cross-border promotion of 5G new economy and drive FET's business and revenues to "Grow".

In terms of brand communication, FET has fulfilled the slogan of "Closing the Distance" by pulling people closer together; in the future, through the application of Big Data, Artificial Intelligence, and IoT, we will set brand new milestones with the statement of "For Every Thought, We Go Further." We aim to bring people more convenient smart living by shortening the distance between people and the "new technology."



FET has followed international sustainability trends and responded to the United Nations' Sustainable Development Goals (SDGs) by establishing the "Sustainability Strategic Blueprint for 2018-2025", incorporating "Go Prosperous," "Go Innovative," "Go Caring," "Go Inclusive," and "Go Eco." We have thereby integrated these five aspects into our management strategies, formulating clear and explicit mid to long term goals. On the path to ever upgrading and transforming, we will continue to add value to innovation, make good use of our industry expertise, adopt technology for public welfare, co-promote corporate social responsibility with our stakeholders, including suppliers, users, etc., and bring the influence from information and communications technology into play.

FET's CSR performance in terms of corporate governance has been excellent. In addition to setting up a functional committee under the Board of Directors and linking the compensations of senior executives to CSR performance so as to ensure sustainable business results, FET is also the first telecommunication company in Taiwan's service industry to adopt TIMM<sup>1</sup>, a sustainable management tool to quantify the value of sustainability and to monitor the completion status through systematic data analysis.

In regards to environmental sustainability, business innovations actively developed by FET, such as cloud technologies, Big Data, IoT application, etc., are utilized in the CSR field, including smart cities, smart parking, air quality control, Big Data crowd analysis, and so on, to solve traffic and air quality issues. In combination with IoT applications, we have expanded in the field of smart energy, by cooperating with Prime EcoPower (PEP) team to develop high-efficiency renewable energy devices and collaborating with CPC Corporation, Taiwan (CPC) to build Taiwan's first "CPC Smart Green Gas Station," creating a green energy ecosystem.

With respect to social integration, FET has invested several hundred million New Taiwan dollars in executing the "Mountain Project" in the past few years to advance rural broadband infrastructure coverage, and has achieved 96% LTE signal coverage in outlying islands and rural villages. In addition, FET initiated the "Revolutionize Education. Spread Love Far" project by associating "game" with "learning," through online game learning platform, PaGamO With FET volunteers' care and companionship, FET has visited 26 elementary schools in remote Taiwan areas in the past two years to motivate learning among children living in remote areas and reduce the uneven distribution of educational resources between urban and rural areas.

FET's achievements and performance in regards to sustainability management in the recent years have been highly recognized by international and domestic sustainability rating agencies, such as being included in the Dow Jones Sustainability Indices (DJSI) Emerging Markets for three consecutive years, and in February 2019, being awarded the "Industry Mover" in The 2019 Sustainability Yearbook published by RobecoSAM, an international sustainability rating agency, with FET being the only awardwinning telecom operator globally. In regards to CSR ratings in the domestic benchmark category, FET received the highest honor - the top 5% in corporate governance rated by Taiwan Stock Exchange for five consecutive years, won the Global Views Monthly CSR Major Investigation Model Award for three consecutive years, and proudly won 10 major awards from 2018 Taiwan Corporate Sustainability Awards, setting the record for the most awards won by one single company.

Looking into the future, digital technology is rapidly reshaping business operations, and it has also accelerated the competition and elimination of enterprises. In response to the ever-changing environment, FET will move from 4G to 5G, and transform to digital services from telecommunications services. By increasing the proportion of value-based services, FET will move from price competition. We will make good use of new technologies and innovative thinking in the future, by introducing advanced technologies, such as Big Data, Artificial Intelligence, and Internet of Things (IoT) into the supply chain and business models, to accelerate our transformation, open up new economy, sail together to the blue ocean, revive the future, and create "FET's B.A.I."

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 FET Stakeholders
 FET CSR Website
 FET CSR Survey

 Image: Im

This is the eighth CSR report published by Far EasTone Telecommunications Co., Ltd. (hereinafter referred to as "FET") and its subsidiaries. It is also compiled based on the International Integrated Report (IR) Framework (hereinafter referred to as the IR).

#### **Report Cycle and Period**

The FET IR report is published on an annual basis. The previous report (2017) was published in June 2018. From 2015 onwards, FET has published its CSR report by June 30 each year in accordance with the "Taiwan Stock Exchange Enterprise Rules Governing the Preparation and Filing of IR Report by TWSE Listed Companies." The next report (2019) will be published in June 2020. This report encompasses financial and non-financial information of FET in 2018 (January 1, 2018 to December 31, 2018), including management approach, major issues, and performance. To provide readers with a better grasp of information, some quantified data has been presented for the past three years for comparison purposes.

#### **Reporting Boundary**

In consideration of their financial materiality and industry correlation, the boundary of this report encompasses Far EasTone Telecommunications Co., Ltd. (FET), the parent company; as well as two key subsidiaries, New Century InfoComm Tech Co., Ltd. (NCIC) and ARCOA Communications Co., Ltd. (ARCOA). The revenues of these three companies constitute 96.3% of FET's consolidated revenue. Financial data presenting the business performance included in this report is derived from the CPA-audited consolidated financial report for FET and its subsidiaries. Please refer to the 2018 Consolidated Financial Report for information on individual entities included within the consolidated reports. For information on FET's individual and afiliated entities, as well as investments, please refer to the 2018 Annual Report.

As an extraordinary general meeting of NCIC in 2010 agreed to entrust all of its operations to its parent company, FET, all references to "FET" or "the company" in this report refer to FET itself and NCIC. Where individual entities are not explicitly specified in this report, FET should be taken to refer to all entities within the report boundaries, namely FET, NCIC and ARCOA. The scope of information and data in this report includes the financial and non-financial performance of these three companies. Some of the financial information sourced from consolidated information of FET and its subsidiaries will be marked as consolidated accordingly. Any changes to the scope or calculation methods of information and data are explained in corresponding chapters, and data from previous years will have been recalculated accordingly.

#### **Report Content Management and Auditing**

The FET Corporate Social Responsibility (CSR) Committee is responsible for the IR Report. The contents of the FET IR Report are compiled and provided by the business units. To ensure that the contents of the report are correct and meet the expectations of stakeholders, the FET CSR Committee regularly reviews the contents of the report and suggests recommendations. All contents are approved for release by heads of business units and the company president.

#### **Reporting Guidelines and Third-party Assurance**

The format of this report follows the International IR Framework published by the International Integrated Reporting Council (IIRC) and the core option in the GRI Standards published by the Global Reporting Initiative (GRI).

This report was also verified by SGS Taiwan, an independent third-party certification institution, as being in accordance with GRI core option and AA1000 (AccountAbility 1000) Type II High Level and meeting the requirements of International IR Framework contents.

#### If you have any questions regarding the content of this report, please contact the following:

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# Chapter 1

# **FET Overview**

1.1 Company Information1.2 Awards, Recognitions and Milestones1.3 FET Business Model1.4 Corporate Impact Evaluation

Special thanks to the executive vice president, Eton Shu, for providing the photos for use in this report.

# **1. FET Overview**

Milestones

# **1.1 Company Information**

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Company Name	Far EasTone Telecommunications Co., Ltd.
Industry Catagory	Communications and Internet
Headquarter Location	No. 468, Ruiguang Rd., Neihu District, Taipei City
Chairman	Douglas Hsu
Stock Code (TWSE)	4904
Capital	NT\$ 32.585 billion

Far EasTone was established and received the mobile

communication licenses

from the Ministry of

Transportation and

Communications

#### 2018 Business Operations

**Mobile Service** 

Product

Domestic Fixed Communications Service

Total

companies

International Communications Servie

**Digital Communications Service** 

Product Sales and Others



2% <sup>1%</sup>

1997 1998 Launched the world's first 2G dualband system(GSM900/1800MHz); became the fastest telecommunication **4**G 2G service provider in the world that reached one million users **2018 Major Operating Performance** 126.8 248.9 86.6 total contract amount ×÷ **Combined Total Revenue EBITDA** (billion) **Total Assets (billion)** Market Value (billion) from ICT business 26.8% 7,172 812 6.550 ARPU<sup>2</sup> of Postpaid **Mobile Service Revenue Number of Subscribers** Number of Retail Stores Number of Employees Market Share (%)<sup>1</sup> Subscribers (NT\$) (thousand)



<sup>1</sup> FET 2018 Annual Report <sup>2</sup> Average Revenue Per User + ARPU

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# **1.2** Awards, Recognitions and Milestones

#### Awards & Recognitions in 2018



FET was included in the Dow Jones Sustainable Emerging Markets Index for three consecutive years.



FET was awarded the "Industry Mover" and "Bronze" Sustainability Award in the 2019 Sustainability Yearbook published by RobecoSAM.

> 台北金鵰 微電影展

FET's " Revolutionize Education, Spread Love

Far" project video won the Excellence Award

from Taipei Golden Eagle Micro-movie Festival

- Social Inclusion Awards



FET won 10 major awards from the Taiwan Corporate Sustainability Awards, setting the record for the most awards won by one single company.

#### Major Milestones in 2018

credit card.



FET formulated mid-tolong-term sustainable development goals, establishing Sustainable Strategy Blueprint for 2018-2025.



Sustainable Development Strategy and Performance Operating Environment Analysis and Performance Responsible Governance Stakeholder Management Environmental and Social Protection

Appendix



FET received six major awards from Finance Asia, including Best Investor Relations, Most committed to Corporate Goverance, Best CEO, etc.



FET was rated as the top 5% in corporate governance by Taiwan Stock Exchange for four consecutive years.



FET won the Global Views Monthly CSR Survey - Customer Service Model Award for two consecutive years.



FET's mobile customer APP won the Best Digital Experience Award in Customer Experience Asia Excellence Awards



FET won HR Asia's 2018 Best Companies to Work For in Asia Award.



FET won the Taipei Energy Conservation Leadership Awards for two consecutive years, the highest honor for energy conservation across the country.



FET won Commercial Times' Taiwan Service Grand Assessment – Gold Award in Telecommunication Channel for seven consecutive years.



FET won First Prize for Telecom Industry from Global Views' Five-Star Service Award, which is considered the Oscar of the Taiwanese service industry.







\*Q-ware system was eliminated after merging with FET at June 2018, so the related data is offered only during January to June of 2018, therefore the revenue from V service dropped significantly compare to 2017.

## **1.4 Corporate Impact Evaluation**



supply chain

Employee

community

safety

Since 2018, FET has adopted the Total Impact Measurement and Management (TIMM) framework, becoming the first Taiwanese enterprise in the service industry to quantify the sustainable impact in the four quadrants of economy, tax, environment, and society. This year, FET continues to measure the sustainable impact of the four quadrants. In response to the transparent and accountable reporting, which UN Global Compact considers significant to the external stakeholders, we hope to engage each stakeholder in those impacts through annual inventory, tracking, and regular disclosure. At the same time, we also review the data of the biennial sustainable impact for the adjustment of corporate decisions and performance measurement, demonstrating our efforts and determination in the course of sustainable develooment.

The sustainable impact of FET in 2018 was NT\$72.8 billion, representing an increase of NT\$500 million compared to 2017. Due to changes in the market and the decline in rate plans last year, there was a reduction of roughly NT\$400 million in economic impact from the previous year. At the same time, due to the decrease in profits and the adjustment of tax laws, there was a decrease in tax impact of about NT\$400 million. The increase in the wo fiscal years mainly comes from differences in the social impact.

In the quadrant of social impact, our new assessment this year in sustainable impact on employee health and safety was about NT\$235 million, and the impact on suppliers has increased by about NT\$1.4 billion over last year. Although the investment in public welfare activities has been reduced compared with that in 2017 due to strategy adjustment, since the use of resources had become more efficient, there is not much difference in the amount of impact generated by the public welfare activities this year from that of the previous year.

FET has examined the differences and results above for the assessment of the Company's operational strategy and the core direction of future development. We periodically adjust our performance standard and medium-term and long-term goals under the premise of maximizing sustainable value. Through regular tracking, evaluation, and review of stakeholder impact, as well as the transparent public disclosure, we expect to demonstrate our role as a responsible enterprise and continues to prove the sustainable development path of FET.

Sustainable Development Strategy and Performance

**Operating Environment** Analysis and Performance Responsible Governance Stakeholder Management

Environmental and Social Protection

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#### **Measuring framework**

From four aspects of economy, tax, society and environment, Total Impact Measurement & Management measures the social impact of an enterprise's operations with regard these four aspects and expresses these four aspects in monetary units. Also, the monetized framework and integrated reporting principles of Natural Capital Protocol and Social Capital Protocol are used as tools for analyzing source of sustainable value.

Starting from the viewpoint of stakeholders in enterprise operations, FET completely describes the process of enterprise operations from input of resources to production of value through TIMM. With integrated thinking and tools, the enterprise is able to immediately reflect the total impact of enterprise operations on society and value produced. Consequently, FET uses TIMM, which has stakeholders as the starting point, to create a new definition of sustainable value for our stakeholders.



Disclaimer: The monetization results derived from PwC's Total Impact Measurement and Management (TIMM) framework in 2017 and 2018 of FET are unrelated to the financial information in the past, present, and future publicly disclosed by the Company; the results of this 15 report are not intended for financial assessment and forecast.

# Chapter 2

Sustainable Development Strategy and Performance

2.1 Go Prosperous2.2 Go Innovative2.3 Go Inclusive2.4 Go Caring2.5 Go Eco



#### Blueprint for FET's 2018-2025 Sustainable Development Strategy

FET has established the "Blueprint for 2018-2025 Sustainable Development Strategy" in 2017 and formulated the mid-to-long-term goals. This year we will continue to evaluate resources needed and amend the long-term goals and action plans accordingly. We hope to strengthen the power of inclusion for ICT telecommunication and sustainable values of environmental and social innovation applications, so as to maximize the Company's contributions to the economy, environment and society, fulfilling FET's vision (FET Connects and Enriches Life) and becoming the most preferred partner in digital Life.







Note: Main objectives of operations adjusted to profitability. Some of the low profit margin products/services' sales volume were decreased, which affects the estimate of original total revenue.

### **Build NB-IoT Ecosystem with Technology Partners**

# FET is the first service provider that puts NB-IoT into business operation in Taiwan. It has provided IoT testing, service rate plan and national network coverage. The Company has completed the NB-IoT roaming test with 3 Hong Kong, and has been actively negotiating with crucial global partners to expand the business opportunities of the IoT industry, to bring about the upgrade of the domestic IoT industry and connect the Company internationally.

Since the establishment of the first NB-IoT ecosystem at the end of 2017, over 300 companies have joined the ecosystem for trial tests. Among them, close one hundred companies have become FET NB-IoT's official users. The application scenario stretch across multiple fields from smart city, IoV, smart energy conservation/electricity management, smart medical, to smart factory.



Since 2015, FET has collaborated with Tainan City Government to create the first comprehensive smart city in Taiwan. The Company also assists Tainan City, with "Cultural Heritage City and Technological transformations", to be selected as one of the world's top seven smart cities in the 2018 Smart City Forum (Intelligent Community Forum, ICF). FET's goal is not only quickly exporting the smart city construction experience to various cities in Taiwan, but also leading the Taiwan industrial industry to the world, so that the technological power will be able to connect internationally and open for unlimited smart business opportunities.

FET has been cooperating with the Industrial Development Bureau, Ministry of Economic Affairs and various Taiwan municipal governments to incorporate different smart city applications, including smart street lights in Taoyuan Industrial Park, smart street parking in the Taoyuan County Government, air pollution detection in Yilan county and New Taipei City, smart transport corporation with Yilan county municipal government, and smart streaming such as the analysis of big data crowd streaming in Chiayi.

#### Smart City Application Ranked World Top 7





	FET Overview	Sustainable Development Strategy and Performance A	perating Environment nalysis and Performance	Responsible Governance	Stakeholder Management	Environmental and Social Protection	Appendix
Development Indicators/Direction	2018 Performance	Status of Achievement	20	19 Targets	Goals of 2025		
<ul> <li>Addition during the annual CSR training</li> </ul>	215	Achieved		200	Implement supply chain ESG management to enhance sustainability performance		e supplier
<ul> <li>Percentage of signature of CSR self-declaration by top 100 suppliers</li> </ul>	95%	Achieved		95%			
<ul> <li>Annual addition of on-site audit for the third-party units</li> </ul>	20	Achieved		20	. Complete en site audit for	all the first tion critical su	ppliors
• Annual addition of on-site self-audit by FET	28	Achieved		30	<ul> <li>Complete on-site audit for all the first-tier critical s</li> </ul>		philers
Ratio of performance improvement in the high ESG risk suppliers	95%	Achieved		70%	· 85%		

Annual Meeting of Supplier Corporate Social Responsibility

#### **Collaboration with Delta on Energy-Saving Plan in Taiwan**

Based on the concept of "Create sustainability and beauty altogether", FET has organized a total of 2 suppliers' meetings in 2018 to conduct communication and training on sustainable governance, supplier management, environmental management, labor rights and social aspects.

Furthermore, FET has conducted a third-party supplier sustainable assessment this year with reference to the global supply chain sustainable management standards. The supplier sustainability evaluation was conducted with supplier sustainability self-assessment questionnaire designed on a total of 19 types of issues from 5 aspects, which include sustainable governance, supplier management, environmental management, labor rights and social welfare. A total of 158 suppliers have participated and 10 excellent suppliers were selected in the meeting and were invited to share their experience, strengthening the partner relationship between various suppliers.



FET collaborated with Delta to launch a new generation electronic powersaving project to achieve as high as 98% utility on energy conversion to drastically decrease base station energy consumption and carbon emission, and realized approximately 12% of reduction effect on overall energy usage, contributing its own effort to environmental sustainability.

Comparing Delta's next generation DPS 3000 power supply system with traditional base station power supply, it can not only effectively help clients level up energy conversion utility and save power, but also produce only 24% heat loss compared with the traditional power supply and reduce the usage of air conditioning equipment in processing the heat, achieving further energy conservation. In addition, energy module process a high utility density of 56.8 W/in3, so the size of power supply is drastically reduced, allowing more flexibility on the use of space in base station.





	FET Overview	tainable Development tegy and Performance	Operating Environment Analysis and Performance	Responsible Governance	Stakeholder Management	Environmental and Social Protection	Appendix
Development Indicators/Direction	2018 Performance	Status of Achievemen	t 2019	Targets	Goal	s of 2025	
<ul> <li>Integrate sustainable development and corporate operation strategies, target to be selected into Dow Jones Sustainability World Index (DJSI World) and become a world-class sustainable enterprise.</li> </ul>	<ul> <li>Constituent stocks of DJSI Emerging Markets</li> </ul>	Achieved	Constituent stor Markets	cks of DJSI Emerging	Constituent stock	s of DJSI World Index	
<ul> <li>Take leading position among the top listed companies in the Corporate Governance Evaluation by TWSE</li> </ul>	• Top 5% among the highest level	Achieved	• Highest level		• Highest level		

## Promote the Level of Risk Management Committee to the Board Level

FET's risk management vow to tale the following as priority, they are, protect the Company's assets, reduce the damage of business, increase business interests and ensure the sustainable development of the business. In order to enhance the management structure, FET has further adjusted the risk management organization in 2018 and promoted the level of risk management committee which consisted of independent directors appointed by the Board of Directors to fulfill a corporate risk management with regard to financial, strategic and operational, information security, environmental and energy risks in a more comprehensive angle and aspect, bringing cooperation through different levels in organization and job duties.

In the management system, FET has established the "Risk Management Policy" as the principle in accordance with the "ISO 31000 Risk Management - Principles and Guidelines" and PDCA model. The "Risk Management Policy" is set up as the principle of all business implementation to ensure that risks are effectively managed in a timely manner in respond to changes in business environment.

FET regularly conducts annual Board performance self-evaluation at the end of each year and performs external evaluation of the performance of the Board of Directors every three year. The target of evaluation includes the performance of the Board of Directors as a whole and the individual level, and the aspects include control and understanding of company, operational participation, education, decision-making quality and internal control, etc.

In 2018, internal evaluation was conducted by the Directors filling in the self-assessment questionnaire and the internal units filling evaluation form. The result of the evaluation was good. FET also appointed third-party independent consultants, KPMG, to perform an external assessment of the effectiveness of the Board of Directors, and the result is in between good and excellent. Specific recommendations include: improving the on-boarding process for new directors, establishing a risk management mechanism for major unfavorable events, establishing an independent complaint email for audit committee, assisting directors in keeping update with the management status, industry trends and trainings, etc., which can serve as reference on the continuous improvement of job duties for members in Board of Directors in the future.

**Annual Board Performance Evaluation** 





	FET Overview 2. Sustainable Developmen FET Overview	e Operati	ng Environment Responsible s and Performance Governance	Stakeholder Management	Environmental and Social Protection	Appendix
Development Indicators/Direction	2018 Performance	Status of Achievement	2019 Targets		Goals of 2025	
<ul> <li>Accelerate smart life and sustainable development with digital innovation products</li> </ul>	• Total digital product connectivity over 10 million	Achieved	• Total digital product connectivity	y of 11 million · New reven reaches 20%	ue of digital products* the %	proportion
• NB-IoT coverage rate	Completed nationwide NB-IoT network coverage	Achieved	· 100%	· 100%		
<ul> <li>Continue to expand the applications of IoT and become the leading provider of IoT services in the country</li> </ul>	<ul> <li>Completed the first NB-IoT smart street light application in the country</li> <li>The first NB-IoT geomagnetic application case in the country</li> <li>Acquisition of air quality monitoring in several counties</li> <li>NB-IoT smart car connection goes online</li> <li>The first NB-IoT application for electric vehicles in the country</li> </ul>	Achieved	<ul> <li>Expand application to water resorm monitoring, smart gas meters, si electricity meters, environmenta position tracking.</li> </ul>	mart · More than 7	2000 enterprise users, and No. Ses.	1 providers

Note: the new services for digital products include frDay Video, friDay Omusic , friDay shopping, MFS, DCB and C-IoT etc.

### **Smart Air Pollution Prevention**



The Energy and Air Pollution Report published by IEA in 2016 warned that the air pollution causes the early death of around 6.5 million people per year, which becomes a major threat to human beings. According to epidemiologic statistic surveys, seven out of ten main causes for death in Taiwan are highly relevant to air pollution. Thus, air quality monitoring is becoming more and more crucial.

FET cooperated with Tainan City Government in 2018 to launch the new smart air pollution prevention to monitor the environment. The smelling condition in the surrounding environment isdetected by the sensor components. The sensor will warn the environmental protection bureau of the city upon abnormal or exceeding the default value. The sensor will be used to prevent the cause of air pollution and to maintain the clean cities in a timely manner. A highlight worth mentioning is that the IoT wireless transmission technology used in Tainan City enabled deployment of large volume and high density sensor components at a relatively low cost in Tainan City, have effectively improved air pollution prevention.

Featuring "Health +" service, FET has actively invested in smart medical and elderly care applications in recent years, and is committed to integrate medical technology into the cloud, IoT communication and AI technology. Currently, FET has been collaborating with nearly 70 medical institutions, across various regional medical centers, regional hospital, community clinics and Elderly care institutions, total number of members reaching 170K. To expand the smart medical setting, FET integrates system to assist hospitals to build the digital clinical system, smart ward and digital nursing station to create a complete medical care system.

This service can help the general public to effectively manage health information, and use data analysis to reveal the health condition, thus offering immediate reminders and suggestions and help the general public to build a correct health awareness and lifestyle. As an example, FET has promoted the health service to Far Eastern Hospital's community members. Benefits of usage includes: decrease in the number of high blood pressure drug usages by 48%, decrease in the average of the emergency outpatient rates by 47%, increase in health alarm awareness by 14.5%, and decrease of the average blood pressure.

### "Health +" service for Smart Medical and Elderly Care Business







Note 1: Accumulated impacted number starts calculation from the base year of 2016, and the projects include special group rate plan and charity projects. Note 2: Amount measured by management tools for total impact measurement and management (Total Impact Measurement and Management, TIMM)

Note 3: FET's smart city infrastructure was completed in 2017. In 2018, the amount of the investment in this part was reduced, and the impact of the social influence was also affected. If the change in infrastructure input is not included, the social value is still growing in 2018.

#### **Revolutionize Education, Spread Love Far**

### Save Abandoned Children, Spread Love Far



The uneven allocation of education resources in the remote areas in recent years leads to the children in remote areas missing a good learning environment. Since 2017, FET has launched the "Revolutionize Education, Spread Love Far" project in collaboration with NTU professor Mr. Benson Yeh and integrated his development of worldwide first online game-learning platform, PaGamO. "Learning" is combined with "Game", and the software, which can gain land by solving questions, has been promoted to primary school students in remote areas and further raised their learning motivation. In 2018, a total of 119 volunteers were involved to help 26 schools, 115 classes and 984 students in remote area in the north, middle and south to initiate digital learning with a "click", offering the warmest accompany to the children in rural areas.

Taiwan's adoption rate remains high. FET, to help children waiting for adoption to receive proper care in the process of waiting for home, collaborates with Child Welfare League Foundation to promote "Save Abandoned Children, Spread Love Far" project, holding charity sales in all retail stores in Taiwan. At the same time, FET cooperates with friDay Video and friDay Shopping to hold activities such as "home-waiting baby online video exhibition", "Shopping with LOVE", bringing out the issue of child adoption and calls for more helps from general public to help the home waiting babies. In addition, FET uses the concept of "home" to launch the "Cumulate my love, make his home charity money raising festival". Through online and offline collaboration, traditional money raising model is overthrown and the largest caring network in Taiwan is created. So far, FET has helped the Child Welfare League Foundation to raise an accumulated total of over NT\$ 43 million and helped over 1,400 home waiting babies to grow up safely.







of the super-cute 24-hour smart customer service has applied verbal analysis and AI processing program. When users encounter any questions on app operations, rate plans or discounts, etc., the best answers can be provided immediately to users to solve all the problems.

FET's Self-Care APP was awarded the Best Digital Experience Award of Customer Experience Asia Excellence Awards by providing creative, outstanding and thoughtful customer experience management. The APP stood out from many competitors in the Asia-Pacific market, and was also the only Taiwan telecommunications company to win the award.



	FET Overview 2. Sustainable Development Strategy and Performance		; Environment nd Performance	Responsible Governance	Stakeholder Management	Environmental and Social Protection	Appendix
Development Indicators/Direction	2018 Performance	Status of Achievement		2019 Targets		Goals of 2025	
<ul> <li>Provide quality service experience, be a trusted telecommunications provider, and reach the highest level of NPS<sup>1</sup></li> </ul>	<ul> <li>NPS highest level- Grade A and a significant growth compared with 2017</li> </ul>	Achieved	• NPS highest lev	vel- Grade A	NPS highest	t level- Grade A	
<ul> <li>Establish a safe and trustworthy communication environment; successfully gained ISO 27001 information security management certification</li> </ul>	· Gained certification	Achieved	• Continue to ga	in certification	• Continue to	gain certification	
<ul> <li>Fulfill customer personal information and privacy protection responsibility, successfully pass BS10012 personal data management international standards certification to achieve zero personal information leak</li> </ul>	<ul> <li>Gained certification and the number of personal information leaks is 0</li> </ul>	Achieved		in certification and the rsonal information leaks 0		gain certification and the numb formation leaks 0	er of
<ul> <li>Provide customers with excellent quality digital experiences to enhance user digital services usage ratio</li> </ul>	<ul> <li>E-bill usage rate 72%</li> <li>Digital services usage ratio 31%</li> </ul>	Target Adjusted <sup>2</sup>	<ul> <li>E-bill usage rat</li> <li>Digital services</li> </ul>	e 60% s usage ratio of 48%		customers with excellent quality rience and digital services usage	•

Note 1: Net Promoter score, NPS

Note 2: The digital service definition was adjusted and objectives was amended at the end of 2018. The digital services definition is the proportion of payment through IVR/Chatbot/APP/Web and non-payment service contract to all the payment and non-payment service contract.

#### FET 360° Service in Stores Gain 5-Star Recognition



With the main focus of "360° Service" and the integration of "Care" into the DNA of services. FET launched customized service projects and services provided include wet tissue to customers. handset examination and cleaning services. Store employees strive to further understand the demand of customers in the process of serving the customers. Upon completion of the service, a hand written caring card will be given out to make customer service warmer. In addition. FET has been able to provide faster and more efficient services to frequent customers through system identification by AI and big data analysis. The services FET rendered have won the Company First Place honor in the Five-Star Service Award by Global Views Monthly Magazine. The award is deemed as the "Oscar award of Taiwan Service Industry". The Company has also won the Best-Ranking Service Awards on customer Net Promotor Score (NPS), being the number one ideal brand in the heart of consumers.

FET's highest requirements for information and personal security management will always be maintained. In 2018, we fully demonstrated the results of FET's implementation of information security and personal data protection through meeting multi International Certification Standards. In addition to actively introduce the above international standards, FET also established the information security control system over the four areas of information and technology security, personnel safety, physical and environmental safety, and customer personal data protection. In 2018, FET organized 100 training sessions for information security training, with approximately 15,000 participants, and the total number of trainings reached 18,000 hours.

### **Highly Value Information and Personal Data Security**





	Sustainable Development			
	FET Overview Strategy and Performance	Operating Environment Analysis and Performanc	Responsible e Governance	Stakeholder Environmental and Appendix Management Social Protection
Development Indicators/Direction	2018 Performance	Status of Achievement	2019 Targets	Goals of 2025
Ratio of employees in the Innovation field	• 26%	Achieved	• 30%	• 50%
<ul> <li>100% of the Company's system is compliant with the relevant labor laws and regulations to eliminate any invasion and violation of human rights</li> </ul>	• Full compliance with labor regulations and human rights cases	Achieved	• Continuous maintenance	<ul> <li>Maintain the spirit and basic principles of human rights commitment and require the overall supply chain vendors to maintain the spirit and basic principles of human rights commitment. FET will also make supply chain supplier to achieve non-violation of human rights actions.</li> </ul>
• Maintain occupational health and safety's dual certification	<ul> <li>Introduced and Passed the OHSAS 18001 Occupational Safety and Health Management System Certification, and in 2018, FET introduced ISO 45001 Occupational Safety and Health Management System.</li> <li>Certification Mark for Sports Enterprise by the Sports Administration, Ministry of Education and the iSport corporate certification by Global Views Monthly</li> </ul>	Achieved	<ul> <li>Continue to gain double certification</li> </ul>	<ul> <li>Continue to gain double certification</li> <li>Protect employees' health rights and with 100% of employees participate in health promotion activities</li> </ul>
<ul> <li>The employees' freedom of speech is protected by providing diverse and free communication channels. The coverage rate for employee communication is 100% and the communication satisfaction rate is increased year over year.</li> </ul>	• 100% coverage rate through internal communication platform	Achieved	<ul> <li>Employee communication coverage rate is 100%</li> <li>Employee communication satisfaction rate is 65%</li> </ul>	<ul> <li>Employee communication coverage rate is 100%</li> <li>Employee communication satisfaction rate: 85%</li> </ul>
<ul> <li>Incorporate sustainability related KPI into employees and managers' performance evaluation</li> </ul>	<ul> <li>Sustainability related KPI was introduced for Executive Management Team (EMT)</li> </ul>	Achieved	<ul> <li>Incorporate sustainability related KPI for associate directors or above</li> </ul>	• Sustainability related KPI introduced to all employees.
Average training hours per employee per year	• 65.62 hours	Achieved	• 67 hours	• 72 hours
• Ratio of female managers among all managers	• 32%	Achieved	· 32%	• 35%

## "New Generation Elite Program" Talent Recruitment



With the rapid development of the IoT. Al. cloud technology and products, and the upcoming 5G era, promotion of the "New Generation Elite Program" recruits big data, AI and IoT related talents and calls for mobile generation youngsters to join FET. The New Generation Elite Program are designed to cultivate the special training program for big talents in 5G, including three major characteristics: 1. Theory and practice: 2. Practical training evaluation mechanism 3. Career mentoring. Training will last for 18 months and admission to the program is equivalent to a fulltime employee. Program participants can engage in various system development and application service projects as well as marketing projects for the implementation of the online and offline channels, helping them quickly becoming digital professional talents. A total of 38 FET employees have joined FET through admission to the program from 2016 to 2018.

FET launched the "Innovation Award" in response to the digital transformation of FET in 2018. The Company select by looking at whether innovation models and practices are applied in work and the significance of contribution to the organization. This campaign is launched every quarter and the highest awards will receive 120,000 FET points and praised in employee meetings With Chairman presenting the award in person. As of 2018, 63 teams of employees have signed up and 12 teams were awarded, implementing innovation and creating excellent results.

One of the Awardee team in 2018 is the industry's first "mobile phone as the mobile bill" e-service. Following the bills payment notification message, barcode is sent to the customer. Users can directly make payment in the nearby convenient stores by presenting the "Payment Barcode". In addition to reduce the consumption of paper bills, e-bills make bill payments easier and more convenient, and give customers higher motivation in using them.

## Implement Digital Transformation and Advocate "Innovation Award" Selection





	FET Overview 2. Sustainable Development Strategy and Performance		Operating Environment Analysis and Performance	Responsible Governance	Stakeholder Management	Environmental and Social Protection	Appendix
Development Indicators/Direction	2018 Performance	Status of Achievement	2019 Targets	5	Goals of 2025		
• Total GHG Emissions	• 293,817.41	Achieved	• 290,879.24 (reduce 1% a	nnually)	• 242,930.82 (Goal of 2030)		
<ul> <li>Electricity consumption per GB in base station (millions of cards/GB)</li> </ul>	· 0.228	Achieved	• 0.217		· 0.173		
· IDC PUE	· 1.79	Achieved	· 1.77		<ul> <li>1.5</li> <li>The new IDC PUE is set as below 1.3</li> </ul>		
• Total renewable energy generation construction	• 116KWp	Achieved	• 536KWp, a growth of 54 compared with 2016	times	• 1,081 KWp, a growth of 108 •	times compared to 2016	



## Smart Green Energy and Renewable Energy Development Plans

FET has been continuously deepening green energy key technologies. FET cooperated with Prime EcoPower Co., Ltd. in generating energy development plan to install solar power system of 187 Kwp in the self-owned sites in middle and south regions. In addition, FET has cooperated with CPC Taiwan to build intellectual green power gas station. Combing professional partners in various aspects including national top system platform, hardware, engineering and energy, power storage systems are built and power management system technology is provided to create the first "Taiwan Oil and Green Energy Plant" in the country. Not only does the CPC hope to gradually realize the development goals of smart green energy life circle through the industry-government-academia cooperation, but also allows FET's expertise in innovation and technology be used and developed, and contribute the best effort in the green new era.

In the future, FET will continue to provide solutions for the solar system planning, smart electricity grid construction, smart energy platform management, and integrate the expertise of IoT application and big data management, to assist the government and its corporate customers to achieve the goal of smart management.



# Chapter 3

**Operating Environment Analysis and Performance** 

謂

3.1 Operating Environment Analysis 3.2 Annual Operating Performance 3.5 FET B.A.I. Innovation Strategy
# **3. Operating Environment Analysis and Performance**

# **3.1 Operating Environment Analysis**

# **3.1.1 External Environment Analysis**

# **External Factors with Major Impacts on the Year**

Fierce Price Competitions Sustained Pressure on Mobile Revenue Growth

- At the end of December 2018, the total number of 4G subscribers in Taiwan was 27.69 million, an increase of 22.62% from 2017.
- Even though the number of mobile subscribers has grown, the total revenue of Taiwan's Telecom industry in 2018 was NT\$346.9 billion, a slight increase of 0.76% from 2017. The service revenue from Mobile 4G was NT\$160.4 billion, a decline of 4.65% from 2017.
- Facing the issues of fierce rate plan price competitions and the difficulties in terminating postpaid unlimited data contracts, in 2018, the average revenue per user (ARPU) from Taiwan's 4G mobile communication services continued to show a downward trend.
- In 2018, the number of 4G and fiber-optic broadband subscribers in Taiwan continued to grow. Meanwhile, the revenues from data and other value-added services grew by 8% from 2017, which is the highest growth categories in the telecom service industry

#### Information Security Awareness and Human Rights Issues on the Rise Taiwan Officially Entered into an Aging Society

- Facebook's large-scale data leakage incident triggered a rise in global awareness of information security. The EU has implemented the General Data Protection Regulation (GDPR) to strengthen the protection of individual data, with worldwide impact.
- Labor awareness has risen, and incidents like Google walk out, Amazon labor protests, and domestic aviation strikes are happening all over the world. Human rights issues have become the common challenges for enterprises across the board.
- With over 14% of Taiwan's total population aged 65 or older, Taiwan has officially entered into an aging society. There may be potential business opportunities from issues like healthcare, medical services and welfare brought about by maintaining the quality of life for the elderly and managing an aging society.

#### The Government-Industry-University Collaborations in Taiwan Actively Promote 5G Industry Alliance Domestic Telecom Industry Completes NB-IoT Network Coverage

- In June 2018, the 3rd Generation Partnership Project (3GPP) of International Organization for Standardization (ISO) issued the first edition of the "5G Mobile Communication Technology Standards", and the plan is to meet all 5G standards from the International Telecommunication Union (ITU) by December 2019, with the expectation of commercial operation of global 5G services in 2020.
- In 2018, the Ministry of Economic Affairs, the Ministry of Communications, and NCC jointly initiated the "Taiwan 5G Industry Promotion Alliance". In the future, FET will actively participate in the EU's 5G projects and develop a long-term cooperation program.
- · In 2018, Taiwan's major telecom operators successively completed the NB-IoT network for IoT applications, contributing to the integration and introduction of future mobile 5G service applications.



Economic&Market

Social

Technological

# Global Warming Accelerates Climate Change Driving Green Consumption and Business Models

- Taiwan's "The Greenhouse Gas Reduction Act" plans to implement a carbon emission trading system. In the future, the greenhouse gas emissions exceeding the approved allowance may be offset by way of carbon trading. The penalty for emission volume exceeding the allowance is three times of carbon market listed price, with NT\$ 1,500 per metric ton as the upper limit.
- The Intergovernmental Panel on Climate Change (IPCC) issued a special report on warming up of 1.5 degrees, reaffirming the significant impacts of global warming on extreme climate, rising sea level, and melting glaciers, and making it even more critical to grasp the potential financial impacts of climate change on enterprises.
- Climate change may affect consumer product purchase processes and behaviors, such as more online purchases, or the inclination to purchase more low-carbon or climate change resistant products. The transformation of business model is imperative.



#### 3G License's Official Termination Prompted Users to Switch to 4G Telecommunications Act Lifted Restrictions and Encouraged Base Station Co-Construction

- In response to IoT and 5G technology, NCC passed the revised "Low-power Radio-frequency Devices Technical Regulations", and formulated the revisions of "Technical Specifications for Narrowband Terminal Equipment
  of Mobile Broadband Business" and "Administrative Regulations on Radio Waves".
- As the total number of 5G base stations to be constructed is expected to be several times that of 4G, NCC formulated the "Telecommunication Administration Act" (draft), and lifted restrictions on telecom infrastructure requirements, to encourage operators to co-construct, partially leased, or fully leased networks.
- Taiwan's 3G business license was terminated at the end of 2018. At the beginning of 2018, NCC passed the "Action Plan for User Rights Protection in Response to the Third-Generation Mobile Communications Service Termination", enabling consumers to switch to 4G services on their original mobile phones, with original or more preferential rate plans.
- NCC regulates the telecom operators launching rate plans with cross-industry operators shall clearly specify the identities of the telecom service providers, and comply with relevant laws and regulations.

		Operating Environment				
FET Overview	Sustainable Development Strategy and Performance	<ul> <li>Analysis and Performance</li> </ul>	Responsible Governance	Stakeholder Management	Environmental and Social Protection	Appendix

# 3.1.2 Key Sustainability Risks

To ensure that the Company's sustainability strategies are able to withstand long-term challenges, FET continuously observe the ICT industry trend, technology development, policy and socio-economic changes, then compared the results with corporate operating strategy and development directions to identify four key emerging risk factors. In response to the potential impacts and business opportunities presented by the risk factors, FET have devised proper operational strategies to ensure the sustainability of the organization.

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Risk factors	Risks	Impacts	Opportunities	Response Measures
Technology Development and Digital Convergence	<ul> <li>Information and Internet security</li> <li>Advancement of ICT technology (5G)</li> <li>Cross-industry competition and collaboration</li> <li>Recruitment and development of new- generation talents</li> </ul>	<ul> <li>Changes of consumer behaviors and communication patterns, and impacts on traditional telecom service revenues</li> <li>Industry restructuring and technology integration, and how they change the industry's ecosystem and allow new competitors to join the competition</li> <li>Difficulty in recovering costs due to redundancy of technology and shortened product cycles, which both lead to substantial increase of R&amp;D and investment costs</li> <li>Security of Internet content, hackers' attack and information leakage have become key issues of the ICT industry, particularly in the Internet and digital era</li> <li>Talents' professional capacity must grow in line with industry and technology trends, otherwise a talent or technology gap may arise, increasing training costs and impacting the Company's competitiveness</li> </ul>	<ul> <li>Changes of consumer behaviors and communication patterns can create innovative markets and application opportunities. Coupled with innovative technology, products and services, FET can meet or even create customer demand</li> <li>FET has engaged consumers in the mobile field for a long time, and the accumulated data and experiences help us thoroughly understand consumer behaviors</li> <li>Cross-industry collaboration and alliance give FET the opportunity to expand the size of the market and explore new customers and consumer groups</li> <li>New talents may help expand possibilities for the Company</li> </ul>	<ul> <li>Enhance cyber-attack protection mechanism and information security education for all employees</li> <li>Identify and target key development areas, defend the Company's market leadership, and perform more precise R&amp;D and cost control</li> <li>Utilize core technology such as cloud and big data and actively advance cross-industry technology development and strategic alliances to accumulate experience for innovative development</li> <li>Analyze consumers' mobile lifestyle through big data and use the findings as the basis for product design, communication and marketing to deliver user-centric products and services</li> <li>Create synergy within the Group and integrate telecommunications, retailing , e-commerce, banking and other fields to create the foundation for FET's future development in innovative businesses</li> <li>Adjust its human resource strategies to focus on recruiting new-generation employees and developing leadership talents to drive the Company's transformation</li> <li>Strengthen industry-academia collaborations and talent cultivation, improve technological and strategic flexibility within the organization, and develop an innovative corporate culture</li> </ul>
Climate Change and Scarcity of Energy Source	<ul> <li>Carbon control and energy conservation</li> <li>Adapting to climate change</li> </ul>	<ul> <li>[Transformation Risks ]</li> <li>Uncertainties in Taiwan's renewable energy policies result in the increased instability of the Company's costs of energy usage and power supply</li> <li>Global and national greenhouse gas controls result in increased costs of greenhouse gas emissions</li> <li>Low-carbon technology transformation demands by Company's operations and business models lead to additional expenditures</li> <li>[Physical Risks]</li> <li>Frequency of severe typhoons and extreme rainfalls increase, and more frequent natural disasters result in disruptions of operations and services</li> <li>Average temperature rises, resulting in increased instability of electricity costs and power supply</li> </ul>	<ul> <li>Big data analysis and IoT technology contribute to smart low-carbon transformation of households, enterprises and cities, such as: work from home, telemedicine practice, online shopping and other services</li> <li>Deploy energy management and renewable energy industry to create new revenues</li> <li>Effective energy and greenhouse gas management may reduce operating costs, while demonstrating a sustainable brand image simultaneously</li> </ul>	• For further details, please see 6.1.2 Climate Strategy
Policy, Social, and Economic Trends	<ul> <li>Changes in telecommunication Regulations</li> <li>Demographic changes</li> <li>Urbanization and digital divide</li> </ul>	<ul> <li>Government policies on frequency band tendering, licensing, service rates and investments may directly affect operating costs</li> <li>The market of telecommunication service has matured with saturated number of users; growth rate has slowed down as a result</li> </ul>	<ul> <li>Telecommunications deregulation is likely in the future; loosening and removal of investment restrictions may allow telecom operators to engage in business activities that were previously prohibited, and thus create opportunities for new cross-industry collaboration</li> <li>Economic and social changes may give rise to new commercial models or consumer groups</li> </ul>	<ul> <li>FET will closely monitor new regulations and actively participate in policy discussions with the related authorities, and utilize available public opinion platforms to enhance communication</li> <li>FET will change its competitive strategy to focus on product and service quality, and aim to raise customers' loyalty and retention rate.</li> <li>Explore diverse users such as enterprises, roaming tourists, and online marketers/ promoters</li> </ul>

Risk factors	Risks	Impacts	Opportunities	Response Measures
Stakeholder Engagement	<ul> <li>Concerns for electromagnetic radiation</li> <li>Sustainable supply chain</li> <li>Other issues of dispute</li> </ul>	<ul> <li>The public has long been concerned with the issue of electromagnetic waves, and protests against the establishment of base stations</li> <li>In the age of Internet and social media, public opinions spread at such a fast speed that makes it difficult for the Company to respond in time. Mishandling of customer complaint and incident may severely undermine brand image, making customers' loyalty difficult to maintain</li> <li>Consumers now have more service providers and broader product variety to choose from in the market. Consumers' choice of carrier is easily affected by media, peers, relatives and friends.</li> <li>Due to rise of sustainability awareness throughout the world, any lack of sustainability management over the supply chain may result in major environmental and social disputes (e.g. low carbon, fair trade, local purchase etc.) and result in additional costs, risk of supply chain disruptions, and negative impact on brand image</li> </ul>	<ul> <li>Through the use of social media, FET can more effectively track and manage customers' complaints for proper response and crisis management, and thereby maintain brand image</li> <li>Operation of a sustainable supply chain helps raise corporate image and enables development of sustainable products and services, which ultimately improves the organization's ability to retain customers</li> <li>By coordinating environmental management efforts throughout the supply chain, FET aims to adopt low-carbon operations for more effective and efficient resource management, and thereby saving costs</li> <li>FET has the ability to utilize big data analysis to monitor market movements, and introduce more precise and more efficient brand marketing solutions accordingly</li> </ul>	<ul> <li>FET has improved its supplier sustainability management system and conducts regular supplier ESG risk assessments and audits strengthening the establishment of sustainable supply chain</li> <li>Launch strategic co-operations and innovations with suppliers, and jointly drive the sustainable development of the value chain</li> <li><b>Community groups ]</b></li> <li>FET continues communicating with the public on the topic of electromagnetic radiation, to alleviate their health and safety concerns regarding electromagnetic radiation emitted from base stations</li> </ul>

# **3.2 Annual Operating Performance**

internet is increasing and cross-region mobile

internet services are turning into a necessity.





4.2%

# Supply, Demand and Growth of the Future Market

- As the market matures, operators usually place the focus on valueadded services and heavy users. Take the leading international mobile operator, Vodafone, for example – with market growth slowing, its focus shifts from general consumers to enterprise customers. FET proactively collaborates with enterprise application service providers of various industries to promote enterprise ICT integration services, and cloud and IoT applications.
- The demand for mobile digital services is growing every day, and the market competition is heating up. International players also take parts in mobile video/music streaming services and e-commerce markets in Taiwan, indicating the robust development in Taiwan's digital service market.

<sup>5</sup> Source : Taiwan Industry Economics Services <sup>7</sup> 2019 Telecom service industry trend report J <sup>6</sup> Source : 2018 FET Financial report and 2018 mobile service revenue is sourced from public informatio released by each company.

	FET Overview	Sustainable Development Strategy and Performance	- <b>3</b> Operating Environment Analysis and Performance	Responsible Governance	Stakeholder Management	Environmental and Social Protection	Appendix
Market Overview	Market Share				Supply, Demand	and Growth of the Future	e Market
• The telecom market in Taiwan continues to be	• With the 4G penetration satura	tes, the mobile market in Taiwan	has been very challenging. Total	mobile market reven	ue		

0

- The telecom market in Taiwan continues to be dominated by three large and two small players. As the two small operators unceasingly offer competitive rate plans to acquire customers, competition intensifies.
- Digital services market in Taiwan has attracted not only local but also international players to join, for example, Netflix and Shopee. The friDay service leverages the advantage of telecommunication business, improves its own capabilities and carries out integrated marketing to become consumers' best digital partner.

• With the 4G penetration saturates, the mobile market in Taiwan has been very challenging. Total mobile market revenue in 2018 declined almost 6% year-over-year. The decline was greater than a year ago, which dropped 3% YoY in 2017. It is very hard to reverse the declining trend in the short run. The revenue market share changes in the future shall be determined by the new economy business, including: big data, AI, IoT, Cloud business and information security... etc. Operators seek to expand revenues from providing ICT (Information and Communication Technology) solutions to enterprise customers. As for retail customers, operators would continue to ensure network quality, provide good customer services, offer innovative services and applications, along with the bundling of various smartphones and devices with various rate plans, to keep the customers and protect the core revenue. Hopefully, when 5G and more consumer-related applications become available, operators would have the chances to increase the revenue.

FET aggressively exploits the digital service market and many of its products have the scale of over 1 million members. friDay Video has over 2 million users and friDay Omusic has 1.3 million users. friDay Shopping has close to 1 million interactive members each month. More than one-third of FET subscribers enjoy FET carrier billing service every month.

#### **Products and Services**

# **Existing Products and Services**

- Wireless Telecommunication Services: Provide mobile telecommunications services, including 4G voice calls on mobile phones and data communication services along with value-added services. Those services are categorized into postpaid and prepaid according to payment methods.
- Fixed Line Communication Services: This includes domestic phone call service, long-distance call service, 007 international call service, Wagaly Talk cost saving service, etc.
- New Economy: friDay digital services include friDay video, friDay Omusic, friDay wallet, friDay shopping and friDay photobook. And also provides direct carrier billing of payment service, personal tracker "Bobee," and smart speaker of consumer IOT product.

#### New Products or Services under Development

• FET provides different pricing plans to different target audiences. We will stay connected to consumers' needs, lead the industry • We persistently integrate online and offline sales services and introduce various smart 3C products. Based on our

Based on the brand spirit of FET and friDay, we continue to develop diversified digital services to meet consumers' needs and satisfactions including mobile entertainment, mobile payment, e-commerce, and personal Al assistant.

#### Consumer Business Market Ratio of Product/Service Revenue



and introduce various smart 3C products. Based on our objective of "FET Connects and Enriches Life", apart from introducing integrated services for the ICT market, we consistently improve the service quality of local stores to enhance customers' experience with innovative services including communication devices, voice calls, broadband and value-added services. By the end of 2018, the total number of store is around 900, comprising FET, ARCOA, and Data Express, enabled customers to experience enhanced professional service and care via wide store coverage.

Main Products and Service Area

 FET digital content services are available all over Taiwan, including friDay video, friDay Omusic, friDay Wallet, friDay Shopping, friDay photobook, direct carrier billing, Bobee, and smart speaker. Services are all catered to consumers' needs.

<sup>8</sup> Since Q-WARE was closed after merged with FET at the end of June, 2018, the number only include Q-WARE's wifi revenue from Jan. to June 2018. Therefore, the amount of 2018 was drastically less than 2017.

#### Long-term & Short-term Sales Development Plan

#### Short-term Plans

#### · Expand market share and build high-value, loyal customer groups.

- · Dedicate to the development and promotion of new products and values-added services.
- · Dedicate to building a corporate brand trusted by customers.
- · Continue to improve network guality and infrastructure.
- · To cater to the digital lifestyle of the mobile generation, FET launches "FET Self-Care App" as the one-stop Online to Offline (O2O) service.
- · Provide diverse mobile value-added services by cooperating with digital content providers.
- · Develop new financial service, focusing on the youth and provides them exclusive experiences
- · Leverage big data to analyze consumer behavior and enhance precision marketing to satisfy customers personalized needs.
- · Shape FET and friDay brand image, strengthen customer experience and loyalty, and establish customer-first spirit.

#### **Long-term Plans**

- Keep up with the trends of global communication network technology and product development.
- Combine services of fixed network, mobile phone and internet access through strategic alliances and integration of internal resources to stay abreast of the digital convergence trend. Strengthen human resources by enlarging talent reserves in the field of telecommunication to facilitate the expansion of operations.
- Continuously promote four major services: digital content, mobile financial services, e-commerce, and AIoT. Products shall meet customers' demand in aspects of content, price and services and to set new profit target by differentiate product and services.

#### Advantages and Disadvantages of Future Developments and Countermeasures

- $\cdot$  4.5G 3CA offers the best indoor and outdoor signal, professional management team, outstanding corporate image, and technology advancement, all points to mobile phone will be the integrated media for all kinds of information transmitted. 5G Market is about to enter the stage of commercial operation which will bring the demand of IoT, IoV and so on.
- The initiation of mobile number portability intensifies the SIM card competition among operators, overall revenue shrunk due to NCC (National Communications Commission) restriction on telecom market pricing and CHT's (Chunghwa Telecom) "Last-mile" advantage on broadband network and fixed net services
- · Based on the combination of mobile communication and internet, to build up multi-media services of communication and internet and then provide integrated mobile internet services.
- · Offer a variety of value-added rate plans to customer.
- · Differentiate products and services in order to avoid Red Ocean competition that leads to a price war.
- · Be precise to segment customers and their needs, so as to increase overall revenue.
- · Continue to upgrade island-wide 4G coverage and improve transmission speed.
- · Deploy 5G Market aggressively and provide a whole new kind of network.

# **Enterprise Business Market Analysis**

#### **Market Overview Market Share** Supply, Demand and Growth of the Future Market · Affected by trends of ICT integration and digital convergence, . As of December 31, 2018, · The free instant messaging software and fierce price competition result in a flat or slightly declined market for traditional the market of corporate sector has shifted from traditional sales from enterprise telecommunications services. telecommunications services to ICT integration, providing customers account for 17% • In the fixed-network market, the domestic fixed communications revenue declined by 5% comparing to 2017, according to the customers with applications which integrated telecommunication telecommunications market revenue analysis published by NCC. Among which, landline network, long-distance network and international of our overall revenue in services, mobile commerce, cloud platform, big data analysis 2018. We are committed to network were down by 3.4%, 7.6% and 10.1%, respectively. and IoT. We aim to build one-stop services and solutions that provide better services in • With regard to fixed broadband access services, the NCC data indicate a small increase in the number of accounts, which went from 5.7 are more diverse, intelligent, flexible and in line with industrial the future. million in the early 2018 to 5.71 million by the end of year. The continuous promotion of high-speed broadband plans by internet service features. providers, the increasing speed from xDSL to fiber optic internet and the huge increase in the demand for video transmission from 4G · In the enterprise user market, Chunghwa Telecom, with its generation consumers led to a small increase of 0.1% in the number of FTTx and Cable Modem users in 2018. fixed network services and economies of scale, continues to • TWNIC's long-term survey, "A Survey on Broadband Internet Usage in Taiwan", states that there are 17.38 million internet users aged 12 and be our primary competitor and industry leader. In addition above in Taiwan and the total number of users is estimated to be 18.66 million, which is equivalent to an 79.2% internet usage rate. The

to continuously improving the 4G network development and investing in the 5G and IoT technology research, the Enterprise and Carrier BU takes on a more aggressive approach in developing intelligence applications and solutions to fulfill the needs of various industries and government departments. Those applications and solutions cover sectors of smart city, smart transportation/Internet of Vehicle, smart medical treatment/ healthcare, smart manufacturing and smart retail. We aim to differentiate ourselves from competitors in the enterprise market with strong innovation skills and integration ability plus flexible services.

- mobile internet usage rate increases over the years, hitting 70% mark in 2018 while Wifi usage declined 15%.
- · In recent years, the increasing market penetration of smart mobile devices demonstrates the importance of fixed-mobile convergence (FMC). The rapid developments in cloud computing and technologies such as IoT, big data, artificial intelligence and robots bring brand new market growth opportunities.

70%

60%

50%

40%

30%

20%

10%

0

Sustainable Development Strategy and Performance



Responsible Governance

**New Economy Business Market Ratio** 

Stakeholder Management Environmental and Appendix Social Protection

#### **Products and Services**

#### **Existing Products and Services**

#### New Products or Services under Development

 Professional telecommunication integrated services: mobile service, broadband service, mobile data service, mobile voice service, fixed network voice service, data communication service, internet data center (IDC) and cloud application service.

- Cloud services: Integrate telecom resources with cloud platforms of international corporations (e.g., AWS, Microsoft Azure/Azure Stack, VMWare); provide one-stop services incorporating deployment, construction, transfer, and maintenance; and formulate enterprise public, private, and hybrid cloud structures.
- Information security services: Integrate the professional information security consulting services of subsidiary Information Security Service Digital United Inc., to offer the safest and most reliable, as well as flexible and cost-effective, solutions for information security.
- New economy: FET provides enterprises professional ICT integration solutions with flexibility for customization. At the same time, the Company establishes the IoT ecosystem with hundreds of partners. It integrates innovative applications such as NB-IoT technology, Big Data, and AI via mobile services to customize more flexible services for enterprise users and government departments. FET builds diverse IoT applications encompassing smart city, smart transportation/IoV, smart healthcare, smart manufacturing, and smart retail.

The Market Intelligence & Consulting Institute (MIC) indicates that in 2019, the global ICT industry will focus on FET provides enterprise customers with services 5G, IoT, AI, and blockchain developments, which encompass peripheral applications such as edge computing, ranging from domestic and international ASIC, FWA, sensing elements, and smart devices.

#### Enterprise Business Market Ratio of Product/Service Revenue



#### Main Products and Service Areas

FET provides enterprise customers with services ranging from domestic and international voice, data, mobility, roaming to cloud along with corporate solutions including IoT and ICT integration. Taiwan is our main market. Details on the sales of cloud and IoT services are as follows:

- Cloud: The key customers are enterprise customers in Taiwan. FET can assist companies with deploying their services at cloud platforms in Taiwan or other countries.
- IoT: The key customers are enterprise customers in Taiwan. FET can not only assist customers with developing local applications, but also help the manufacturing industry with developing IoT applications for products. As the demand for IoT application increases, FET will also assist multinational enterprises to promote the IoT applications of their products in Taiwan.

#### Long-term & Short-term Sales Development Plan

S	hort-	term	plans

# Long-term plans

 FET will continue to improve the telecom infrastructure; integrate IoT, AI, and Big Data on a professional telecom basis; and offer professional total solutions with flexibility for customization, providing them to government departments and large enterprises. These will include applications of NB-IoT in different industries, as well as additional comprehensive smart information security and diverse cloud services. Also, FET provides one-stop cloud digital instruments to small and medium-sized enterprises to satisfy their needs for enterprise transformation and IT-based services.

 FET will utilize its professional ICT capability and vast experience in customization as it remains committed to nurturing talent and developing technologies associated with innovative applications. It will promote the transformation and innovation of Taiwan industries in the IoT era, integrate innovative applications of the cloud, IoT, Big Data, and AI; and it will realize the goal of "AI industrialization and industrial AI" in order to assist domestic industries and enterprises with upgrades and speed up the practical applications of AI in the 5G era.

#### Advantages and Disadvantages of Future Developments and Countermeasures

• Building long-term relationship with enterprise customers and having a basic telecommunications customer group facilitate the promotion of value-added ICT integrated services. On the other hand, enterprise-related services and products can be sold via our nation-wide stores.

• The telecommunications market becomes saturated in recent years. Each player also actively competes in both developing and providing enterprise customers integrated ICT services.

 FET will utilize our vast selling experience as we aggressively develop solutions in mobile applications, IoT, cloud computing, Big Data, information security, and AI. These efforts will be tailored to different industrial features in order to satisfy different customer segments and groups. Furthermore, we will collaborate with international telecom carriers to offer localized professional services to international enterprises. We will move toward becoming a comprehensive "ICT service provider" and assist users to successfully achieve comprehensive digital transformations.

# 3.3 FET B.A.I. Innovation Strategy

According to International Data Corporation, IDC's 10 major upcoming trends in Taiwan's ICT (Information and Communication Technology) market published in 2019, it was predicted that 2019 is a key to "Race to Reinvent for Multiplied Innovation". Enterprise must speed up their pace in digital transformation. If speeding up digital innovation and technological application is not possible, two-thirds of market opportunities will be lost by 2022. In face of intense competition and challenges, FET has the mission of becoming the best partner of the customer's digital life. Leveraging the expertise of the excellent mobile communication technology, big data analysis, artificial intelligence and IoT, we will work together with business partners from various fields to create forward-looking application technologies in various aspects and strive to create a diversified ICT innovation service.

FET has launched the digital transformation program 2020, and has planned the application of Big data, AI and IoT, and has been able to cooperate with the government's promotion of smart city to realize self-driving field, and further display the smart transport or smart city new 5G application services to drive Taiwan's digital transformation. In 2020, the target for ratio of digital talents in FET is set to 30%, while corporate and digital services 35%. We wish to apply FET core technology and abilities in various areas: enhanced customer network experience, public transportation planning via big data analytics to assist government and enterprises increase their revenue and effectiveness; network efficiency prediction and smart base station management so as to collaborate with strategic partners and develop technology and talents; promote the upgrade of IoT ecosystems so as to stimulate the development of Taiwan IoT industry. FET wishes to first implement these values internally and then promote the technical capabilities and innovative applications externally to assist consumers, enterprises and collaborators from various areas to shape the vision of smart life, smart business and smart city.



- · Created a one-stop telecommunications service in collaboration with LINE to provide convenient application methods and special offers
- · Launched the first localized Taiwanese "FET Smart Speakers" to enrich applications in home domain
- · Launched the first "NB-IoT-IoT ecosystem" in Taiwan to become the first NB-IoT telecom provider in Taiwan.
- FET's Tainan smart city project was selected as 2018 Smart City Forum Global Top 7 Smart City



# 3.3.1 Smart Life

The FET subsidiary digital brand friDay insists in creativity and innovation and aims to become the most preferred partner in digital life. From basic necessities of life to recreation and entertainment, friDay offers consumers a full range of smart digital services, so Taiwan people can enjoy a more digitalized and mobilized life. In 2018, Aside from continuing to provide quality digital entertainment and online shopping service for consumer, new smart speaker was introduced to bring consumers a new smart life application, which works with smart home internet connection and provides various smart home services.

	2018 Number of Users/Downloads <sup>9</sup>	2018 Revenue Growth Rate	2019 Expected revenue growth rate			
	2 million	25%	50%			
<b>friðay</b> Video	friDay Video is the leading online video streaming service in terms Golden Horse Award for six consecutive years. The average numb break down online and offline fence and to cooperate with local c through strategic cooperation, with the rapid developing markets o expansion.	per of audience has exceeded a million. The friDay Video cont able TV manufacturers to enter the home entertainment marke	inued to invest in film distribution, strengthen vertical integrati et. friDay Video will continue to develop new business opportunit			
	740 thousand	10	-			
friday Shopping	friDay Shopping launches various value offers based on consumer at a more affordable price. In addition, friDay shopping launched " designed golden card program.					
	1.3 million	30%	15%			
friday Omusic	friDay Omusic has more than 3 million of the latest and most popul consumers can enjoy the company of music any time. At the same of promoting local music, friDay Omusic supports the innovation a Awards " in 2018.	e time, both Apple Watch and FET's smart speaker support fri	Day Omusic, making music listening at home most easy. In the sp			
	10 thousand	200%	100%			
Bobee	BoBee is a positioning device developed by FET. It is the only electric positioning device that can support golden 72-hour emergency rescue in the market. With the patented dual-frequency (bas station + GPS) technology, FET provides whole day uninterrupted positioning services to the family with elderly, smaller children, and even pet owners.					
	25 thousand	11	320%			
FET Smart Speaker	FET Smart Speakers has built-in smart voice assistant with local Taiwan accent of the Chinese language. By voice commands, users can initiate a variety of smart lifestyle applications, including friDay Omusic, Weather Forecast, Air Quality, Radio Broadcasting, Audiobook, Call Taxi, etc. In addition, smart home networking devices are available for linkage to access voice control of the home appliances and realize more smart home services.					
	1.41 million	5%	10%			
	FET is the first in Taiwan to launch both the Android and iOS Direct Carrier Billing (DCB) services, the average amount consumed and number of transactions per customer has both gradually increased. FET has again taken the lead in Taiwan and exclusively launched the Microsoft Store carrier billing service in 2018. The one-stop shop service enables users to receive free and paid applications directly. In addition, FET's bills can also collect parking fee for 11 counties and cities in Taiwan.					
		nanged from revenue to profit, the sales volume of low-margin products and services	riDay Omusic ; Active Users – E bill payment; Interactive member number –friDay Shop ; were reduced.			

<sup>&</sup>lt;sup>12</sup> Direct Carrier Billing, DCB

		Operating Environment				
FET Overview	Sustainable Development Strategy and Performance	<ul> <li>Analysis and Performance</li> </ul>	Responsible Governance	Stakeholder Management	Environmental and Social Protection	Appendix

# 3.3.2 Smart Business

For enterprise users, FET is committed to the concept of "customer service orientation" to provide One-Stop Shopping ICT Integration solution for the different needs of the industry. In the future, the Company will continue to make use of technologies in 5G, IoT, Big Data, private cloud, cloud-based network management and storage, etc., to provide corporate customers with a comprehensive mobile business service, including service for information security, data center establishment, cloud integration and mobile applications, leading corporate customer to move toward full digitalization.





# Smart Owner

The Taiwan SME has grown rapidly and has already accounted for 78% of the overall employment market. To assist Taiwan SME with digital transformation, FET launched the "Smart Owner " one station digitalized toll and O2O solution to provide SME with all the necessary tools for digitalized operation, helping new enterprises to quickly move forward to become a digitalized enterprise and create best possible customer experiences.



# **EMMA Corporate Mobility Platform**

FET strives to innovate in digitalization and IoT solutions. EMMA (Enterprise Mobility Messaging Assistant) has transformed from corporate ICT platform into a corporate mobilized platform in 2015, and provides the enterprise with secured immediate internal communication channel under the private cloud architecture, working with international giant manufacturer MobileIron to provide mobile devices and information safety protection management for various business processes. In addition, the IoT technology is also used to assist companies in different industries to meet diverse applications development needs. Currently, there are already about 100 companies that have incorporated the use of the platform or in testing stage. Nearly 30 enterprise innovation applications had been successfully developed on this platform.



# BYOD, Mobile Device Management Solutions

Popularization of mobile device has driven the global wave of BYOD (Bring Your Own Device). According to Gartner, most companies only regulate the use of company devices, and there is little corresponding management measures for employees' own device, forcing enterprises for a solution to balance between data confidentiality, employee privacy and usage flexibility. FET provides the BYOD mobile device management solution which is most suitable for use in enterprises in manufacturing, retail, finance, service, medical, food and beverage to import their needs regarding device access control, Email/Approval system integration, access and management of internal sensitive information into BYOD application, and guard for corporate information security, resulting in more than double growth for BYOD service.

# 3.3.3 Smart City

FET took the lead to be the first one in Taiwan to launch the "NB-IoT ecosystem" in the end of 2017. The Company has introduced the growth momentum of IoT with more than 300 companies in upstream and downstream software and hardware fields to join as cooperation partners and created the largest IoT ecosystem in Taiwan. FET has upheld the R&D spirit of solving municipal administration issues by innovative technology solutions and integrating cloud IT technology, big data collection analysis, NB-IoT applications and AI professional capabilities. 5G innovative application is incorporated to bring along smart city transformation, and quickly extend smart city construction experience to all counties and cities throughout Taiwan. The cities are currently cooperating with FET, including New Taipei City, Tainan City, Taioyuan City, Chiayi County and Yilan County Government. Among these, FET cooperated with Tainan City in depth and further helped to assist Tainan City to be awarded as the world's top seven smart city in Intelligent Community Forum (ICF) in 2018.

Smart Driving The idea is to put tracking device in the vehicles and collect information through the NB-IoT network service. The location and the routes of the vehicle will be monitored through the platform to achieve the applications of the Internet of Vehicle. FET has targeted the global supply chain of Internet of Vehicle. In 2018, it joined 5G Automotive Communication Technology Alliance (5G Automotive Association, 5GAA) to become the first telecom operator in Taiwan that joined the league. 5GAA gathers world class vehicle manufacturers and ICT leading brands together to develop ultimate solution for intelligent transport service.



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Smart Street

Lights

FET has acquired the Air Quality Sensor and IoT design project for the air quality sensor in Yilan City, New Taipei City and Tainan City, assisting in the construction of air quality sensors in the industrial parks and uploading the quality sensor data to the designated information platform of Environmental Protection Administration, Executive Yuan. This makes sure the air quality data is open and public to ensure the local environmental bureau can take control of the highly-polluted areas, reinforce environmental audit process, and improve the environment quality.



The "NB-IoT Smart Outdoor Parking Information System" created by FET in Taoyuan City was installed in 400 parking spaces, providing a timely and accurate parking information for citizens in the Taoyuan City. Because of the improved management efficiency, it not only increased the usage of the car parking spaces, but also answered to the problems from car congestion, illegal parking, and air pollution. FET has been selected as the "Pilot Project for Silicon Valley in Asia" by the Industrial Development Bureau, the Ministry of Economic Affairs to install smart lighting facilities in several industrial parks in Taoyuan. Cooperation with leading smart lighting vendors like Delta and ORing have been carried out to not only provide basic lighting management, but also offer smart lighting management platform and diverse value added applications including micro base stations, micro weather forecast stations, Digi boards, chargers, car flow monitoring, emergency reporting system, and solar energy generation. Crowd Flow Analysis

 $\sim$ 

Big Data

nnovation in

Traffic

The "Taiwan Lantern Festival 2018" organized by the Chiayi County Government has been launched for the first time. The government cooperated with FET to conduct the statistics and flow detection of the Taiwan Lantern Festival. The Taiwan Lantern Festival has been actively updated with the crowd flow detection and the flexible adjustment of the resources planning for the event of the Chiayi County Government. After the lantern festival, FET also analyzed the interest in the domestic and international tourists by analyzing information such as the crowd-intensive area and retention time. Such information can be used in tourism promotion and traffic planning for the Chiayi government.

FET has been utilizing Signal Data to generate various physical footprint data sets for FET users, including customers' footprints, residence place, and work place. After the de-identification process, relevant analyses such as geographic crowd flow, traffic, and retail fields have been conducted. In 2018, FET established Transformation Office (TO) to have cross-team collaboration with Enterprise& Carrier Business Unit (EBU), the Advanced Intelligent Transportation Service (AITS) was then founded. The task-oriented innovative team was created to pay special attention to smart traffic solutions and data application in the fields of market management and products/services development. Subsequently, FET has worked on the telecommunications big data projects with several City Governments, the Tourism Department and the Institute of Transportation. Four services are developed so far:

- Starting and ending points distribution: Analyze the characteristics and purpose of the regional travel behavior as the base for the strategic planning of traffic situation / condition.
- 2.Road speed: provide accurate and instant road speed information as a performance evaluation indicator for various transportation management
- 3.Route: mastering the regional transportation behavior and optimizing planning strategies to assist traffic management measures
- 4.Hot Spot Analysis: Understand the flow and traffic hotspots, provide business expansion and location selection opportunities



#### Award-winning case "Traffic Lights Cooperation Plan for National Highway No. 1, Provincial Highway 74 and Freeway".

FET and Taichung City Government had an in-depth collaboration on project "Traffic Lights Cooperation Plan for National Highway No. 1, Provincial Highway 74 and Freeway", which used mobile communication technology, IoT application, and big data analysis expertise to introduce the intelligent traffic management system. With regard to the long-term serious traffic congestion in the surrounding area of Taichung City Taiya Interchange, several measures were taken. Intelligent regional adaptive signal control is introduced; advanced traffic detection equipment such as traffic detectors, RFID detectors, CCTV monitors, etc., are integrated to monitor real-time regional traffic conditions; LED information display board is used to announce travel time and guidance information of substitute routes. Through the integration of diversified traffic information, traffic congestion around the Taiya interchange surrounding area is relieved. During the two-week system trial run in 2018, the travel time was reduced by 9.6%, the total traffic volume increased by 7.6%, and the alternative route guidance diverted up to 35% of the traffic file. When the first successful application of the "Dynamic Traffic Light Optimization System" in Taiwan, which was updated every five minutes, effectively solved traffic congestion problems and reduced labor costs. It was awarded the "Dynamic Traffic Light Optimization System" by the Ministry of Communications.



# Chapter 4

# **Corporate Governance**

4.1 Corporate Governance Framework
4.2 Implementation of Sustainable Governance
4.3 Ethical Corporate Management
4.4 Business Risk Management
4.5 External Participation

# 4. 公司治理

Since 1997, when FET was established, FET has made progressive steps in improving corporate governance, supervisory framework and business integrity, as the organization believes that a streamlined governance system with clearly defined responsibilities is the key to building a culture of responsible governance, and the foundation to long-term profi-tability and value creation.



- Highlights
  - Celebrated as the "Industry Mover" in the 2019 Sustainability Yearbook published by RobecoSAM, the only telecome operator in the world awarded this honor
  - Won six awards in "2018 Asia's Best Companies" from FinanceAsia, including Taiwan's "Best Managed Companies", "Best Investor Relations", "Most committed to Corporate Governance", "Best CFO", "Best CEO", and "Best at Corporate Social Responsibility"
  - Won the Exemplar Award in Global Views Magazine's 2018 "CSR Annual Grand Survey Service Division"
  - Won the "Transparency and Integrity Award"in the 2018 Taiwan Corporate Sustainability Awards



Operating Environment Analysis and Performance

Stakeholder Management Environmental and Social Protection Appendix

# **4.1 Corporate Governance Framework**

The Board sits atop the managerial level of the company, with responsibility for appointing and supervising the management team, monitoring operating performance, preventing conflicts of interest and ensuring compliance with laws, regulations, and the Articles of Incorporation of FET. FET has "Audit Committee," "Remuneration Committee," "CSR Committee" and "Risk Management Committee" in place to support management of the organization. Activities and decisions of the respective committees are reported regularly to the Board of Directors. FET has a clearly defined organizational structure with different business groups under the President's management. The Chairman of the Board of Directors does not assume daily operations to establish a governance structure that is objective and independent from management. For detailed descriptions on the responsibilities of existing departments, please refer to FET's 2018 annual report.

In order to provide local and foreign investors with correct and detailed information, FET has created an Investor Relations section on its official corporate website that provides constant update of the latest financial, business and CSR news. Furthermore, for the convenience of shareholders and stakeholders local and abroad, all information disclosed in annual reports, conference manuals, the Taiwan Market Observation Post System (M.O.P. S.), CSR reports and websites have been made available in both Chinese and English.

**Organization Structure** 

#### Shareholders' Meeting Audit Committee Remuneration Committee Board **Risk Management Committee** Board of Managing Directors Internal Audit **CSR** Committee Chairman President Occupational Safety & Health Office Human Consumer Omni Channel Enterprise Transformation Network & Information Strategy & PR & Brand Legal & Resources ΒU Management & Office Technology Technology Finance Management Procurement & Facility Carrier BU

# Composition and functionality of the Board of Directors

FET's 8th Board of Directors has 11 directors who serve a term of three years from June 14, 2018 until June 13, 2021. In order to implement and strengthen the functions of the Board of Directors and to exert its supervisory function, FET regularly conducts the re-election of directors. The average serving time of the members of the Board of Directors is eleven years. The Board of Directors includes three independent directors and one female director, whose presence ensures independence and brings diversity along with stakeholders' opinions to the Company's governance system. Board of Directors members are chosen through stringent selection procedures using the nomination system, in which shareholders are able to exercise rights to the fullest extent for the best corporate governance effect. Independent director candidates are required to comply with the independence criteria outlined in "Regulations Governing Appointment of Independent Directors and Compliance Matters for Public Companies." The selection process takes into account not only candidates' professional capacity, but also their ethical behaviors and leadership reputation.

FET welcomes directors with extensive global vision, management experience or academic achievement to join its board. With greater diversity in the Board of Directors, board members will be able to contribute objective opinions on different areas of expertise (such as telecommunications, finance, economics and corporate governance) to the management, and guide the Company's strategies on economic, environmental and social issues, which leads to the best decisions for shareholders and the society. FET also purchases liability insurance coverage to protect itself from liabilities, risks and ¬financial losses that arise as a result of third party lawsuits ¬led against directors for business decisions they have made.

Title	Name	Nationality	Gender	Major Experience	Concurrent duties in the Company and in other companies
Chairman	Douglas Hsu, Representative of Yuan Ding Investment Co., Ltd.	R.O.C.	Male	President of Far Eastern New Century Corporation	Chairman of Far Eastern New Century Corporation; Chairman of Asia Cement Co., Ltd.; Chairman of Far Eastern Department Stores Ltd.; Chairman of Oriental Union Chemical Corp.; Chairman of U-Ming Marine Transport Corp.; Chairman of New Century InfoComm Tech Co., Ltd.; Vice Chairman of Far Eastern International Bank
Vice Chairman	Peter Hsu, Representative of Yuan Ding Investment Co., Ltd.	R.O.C.	Male	Vice President of Ding & Ding Management Consultants Co. Ltd.	Vice Chairman of Far Eastern New Century Corporation; Director of Asia Cement Co., Ltd.; Supervisor of U-Ming Marine Transport Corp.
Managing Director	Jan Nilsson, Representative of Yuan Ding Investment Co., Ltd.	Sweden	Male	Vice Chairman of Far Eastone Telecommunications Co., Ltd.; President of Far Eastone Telecommunications Co., Ltd.; Sr. Executive VP of Satelindo Telecom Indonesia	None
Independent Director	Lawrence Juen-Yee LAU	Hong Kong (China)	Male	Academician, Academia Sinica, 1982; Kwoh-Ting Li Professor in Economic Development, Stanford University, U.S.A.; Vice-Chancellor (President) of The Chinese University of Hong Kong; Chairman of CIC International (Hong Kong) Co., Limited	Ralph and Claire Landau Professor of Economics, The Chinese University of Hong Kong; Independent Non- executive Director, CNOOC Limited in Hong Kong; Independent Non-executive Director, AIA Group Limited in Hong Kong; Independent Non-executive Director, Hysan Development Company Limited in Hong Kong; Member of the Hong Kong Special Administrative Region Exchange Fund Advisory Committee; Member of its Currency Board and Investment; Vice-Chairman, Our Hong Kong Foundation; Member and Chairman of the Prize Recommendation Committee, the LUI Che Woo Prize Company; Chairman, Board of Directors, The Chinese University of Hong Kong (Shenzhen) Finance Institute, aka Shenzhen Finance Institute
Independent Director	Tim Pan	R.O.C.	Male	Chairman and CEO of Gemfor Technology; Co-founder and CEO of GoldKey Technology; Board member of St. John's University	Senior Outreach Director, Microsoft Research Asia
Independent Director	Chung Laung Liu	R.O.C.	Male	President and Mei Yi Che Honorary Chair Professor of National Tsing Hua University, Taiwan; Professor Emeritus of University of Illinois at Urbana-Champaign, U.S.A	William M. W. Mong Honorary Chair Professor, National Tsing Hua University, Taiwan; Director of United Microelectronics Corporation; Independent Director of Microelectronics Technology Inc.; Independent Director of Powerchip Semiconductor Corporation; Director of Macronix International Co., Ltd.; Director of UBI Pharma Inc.; Supervisor of Andes Technology Corporation; Independent Director of Accton Technology Corp.
Director	Champion Lee, Representative of Yuan Ding Co., Ltd.	R.O.C.	Male	President of Yuan Ding Co., Ltd.; Sr. EVP of Far Eastern New Century Corporation	Director of Far Eastern New Century Corporation; Director of Asia Cement Co., Ltd.; Director of U-Ming Marine Transport Corp.
Director	Jeff Hsu, Representative of Yuan Ding Co., Ltd.	U.S.A.	Male	Worked as a Strategy and Design Consultant in the United States with clients ranging from hi-tech startups to Nestle Denso Automotive, Kia Motors, and Target.	
Director	Keijiro Murayama, Representative of U-Ming Marine Transport Corp	Japan	Male	Senior Manager, Smart-life Solutions Department, Smart- life Business Division, NTT DOCOMO, Inc.	Executive Director Asia Business, Global Business Division, NTT DOCOMO, Inc.
Director	Bonnie Peng, Representative of Asia Investment Corp.	R.O.C.	Female	Chairperson of the 2nd term of National Communication Commission; Professor, Department of Journalism (Graduate program), National Chengchi University, Taiwan	Adjunct Professor, College of Communication, National Chengchi University; Adjunct Professor, School of Communication, Ming Chuang University.
Director	Toon Lim, Representative of Ding Yuan International Investment Co., Ltd.	Singapore	Male	Chief Operating Officer, SingTel Group	Advisor, SingTel Group; Board Director, APT, Satellite, HK

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The Board of Directors convenes meetings at least once every quarter. Pre-board meetings are held one day before each Board of Directors meeting so that the executive management may discuss with the Board members in advance about the proposals or resolutions that are to be raised during Board of Directors meeting. The scope of discussion covers diverse topics from operational strategy to business risks. All departments of the business units also compile key issues, major risks, and key performances quarterly and report to Chairman, such as major investments, charity projects, and overall energy-saving performances to ensure that the Board of Directors understands the company's overall operations.

Independent directors' opinions are fully taken into consideration in all Board of Directors discussions. Any disagreements or opinions from independent directors are reasoned and recorded in meeting minutes, and disclosed to investors as material information. The Board of Directors held a total of five meetings from 2018 to Q1 2019. Directors' attendance rate was 87% in terms of personal attendance, and 100% when including proxy attendance. FET has a set of "FET Corporate Governance Best Practice Principles" in place to ensure the robustness and effectiveness of the governance system. In shareholder meetings, an electronic voting system on a case-by-case basis is adopted, and FET has a "Corporate Governance" section available on its website to disclose detailed voting results for all proposals, providing shareholders with more diverse ways to vote on meeting agendas.

FET Corporate Governance section: Board of Directors-related information





# Avoidance of conflict of interest by directors

None of the Board of Directors members held equity stake in any of FET's main suppliers. To prevent conflict of interest at Board of Directors, Article 11 of the Board of Directors Conference Rules states that directors must uphold high level of selfdiscipline and disassociate themselves from board meeting agendas that present conflict between the Company's interests and interests of the directors themselves or the corporate entities they represent. Directors will have their votes voided if they are found to have failed to avoid conflict of interest. All directors of FET adhere to the principle of self-discipline and carry out interest avoidance. The outcomes of following the principle of self-discipline from 2018 to the beginning of 2019 are illustrated as below:

Company	Date of Board Meeting	Proposal contents	Status of the conflict of interest	Outcomes of following interest avoidance
New Centry InfoComm Tech Co., Ltd.	May 4, 2018	Planned to fund its parent company FET with a loan of no higher than NTD 10 billion	Chairman Douglas Hsu has conflict of interest since he also is the chairman of FET	Except Chairman Douglas Hsu has conflict of interest so he cannot participate in discussions and vote, all other attending directors vote for approval without objection.
New Centry InfoComm Tech Co., Ltd.	August 1, 2018	Established "Prime EcoPower" as sole proprietorship	Director Philip Tseng has conflict of interest since he also is the chairman of Prime EcoPower	Except Director Philip Tseng has conflict of interest so he cannot participate in discussions and votes, all other attending directors vote for approval without objection.
New Centry InfoComm Tech Co., Ltd.	November 5, 2018	Participated in the subscription of Prime EcoPower's capital increase for no higher than NTD 160 million	Director Philip Tseng has conflict of interest since he also is the chairman of Prime EcoPower	Except Director Philip Tseng has conflict of interest so he cannot participate in discussions and votes, all other attending directors vote for approval without objection.

# **Director performance evaluation**

# Self-Evaluation

Yearly

FET's Board of Directors passed "Rules and Procedures for the Board of Directors' Performance Assessments" as a means to ensure ongoing improvement of board performance. FET's performance evaluation procedures require "Self-Evaluation Questionnaire for Board Members" to be completed by Board of Directors members and "Evaluation Form for the Agenda Working Group" to be completed by the Treasury and Credit Management Division of the Strategy and Finance Group. Outcome of the evaluation is reported to the Board of Directors in the first quarter of the following year by the Strategy and Finance Group. Regarding items to be improved, the Company has appointed an external independent evaluation institution to conduct evaluations of board performance in 2018. The overall evaluation result is good and has been reported in the 5th meeting of the eighth-term Board of Directors on February 20, 2019. Based on this year's results, in 2019, "organizing appropriate orientation for new directors" has been identified as the aspect that can be optimized.

#### Director Performance Evaluation Procedures

Review the design of self-assessment



Every

Treasury and Credit Management Division of the Strategy and Finance (S&F) completes an "Evaluation Form for the Agenda Working Group" based on actual execution of the annual agenda

Beginnin of the following

S&F reports outcome of overall assessment during the Q1 board meeting of the following year

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#### Third party evaluation

FET's director performance evaluations are conducted at least once every three years by an independent professional institution or a team of experts and scholars from outside the Company. The professional institution or team of experts/ scholars chosen to perform evaluation must satisfy the following criteria:

- An institution or management consulting company that specializes in organizing Board of Directors training courses and improving corporate governance.
- · An outside team consisting of experts and scholars specialized in Board of Directors matters or corporate governance affairs.

FET in 2018 commissioned risk consulting department of KPMG ("KPMG") to conduct external assessment on the effectiveness of the Board of Directors and the report was obtained in January 2019. The assessment results were between good to excellent and were reported to the 5th session of the 8th Board of Directors Meeting on February 20, 2019. KPMG proposed the following suggestions for improvement. 1. To hold forums or offer information on responsibilities, system design and operational status of the Company and Board of Directors /functional committees when introducing new directors. 2. To periodically provide critical information to the directors and improve procedures for reporting major adverse events and include the procedures into risk assessment report procedures of risk management mechanism. 3. To consider to designate the Audit Committee as contact window for whistle blowing to emphasize the independence of channels for complaints by internal and external beneficiaries and review annually the further education needs for individual directors, etc. The aforesaid recommendations and suggestions will be a reference for FET to continue to strengthen the effectiveness of the Board of Directors and competencies of the board members.

#### Procedures of Third Party Performance Evaluation of Board Members



Y2018 Board Performance Evaluation Report



Rules and Procedures for the Board of Directors' Performance Assessments



# **Directors Training**

All local directors of FET are required to undergo regular training and foreign directors are also provided trainings in English by experts to ensure continual improvement of knowledge in areas such as sustainable management and corporate governance. Training courses completed in 2018 by local and foreign directors are listed in the following table, and apart from training, the Company also updates directors on the latest corporate governance-related regulations every six months.

Organizer	Course Name	Training Hours	Number of participants
Securities and Futures Institute	2018 Insider equity transaction law compliance announcement	3	1
Taiwan Corporate Governance Association	How to effectively demonstrate the functions of director, implementation of corporate governance	3	1
Taiwan Corporate Governance Association	Board effectiveness evaluation	3	1
Taiwan Corporate Governance Association	Cyber Risk: What the Board of Directors Needs to Know	18	6
Taiwan Corporate Governance Association	Introduction to Directors and Officers Liability Insurance	24	8
Taiwan Corporate Governance Association	A class for directors and supervisors-Business operation risk analysis	3	1
Taiwan Academy of Banking and Finance	Board Operations and Corporate Governance	21	7



# **Audit Committee**

FET assembled an "Audit Committee" to replace supervisors. The committee consists of three independent directors, and is intended to assist the Board of Directors in supervising the quality and credibility of internal practices such as accounting, auditing, financial reporting, and financial control, and contribute to the creation and enhancement of relevant corporate governance policies. The Audit Committee is empowered to conduct any audit and investigation deemed suitable, and has direct contact with the Company's internal auditors and financial statement auditors. The Audit Committee convenes meetings on a quarterly basis with the audit manager and the accountant reporting their operations and audit results of financial statements respectively. A total of four meetings were held in 2018. Minutes are compiled after the end of each Audit Committee meeting with details of important discussions and resolutions, which are subsequently notified to directors, the President and members of the Company's executive management. Communications have been made to ensure they completely understood the way of conducting, the result, and proposed recommendations.

### Audit Committee Communication Policy

	Quarterly	Annual
Participants	Internal Audit Officers, Independent Directors	Certified Public Accountant, Independent Directors
Responsibilities	Internal Audit office is under Board of Directors and implements the audit process based on annual plans. It presents the outcomes of internal audits and internal control in the board meetings and has the power to hold meetings immediately if important irregular events happened. In addition, audit officers will present the monthly reports to independent directors.	The Certified Public Accountant will present to independent directors based on company's financial status, local and oversea subsidiaries' financial and overall operation status and internal audit status, and fully communicate about the status of whether major adjusting entries and legislative amendments affect the accounting status. The Certified Public Accountant also has the power to hold meetings immediately if important irregular events happened. Independent directors shall appoint Certified Public Accountant to audit the financial reports and provide the audit reports for discussion.

# **Remuneration Committee**

The "Remuneration Committee" exists to assist the Board of Directors in executing and evaluating the Company's overall remuneration and welfare policies, as well as directors' and managers' remuneration<sup>13</sup>. FET's Remuneration Committee comprises three members; two of whom are FET's Independent Directors. Members' compliance with independence criteria has been disclosed in the annual report. The Remuneration Committee held a total of four meetings in 2018. Members' personal attendance rate was calculated at 89%. In addition to financial performance, remuneration of FET's executive managers and employees is also associated with customers' loyalty, and is subject to Board of Directors' approval on a yearly basis. The Company plans to incorporate environmental and social performance into the evaluation process in the future. Directors' and Managers' salary and remuneration are reviewed by the Remuneration Committee and presented to the Board of Directors for discussion on a regular basis, ensuring balance between the Company's sustainable operations and risk management.

# Director compensation policy and practice

Directors may receive three different forms of compensation: remuneration, remuneration through earnings distribution, and business execution expense. These compensations are determined by the Remuneration Committee and the Board of Directors, and are reported in annual general meetings as required by law. Directors are compensated not only based on the Company's business performance, but also based on other factors such as directors' shareholding percentage, overall performance of the board, the number of votes received in election, and contribution to the Company's affairs. Business execution expense consists mainly of travel allowance. They are determined in reference to standards of the high-tech industry and are paid with the resolution of the Board of Directors. Compensation standards, structures and systems are adjusted flexibly according to future risk factors; unfavorable outlook and rise in business risk may result in a downward adjustment of directors' compensation.

	2016	2017	2018
Ratio of directors' compensation to after-tax net income	1.06%	1.12%	1.18%

# Manager compensation policy and practice

Managers may receive three different forms of compensation: salary, bonus and allowance, and employee remuneration. Salaries are determined at levels that reflect employees' work performances, while taking into consideration several factors including: the nature of job duty, the overall environment and the market rate. Bonuses and allowances consist mainly of travel allowance, which employees are entitled to choose between fixed vehicle subsidy, vehicle rental or mileage-based subsidy. Employee remuneration is allocated according to the bonus policy, which takes into account the Company's financial and non-financial goals, employees' individual annual business performance indicators, CSR performance indicators, and the Company's operating performance. The level of remuneration is subject to Remuneration Committee's and Board of Directors' resolution before proposal at shareholder meeting. Managers' compensation standards, structures and systems are adjusted from time to time to accommodate the Company's oterance.

	2016	2017	2018
Ratio of managers' compensation to after-tax net income	1.65%	1.59%	1.61%

# **Equity information**

As at December 31, 2018, Far Eastern New Century Enterprise and affiliated companies directly or indirectly held a total of 38.16% shares of FET. Since Far Eastern New Century and subsidiaries have jointly obtained more than half of total seats on FET's Board, Far Eastern New Century is deemed to exercise controlling influence over financial, operational and human resource policies in thecompany, and is therefore recognized as FET's ultimate parent company. Below is a list of FET's shareholder structure and top 10 shareholders as at April 20, 2019:



# Tax policy and management

FET has established its tax policies with integrity. The tax policies serve as a compliance guide for the Company and all its subsidiaries, and the policies mainly include major operational activities, including the promises and obligation to pay taxes, the tax-related impacts and risks involved in business transactions, tax risk-management, and R&D and reinvestment activities in the support of government, etc. The Company also has a tax management system in place. Professional consultants are invited to review the rationality of transfer pricing and update the Company on tax law changes, and thereby ensuring the validity of the Company's tax compliance efforts amidst the changing environment and regulation. The following table shows 2018 income tax payment of FET. The difference between the effective tax rate and Taiwan statutory tax rate (20%) is caused by the losses arising from domestic investments.

Note: According to the Financial Supervision and Administration Commission of the Executive Yuan' letter of No. 0990002770 on January 15, 2010, the telecommunications industry is an investment-prohibited industry for the mainland China investors. Therefore, mainland China's people, coporations, groups and other institutions are unable to invest in the company. The direct shareholding ratio of investors from mainland China is zero.

FET's i	Unit:NTD \$ thousands	
	Y2017	Y2018
Net operating income for the year ( A )	13,162,572	11,869,430
Amount of income tax ( B )	2,308,929	2,444,654
Amount of income tax paid	2,125,391	2,124,394
Effective tax rate (C)=B/A	17.54%	20.60%
Cash tax rate	16.15%	17.90%

FET Overview

Tax Policy



Sustainable Development

Strategy and Performance

# 4.2 Implementation of Sustainable Governance

FET has established its "Corporate Social Responsibility Policy" based on Taiwan Stock Exchange Enterprise's "Corporate Social Responsibility Best Practice Principles for TWSE/TPEX Listed Companies" to serve as the ultimate guiding principles for CSR conducts within FET. A "Corporate Social Responsibility Committee" (CSR Committee) was assembled in 2011 to serve as the highest authority for matters concerning sustainable governance, strategy and planning. Within the CSR Committee, the Chairman undertakes the role of chief commissioner, while the President assumes the role of executive officer and the CFO assumes the role of deputy executive officer. The Executive Management Team (EMT) serves as the convener that coordinates task forces in various business groups, and issues instructions to representatives of various business groups. The CSR Committee base the verification and management of sustainability issues on investigation of the material issues of the Company, annual performance report of each business group, recommendations from external stakeholders, and advice gained by consulting external experts. The Company has also appointed the CSR Department within Public Relations Division as designated unit with the responsibility of enforcing CSR actions and measures within the organization.

The CSR Committee convenes meetings on a quarterly basis and report relevant policies, decisions and the performance to the Board of the Directors from time to time. Meetings are hosted by the President while members of the executive management serve as conveners for the relevant task force. Matters such as progress of annual action plans, tracking of material issues and proposals are raised and discussed during CSR Committee meetings. The CSR Committee held a total of three meetings in 2018. To ensure ongoing improvement of governance performance in line with global standards, FET actively participates in surveys conducted by world's renowned institutions such as Dow Jones Sustainability Indices (DJSI) and Carbon Disclosure Project (CDP). For details on 2018 KPI and performances, please refer to chapter "Sustainable Development Strategy and Performance".

To adapt to the internal restructuring for the 20th anniversary of the Company in 2018, FET approved its sustainability strategic plan for 2018 through 2025, in which the core actions feature five facets including "Go Prosperous," "Go Innovative," "Go Caring," "Go Inclusive," and "Go Eco." All business groups formulate shortterm, mid-term and long-term action plans and goals for sustainable development accordingly to integrate the spirit of corporate social responsibility to daily business operation of FET and instill the philosophy into every member of FET.



# 4.3 Ethical Corporate Management

FET has "The Code of Business Conduct" and "The Code of Ethics" in place to enforce ethical corporate management. FET has been disclosing relevant information through corporate website, annual reports, prospectus, and the Taiwan Market Observation Post System (M.O.P. S.) to ensure transparency of corporate governance practices. This information is also communicated internally to all employees through orientation training and the intranet. Furthermore, the Company evaluates "Integrity" as part of employees' performance appraisal. In terms of external governance, FET uses commercial documents, such as "The Code of Business Conduct Agreements" as part of the "Supplier Information Form," to ensure stakeholders' compliance and respect for FET's ethical and trustworthy standards. Any donations by FET are subject to Board of Directors' approval, according to "FET Board of Directors Conference Rules."

# **Legal Compliance**

FET complies with the authority's rules and laws on corporate governance, trustworthy management, environmental protection and labor rights, and has taken actions to enhance legal education within the organization. In 2018, FET updated the Board of Directors every quarter on the latest regulations, along with Board meeting minutes. The same information was communicated to employees through intranet. FET and ARCOA did not have any violation against antibribery or anti-competition policy in 2018.

In the face of changing laws and 5G licenses scheduled for 2020, as well as FET's efforts in big data, artificial intelligence and Internet of Things (such as smart city, electronic ID, OTT music and video, mobile payment, and EC), FET continues to communicate with the authorities to loosen up control and planning in the directions of maintaining industry development, enhancing fair competition and facilitating flexibility in business operation. Our goal is to remove obstacles and gain advantages so as to reduce operational costs, secure fair competition and provide customers with services of higher quality. The industry segment can also benefit from digital convergence and 5G hyper-fast broadband services. As for the DIGI+ plans and targets set by the Government, such as high-speed broadband service KPI, formulation of digital convergence laws and regulations and establishment of regulatory sandbox mechanism, FET will work towards optimizing network development and network coverage so as to earn greater recognition form customers.

# The Code of Business Conduct

"FET Code of Business Conduct " applies to directors, managers, employees, agents or any person exercising material control, as well as subsidiaries, non-profit organizations in which FET has more than 50% direct or indirect donation, and any other institutions or corporate entities in which FET exercises control. FET follows the rules of The Code of Business Conduct and prohibits any action against it; In 2018, no political donation was made. FET continuously communicate issues related to anti-corruption and ethical corporate management. Except the trainings undertake by new employees, FET also communicate and arrange trainings through intranet websites. The subsidiary - ARCOA also supports FET's business integrity policy with the establishment of its own "The Code of Business Conduct", and communicate through competency trainings and legal cases. FET and ARCOA had no breaches against code of conduct/ethics in 2018.

# The Code of Ethics

To ensure that actions of the Company's directors, managers, employees and agents are compliant with ethical standards, FET has implemented its "The Code of Ethics" that outlines the boundaries of moral behavior for the Company's directors, managers, employees and agents. The Code of Ethics covers several aspects including: prevention of conflict of interest, prohibition of unauthorized selfbenefits, confidentiality of corporate and customers' information. and fair trade. The Company also has business ethics guidelines, gift and treatment acceptance principles, and employee declarations in place to outline employees' rights and obligations over the course of employment.

# **Whistle-blowing Channels**

FET has set up mailboxes that internal and external personnel may use to express opinions or report violations against the Code of Business Conduct or the Code of Ethics FET employees are entitled to express opinions or report misconducts according to the "Trustworthy Business Violation Reporting Policy" over the intranet. Upon receiving employees' claims, the handling department will immediately follow up with inquiries or begin investigations if necessary. ARCOA also has an "Opinion Box" available for employees to express opinions or report misconducts. Other reporting channels include:

- > Mailbox of Internal Audit : ia@fareastone.com.tw
- > Whistle-blower internal email : whistle\_blower@fareastone.com.tw
- > Procurement management e-mail : http://www.ecome.com.tw/A00BG/ABG\_Index.aspx\_Please click "Contact us"
- > ARCOA also has an "Opinion Box" available for employees to express opinions or report misconducts.

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# 4.4 Business Risk Management

# **Risk Management**

The fundamental principle of FET's overall risk management is to protect corporate assets, reduce business losses, enhance business profits and ensure sustainable corporate development. To further complete the management framework, FET in 2018 adjusted the risk management organization to elevate the level of the Risk Management Committee. Composed of independent directors delegated by the Board of Directors, the committee aims to enforce management of financial risks, strategic and business risks, information security risks, and environmental and energy risks within the organization from a more comprehensive perspective and scope and through collaboration among different levels to implement enterprise risk management. As to the management systems, FET has formulated the Risk Management Policy based on ISO 31000 Risk management – Guidelines and the PDCA Cycle, which has been approved by the Board of Directors to be the guiding principles and basis for all business groups in the purpose of quickly adapting to changes in business environment and ensuring effective risk management.

The Board of Directors serves as the highest authority of the risk management system to approve policy framework and supervise management performance. The Risk Management Committee reviews the Company's risk capacity and tolerance and management reports of major risk issues. The Executive Management Team manages the overall corporate risks and facilitates the development of risk management culture. All business groups are responsible for identifying, analyzing, managing and reporting of relevant risks as well as taking necessary responsive solutions. The internal audit unit plays the role of supervising unit to review risks and make regular audit reports to the Board of Directors. Through the design and operation of multiple lines of defense comprising business units, the Executive Management Team, the Board of Directors, the Risk Management Committee and audit units, the company is equipped with the flexibility of risk management, supervision and response to risk and is able to quickly grasp the situation of changing environment and risk, and achieve the organization's strategic goals.

In 2018, the Risk Management Committee held a total of two meetings and the Corporate Security Committee held a total of four meetings which highlighted the analysis of primary global risks, threats and trends, review of relevant laws and regulations such as GDPR, identification of high risk issues and response plans and improvement plans. All units have planned, conducted and completed various projects, including raising staff members' awareness of risk management and safety, improvement in cyber-attack protection and physical security management, information security testing and business continuity drills to continue to upgrade the overall business security.



#### **Risk Management Committee Structure**

#### **Financial risk management**

This area of financial risk management is handled by the Strategy and Finance Group (S&F), and involves constant observation of changes in local and foreign financial markets as well as evaluation of how changes in interest rate, exchange rate and inflation rate affect the Company's profit and loss and investment plans. Based on observations and findings above, the S&F establishes relevant management procedures and adopts appropriate management and hedging measures to address interest rate or exchange rate exposures. As to the sensitivity analysis of impacts on interest rate and exchange rate changes in the Company's profit and loss, please refer to the sensitivity analyses provided in FET's annual report.

#### Strategic and business risk management

FET's general strategies are determined by the executive management during yearly strategic development meetings. Each business department then creates its own strategies and goals from the general strategy. Performance of the Company's general strategy is reviewed and reported by responsible departments during quarterly strategic meetings, and may be adjusted according to changes in the internal/external environment, industry trends, and risks. As for business departments, monthly operational management meetings are held to review the performance of department strategies and goals, and to formulate response solutions depending on regulatory changes, competitive environment, and opinions of internal/external stakeholders.

#### Information security risk management

Based on legal compliance, personal data protection, risk management and crisis management, the Corporate Security Committee and Operation Security Committee established security policies and frameworks, including business information security, technology security, security of office premise, and employee safety. An information security section has been created on the intranet to communicate with employees on relevant topics. FET also conducts annual information security risk evaluations to address high-risk issues so as mitigate, transfer, and ultimately reduce risk exposure. For outcomes of FET's information security promotion efforts, please refer to Chapter 5.3.3 "Customer Privacy Protection."

#### Environmental and energy risk management

An "Environment and Energy Management Committee" of representatives from different departments has been assembled to identify and manage related risks. The committee convenes meetings on a quarterly basis to ensure proper coordination between the departments, and the effectiveness of environmental energy management systems, such as ISO14001 and ISO50001. For outcomes of FET's environmental management efforts in 2018, please refer to Chapter 6.1.2 "Reducing Environmental Impact."

#### **Emergency response management**

FET has also created a "Business Continuity Management Organization" for the management of the overall risk. The highest unit of the organization is headed by the Executive Management Team (EMT). In the event of an emergency or major accident, the reporting team will collect information from the accident management unit and the report coordination unit and provide them to the response team for decision of whether to activate emergency response procedures, so that risks and possible impacts can be controlled quickly and reduced to the minimum. In the meantime, related units will work together and respond, and information will be escalated to the executive management in the shortest time and communicated with internal and external stakeholders in an appropriate manner.

The Business Continuity Management Organization held a total of eight meetings in 2018 to coordinate interdepartmental responses to major incidents including earthquake and typhoon, and supports to service outlets, customer service center, technical team and operational team. By establishing real-time communication and response between the Company's frontline and back-end units, we hope to minimize impact on customers and operations in the event of an incident.





# 4.5 External Participation

FET gives close attention to the latest development in the industry both home and abroad, and actively participate in the telecommunications industry and corporate social responsibilities related public association, to ensure FET's corporate governance work in concert with important initiatives and operations worldwide, raise FET's corporate competitiveness, and help promote the overall development of the industry. All membership fees FET paid in 2018 add to NTD \$8,592,516. The following chart displays the associations in which FET occupied a position, or associations that are important.

	2016	2017	2018
Telecommunications industry related association investment ( Unit : NTD \$ thousands )	9,967	9,709	8,592
Ratio to total revenue	0.01%	0.01%	0.01%

Name of Association	Nature of association	Yearly amount contributed ( Unit:NTD \$ thousands )
Taiwan Telecommunication Industry Development Association (TIIDA)	Industry Development	8,000
Taiwan Intelligent Aerotropolis Association (TIAA)	Industry Development	100
Taiwan Communications Society (TCS)	Academic Research	100
Taiwan Electrical and Electronic Manufacturers' Association	Industry Development	100
ROC Business Council for Sustainable Development (BCSD)	Sustainability Initiative	60

# Chapter 5

# **Stakeholder Management**

5.1 Key Stakeholder Communication5.2 Employee Management5.3 Customer Management5.4 Supplier Management

HEREFERENCES FRANK

EFFETTE

# 5. Stakeholder Management

# 5.1 Key Stakeholder Communication

FET highly values its communication and engagement with various stakeholders. For the purpose of fully comprehending the essence of internal and external stakeholder management, we have followed the principles of AA1000 Stakeholder Engagement Standard to identify nine types of stakeholders crucial to our operations, and ensure that we have dedicated communication channels to respond to our stakeholders' requests and expectations in our daily operations. In addition, we have established a <u>stakeholder CSR survey</u> and <u>dedicated communication channel</u> on our website to receive more feedbacks.

	Stakeholders	Communication Strategy and Response	Material Issu	es of Concern
T.	Consumers Communicate transparently, listen to every customer, and provide · Information set service with warmth and sincerity. · Brand image r		<ul> <li>Communications quality and infrastructure</li> <li>Information security and customer dataprotection</li> <li>Brand image management</li> <li>Quality customer experience</li> </ul>	<ul> <li>Communication and research on issues concerning electromagnetic radiation</li> <li>Rate plan transparency and communication</li> </ul>
<b>*</b>	Enterprise Customers	Maintain partnership; provide customized solutions according to unique enterprise management requirements.	<ul> <li>Social innovation</li> <li>Environmental innovation</li> </ul>	<ul> <li>Quality customer experience</li> <li>Information security and customer data protection</li> </ul>
	Investors/ Shareholders	Transparently disclose FET's development strategy and major operating changes to maintain confidence of investors		
	Competent Authorities	Actively respond to policy trends and actively participate in policy development process	<ul> <li>Communications quality and network infrastructure</li> <li>Information security and customer data protection</li> <li>Risks management and emergency response</li> <li>Response to government policy and regulatory changes</li> </ul>	<ul> <li>Digital inclusion</li> <li>Energy management</li> <li>Corporate governance and integrity</li> <li>Climate strategy</li> </ul>
<b></b>	Employees	Enhance employee cohesion and sense of identity, cultivate innovative corporate culture, and implement two-way communication	<ul> <li>Operating performance</li> <li>Human rights issues management</li> </ul>	<ul> <li>Talent development and management</li> <li>Corporate governance and integrity</li> </ul>
	Suppliers/ Contractors/ Developers	Maintain stable partnership with suppliers/contractors, perform supply chain impact management, co-develop products or services with developers	<ul> <li>Operating performance</li> <li>Investment in R&amp;D/Innovation and collaboration</li> <li>Corporate governance and integrity</li> </ul>	<ul> <li>Supply chain management</li> <li>Human rights issues management</li> </ul>
	Community Groups/ NGOs	Maintain partnership, jointly promote social welfare, and create the social value of FET	<ul> <li>Community care and charity programs</li> <li>Climate strategy</li> </ul>	• Digital inclusion
	Media	Actively express opinions of the company, communicate transparently, and create positive corporate image	<ul> <li>Operating performance</li> <li>Corporate governance and integrity</li> </ul>	<ul> <li>Investment in R&amp;D/Innovation and collaboration</li> <li>Communication and research of issues concerning electromagnetic radiation</li> </ul>
	Competitors	Keep competitive relationship, mutually discuss material industry issues	<ul> <li>Response to government policy and regulatory changes</li> </ul>	• Operating performance

				5 Stakeholder		
FE	Sustainable Development Strategy and Performance	Operating Environment Analysis and Performance	Responsible Governance	• Management	Environmental and Social Protection	Appendix

# 2018 Stakeholders' communication performance

Stakeholders	Response and communication channels	Key communication results in 2018
Employees	<ul> <li>Education and training programs</li> <li>Annual performance evaluation</li> <li>Quarterly two-way communication meeting</li> <li>Employee satisfaction survey</li> <li>Employee complaints mailbox</li> <li>Quarterly Lantern Legend Meeting</li> <li>Annual Employee Meeting</li> <li>Employee Velfare Committee</li> <li>FET Express</li> <li>FET internal website/News update</li> </ul>	<ul> <li>Through FET Express and internal website, all employees are informed of employee discounts, employee benefits and volunteer accomplishments for the year.</li> <li>3,373 employee training courses held, and average training hours per employee was 65.62 hours.</li> <li>Percentage of employee who received annual performance assessment: 100%</li> <li>FET received 29 employee suggestions and 12 cases from the grievance mailbox. ARCOA received two cases from the grievance mailbox.</li> <li>For other communication performance, please refer to "5.2 Employee Management" of this report.</li> </ul>
Consumers/ General Customers	<ul> <li>In-store face-to-face communication</li> <li>Six complaint channels available to customers (official correspondence, arbitration meeting, inbound customer service, FETnet Website, self-care APP, and online chat)</li> <li>Customer Satisfaction Survey</li> <li>Product information meeting and marketing activities</li> <li>User behavior research/surveys</li> </ul>	<ul> <li>Customer loyalty and NPS: Grade A.</li> <li>Overall average customer satisfaction of FET's retail stores 4.71 \ Overall FET retail store repair and maintenance service satisfaction 4.66 (out of 5)</li> <li>Overall customer satisfaction of FET's customer service center reached 93.1%</li> <li>By the end of 2018, there were 7,650,000 friends on LINE accounts and 560,000 fans on Facebook fan pages.</li> <li>For other communication performance, please refer to "5.3 Customer Management" of this report.</li> </ul>
Enterprise Customers	<ul> <li>Business visits</li> <li>Call Center</li> </ul>	<ul> <li>Call Center has handled 1,050,367 calls</li> <li>For other communication performance, please refer to "5.3 Customer Management" of this report.</li> </ul>
Competent Authorities	<ul> <li>Business meetings and administrative inspections by the National Communications Commission (NCC)</li> <li>Fair Trade Commission investigations</li> <li>Official correspondence</li> </ul>	<ul> <li>Took part in 170 NCC business meetings and 15 administrative inspections in 2018. NCC identified one violation relating to FET dealers, for more information on the "Limited Offer NT\$499 Unlimited Data Plan", please refer to "5.2.4 Human Rights and Workplace Safety" of this report.</li> <li>There were three cases investigated by the Fair Trade Commission in 2018. All cases were closed and no violation of the Fair Trade Act was found.</li> <li>151 Official correspondences</li> </ul>
Suppliers/ Contractors/ Developers	<ul> <li>Supplier CSR Self-Declaration</li> <li>FET Supplier Chain Guidelines for Corporate Social Responsibility</li> <li>Procurement Satisfaction Survey</li> <li>Developers' Conference</li> </ul>	<ul> <li>97% of material suppliers and 100% of new suppliers signed the "Supplier CSR Self-Declaration".</li> <li>215 suppliers participated in and completed trustworthy management training and exams of supplier's management, supplier's CSR risk management, office energy and environment management, and supplier's code of conduct. These suppliers accounted for 90.2% of total procurement.</li> <li>The average satisfaction rate of procurement is over 90%</li> <li>For other communication performance, please refer to "5.4 Supplier Management" of this report.</li> </ul>
Shareholders/ Investors	<ul> <li>Communication through</li> <li>Annual general stockholders meeting</li> <li>Investor-related conferences</li> <li>Investor Relations section on the website</li> </ul>	<ul> <li>Hosted one general shareholders meeting.</li> <li>Hosted four Global Investor Telephone Conference to facilitate direct communication between investors and executive management.</li> <li>Dedicated units took part in domestic/overseas face-to-face institutional investor meetings to communicate with investors.</li> <li>Published 12 monthly non-audited revenue, profi-t and operating statistical data on the FETnet website.</li> </ul>

9	Stakeholders Communication Strategy and Response		Material Issues of Concern
	Competitors	<ul> <li>Participation in related industry association engaging in exchange and communication on an irregular basis</li> <li>Competition/market survey</li> </ul>	<ul> <li>Attended 112 meetings in 2018, including 71 on general issues and 41 working groups related to the construction of base stations.</li> <li>Other details on communication performances can be found in "6.1.5 Environmental Impact Management in Base Stations" of this report.</li> </ul>
	Media	Press releases/conferences	<ul> <li>Hosted 20 media events and issued 276 press releases in 2018.</li> <li>Other media exposure performances can be found on the News Room of FETnet website.</li> </ul>
2	Community Groups/NGOs	<ul> <li>Information meetings/symposiums/forums</li> <li>Sponsorship and collaboration</li> </ul>	<ul> <li>Public welfare appropriation in 2018 was NT\$20,910,000.</li> <li>A total of 352 volunteers participated in public welfare activities and 799,391 people were benefited.</li> <li>For details on communication performances, please refer to "6.2 Creating Social Value " section of this report.</li> </ul>

# 5.2 Employee Management

Good labor relations, talent cultivation system and welfare policies help to create a sense of work achievement and corporate commitment. This enhances employee cohesiveness and strengthens organization efficiency. FET seeks to create a happy workplace and provide employees with a work environment based on equality of opportunity, excellent welfare provisions and diverse development. This approach showcases FET's efforts to become "top choice for the employees," thereby increasing the potential for external talents to work for FET.



- FET receives a "Talent Quality-Management System" Gold Medal from the Workforce Development Agency
- FET receives "Healthy Workplace Certification" and "Badge of Accredited Healthy Workplace" from the Health Promotion Administration, Ministry of Health and Welfare
- FET Long-term Health Activity results in 1,500kg in total weight loss
- FET Neihu Office comes fifth place in a competition for workplaces with zero occupational accidents
- Promotes "Supplementary Measures for Digital Capability Advanced Study" to provide employees with a wider range of diverse study options

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**Stakeholder** 

# 5.2.1 Employee Structure Overview

In terms of workforce structure at FET, 53% of employees are female and 47% male, of which females account for 32% of senior managers (deputy managers, managers and above). More than 99% of employees at FET are R.O.C. citizens employed on indefinite contracts. In response to the arrival of the 5G era, FET continues to enroll new technical talent and make necessary adjustments to its workforce makeup. At the same time, as a result of a fall in the volume of phone repair work by ARCOA in recent years, repair outlets have been merged and staff downsized to maintain corporate competitiveness. As a result, 2018 saw a small fall in total workforce to 6,550. The employment status at FET in 2018 is shown in more detail below:



# General Employees and Management by Age Unit: number of people

	Age	Male	%age	Female	%age	Total
Number	Under 30	601		819		1,420
of General Employees	30~50	1,918	46%	2,363	54%	4,281
Employees	Over 50	220		90		310
	Under 30	0		0		0
Number of Managers	30~50	204	66%	120	34%	324
	Over 50	79		26		105
	Under 30	0		0		0
Number of Directors	30~50	25	71% 15	29%	40	
	Over 50	31		8		39
	Under 30	0		0		0
Number of Vice President	30~50	2	58%	2	42%	4
	Over 50	16		11		27

	Employee Education	Unit: number of people	
	Male Female		Total
General/vocational high school	359	715	1,074
College/University	2,202	2,425	4,627
Master's degree	522	310	832
Ph.D.	13	4	17

**Employee Nationality** 

Unit: number of people

	Taiwan	%age	Overseas	%age	Total
2018	6,543	99.9%	7	0.1%	6,550

# Average Employee Age and Seniority

	Average Age (Years)				Average Seniority	
	Male	Female	Total	Male	Female	Total
FET	39.14	36.42	37.78	9.47	8.64	9.06
ARCOA <sup>15</sup>	38	36	37	5	7	6

# Employee Contracts<sup>14</sup>

Unit: number of people

Permanent Contract		Contract Tune %	Temporary Contract			Contract Turne 9/	
Male	Female	Total	Contract Type %	Male	Female	Total	Contract Type %
3,084	3,499	6,533	99.8%	12	5	17	0.2%

<sup>14</sup> Permanent contract is a non-fixed term contract, and temporary contract is a fixed-term contract. According to Article 9 of Labor Standards Act, a contract in nature for temporary, short-term, seasonal or specific work may be made as a fixed term contract, but a contract for continuous work, should be a non-fixed term contract.

64 <sup>15</sup> The statistical scope of ARCOA's average age and average senioritycovers only official employees.

# Figures for Newly-Hired and Resigned Employees in the Year

As part of its pursuit of sustainable development and in response to rapid technological and product changes in the telecommunications industry, FET actively recruits technical talent in the fields of telecommunications, digital media, data security, cloud computing, artificial intelligence (AI) and the internet of things. This allows the company to provide integrated services across business fields, areas and industries, while building up its innovative human resources. At the same time, in 2016 FET began to focus on schools and actively promoted industry-academia cooperation, in order to attract more talent into the information and communications technology industry. Since then the company has nurtured dozens of technicians who have already begun to excel in their various departments and serve as seed talent as FET seeks to transform its operations. In 2018, the employee turnover rate fell 1.03% from the previous year, an indication of the company's increasing ability to retain talent.

#### New Hires in 2018

Unit: number of people

	Male	Female	Total	Ratio of New Hires <sup>16</sup>
Under 30	208	197	405	6.18%
30~50	391	447	838	12.79%
Over 50	1	3	4	0.06%
Total	600	647	1,247	19.04%

#### **Resignations in 2018**

Unit: number of people

	Male	Female	Total	Turnover Rate <sup>17</sup>
Under 30	276	379	655	10.00%
30~50	358	425	783	11.95%
Over 50	11	8	19	0.29%
Total	645	812	1,457	22.24%

# **Employee Salary and Welfare**

FET believes that providing employees with competitive, fair salaries and welfare benefits are key factors in retaining talent. In terms of the compensation system, the starting salary at all levels is the same for male and female employees. It is also higher than the statutory minimum wage mandated by the government, with a balance maintained between average male and female salaries in all positions. The company also provides employees with annual bonuses, performance bonuses, sales bonuses and special incentives, to reward exceptional employees and create a high performance corporate culture.

	FET	ARCOA
Pay for basic-level employees is above the legal minimum wage $^{\mbox{\tiny 18}}$	22%	18.2%

<sup>16</sup> New hire ratio = 2018 total number of new hires/2018 total number of employees

<sup>17</sup> Turnover rate=2018 total number of resignations/2018 total number of employees

<sup>18</sup> Basic salary has been NT\$22,000 in Taiwan in 2018.

Non Management Employees Salaries – ARCOA

Sustainable Development

Strategy and Performance

項目	2017 年	2018 年	年度差異
No. of non-management full time employees (Employees)	370	337	-8.9%
Total salary of non-management full time employees (NT\$ Thousands)	190,926	178,848	-6.3%
Average salary of non-management full time employees (NT\$ Thousands)	516	531	2.8%

# Average salary by employee type - FET

Basic salary and other compensation	Female: Male
Technicians	1:1.03
Sales and Customer Services	1:1.01
Marketing and other support services	1:0.98
Total	1:1.02

# Average salary by employee type – ARCOA<sup>19</sup>

Basic salary and other compensation	Female: Male
Store sales	1:1.07
Repair / Maintenance(Technicians)	1:1.15
Other support services	1:1.15
Logistics	1:1.27
Total	1:1.15



# Non Management Employees Salaries - FET and New Century InfoComm Tech Co., Ltd.

Responsible

Governance

**Operating Environment** 

Analysis and Performance

	2017	2018	Year-on-year difference
No. of non-management full time employees (Employees)	5,806	5,618	-3.2%
Total salary of non-management full time employees (NT\$ Thousands)	4,970,586	4,865,492	-2.1%
Average salary of non-management full time employees (NT\$ Thousands)	856	866	1.2%

ET	ARCOA
0(	10.00/

<sup>19</sup> The screening scope of ARCOA's various type average salary ratio covers all official employees who took up their posts in 2018. (Only the employee has been employed for more than one year)

Environmental and Appendix Social Protection

In terms of welfare policy, all FET employees receive more than the legally mandated minimum welfare benefits. The company also provides employees with health checks and preventative screening for cancer that are superior to the legally required basic minimum. In 2018, 100% of employees took the company provided health check. In addition, in order to create a happy workplace environment that promotes an optimal work-life balance, FET also provides a range of other welfare items like establishment of Employee Welfare Committee, group activities and employee outings both in Taiwan and overseas. Currently, FET has 27 sports related employee groups, which receive a maximum of NT\$1.2 million in sponsorship for activities each year. In 2018, 9,604 employees participated in 612 activities.

#### Welfare Provisions at FET

- Employee Group Insurance: This includes guaranteed term life insurance, personal injury insurance, injury treatment, hospitalization treatment, cancer etc.
- Paid sick leave: In addition to existing legal provisions, employees receive five days more per year than the full-pay sick leave pension statutory minimum. Employees are also provided with retirement benefits in accordance with retirement measures based on the provisions of the "Labor Standards Act."
- Employee Canteen: FET works with a nutritionist from Cathay General Hospital to promote healthy dietary habits and provide employees with vegetarian and healthy set meals selections.
- The company provides a cellphone allowance and monthly subsidy for phone bills.
- Work at home: Depending on the nature of their work, employees can seek permission from their senior manager to work at home.
- Remote office: Some employees, based on the nature of their work, such as salespersons or network maintenance technicians work long hours outside the office at different times and places.
- Flexible work hours: The company has three flexible work time schedules. If employees in a work team need to start work at a different time, they can discuss the matter internally and apply for an adjustment of their work schedule.
- Maternity / Paternity leave better than legal minimum: maternity leave (including pregnancy checkups) and paternity leave are one day longer than the legally mandated minimum. Miscarriage leave is paid in full and not counted as part of sick leave.
- Parental leave and childbirth allowance: Parental leave is legally mandated; childbirth allowance at NT\$1,200, female and male employees alike.
- Employee child care program: the company works with neighboring kindergartens or child-care centers to provide child care options that have flexible times and offer discounts.
- Breastfeeding rooms: Office spaces include certified breastfeeding (nursery) rooms that have received awards from local health agencies.



#### **2018 Parental Leave** Unit: Number of people

Parental Leave	Male	Female	Total
No. of employees qualified to apply for parental leave (A)	300	525	825
No. of actual applicants (B)	17	140	157
Application rate (B/A)	6%	27%	19%
No. of employees reportedly waiting to return to work (C)	28	189	217
Applications to return to work (D)	13	101	114
Return to work rate (D/C)	46%	53%	53%
No. of employees returning to work the previous year (E)	12	95	107
No. of employees returned to work for a full year the previous year (F)	6	82	88
Retention rate (F/E)	50%	86%	82%

In terms of retirement benefits, FET has drafted retirement measures for formally hired employees. These are drafted in accordance with the Labor Standards Act" and the pension paid is calculated based on years of service and average monthly salary earned in the last six months prior to retirement. Every month 2% of an employee's salary is allocated to a retirement provision managed by the company's Labor Retirement Preparation Fund Supervisory Committee and deposited in the name of the committee in an account at the Bank of Taiwan. In addition, following the introduction of the new "Labor Pension Statutes" that came into force on July 1, 2005, FET pays 6% of monthly salary to the Labor Insurance Bureau for employees who choose the new system. This ensures sufficient Retirement Provision to cover pensions to colleagues who are eligible to retire.

	2018 Retirement A	Unit: NT\$Thousand	
	2016	2018	
Pension liabiltiies	777,413	743,238	677,745
Pension Cost 287,438		317,707	225,043

**Big Data Analysis Camp** 

FET provides internal

training for data talent,

holds "Big data analysis

camps" with four classes

(beginners classes and

advanced classes). In

2018, two training classes

were completed, with 38

participants passing.

Operating Environment Analysis and Performance

Responsible Governance

Environmental and Social Protection Appendix

# 5.2.3 Employee Training and Development



In order to cultivate the long term development of personnel, FET continues to improve the quality of training available to employees. Every year the company reevaluates the comprehensiveness and suitability of training to ensure close coordination with company strategy and operational objectives. It also establishes a training development blueprint based on an organizational competency system and career level. In addition to comprehensive talent and career development training, FET also provides training development plan and arrangements related to employee core competence. This enables each employee to devise a personal training development plan and ensures colleagues at the same level receive an equal right to work competency training and development, with no differences based on gender or preferences.

The company also continues to use advanced study subsidies to incentivize outstanding employees to enroll on advanced study programs in Taiwan or overseas. In this way, FET enhances the company's professional capabilities and the career planning of colleagues. It also provides retiring employees with job matching opportunities within the Far Eastern Group, while also offering interview skills and capabilities training, encouraging retiring employees to enroll as a way of improving their ability to continue in employment and career planning guidance.

#### **Annual Focus Projects**

#### Agile Way/My Agile Attitude

Initiate "Agile Way/My Agile Attitude" program, which restricts meetings to a maximum of 30 minutes in duration; an EMMA platform is used for Agile communications, efficiently transmitting internal messages; about 1,000 employees have attended Agile Talks classes, a key program in the promotion of FET employee Agile Culture. **Promoting Digital Capability Professional Certification** FET promotes a digital capability certification and allowance program to encourage employees to further develop their professional digital capabilities and obtain related digital capability certification. Currently, 180 colleagues have passed Amazon Web Services (AWS) certification and 38 have completed Agile Development and Agile Project Management classes.

#### Elite Talent Training Program

This is the third year the program has been held and will enroll 15 colleagues. The hope is to encourage individuals with great potential to join FET, using diverse development programs to nurture talent with cross-field, cross-expertise, crossvision capabilities. The objective is to develop highly capable key personnel for the company, while also enhancing the employer brand of FET.

### AI Hackathon Competition

In 2019, FET and Microsoft, which has long been involved in the field of artificial intelligence (AI) held the "FET AI Hackathon Competition," inviting experts from different departments to display their talents on stage, using Microsoft's Azure Cloud Platform to develop innovative AI solutions. Competitors from different fields held talks and exchanges, brainstorming creative sparks that led to a wide range of AI solutions in different areas. A total of 20 participating teams received three days of intensive training from 32 Microsoft experts and 72 hours of intense competition, with professors in related fields, as well as experts from FET and Microsoft selecting the top three teams.

# FET Education and Training System – Five Main Training Focuses

Stakeholder Management

Talent / Career development	Next Gen Program / Further eTrainee Training Program	
Core competence training	Diverse learning resources, including innovation and creativity, work management, customer orientation and operational leadership	
Specialist training	Telecommunications technology training, department sales and operations training, external professional training	
Self development training	Cultural seminars/lectures, advanced study subsidies, senior management seminars, project development models	
New employee / Senior management training	Integrity and ethics, data security, labor safety education, basic management and leadership training	







FET also strives to create a friendly and convenient learning environment. In 2017, the company developed and upgraded three main internal communications platforms and in 2018 continued to improve system functions efficiency. The communications platforms and channels made it easier to effectively provide rich and diverse content and innovative application services. It also ensures employees enjoy work and are keen to learn and grow, effectively enhancing work and organization efficiency so customers in turn benefit from the quality service provided by FET staff.

In terms of industry-academic cooperation, FET has developed a wide range of cooperative models with various departments at different schools. The company also works hard to integrate campus resources and cultivate professional talent in different fields, which has involved not only using the G roup's own resources and promoting industry-academic cooperative programs with Yuan Ze University and the Oriental Institute of Technology, but also ongoing cooperation with National Taiwan University, National Chengchi University, National Taiwan University of Science and Technology and National Sun Yat-sen University. In 2018, FET provided 20 openings of different durations, offering students still at school opportunities to undertake internships or work on industry-academic cooperative projects.



In 2018, ARCOA adopted "One Team" as its training focus, establishing "win-win cooperation" consensus and a strategic partnership with employees, to facilitate team cooperation based on mutual benefit. The main objective of training is to cultivate the professional service skills of employees, including the improvement of logistics distribution service response, enhancing the ability of maintenance staffs' customer complaints handling, and establishing internal customer quality service among logistics personnel. In addition, ARCOA also introduced the "Store Manager Development and Cultivation Program," enhancing digital marketing tools and consultative sales skills capabilities while creating synergies between departments and optimizes operating profits.

Based on the 2019 operational strategy plans of various business groups, ARCOA conducted competency interviews and gap analysis. These revealed an urgent need, on the part of senior managers facing a rapidly changing environment, to improve market intelligence and business intelligence analytical capabilities, in response to changing future technological trends. It was also determined that colleagues need to improve their ability to identify and prevent problems, as well as improve existing processes. At the same time, many employees were too used to waiting for instructions and needed to be more proactive and take the initiative in the pursuit of excellence. In 2019, ARCOA drafted the following training project and talent development plan in response to these issues:

- · Management competency and general training: set "One Smart Team" as the focus of 2019 training.
- · Excellent Store Manager Training Program: focus on distribution channel training, store manager trainee program, excellent store manager training.
- · Onsite logistics quality management training: to enhance operation efficiency, storage space utilization rates.
- · Maintenance station management training: to improve the level of customer satisfaction.

ARCOA adopted the aforementioned training program in response to future trends. The objective is to adopt the program to upgrade and transform digital talent and cultivate big data analysis capability combined with the application of AI technology, to create "one smart team." At ARCOA, training is divided into management, general, professional, lectures and new employee training classes, together with customized team building camps designed to meet the needs of specific teams. In 2018, 738 employees attended 83 internal and external training classes for 5,940 hours, at a cost of NT\$831,929.



Sustainable Development Strategy and Performance Operating Environment Analysis and Performance

Responsible Governance Stakeholder Management

Environmental and Appendix Social Protection

# 5.2.4 Human Rights and Workplace Safety

# **FET Human Rights Policy**

FET has drafted its own "Human Rights Commitment and Policy" which strives to protect employees' basic human rights and uphold related labor laws. Every three years, the company conducts a "Human Rights Due Diligence Survey," which looks at all FET operational outlets, suppliers, community residents and customers. At the same time, the company also observes international human rights treaties, including the "United Nations Declaration on Human Rights," "The United Nations Global Compact" "UN Guiding Principles of Business and Human Rights" and the International Labor Organization's "Declaration of Fundamental Principles and Rights at Work", etc. These are used as a guide to eliminate any behavior that infringes or violates human rights and enhance the awareness of colleagues and stakeholders. The FET Human Rights Commitment applies to FET and all affiliated companies. FET has also drafted "Corporate Social Responsibility Rules for Suppliers" that applies to cooperating firms. These measures embrace the same standards and require such companies to observe the spirit and basic principles of the FET Human Rights Commitment.

FET also works to create a corporate work environment that is friendly, respectful of differences and treats men and women equally. It also provides male and female employees with the same opportunities and salaries above the mandatory minimum wage. After employees are hired, salary and promotions are based on their capability and performance regardless of age, race, skin color, gender, or sexual orientation. FET has also established a "Sexual Harassment Complaints Committee" and a complaint process that includes employee complaint mailboxes, as part of its efforts to build a work environment that is healthy, with zero harassment and discrimination. In 2018, no sexual harassment complaints were made at FET or ARCOA.

#### Responding to the "Limited Offer NT\$499 Unlimited Data Plan" Incident

In May 2018, telecoms companies in Taiwan introduced "Limited Offer NT\$499 Unlimited Data Plan" and in response FET passively introduced its own promotional offer, which led to a flood of customer applications. However, the popularity of this program far outstripped expectations and as a result customers had to wait in line for long periods of time, the customer service was inundated with calls and the company's stores had insufficient staff to properly deal with the huge demand and employees had to work overtime. As a result of this incident, FET violated the provisions of the Labor Standards Law and was fined NT\$1.92 million by the competent authority, Taipei City's Department of Labor.

FET attaches great importance to customer experience and consumer rights and in response adopted emergency countermeasures, undertook a review and introduced improvements, including agreeing to pay staff overtime pay at a higher rate than mandated in labor rights provisions and give employees an extra day off. Thereafter FET continued to review the roll-out of this program and decided that any future marketing program should first estimate likely demand, make appropriate staffing arrangements at stores and customer services departments and improve the use of smart digital customer services. This would provide a wide range of channels for applications and customer services, thereby reducing the amount of time customers have to wait and employee overtime, obeying related laws and protecting the rights of customers and employees.

# Workplace Safety and Labor Health



FET strives to provide employees and stakeholders with a safe environment in which to work together to promote a professional health and safety management system. FET's "Professional Health and Safety Policy" makes the following commitments:

- 1. To protect the health and safety of employees, with a people-oriented respect for life.
- 2. To provide a safe work environment by upholding related laws and requirements.
- 3. To encourage employee participation in the facilitation and continued improvement of system performance.
- 4. To adopt risk management and health promotion in pursuit of sustainable operations.

In 2017, FET introduced a professional health and safety management system (OHSAS 18001) and passed international certification. In 2018, the company introduced another professional health and safety management system (ISO 45001). By improving the systemization of processes, the company implemented training/education, revised management procedures, conducted internal audit management, on-site surveys, and through British Standards Institution (BSI) certification implemented professional health and safety management.

#### **Ensuring Workplace Safety**

Most FET employees work in offices or stores, locations where there is a relatively low level of risk. In order to maintain workplace safety in offices, server room, base stations, stores and on construction projects, the company conducted safety patrols, inspecting 207 work environments in all. It followed up on areas where improvements were identified as needed, with an improvement rate of 100%, which is an effective way to avoid occupational accidents. Because base stations and related communications infrastructure work is conducted by contractors, FET has also drafted health and safety regulations for contractors. As such, labor safety requirements are included in all contracts for contracted work on building or maintaining facilities, with related training offered to avoid the danger posed by problematic construction work, thereby ensuring the health and safety of construction workers. In 2018, FET had no work safety incidents with contractors. During the hot summer months, when employees engage in outdoor work or activities, the company las drafted "A Guide to Prevent Heat-Stress Outdoors" to help employees and workers avoid heatstroke. This reminds employees to "drink lots of water, rest as much as possible and remain in the shade." The company also hands out warm greeting cards and Pocari Sweat electrolytic powder bags. Colleagues can go to the "Ministry of Labor's Outdoor High Temperature Work Site Labor Information Platform" to better understand the heat risks in different locations and take necessary preventative measures.

#### Establishing a Dedicated Occupational Health and Safety Unit

FET has an "Labor Health and Safety Committee" ("LHS Committee") and a dedicated occupational health and safety unit, which seek to improve the working environment and guarantee the safety of employees. The LHS is made up of 17 members, including the owners of business operations or their representatives, LHS personnel, senior managers from each department, a supervisor, controllers, engineers and technicians involved in occupational health and safety work, medical personnel and labor representatives, as stipulated by the regulations. In fact, the 8 labor representatives account for 47% of the committee's membership.

The LHS meets quarterly and is responsible for drafting an occupational health and safety management plan and automatic inspection plan. It reviews, discusses, examines and analyzes related occupational injuries; it also reviews improvements in occupational health and safety, implementing injury prevention communication and management measures. In addition, the occupational health and safety unit communicates occasionally with employees and contractors on injury prevention and holds occupational safety education and training programs. In 2018, 1,177 employees attended 19 occupational health and safety training programs. The company also established a "Health and Safety" website to disseminate information on injury prevention and thereby improve employee awareness of related measures.

#### Occupational Health and Safety

FET Employees		2016	2017	2018
Injury Rate (IR) <sup>20</sup>	Male	0.032	0	0
	Female	0.059	0	0
	Total	0.046	0	0
	Male	0	0	0
Occupational Disease Rate (ODR) <sup>21</sup>	Female	0	0	0
	Total	0	0	0
Absentee Rate (AR) <sup>22</sup>	Male	0.006	0.006	0.011
	Female	0.016	0.017	0.006
	Total	0.011	0.012	0.008
Lost Days Rate (LDR) <sup>23</sup>	Male	0.163	0	0
	Female	0.023	0	0
	Total	0.090	0	0

#### FET Occupational Health and Safety Accident Reporting System



<sup>20</sup> Injury Rate = (injury frequency / total work hours) x 200,000; Note: IR calculations include minor injuries but exclude traffic accidents during journeys to and from work.

<sup>21</sup>Occupational disease rate = (occupational disease frequency/total work hours) x 200,000

<sup>22</sup> Absentee rate = (total days absent/total work days) x 100%; Definition of Absenteeism: Employee is away from duty because they are unable to work (not limited to occupational injury or disease). This includes sick leave and personal leave, but does not include approved holidays, maternity leave and paternity leave and bereavement leave.

<sup>23</sup> Lost days rate = (total lost days/total work hours) x 200,000; Note: LDR calculations don't include traffic accidents during journeys to and from the workplace. The calculation of lost days is based on the number of workdays.

				5 Stakeholder		
FET Overview	Sustainable Development Strategy and Performance	Operating Environment Analysis and Performance	Responsible Governance	• Management	Environmental and Social Protection	Appendix

#### **Building a Healthy Workplace Environment**

In 2018, FET held "FET Long-term Health" series of activities. These activities encouraged employees to participate in sports clubs and external sporting competitions, with 4,280 employees taking part in related events, a participation rate of 65%. In order to further encourage colleagues to stay healthy through a balanced nutritious diet and reasonable amounts of exercise, the company organized a weight loss competition. A total of 730 employees signed up to take part and collectively lost 1,513.7kg in weight, with the most impressive participants receiving company gift certificates worth NT\$101,000.

In 2018, FET became the promotional partner of the "Enterprise I Sports, Employees Non Stop" activity, an activity hosted by the Sports Administration and commissioned to Global Views Monthly magazine. As a result, the company received the "I Sports Enterprise Certification Mark" and invited employees at its 2,016 stores across Taiwan to wear an iSports badge while displaying an iSports Stand in 380 stores to promote the idea of enterprise sports. FET also promoted the "FET Loves Sport" Apple Watch program for business client to encourage enterprise sports.



ARCOA conducts regular health checks, holds safety training and regular fire prevention drills to reduce the risk to employees and property from fires. The company also trains factory staff to ensure they have the ability to maintain warehouse safety standards.

		2016	2017	2018
Injury Rate (IR)	Male	0	0	0
	Female	0.35	0.39	0.79
	Total	0.22	0.23	0.48 <sup>24</sup>
	Male	0	0	0
Occupational Disease Rate (ODR)	Female	0	0	0
	Total	0	0	0
Absentee Rate (AR)	Male	0.01	0.01	0.01
	Female	0.01	0.01	0.01
	Total	0.01	0.01	0.01
Lost Days Rate (LDR)	Male	0	0	0
	Female	58.30	13.14	1.85
	Total	35.52	7.73	1.13

#### **Occupational Health and Safety**

#### **ARCOA LHS Occupational Health and Safety Accident Reporting System**



# **Employee Care and Communicatio**

FET attaches great importance to employer-employee communications in order to ensure good labor relations and build a fair, open and transparent corporate communications culture, providing multiple communications channels to guarantee employees their rights. The main channels and their results are introduced below:



Communications Channels	2018 Communications Agenda
Lantern Legend Meeting	These meetings are held every quarter and discuss company profitability, future development plans and related labor issues. In 2018, four meetings were held. FET guarantees employees right to collective bargaining.
Annual Employee Meeting	This meeting is held once annually and chaired by the company President. It provides colleagues and senior management with an opportunity to talk face-to-face, share operational achievements and future policy directions. In 2018, one Annual Employee Meeting was held.
Employee Welfare Committee	This committee meets every two months. Various welfare measures are regularly announced on the Employee Welfare Committee website which can be accessed by all employees. In 2018, the committee met a total of seven times.

<sup>24</sup> AROCA had two cases of employee injury; one was an injury caused in a collision, the other in a crash; there were no incidents involving fatalities and subcontractors.
Communications Channels	2018 Communications Agenda
Town Hall Meeting	<ul> <li>These meetings convey the company's operational direction, and implementation efficacy. Participating senior managers can discuss related operational issues and top management answer questions or heavyweight experts and academics invited to share the latest market trends. In 2018, three meetings were held and discussed the following subjects:</li> <li>Sharing Microsoft's experience of digital transformation, with an exhibition type tour and interactive communication.</li> <li>World Café type interactive discussion of management issues, jointly creating new innovative ideas.</li> <li>Annual strategic communication and discussion, lean issue discussion and collection of opinions.</li> </ul>
Employee opinion survey	A "Connect for Best" employee opinion survey is conducted biannually to gain a better understanding of those factors that motivate employees to work harder. These are then compared to the best employers in Taiwan and the Asia Pacific telecommunications industry. This gives management a more objective and precise understanding of employees' feel for work, which can serve as a reference for improving the work environment. The most recent survey indicated that nearly 60% of employees (59%) <sup>25</sup> strongly identify with the company and showcased a high level of professionalism. That represented an improvement of 4% on the last survey (2014) and is at about the benchmark level for the telecommunications service industry in the Asia Pacific. The next survey will be conducted in 2019.
FET internal websites	<ul> <li>These are used to issue the latest news relating to FET, FET opinion exchange and employee special offers. They also help colleagues better understand company activities and include "Colleague Proposals" and "Complaints Letterbox" sections. Complaints are dealt with by a dedicated unit, providing a communications platform where employees can honestly express themselves.</li> <li>In 2018, 29 "Colleague Proposals" were received, mainly focused on product proposals, health and safety etc. The responses to these have already been made public on company websites.</li> <li>In 2018, 12 employee cases developed from the "Complaints Letterbox." Based on standard company processes these resulted in the establishment of taskforces to investigate and deal with related matters, while communicating with employees. All cases were fully dealt with by December 31, 2018.</li> </ul>
ARCOA	
Communications Channel	ls 2018 Communications Content





<sup>25</sup> This survey is a six-point scale, with 59% including "moderately engaged" and "highly engaged". FET adopts the survey with a stricter standard, so the proportion of "slightly-respected engagement" is not covered in the presentation.



# **5.3 Customer Management**

Sinceinception, FET has consistently upheld the spirit of "Closing the distance" and moved forward together with our customers in the past 20 years. We believe that paying attention to every customer's needs is essential for us in order to provide the best possible services that touch their hearts and make them satisfi-ed. FET provides services that make customers go "Wow!", gradually closing the distance and creating our caring customer service philosophy.



- Received Best Digital Experience Award from CX Asia Excellence Awards
- Continuously received information security and customer data protection international standards certifications.

# 5.3.1 Zero Distance Services

FET established an iterative service management system to ensure the smooth operation of customer service process, periodically monitor the service quality, hold up service quality meetings, make sure customers get solid and consistent service and enhance brand communication.

# **Diversified Rate Plans**

According to a survey conducted by Taiwan Network Information Center (TWNIC), the ratio of Taiwan's mobile Internet users aged 12 or above increased from 60.1% in 2015 to 76.9%. Under the current circumstances, with mobile devices and 4G networks readily available, in order to cater to customers' diverse needs, FET has released diversified 4G rate plans based on the principles of "simplicity, value, diversity, and satisfaction." The plans are designed for consumers with different lifestyles, so consumers can choose suitable network plans according to their own data transmission needs. In consideration of the needs of low-income and special groups, FET provides special rate plans to ensure that everyone is entitled to the right of basic telecommunications service.





Special Consumer Group	Program name	Program Content
Student	Student Youth Unlimited Plan	At NT\$588 per month, customers get unlimited domestic data allowance, plus inter-network/landline calls 40/60 minutes, respectively
Foreign Visitors (Taoyuan Airport Exclusive)	Prepaid Card for Foreign Visitors	Provide internet access charged by day, 4G unlimited data, starting from NT\$300
Handicapped Persons	Genial Plan	Bundling with 4G Ideal Plan or 4G Ideal Plan, and enjoy 100 inter-network SMS, 300 intra-network SMS, and 1GB Internet data
Seniors over the age of 60	Evergreen Plan	Please inquire FET sto <b>r</b> es
Foreign Workers	Foreign Worker IF Card	Please inquire FET stores

# 360° Service

FET launched the "360 • Store Service "concept in 2012 by blending caring into services' DNA and regularly releasing thoughtful services. These services provided service content tailored to different consumers' time, locations and product requirements, thus putting FET's "closing the distance" warm service spirit into practice.

	Caring Service	Service Content
	Store Reservation Service	Reserve online or through mobile devices to shorten waiting times.
Caring Service	100% Promise 100% Satisfaction	If a customer has to wait for more than 10 minutes to be served in a store, FET promises to deduct NT\$1 for every additional minute they spend waiting from their next bill.
Service Content	Self-service Kiosk	Self-service kiosks are being installed at stores throughout Taiwan.
	Free 4G road test	7-day free trial of 4G SIM card/ mobile phone.
	Consumer Training Course	Consumers of different ages are provided with free mobile phone, tablet and cloud application courses in northern, central and southern Taiwan after product purchase.
Complete and Caring	Home Delivery Service for Platinum Members	FET Platinum VIP members can call customer service for courier pick-up of products requiring repair and/or maintenance.
After-sales Service	Mobile Device Insurance	Two-year repair and maintenance warranty for accidentally damaged mobile phones or tablets with post-paid contracts. Starting from monthly fee of NT\$99 for unlimited free repair and maintenance for mobile phones and tablets, plus use of complimentary FET mobile phones during repair and maintenance period.
	Mobile Phone Trade-in	FET assesses the trade-in value of customers' unused or obsolete phones against the value of their purchase. This is also better for environmental protection.

# **Training for Store Staff**

Customers' first impression for a brand depends on the frontline staff. Whether handling general demands or emergent cases, both challenge the flexibility and adaptability of store staff. It is crucial to FET's service-oriented brand image if a store staff can maintain professional and effective service under diversified conditions. In order to maintain professional and consistent service standards, FET launched the "2x3" system training course. The focal points of the system are knowledge and skills, with emphasis on basic training for new staffs while emphases are on ability development and diversified training for in-service staffs. Meanwhile, to embrace the click-and-mortar strategy in physical channels and strengthen franchisees' market competitiveness, in 2018, FET provided four sessions of external training courses for channel operators, including communication and motivational skills for new generation leaders, creating high-performance sales teams, etc.



# 5.3.2 Most Considerate Communication

FET is devoted to realizing the corporate vision of "FET Connects and Enriches Life" into customer communication. We ask our store staff to not only fulfil the responsibility of before and after sales communication with customers but also keep up with the global digitization trend for developing online and offline click-and-mortar services. With Self-Care App and internet customer service, we offer the most instant and comprehensive communication service experience anytime and anywhere to our customers.

#### **FET Self-Care APP**

With the easy and fun features, we offer various services such as "Exclusive Campaigns", "Online Shopping and Customer Service Consulting" and "Personal Telecom Service" for users to check their instant usage load and current bill; the roaming service is also available with easy setting according to the users' demand before leaving the country. By the end of 2018, there had been more than 6 million downloads.





# **CEM User Online Service**

FET customer online service has always devoted itself to becoming an excellent Customer Experience Management (CEM) system. "Five Services" and "My Personal Customer Care" are offered to allow users to truly enjoy "One-Step Self-Help Service" and the most convenient, comprehensive telecommunication service at anytime.



# **Product and Service Sales SOP**

FET conforms to all NCC and Fair Trade Commission (FTC) regulations regarding the marketing and promotion of products and services. Standard operating procedures ensure that all products and services are sold legally. Products and services are entitled to product warranties provided by the original manufacturers. All the mobile communication devices that we sell are in compliance with the NCC's regulations on warning labels as well as Specifi-c Absorption Rate (SAR) criteria and actual measurement, thereby offering proper disclosure on EMR to consumers.

For after-sales services, warranty services are provided for all mobile phones and related merchandise sold by FET. Consumers can also contact the warranty service provider or send the damaged products to the distributor for repair. There were no product labeling and marketing communication related violations at FET in 2018.

#### **Rate Plan Transparency and Service Procedure**

Rate plan transparency and communication can effectively reduce consumer complaints due to insufficient awareness and misunderstanding of products or services, thereby enhancing consumer trust. The rate plans for new products and services must be submitted to the competent authority for approval or their reference in accordance with the "Standard Operating Procedure for Reporting of Telecommunications Rate Plans to the Competent Authority". They are then published before coming into effect as required by law and full disclosure is provided in the media, on the corporate website and at each business site.

#### FET Sales and Contract Signing Procedure



In order to ensure that users fully understand all the rights and obligations under the rate plan, the store personnel will explain the content of the rate plans in detail when consumers are applying for a service. Written information, such as the service application form, is also provided for the customer's reference. Customers with expiring contracts are notified via SMS and phone calls, and promotional offerings are included in their phone bills. When a customer who qualifies for a contract renewal calls in to customer services, a representative of FET will proactively suggest related promotions and renew the contract online or via Self-Care APP so as to increase the convenience for customers.

# **Customized Communication**

As one of the leading companies in Taiwan's telecommunications market, FET understands the diversity of consumer groups. The FET store service handbook has service guidelines that cover interactions and service reminders for customers with special needs, including the in-firm, elderly, young children, visually/physically/ hearing-impaired, as well as those experiencing language or product difficulties.

FET encourages all stores throughout Taiwan to develop their own community care plans based on local requirements so as to increase influence and create continuous interactive opportunities with others. Since 2016, to help the elderly become more acquainted with smart products, our channel training department has developed consumer courses and worked with neighborhood communities in the Greater Taipei area to allow the elderly, who may ¬find it inconvenient to access FET stores, to learn about smart products. In 2018, 63 such sessions with neighborhood communities were held, drawing a total of 702 participants.



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# **5.3.3 Customer Data Protection**

Providing users with a secure and trusted communications environment and the dedication to maintaining a trusting relationship with the consumers are FET's basic responsibilities. To demonstrate our determination and devotion to information security and customer data, FET has adopted "treasure customer entrustment, respect for customer data, win the trust of customers, and maintain sustainable services" as the key visions to protect information and personal data, and established corporate security organization. FET also formulated nearly 100 information security measurement indicators for our business divisions and units to deal with personnel, operations, technology, and regulations related issues. We regularly review progress in achieving these targets and continue to make improvements where we lag behind to ensure that personal data protection and information security are effectively managed. In 2018, FET has received 9 customer data related complaints from regulatory bodies. After thorough investigations, there were no violations to the Personal Information Protection Act.

According to the Telecommunications Act and other related regulations, telecommunication service providers in Taiwan are obligated to disclose the basic information and call detail records (CDR) of their customers upon receiving lawful written requests from government agencies. In compliance with this and to ensure proper management, FET set up the Standard Operating Procedure for Processing Requests for Call Detail Records and Customer Basic Information. Accordingly, all replies to such requests are sent via secure and encrypted channels and details of such inquiries are properly retained and documented. All written requests from government agencies received in 2018 were duly replied to. Approximately 2.7% of the SIM cards issued by FET were subject to government inquiry.

FET has always maintained and will continue to maintain the highest standards in information and personal data security management. In 2018, FET fully demonstrated the achievement of its implementation of information security and personal data protection by obtaining many international certifications. In the future, FET will continue to implement these measures to fulfill the requirements of consumers and the general public for personal data protection. In 2018, FET continued to strengthen internal staff's awareness on information and personal data, and immediately make improvements when there are self-discovered risks, so as to ensure effective implementation of information security protection and supervision mechanisms, aiming to minimize foreseeable risks.

Reflecting Issues	FET Responses
Concern on inappropriate data leak	<ul> <li>Continuously promote the importance of customer personal information protection</li> <li>Implement controls on process flows</li> </ul>
Concern on inappropriate personal information use	•Continuously promote and strengthen personal information confirmation process

#### 2018 FET Information Security Management Verication

ISO 27001 Information Security Certifi¬cation	FET has obtained the certification of information security for 14 consecutive years, covering fixed and mobile network operating processes, such as number activation, change of service, billing and payment, fraud prevention, collection management, and customer service. The development and maintenance of the operations support system, as well as the operation of the Internet data center, were also included. Apart from renewing the certification, the maturity analysis of overall information security also reinforced certification effectiveness and the significance of both quality and quantity for certification.
ISO 20000 IT Service Management Certification	FET has obtained the certification on service management for 10 consecutive years.
BS10012 Personal Information Security System Certification	FET has obtained the certifi cation of information security for 6 consecutive years. The scope of the certification covers all retail stores in Taiwan, service applications, collection of customer data at the front-end, as well as ratings and mailing of bills and data processing in the back-end.
CSA STAR Cloud Certification	FET took part in Level 2, which has more demanding conditions and has to be certifi-ed by an independent third party. FET has obtained the highest recognition for 5 consecutive years

# FET Information Security Monitoring System

In addition to actively introducing the above-mentioned international standards to ensure that the IT security and personal data protection systems at FET are in line with international guidelines, FET has also set up an IT security monitoring system that manages technology security, personnel security, physical and environmental security, and customer data protection. In 2018, FET conducted over 100 information security training sessions with more than 15,000 participants, accumulating a total of over 18,000 training hours. Education and training on corporate security issues is an ongoing commitment by FET, and therefore, various resources are made available, such as internal training sessions, pop-up messages on computers, information security promotion and themed activities, etc. As a result of all these efforts, over 99.95%26 of employees pass the information security tests.<sup>26</sup>  $\circ$ 

<sup>&</sup>lt;sup>26</sup> The number of in-service personnel in the 11 departments of FET during the online evaluation period (April 2018) as the statistical basis of "99.95% of all employees passed the test" (not the total number of persons in the report period)



	Four Measures on Information Security Management				
Information and Technology Security	Regular inspection and assessment of operating risks from information security includes the maintenance of information, systems, processes, servers and terminal devices as well as infrastructure management; the continued cultivation of IT security skills for all personnel; validation and verification of policy/specification documentation and conformity.				
Personnel Security	All human resources ¬files are fully and properly managed by FET. Personnel's security responsibilities are stated at recruitment and in the employment contract. All FET employees, suppliers, contractors, contract workers and consultants are required to sign a "Non-Disclosure Agreement" or document with the same legal force				
Physical and Environmental Security	A zoning system with different levels of security has been established based on the equipment, activities, information con-fidentiality and importance of areas controlled exclusively by FET. A personnel identifi-cation system prevents unauthorized access and tampering. Sufficient protective systems, services and procedures are in place to protect physical assets and environmental security.				
Personal Information Management for Customers	To ensure that FET's management of customers' personal information conforms to the requirements of the Personal Information Act, FET has issued guidelines for the collection, processing, use and archiving of customer data. Use of customer data must follow the principles of "relevance, appropriateness, and restraint". Actual management of personal data is reinforced through education, training, planned audits and improvement procedures. Customers will be fully informed of the purpose and scope of personal information being collected, and the further processing and usage then follow a formal access control and certifi–cation process. Due to the introduction of the Personal Information Act, FET is now minimizing the number of physical contracts with sales channels and stepping up controls on contract flow.				

# **5.3.4 Service Feedback and Improvement**

To ensure that we respond to every customer's opinions and feedback, we have set up a comprehensive complaints and management mechanism. We thus, from both internal and external customer satisfaction surveys as well as the customer complaint system, obtain regular feedback from our customers and ways to improve our service. To track service quality, FET has included customer satisfaction as one of the key performance indicators in the awarding of bonuses for employees.

Store Maintenance	&	Repair	Satisfaction	Survey
otore maniferranee	~	pan	0441014041011	

FET stores are renowned for their excellent, quick after-sales service. We have in place a system to call customers within one week of their visit to an FET store to ask them how satisfied they were with the store's service. In leading the telecom industry in after-sales satisfaction, we conducted the "Satisfaction of Completion withCall-outs" survey to obtain feedback within a week of the customer's visit. Such indicators will be reviewed weekly, and any areas of dissatisfaction will be monitored to enhance satisfaction levels.

	2018 Targets	2018 Performance	2019 Targets
24-Hours Engineer Reparability Rate	67%	70%	70%
Over-5-days Reparability Rate	18%	14%	15%
Satisfaction of Completion with Call-outs (maximum: 5 points)	4.62	4.66	4.69

#### Satisfaction Survey on Telephone Service Center

Items of FET telephone customer satisfaction survey include handling capabilities of personnel, service attitude, whether the problem is resolved, waiting time, and overall satisfaction. For customers who leave messages or a negative rating during the satisfaction survey, FET proactively calls back to ask them the reason for the negative feedback. Improvements or explanations are given to repair FET's relationship with the customer.

	2016	2017	2018
Valid telephone customer service satisfaction surveys of overall inbound calls (%) $^{\rm 27}$	6.4%	10.3%	11.2%
Overall satisfaction of telephone customer service satisfaction survey (%) <sup>28</sup>	91.2%	92.6%	93.1%
First Contact Resolution $\geq$ 91%	93.7%	83.3%	91.2%

# FET customer satisfaction survey Internal Survey A thorough evaluation of customer satisfaction with FET's products and services. Outsourcing survey Facilitate comparisons with other telecoms companies in order to drive continuous improvement.

# FET Customer Satisfaction: Internal Survey

#### **Store Satisfaction**

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Inspection items include service attitude by store personnel, problem-solving ability, speed of case handling, product display and experience, and overall satisfaction. FET proactively follows up with customers who provided negative feedback and rewards personnel for excellent performance, aiming for continuous improvement in customer service.

	2016	2017	2018
Number of Survey Call-outs	9,673,000	9,245,000	12,631,000
Number of Valid Call-outs	660,200	572,826	731,480
Customer Satisfaction Survey	4.62	4.68	4.71

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# **Customer Satisfaction Survey - External Survey**

#### **Overall Satisfaction Survey**

FET commissions external market survey companies to conduct two satisfaction surveys of mobile phone subscribers per year, in April and October, Each survey interviews 1.600 subscribers to track service providers' performance in terms of communications quality, rates, billing, store service, telephone customer service, and complaints. Prior to the surveys, we invite employees in the marketing, sales, support, customer service, and online departments to participate in the design and discussion of the questionnaire. Improvement plans are then developed once the survey results are known so as to continually strengthen customer relations management. These consumer surveys help FET understand how we position ourselves against our competitors in each service category.

These surveys target mobile phone users aged between 15 and 64 who have used the services of one of the top five telecommunication companies, including FET. For the overall services we provided in 2018, 69% of the participants were satisfined and customer loyalty with FET scored a Grade A, both meeting the set target. Results of Other Detailed Satisfaction Survey as Below (maximum: five points)



2016	2017	2018
В	А	А

# Other Detailed Satisfaction Grade<sup>29</sup>

	2016		2017		2018	
	Mean	%	Mean	%	Mean	%
Communication and Internet Quality	3.02	64%	3.11	64%	3.35	72%
Store Service	3.72	87%	3.79	87%	3.94	91%
Telephone Service	3.74	87%	3.88	86%	4.04	92%
Overall Satisfaction	3.00	61%	3.14	67%	3.26	69%



# **Customer Complaints Mechanism**

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FET introduced ISO 10002 complaints management certification in 2013 to provide a basis for continuous internal process improvements so that consumer complaints can be processed and satisfactorily resolved in a timely, systematic manner. To ensure that every customer's voice and feedback can be filed via functioning channels. FET offers six main channels for customer complaints and utilizes the individual management method, assuring every complaint will be solved properly. Material customer complaints are forwarded to the customer relations management team by the customer service unit manager within two hours. With the cross-department ad hoc group for customer complaints improvement, FET remain committed to conducting the regular reviews and tracking, reducing the number of complaints as well as elevating customer satisfaction levels with complaint resolutions in accordance with our vision of Service without Distance. In 2018, the increased number of complaint cases through official correspondences and Self-Care App was mainly affected by the postpaid NT\$499 unlimited data plan in May.

Grievance Channels	Complaint Management	Responsible Unit		Complaints	
Government			2016	2017	2018
Document	FET has a complete internal customer complaints management system for handling official complaints from local	Customer Relations	2,051	1,852	1,929
Coordination	governments and consumer protection groups.	Management Team	2016	2017	2018
Meetings			FETnet Website	107	95
Customer Service	Complaints are delivered in the form of calls. These are handled by dedicated	Customer complaints	2016	2017	2018
Inbound	staff at the call center.	handling team	Online Chat	21,577	17,868
FETnet Website	Click on "Complaint" to receive		2016	2017	2018
Self-Care APP	immediate feedback.	Mobile Customer	4,212	2,857	6,143
	FET provides online chat service to help customers with the service content provided by general telephone customer	Service Team	2016	2017	2018
Online Chat	service. This improves accessibility and provides convenience for different customer groups.		235,283	336,605	405,002

<sup>27</sup> This year we combined and simplified the telephone customer service satisfaction survey KPI into three items, which include combining "The number of call-outs of internal telephone customer service satisfaction" and "Valid questionnaires of telephone customer service satisfaction survey" into "Valid telephone customer service satisfaction surveys as percentage of overall inbound calls (%)". In addition, since the service of messages on service satisfaction has been closed, it was deleted and we changed it to "First Contact Resolution".

<sup>28</sup> Refers to the proportion of customers whose answers were "satisfaction" or above

<sup>29</sup> 3200 users aged 15-64 years old who have used FET services for more than three months were randomly selected, accounting for around 80% of FET users overall.

# 5.4 Supplier Management

In support of the company's sustainable growth and active expansion of its overall influence on the economy, society and the environment, FET undertakes to continue improving its supply chain management, working with suppliers to create a sustainable supply chain, to provide quality telecommunications services that recognize the company's responsibility to the environment, society and customers, while pursuing sustainable development both inside and outside the firm. In addition, FET procurement operations have already received 8 licenses from such certification organizations as ISM (Institute for Supply Management), Supply Management Institute, PMI (Project Management Institute) and ISO 14001 Certifications etc.



suppliers. A total of 220 out of 300 suppliers completed the program, a completion rate of 73.3%.

- Education and training on office energy saving and environmental protection with a focus on Supplier Management, CSR Risk Assessment, Code of Conduct and Integrity Management. A total of 215 suppliers completed the program, recording a 94.5% level of satisfaction.
- The Procurement Department has already included suppliers' corporate social responsibility related KPI (Key Performance Indicators) as part of the 2019 performance evaluation of every procurement employee and established a link with the incentive system.

# 5.4.1 Supply Chain Overview

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In 2018, total procurement expenditure at FET reached NT\$29.54 billion, accounting for 29.4 percent of total expenditure. Transactions were undertaken with 1,114 suppliers, with procurement expenditure from the top 100 suppliers accounting for 90.6% of annual procurement expenditure for the entire company. FET manages firms by dividing supplier procurements into five main categories; information and communications (ICT), handsets, construction, general administration and media/non-media, with the main focus firmly on ICT. The quantitative and qualitative standards used by the company identify 69 top level key suppliers, while questionnaire surveys have allowed them to screen a further 21 second level key suppliers, providing a reference point for supplier management.

	Critical Supplier Screening Criteria						
	69 First-tier critical suppliers	Quantitative Screening Criteria	<ul> <li>ICT, construction, general administration and media/non-media categories: For two years in a row total transactions exceeded NT\$50 million.</li> <li>Handsets category: For two years in a row total transactions exceeded NT\$100 million</li> </ul>				
		Quantitative Screening Criteria	· Screening focuses on such quality factors as irreplaceability, high replacement costs, fixed qualifications, exclusivity and equipment binding.				
80	21 Second-tier critical suppliers	Questionnaire Survey Qualitative Screening Criteria	• Questionnaires are sent to top level key suppliers with a focus on the products/services they provide to FET and the direct related products provided by upstream suppliers traced, as a way of determining whether they meet such screening conditions as exclusivity, fixed qualifications, important equipment binding, or the cost of replacement brands would be too high.				

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# **Analysis of Annual Procurement Expenditure**

In 2018, FET had 1,385 active suppliers, demonstrating that the company's suppliers are able to provide good services and possess diverse development potentials across a range of procurement categories, which also helps to diversify procurement risk. In 2018, handsets and ICT category procurements accounted for almost 90% of all company procurements. A total of 844 suppliers were in the ICT industry, which is mainly connected to FET's Enterprise Business Unit and accounts for 60.9% of all suppliers. These suppiers work with the Internet, information and enterprise BU to serve corporate customers in Taiwan. It is also an important business direction for the development of FET Telecommunication's business.





#### **Local and Green Procurement**

Other than providing customers with quality international brand cellphones and equipment, FET also encourages foreign companies to establish offices in Taiwan to boost economic development in the country. In addition, FET also works hard to support local industry. If we deduct the value of orders from overseas company brands<sup>30</sup>, then in 2018 a total of 99.2% of FET's total procurements came from local companies.In order to promote a green supply chain and support FET's "Environmental and Society Friendly Program," the company advocates for different categories of suppliers and their related upstream and downstream suppliers, to engage in procurement on the basis of green procurement regulations. When the Procurement Department considers procurement bids, it asks the Energy Saving Team to conduct an energy efficiency assessment, including energy saving specifications as an open bidding item, while also establishing a tracking mechanism for all orders. FET has undertaken NT\$387,900,000 in green procurement since the beginning of 2018.

5 Stakeholder

	FET Green Procurement	Unit: NT thousands
2016	2017	2018
476,644	500,703	387,900 <sup>31</sup>

<sup>30</sup> Refers to companies registered in the territory of the Republic of China (including Taiwan branch offices)

<sup>31</sup> Because the total value of procurements in 2018 recorded a fall from 2017, the figures for green procurement saw a corresponding reduction. **81** 

# 5.4.2 Supply Chain Management

FET views supplier management as one element of corporate risk management, drafting "<u>FET Supply Chain Management Policy</u>" as a basis for the management of suppliers. The company also introduced ""<u>Supplier Corporate Social Responsibility</u> <u>Guidelines</u>," including various environmental, society and corporate governance (ESG) requirements in its supplier specifications. Other than requiring supplier to sign a "Corporate Social Responsibility Self Declaration" and "Integrity Management Agreement," in 2017, FET also started to gradually strengthen its supply chain sustainable risk identification, management and evaluation mechanisms and in 2018 included supplier risk identification, to better understand supplier ESG risk.

# FET Supply Chain Management Processes

1. Basic Requirements	2.Risk Identification	3.Evaluation and Audit	4. Communication and Improvements	5.Satisfaction Survey
<ul> <li>All suppliers are required to:</li> <li>Read "Corporate Social Responsibility Guidelines for Suppliers."</li> <li>Sign the "Integrity Management Agreement" and "Corporate Social Responsibility Self Declaration"</li> </ul>	In 2019, the sustainable risk evaluation conducted on the company's top 300 suppliers will be expanded to require that all new suppliers conduct ESG quantitative risk assessment	<ul> <li>An annual supplier evaluation will be conducted on the top 95% of suppliers by procurement amount</li> <li>Onsite ESG audits will be conducted at first-tier critical suppliers, including an FET audit and third party audit</li> </ul>	In the event of finding any weakness during the evaluation and audit, suppliers will be given a fixed period to make improvements and where necessary guidance will be offered	Conduct a supplier satisfaction survey as a basis for the optimization of supply chain management

In addition, FET procurement contracts also clearly stipulate that suppliers must obey related local laws on environmental and labor health and safety. Construction category suppliers are required to sign a "Contractors Labor Health and Safety and Environment Commitment," "Contractors Worksite Environmental Dangers Notice of Declaration" and read "Labor Health and Safety Management Implementation Points for Contractors," while conducting required management and injury prevention work in accordance with "Regulations for Occupational Safety and Health Organization Management and Inspection," to avoid hazards to labor health and safety.

In addition to regular supplier evaluations to ensure suppliers meet the above stipulations, every year FET freezes operations with suppliers the company has not conducted transactions with for more than three years. In the event operations need to be restarted, a credit report, proof of no bounced checks and self-declaration must be provided anew, to confirm information on the supplier's creditworthiness and corporate social responsibility is updated. In 2018, operations with 337 suppliers were frozen.

FET has also established an ESG basic threshold mechanism that suppliers bidding in designated sectors are required to meet and implements ESG selection threshold screening for companies that outsourced more than NT\$5 million in software or manpower operations per year. It also requires that suppliers found guilty of violations of the Labor Standards Act two years in a row must make improvements. Companies in violation of this condition cannot be selected. In the event of any violations, suppliers are required to provide an improvement statement. After an investigation, only one supplier in 2016 that outsourced manpower operations had violated the Labor Standards Act and that supplier officially provided FET with an Improvement Statement and by 2018 had not committed any further violations.

# FET Supply Chain Management Strategy

Based on the above supply chain management policy, FET has four main strategy directions each with its own objectives, quantitative and qualitative standards for the execution of supply chain sustainable management. In 2018, the company established three-year objectives with the area of impact expanded to include key FET suppliers, other top level key suppliers and second level key suppliers. In addition, the Procurement Department has already included the sustainable objectives in the 2019 performance evaluation for procurement employees and linked that to the incentive system.

	FET Overview	Sustainable Development Operating Environme Strategy and Performance Analysis and Perform	ent Responsible nance Governance - Management -	Environmental and Appendi Social Protection	
FET Management Strategy	Sustainable Execution Policy	Tracking Objectives	2018 Achievements	2020 Objectives	
<ul> <li>Work to connect supply chain management and company development strategy, proactively elevating the strategic position of suppliers to jointly strengthen sustainable operations and create win-win scenarios</li> </ul>	<ul> <li>Strengthen cooperation with suppliers, jointly develop sustainable new services and products</li> </ul>	<ul> <li>Number of innovative technical cooperation projects with suppliers</li> </ul>		• Complete three projects before 2020	
		$\cdot $ Proportion of top 100 suppliers to sign a SCR Self Declaration	• 95%	• 95%	
<ul> <li>Work with suppliers to promote corporate social responsibility with a focus on the economy, environment and society as the core values for joint development</li> </ul>	<ul> <li>Improve suppliers CSR awareness, enhance ESG performance of the telecommunications industry</li> </ul>	<ul> <li>Lowest threshold for bidding suppliers to meet ESG standards</li> </ul>	<ul> <li>In terms of project planning, in 2019 an ESG selection and screening threshold will be introduced and implemented for designated categories of suppliers; ESG selection threshold screening will be implemented for companies that outsource more than NT\$5 million in software or manpower operations per year; requires that suppliers found guilty of violations of the Labor Standards Act two years in a row must make improvements in order to participate in selection</li> </ul>	<ul> <li>To be implemented with all categories of suppliers</li> </ul>	
		<ul> <li>Newly participating suppliers in annual supplier CSR training (up to 500 companies from 2018- 2020)</li> </ul>	215 suppliers newly added	200 suppliers newly added	
<ul> <li>Management decision making is based on protecting the rights of stakeholders, quality,</li> </ul>	Strengthen supplier communication,	Annual supplier conference	• Once a year	• Once a year	
costs, delivery, service (QCDS), reasonable profits, labor health and safety, human rights and environmental protections	showcase industry chain transparency	• ESG selection mechanism for new suppliers	<ul> <li>The mechanism is being constructed and is expected to go online in 2019, providing a quantitative threshold</li> </ul>	-	
<ul> <li>Business ethics, equality of opportunity, and fair trade are the principles of supply chain interactions and illegal behavior will be severely punished. Conducting proactive audits and guidance help to improve</li> </ul>		<ul> <li>Newly added suppliers to supply chain ESG evaluation (up to 500 companies from 2018- 2020)</li> </ul>	• 158 suppliers newly added	• 200 suppliers newly added	
	Strengthen the durability of the supply chain, reduce industry chain risk	<ul> <li>Newly added suppliers to supply chain ESG onsite audit (up to 100 companies from 2018-2020)</li> </ul>	• 40 suppliers newly added	• 50 suppliers newly added	
the business integrity and sustainable competitiveness of the entire supply chain		Proportion of high risk supplier improvements tracking performance improvement	• 95%	· 80%	

# **Supplier Self-Declaration**

FET has rules that all existing suppliers must sign related agreements and a self-declaration within a set period of time. At the same time the company continues to encourage existing suppliers to sign a corporate social responsibility statement. In order to enhance the diversity of the supply chain and expand the influence of FET in the area of ESG, the company encourages new factories to do business with it. In 2018, 340 new suppliers signed corporate social responsibility self-declarations that is a rate of 100%. Of FET's top 100 suppliers. 95 have signed corporate social responsibility self-declarations, which is higher than the annual target of 90% and accounts for 88.7 percent of annual procurement expenditure.

Company Type	Total Companies	No. of signing companies	Percentage of Annual Procurement Expenditure
Active Suppliers	1,114	732	96.2%
First-Tier Critical Suppliers	69	68	83%

100 main supplier CSR Supplier Self-Declaration signing rate



# Supply Chain Sustainable Risk Assessment

Since 2017, FET has used a supplier sustainability self-appraisal questionnaire to conduct risk evaluation, with items evaluated including 19 indicators, including sustainable governance, supplier management, environment management, labor rights, social impact etc. After suppliers respond, FET conducts a written inspection to confirm the veracity of the date provided by the supplier. In 2018, 158 suppliers were evaluated, accounting for 52%<sup>32</sup> of total procurement expenditure. This year, a total of 20 suppliers were identified as high risk, the main risks focused on confidentiality agreements and protection of intellectual property rights. FET drafts improvement plans for high risk suppliers and continues to track the results of such improvements. By the end of 2018, 19 suppliers had replied on improvement results, and FET had confirmed the improvement rate was 95%. In 2019, FET will conduct onsite inspections at high risk suppliers in the hope of helping supplier partners adopt necessary enterprise social responsibility policies.



				5 Stakeholder		
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In the future, FET will conduct annual sustainable risk evaluations of its top 300 suppliers and gradually increase coverage rate. In addition, in 2019 FET will establish new ESG risk quantification evaluation procedures. When all new suppliers register they are required to complete an ESG risk quantification evaluation form and develop quantitative statistics at the system back-end, as a basis for follow up assistance to suppliers that perform poorly in evaluations. In addition, FET also conducts ESG risk evaluation operations on second level key suppliers. In 2018, six supplier evaluations were completed, with no high risk second-tier critical suppliers identified. In 2019, evaluations of the 21 second-tier critical suppliers will continue.

#### **Routine Supplier Evaluation and ESG onsite inspection**



#### **Routine Supplier Evaluation Outcomes**

FET conducts routine annual supplier evaluations and reviews, with the results of those evaluations placed on publicly accessible procurement system's extranet and announced at the Supplier Conference, as a way of praising companies and inviting outstanding suppliers to share their experience at routine Procurement Department meetings. Suppliers with evaluation score under 70 and is more than 5% drop from previous year will be listed as requiring priority guidance, have to introduce an improvement plan and be subject to a second evaluation. In 2018, 131 suppliers were evaluated, accounting for 95% of total procurement expenditure. Of those, the President of FET praised seven outstanding suppliers at the 2018 Conference. Two suppliers required to introduce improvements in 2017 were unable to achieve the required standard in the set period and so FET excluded them from making new bids, allowing them to only engage in basic maintenance projects.

Evaluation Outcome	2017 No. Suppliers	2018 No. Suppliers	Measures Adopted
Outstanding Suppliers (90-100 points)	3	7	-
Qualified Suppliers (70-89 points)	132	122	-
Suppliers in need of improvement (60-69 points)	2	2	The need for improvement has been communicated and a meeting held to propose an improvement plan. A second evaluation is planned in 2019
Unqualified Suppliers (59 points and less)	1	0	During the execution of the plan, quality, schedules and service were unable to achieve the required standard, resulting in the supplier being suspended
Total	138	131	

#### Supplier ESG Onsite Surveys

Since 2016, FET has conducted annual ESG onsite surveys to ensure suppliers execute their corporate social responsibilities as part of daily operations. These surveys can be conducted by FET or third party experts. In 2018, a total of 28 and 20 suppliers underwent FET or third party expert surveys, respectively. Eliminating companies performed both, a total of 40 suppliers were surveyed, or 58% of all top level key suppliers. FET estimates that all top level key suppliers will have undergone a third party survey by 2020. In 2018, FET conducted onsite surveys of 28 suppliers, accounting for 35% of total procurement expenditure. Of those, three suppliers received more than 90 points, 19 scored 80-89 and 7 suppliers 70-79. All suppliers passed an audit of their environment protection objectives and policy, contracted project environment pollution protection and occupational health and safety management operations.

No. of Suppliers Undergone Sustainable Risk Evaluations and Onsite Surveys	2016	2017	2018
Sustainable Risk Evaluations	-	42	158
Onsite Surveys	20	20	40 33



#### **Supplier Evaluation Outcomes**

ARCOA conducts an annual evaluation of the quality, costs, delivery and services of its suppliers. In concert with the company's annual operational timetable in 2018, ARCOA evaluated 62 suppliers using its "Online Supplier System," accounting for 91.9% of total procurement expenditure, with a questionnaire response rate of 100%. Based on the evaluation results, ARCOA increases the amount it procures from outstanding suppliers and eliminates unqualified suppliers. In 2017, 2 suppliers were evaluated as in need of improvement and revaluation in the first quarter of 2018 showed clear improvement, therefore, they were re-designated as qualified suppliers

Evaluation Outcome	No. Suppliers	Measures Adopted
Outstanding Suppliers (90-100 points)	7	-
Qualified Suppliers (70-89 points)	48	-
Suppliers in need of improvement (60-69 points)	7	The need for improvement has been communicated and a meeting held to propose an improvement plan. A second evaluation is planned in 2019
Unqualified Suppliers (59 points and less)	0	-
Total	62	-

# 5.4.3 Supplier Communication Management

# **Annual Supplier Conference**

FET held its 2018 annual supplier conference, attended by 215 suppliers, with a focus on achieving sustainability and working together to create a better tomorrow. At the meeting suppliers not only shared their experience of FET's sustainable development vision and CSR management mechanism, but FET worked with supplier partners to forge a consensus on corporate social responsibility. In addition, the latest supplier sustainable evaluation results were announced and 10 suppliers received a rating as "Sustainable Excellent Suppliers" -- including Ericsson Taiwan, Nokia Taiwan / Taiwan International Standard Electronics Ltd., Delta Electronics, Acer Electronics. A further five companies received a "Grade A Excellent Suppliers" rating - Kinmax Technology Inc., E&B Technology Inc., Jun Technology Co., Ltd., eMosa Inc. and Peichuan Co., Ltd. and received awards from FET former president Yvonne Li.

# **Supplier Education and Training**

In order to provide FET supplier partners with the most convenient communications channels possible and thereby enhance mutual operational efficiency, in 2016 FET created the "Supply Chain e-Learning Platform," combining FET's mobile communications core capabilities and the teaching material design. In 2018, FET focused on expanding its execution of online e-Learning and selected its 300 largest suppliers in the year as online training targets. This offered education on social care issues (such as online social engineering) and used the training to expand the impact of FET's corporate social responsibility. A total of 220 suppliers out of 300 completed the program, a completion rate of 73.3%. In the future, annual objectives will be set and based on the responses of suppliers, further improvements made.

In order to improve the training of suppliers so they have a better understanding of corporate social responsibility and execution capability, FET worked with the 2018 supplier conference planning classroom program to offer training on supplier management, supplier SCR risk evaluation, office energy conservation and environmental protection and supplier conduct. A total of 215 suppliers completed the training program. The most popular programs with suppliers are office equipment energy conservation, corporate social responsibility management mechanisms, environmental education classes, labor health and environmental health and safety management etc. which will be included in the program in the future.

# Supplier CSR TrainingYear201620172018Online Platform79121220Supplier Conference-135215Total79201435

# **Procurement Satisfaction Survey**



FET conducted its first procurement operations satisfaction survey of suppliers in 2015 as a way of enhancing communication between the two sides. In 2018, the company completed both a supplier conference and a procurement satisfaction survey. Of these, 94.5% of suppliers indicated a high degree of satisfaction with conference arranged activities and made numerous proposals on conference content and training subjects, many of which will be considered for the 2019 supplier conference. In terms of procurement satisfaction, 131 questionnaires were sent to suppliers, with 57 valid questionnaires returned, a return rate of 44%. Among them, 90% of suppliers indicated they were satisfied or extremely satisfied. Areas identified as requiring improvement at the conference were billing efficiency and system convenience. Improvement actions were taken immediately.



Since 2016, ARCOA adopted a proposal by employees, for procurement satisfaction survey, an open feedback approach is adopted to replace monthly and individual case ratings. Moreover, the timely collection of interactive information from the requesters on suppliers or procurement operations facilitates the quicker discovery of problems and immediate introduction of improvements. In 2018, 173 procurement documents were collected as feedback from 67 suppliers, with no major problems discovered.

# Chapter 6

**Environmental and Social Protection** 

6.1 Reducing Environmental Impact 6.2 Creating Social Value

# 6. Environmental and Social Protection

# **6.1 Reducing Environmental Impact**

FET continues to focus on and actively respond to climate change and energy-related issues. Combined with the company's core business, this involves promoting environmental and energy strategies, such as introducing science-based carbon emissions reduction targets and introducing Recommendations of Task Force on Climate-Related Financial Disclosures (TCFD) to guide and identify key climate risks, while simultaneously fulfilling the environmental responsibility of the telecommunications industry with responsible products and quality communications infrastructure.



- Awarded 1stt place in the Energy Conservation Competition Taipei City Department of Information Technology
- · Received British Standards Institution (BSI) 2018 Sustainable Energy Conservation and Carbon Emissions Reduction Achievement Award

# 6.1.1 Environmental Footprint Overview

Telecommunication services impact the environment mainly through energy consumption and associated greenhouse gas emissions. Below we detail an overview of FET's energy consumption, energy use distribution and greenhouse gas emissions in 2018. Other telecommunications industry environmental impacts are also explained, including waste footprint and water consumption.





# **Environmental Footprint Trends over the Past Three Years**

FET focused on the promotion of environmental sustainability and every year promotes a range of reduction measures relating to energy issues, greenhouse gas emissions, waste, and water resources management. As a result of these ongoing efforts, over the past three years the company has reduced its total energy consumption, energy intensity, total greenhouse gas emissions and water consumption. In 2018, FET achieved a large reduction in total waste and the past three years' recycling volume has steadily increased. For more environment-related data please see the Appendix.

Energy consumption for past three years

GHG emissions for past three years



Water consumption for the past three



Energy intensity (kWh/number of active customers)

 310,000.00
 42.50

 305,000.00
 42.00

 300,000.00
 41.50

 295,000.00
 41.00

 290,000.00
 40.50

 285,000.00
 2016
 2017

Total GHG Emissions in CO2e (Tons/Year)

Emission intensity (kg/number of active customers)



# 6.1.2 Climate Strategy

In 2018, FET followed Recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) to present a comprehensive inventory of key climate changes, energy risks and FET management, with a focus on corporate governance, strategy, risk management, indicators and targets. This year, the company identified six major climate change risks, while also evaluating the process and scale of financial impacts related to those risks and related countermeasures in the event of an increase in global temperatures by 2 degrees Celsius.

#### TCFD Guide Framework



#### Governance and Risk Management

FET's Board-level "Risk Management Committee" is the company's highest risk governance body and hold regular discussion with the Board of Directors on key corporate risk management issues, including climate change risks. Under the Risk Management Committee is an "Environment and Energy Management Committee" which is responsible for promoting and executing climate change related policies. For more details on the organizational framework and operations of the Risk Management. Committee, see section 4.4 Operational Risk Management. For more details on the Environment and Energy Management Committee see section 6.1.3 Energy Management.

#### Strategy

FET uses a climate change risk matrix to identify and prioritize related risks, while also drawing up risk pathways in order to better understand the impact of different key risk factors on company operations and establish an inventory of adaptive strategies. In the future, the company will seek to further quantify the scale of potential financial impacts for these risks, to more precisely evaluate how climate change risk factors will influence FET's commercial strategy and related costs.

#### Targets and Indicators

In terms of mitigating climate change, the biggest issue for the telecommunications industry is energy use. Every year, in response to the global objective of keeping temperature increase within 2 degrees Celsius, FET tracks the energy use of its base stations, machine rooms, stores and office buildings and drafts science-based volume reduction targets, while also increase renewable energy installed capacity annually as part of its pursuit of energy transformation. The company also establishes management indicators and targets for energy use in those aforementioned areas of major energy consumption and promotes energy conservation. For more details, see 6.1.3 Energy Management. In terms of climate change adaptation, every year FET tracks the financial impact of physical risk factors (such as natural disasters), followed by discussion and introduction of improvements.

# **Identifying Climate Change Risk Factors**

This year FET used a climate change risk matrix to identify and prioritize related risks. FET then conducted an evaluation based on degree of potential impact, vulnerabilities and likelihood of occurrence, classifying climate risk as high, medium and low risk. This categorization mainly references three aspects to calculate risk value and distribution in the risk matrix. Those risk values that fall in the top 30% or the first quadrant are considered key risk factors, including costs and expenses on low carbon technology transformation, increased frequency of severe typhoons, increased frequency of extreme rainfall, energy policy uncertainty, increase in average temperatures and increase in the cost of greenhouse gas emissions. The identification process is detailed below:





# Climate Change Risk Response

Related departments conduct internal consultations and an inventory of existing or future countermeasures in response to the six key climate risks identified.

Risk Categor	y Risk Facto	rs Potential Impact	Likely Occurrence	e Countermeasures
	Costs and expenses on low carbon technology transformation	<ul> <li>The early replacement of equipment in response to the trend toward low carbon transformation will cause an increase in operational costs.</li> <li>Improving the management of greenhouse gas emissions in the telecommunications industry chain and joint research on energy saving and low carbon technologies will increase operational costs.</li> </ul>	Already occurred	<ul> <li>Roll out new renewable energy business and set renewable energy use targets and timetable, while increasing the installation capacity of renewable energy annually (including increasing the purchase of renewable energy certificates and the capability of those certificates) and build solar energy base stations in the future.</li> <li>Effective control and reduction of greenhouse gas emissions created in FET operations</li> </ul>
Transition	Energy policy uncertainty			<ul> <li>and supply chain; proactively cultivate low carbon technology transformation talent and cooperating with upstream and downstream operators.</li> <li>Evaluate the impact and current implementation of important related laws, while conducting</li> </ul>
Transition . Risk	Increase in cost of greenhouse gas emissions	<ul> <li>Failure to achieve national greenhouse gas reduction and renewable energy use targets could lead to the imposition of fines on FET or the need to buy carbon credits from other enterprises, impacting the image of the company.</li> <li>If FET adjusts its business model and is forced to forgo services with high levels of carbon emissions, FET service revenue could be negatively affected .</li> <li>If national renewable energy policy leads to an increase in electricity prices or unstable power supply, it could disrupt FET operations or services</li> </ul>	Could occur in next 3-5 years	<ul> <li>quarterly reviews of possible legal changes and planning countermeasures.</li> <li>Strengthen energy monitoring and management systems, while using equipment replacement and upgrades to improve the efficiency of energy use and reduce overall power consumption, to balance the cost of rising electricity prices.</li> <li>Take renewable energy into consideration in the case of newly constructed machine rooms</li> <li>Purchase related liability insurance and adopt other disaster prevention measures to improve business continuity management.</li> </ul>
	Increased frequency of severe typhoons	<ul> <li>Typhoons and extreme rainfall can disrupt power provision / or cause equipment malfunction, leading to an increase in repair and maintenance costs, while disrupting operations and services.</li> </ul>	Could occur	<ul> <li>Conduct structural strengthening maintenance at existing base stations and improve disaster prevention base station work, with regular flood pressure testing.</li> <li>Strengthen business continuity management, ensure base stations have backup power</li> </ul>
	Increased frequency of extreme rainfall	<ul> <li>Countermeasures taken before or after natural disasters increase FET's operational expenditure, including employee work hours, rate reductions or deferred payments along with the provision of other care services.</li> </ul>	Could occur	<ul> <li>and establish mobile base station and temporary base station deployment capability. This facilitates rapid response after a severe typhoon, thereby reducing the potential impact of typhoons on service quality.</li> <li>Include climate conditions (especially in climate areas where the average temperature is</li> </ul>
Physical Risk	Increase in average temperatures	<ul> <li>The company has to pay higher electricity bills to ensure equipment remains at a constant temperature.</li> <li>An increase in the rate of equipment malfunction caused by overheating increases maintenance and repair costs.</li> <li>Any limiting or cutting of power supply by TaiPower could disrupt FET operations or services.</li> </ul>	Already occurred	<ul> <li>relatively low and salt damage minimal) as part of the evaluation when building new machine rooms.</li> <li>Regular inspections to determine whether property insurance needs to be adjusted in response to the potential impacts of climate change.</li> <li>Base stations will continue to include air injector fans to replace air conditioners, thereby reducing electricity charges and the impact of thermal exhaust caused by the long-term operation of air conditioners, resulting from an increase in average temperature.</li> <li>Increase frequency of maintenance work to reduce the malfunction rate in machine rooms / base stations.</li> </ul>

					6 Environmental and	
FET Overview	Sustainable Development Strategy and Performance	Operating Environment Analysis and Performance	Responsible Governance	Stakeholder Management	Social Protection	Appendix

#### **Managing Reductions in Greenhouse Gases**

This year, FET adopted Science Based targets (SBT) for the reduction of carbon emissions, setting the company's long-term commitment to the absolute reduction of carbon. The target is that by 2030, scope 1+2 total GHG emissions will be 20.3% less than those in 2016, and scope 3 GHG emissions will be 17.2% less than those in 2016. For now, this has been sent to the international Science Based Targets Initiative (SBTi) for verification. Over the past three years (2016-2018), category one and category two emissions volumes have continued to fall, with levels in 2018 falling 2% lower from the previous year. For related management policies and performance details please see 6.1.3 Energy Management and the appendix of this report. FET is gradually expanding the scope of the audits conducted for scope 3 upstream and downstream industry chain carbon emissions. This year the company audited upstream transportation and goods delivery, purchasing goods and services, business travel, fuel and energy related activities, and has been confirmed by an external agency.

# 6.1.3 Energy Management

FET uses energy management systems (ISO50001) and environment management systems (ISO 14001) as part of its continued efforts to improve the energy and resource efficiency. At the same time, FET has also introduced greenhouse gas inventories (ISO 14064-1) systematic management of the negative impacts from energy use on the environment, and draft the "FET Environment and Energy Policy" and "Policy Statement on the Management of Greenhouse Gases." These guide the management of various environmental impacts to improve energy conservation and energy efficiency at different stages of the telecommunications industry service life cycle, thereby seeking to mitigate and adapt to climate change.

FET Environmenl and Energy Policy



# **Environment and Energy Management Committee**

FET has established an "Environment and Energy Management Committee" which is led by the head of the Human Resources Department. Members include the heads of different departments and meetings are held every quarter to discuss energy and environment related targets and performance. Through vertical management, the company headquarters encourages departments to participate in the formulation and implementation of energy policy. FET also introduced "Environment and Energy Management Policy" which covers energy management, environment management, reducing greenhouse gas emissions and climate change responses.

#### Scope 3 Audit Items

Item	Audit Parameters	2018 Emissions
Upstream transportation and goods delivery	Internal delivery vehicles	574.055 tons of CO2e
Purchasing goods and services	Buying smartphones, tablet computers and watches made by such suppliers as Apple or Huawei.	25,356.66 tons of CO2e
Business travel	Calculates the amount of business travel undertaken by employees by self-drive car, plane, high speed rail, train, and taxi.	660.529 tons of CO2e
Fuel and energy related activities	and transportation (including both category one and two elements) of fuel and energy	

#### **Environment and Energy Management Committee Structure**



# **Environment Management System**

FET has long employed ISO14001 Environment Management, ISO50001 Energy Management and ISO 14064-1 Greenhouse Gas Inventory with external verification. FET has already expanded the scope from energy management to include environment management, greenhouse gas emissions reductions and climate change responses, thereby enhancing the credibility of environment management.

Certi	fication	Category (point of introduction)	Coverage Rate	2018 Results	2019 Plans
And the second s	ISO 50001 Energy Management System	<ul> <li>Taipei: 5 points (offices / server rooms / stores)</li> <li>New Taipei: 3 points (offices / server rooms)</li> <li>Taichung: 1 points (offices)</li> <li>Kaohsiung: 2 points (offices / server rooms)</li> </ul>	72%	<ul> <li>Verification scope increased from 1 to 11 points</li> <li>8 Action Plans resulting in electricity savings of 2,440,000 KWH and a carbon emissions reduction of 1,354 ton CO2e</li> </ul>	<ul> <li>Transfer to ISO50001 2018 version</li> <li>5 Action Plans with target electricity savings of 1,268,000 KWH</li> </ul>
organization for open the transfer	ISO14001 Environment Management System	<ul> <li>Taipei: 5 points (offices / server rooms / stores)</li> <li>New Taipei: 3 points (offices / server rooms)</li> <li>Taichung: 1 points (offices)</li> <li>Kaohsiung: 2 points (offices / server rooms)</li> </ul>	72%	<ul> <li>Verification scope increased from 3 to 11 points</li> <li>Resource recycling increased by 11.7 metric tons</li> <li>SIM card purchases reduced by 15%</li> <li>CSR plant visits increased by 75%</li> <li>Completed introduction of TIMM</li> <li>Electronic billing use reached 55%</li> </ul>	<ul> <li>Increase in resource recycling of 5%</li> <li>Reduction in SIM card purchases of 10%</li> <li>Electronic billing use of 65%</li> <li>Expansion of TIMM scope</li> <li>Introduction of TCFD framework</li> <li>Increase in CSR plant visits of 10%</li> </ul>
organization for optimus that the second sec	ISO 14064-1 Greenhouse Gas Emissions Inventory	<ul> <li>FarEasTone Telecommunications</li> <li>New Century InfoComm Tech Co., Ltd.</li> <li>KGEX.COM Co. ' Ltd</li> </ul>	94%	• Added scope 3 internal logistics inventory	<ul> <li>Increase auditing of scope 3 goods and services, employee business travel, fuel and energy other activities etc.</li> <li>Introduce SBT</li> </ul>

Note: The coverage rate for ISO50001, ISO14001 and ISO 14064-1 is calculated as the number of personnel at the point of introduction relative to the total number of employees

# FET Energy Management and Energy Conservation Policy<sup>34</sup>

FET establishes annual targets for its main high-energy consumption departments and promotes energy saving policies. Focal areas include base stations, server rooms, stores, office buildings and logistics, as the company gradually moves in the direction of energy transition.

	2018 Targets	2018 Progress	Achievement Rate	2019 Targets
Base stations	Annual reduction of 1.5% in electricity consumption per 1GB of traffic volume (million kcal consumed/GB) at base stations	Annual reduction of 18%	Achieved	Annual reduction of 5%
Server Rooms	Annual reduction of 1% in PUE	Annual reduction of 2.77%	Achieved	Annual reduction of 1%
Stores	Annual reduction of 5% in electricity consumption	Annual reduction of 11.28%	Achieved	Annual reduction of 3%
Offices	Annual reduction of 1.5% in EUI <sup>35</sup>	Annual reduction of 4.78%	Achieved	Annual reduction of 1%

<sup>34</sup> In this chapter, the power saving benefit is rounded to the nearest whole number in ten thousand degrees. The carbon reduction is calculated by the energy saving degree of the Executive Yuan Environmental Protection Agency. The latest phase (i.e. 2017) power emission coefficient is calculated as 0.554 kg CO2e/degree.

<sup>35</sup> EUI, Energy Use Intensity Building EUI: Electricity usage / total building floor area (Unit: kWh/ m2•yr)

FET Overview

Sustainable Development Strategy and Performance Operating Environment Analysis and Performance Responsible Governance Stakeholder Management Environmental and Social Protection

Appendix



# **Energy Saving Performance and Programs**

Base station energy consumption is the single largest source of energy consumption in FET operations, accounting for 68% of the company's total electricity consumption. In 2018, total energy consumption by FET base stations increased, mainly because more 4G base stations were built to improve the quality of online services offered to customers. However, the electricity use intensity per 1GB of traffic volume continued to fall. This year a total of NT\$19.3 million was spent on base station energy saving measures, with the largest base station energy saving project involving the installation of FCS circulating fans, saving NT\$5.8 million in electricity costs. In terms of the benefits of energy saving policies, base station electricity use intensity per 1GB of traffic volume in 2018 was 18% lower than that in 2017. It is estimated that electricity consumption fell by almost 7,300,000 KWH, reducing carbon emissions by 3,861 tons of CO2e. In addition to improve the energy saving efficiency of base stations, FET also plans to introduce base stations that primarily use renewable energy in response to the government's energy saving, carbon emissions reduction and renewable energy policies. In 2018, base station solar energy installation capacity was increased by 6kwp.

#### 440,000 0.6 1GB traffic electricity consumption reduce $\downarrow$ 18% 0.5 420,000 400,000 0.4 380,000 0.3 0.2 360,000 340,000 0.1 320,000 0 2017 2016 2018 Electricity consumption (kWh) 1GB traffic electricity consumption (kWh)

Average Base Station Traffic Volume

**Electricity Consumption Intensity** 

#### **Strategies and Measures** 2018 Energy Saving Results and Benefits Short-term Long-term NT\$19.3 million · Install frequency conversion air Expenditure (NT\$) Introduce high efficiency power conditioners conversion equipment Improve ventilation systems Estimate that 3G systems Remove 2G equipment equipment will be eliminated by 3G/4G carrier wave parameter 2020 Electricity saving benefits 7.3 million KWH adiustment · Build base stations that mainly (KWH)) · Adjust 3G traffic card panel use renewable energy Increase base station solar energy capacity Reduction in Carbom Emissions 3,861 tons of CO2e (tons)

#### **Energy Saving Measures and Results**



#### **Energy Saving Performance and Programs**

In 2018, the energy consumption of FET server rooms continued to fall, with a year-on-year fall in electricity consumption of about 8.33 million KWH or 5.56%. This year the key program is to start introducing magnetic bearing units with capacity in excess of 1,000 refrigeration tons (RT). On average these are 20% more efficient than domestic server rooms and thereby greatly reduce energy consumption. As a result of the company's ongoing promotion of server room energy saving programs, PUE continues to fall, with average PUE<sup>36</sup> for server rooms this year of 1.79, a drop of 2.77% from last year. In addition, FET also continues to invest in server virtualization, with total energy savings of 1.79 million KWH. In 2009, in response to steady growth FET started to introduce server equipment virtualization as a way of reducing costs, improving efficiency and simplifying management. In 2018, the company spent NT\$22.4 million<sup>37</sup> on server virtualization, adding 477 virtual technology servers, for a grand total of 3,610. At present, the company has only 165 physical servers, reducing energy consumption by about 74% or more than NT\$1.59 million in electricity costs from previous year<sup>38</sup>.





# **Energy Saving Performance and Programs**

FET continues to transform its stores to become friendly green stores, with environmentally friendly energy saving label equipment designated for showroom contracting standards. The company is also gradually improving energy saving at stores by installing energy saving devices, including T5 lighting, frequency conversion air conditioners, LED emergency exit lights etc. In addition, digital multimedia interactive equipment has replaced traditional posters, reducing resource consumption. In 2018, four stores were refitted at a cost of NT\$15.42 million, reducing overall store electricity consumption by 2.4% or 320,000 KWH per year. Arcoa has also embraced the idea of friendly green stores and is gradually replacing the old air conditioning in its stores with frequency conversion energy saving air conditioners and T5 energy saving lighting.

<sup>36</sup> PUE (Power Usage Effectiveness): Total server room energy consumption / IT equipment energy consumption

<sup>&</sup>lt;sup>37</sup> Server equipment virtualization cost: Average price of the servers \* Number of physical servers

<sup>&</sup>lt;sup>38</sup> Electricity use cost-saving calculation: Refer to TaiPower Company's reported average tariff rate of the public electricity industry at the electricity price rate review meeting

5,000 — 4,500 — 4,000 —	10,000 0	Tota Str	rategies and Measures	2018 Energy Savin	g Results and Benefits
3,500 1,357 3,000 2,500 -	1,246 — 14,000 eeo	다. stores 다. Environment	efit stores and increase the number of green ally friendly energy saving label equipment s contracting standard for new stores	Expenditure (NT\$)	NT\$15.42 million
2,000 — 3,264 — 2,939 — 1,500 — 2,939 —	3,112 6,000 9	New generat as T5 energy LED emergen     Stores will re	tion stores to use such electricity saving devices lighting, frequency conversion air conditioners, ncy exit lights, etc. place traditional posters with digital multimedia	Electricity saving benefits (KWH)	320,000 KWH
0 2016 2017	2018	10	quipment tioning units at Arcoa stores will be replaced to ration efficiency.	Reduction in Carbom Emissions (tons)	177.28 tons of CO2e

**Operating Environment** 

Analysis and Performance

Responsible

Governance

Stakeholder

Management



# **Energy Saving Performance and Programs**

FET Overview

Sustainable Development

Strategy and Performance

In 2018, FET continued its efforts to reduce the consumption of energy in company offices through a series of energy saving and carbon emission reduction measures, by upgrading equipment, optimizing operation management, etc. As a result of such efforts it is calculated that this year the company saved 180,000 KWH in electricity consumption. Moreover, energy use by FET offices has fallen three years in a row and in 2018 EUI was 117.14(kWh/m2/year), a decrease of 4.78% from the previous year, with electricity consumption falling by about 430,000 KWH.

Since 2011, FET has continued to replace and donate to charity its less efficient computer equipment. In selecting replacements, priority has been given to rental products that have received an environment friendly label as a way of enhancing efficiency and green benefits of information equipment. From 2016-2018, the ratio of personal information devices rental increased. In 2018, the rental rate for newly added personal computers was 99.6%, notebook computers 88.4% and LCD monitors 95.9%.

Arcoa's Neihu offices continue to replace old air conditioning units and equipment and lighting with energy saving models, while continue to educate employees about energy saving practices and promoting green and environmental-friendly measures. In 2018, the company also received funding from Taipei City Government to relay the top floor of the building with heat insulating bricks, effectively isolating heat and reducing energy consumption. In 2018, Arcoa saved 15,000 KWH in electricity consumption, with a reduction in carbon emissions of up to 3.37 tons.

Environmental and Social Protection

Appendix



#### Equipment Rental Rate\_FET

#### Office Energy Consumption\_FET



#### Energy Saving Measures and Results\_FET

Strategies and Measures	2018 Energy Saving	g Results and Benefits
<ul> <li>Optimization and replacement of air conditioning units</li> <li>Introduction of LED lighting</li> </ul>	Expenditure (NT\$)	NT\$300,000
<ul> <li>Introduction of high efficiency power supply equipment.</li> <li>Promotion of energy management control systems</li> <li>Optimization of lighting control systems</li> <li>Rental equipment activation</li> </ul>	Electricity saving benefits (KWH))	180,000 KWH
	Reduction in Carbom Emissions (tons)	101 tons of CO2e

#### Energy Saving Measures and Results\_ARCOA

Strategies and Measures	2018 Energy Saving	g Results and Benefits
<ul> <li>Optimization and replacement of air conditioning units</li> <li>Introduction of LED lighting</li> </ul>	Expenditure (NT\$)	NT\$15 thousand
<ul> <li>Introduction of LED lighting</li> <li>Introduction of regular checks to turn off unnecessary energy sources</li> <li>Warnings and tracking system for irregular monthly electricity consumption</li> <li>Educate employees about importance of energy saving practices</li> </ul>	Electricity saving benefits (KWH))	6,236 KWH
	Reduction in Carbom Emissions (tons)	3.4 tons of CO2e

Environmental Logistics and Packaging

#### Energy Saving Performance and Programs

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FET promotes environmental logistics, using big data analysis in concert with the different opening times of stores as it continues to optimize logistics routes. At the same time, in order to avoid making individual order deliveries and increasing the number of logistics journeys, the company divides products into two categories: "Marketable Merchandise" (cellphones, customer purchases accessories, etc.) and "auxiliary sales products" (DM, POSM, SIM cards). The logistics for these two types of products differ to reduce transportation costs and environmental pollution. In 2018, FET reduced carbon emissions by 373.6 tons by cutting back on cardboard boxes used for logistics operations and optimizing logistics routes. Arcoa

• continues to upgrade the energy saving equipment and optimize electricity consumption processes at its logistic center. In 2018, carbon emissions were reduced by 10.5 tons.

FET Overview	Sustainable Development Strategy and Performance	Operating Environment Analysis and Performance	Responsible Governance	Stakeholder Management	Social Protection	Appendix

# Energy Saving Measures and Results\_FET

Strategies and Measures		2018 Energy Saving Results and Benefits	2017 Carbon Emissions Reduction (tons)	2018 Carbon Emissions Reduction (tons)
	Combined orders, saving on use of cardboard boxes		89.34	218.3
<ul> <li>Combine big data and different business hours of stores to optimize logistics routes</li> <li>Require all deliveries to turn off engine when parked to save on fuel consumption</li> <li>Promote green product packaging, reduce environmental impacts</li> </ul>	Marketable Merchandise	Use of environmentally friendly renewable green packaging	82.89	75.9
		Picking up products by hand rather than conveyor belt	31.56	0
	Auxiliary sales products Collective delivery of store auxiliary products every month		98.33	79.4
		Total carbon reduction benefits	302.12	373.6

# Energy Saving Measures and Results\_ARCOA

Strategies and Measures	2018 Energy saving results and benefits after change to energ saving lighting		
<ul> <li>Introduction of energy saving lighting, together with improvements and adjustment in electricity consumption processes. Factory affairs staff also patrol sites to determine whether energy is being wasted</li> <li>In the future, Arcoa will install infrared sensors in unmanned areas of the logistics center so lights can be automatically turned on and off to avoid unnecessary waste.</li> <li>Long-term planning on feasibility of solar energy generation at the logistic center, creating an opportunity to produce green energy</li> </ul>	Expenditure (NT\$)	NT\$114,000	
	Electricity saving benefits (KWH))	19,900 KWH <sup>39</sup>	
	Reduction in Carbom Emissions (tons)	10.5 tons of CO2e	

# 6.1.4 Environmentally Friendly Products and Services

In order to increase FET's positive influence on environmental protection, FET has integrated key services and products as well as resource recycling at major stores across Taiwan. Through the introduction of mobile device recycling and resale, the company provides integrated SIM cards and promotes paperless services, reducing resource waste when consumers use FET products and services.

39 The energy saving benefits are estimated numbers. The calculation formula is average energy saving capacity per lamp \* number of lamps \* daily using time \* number of days



**6** Environmental and

# Store Cellphone Recycling

Electronic waste is an issue the telecommunications industry and consumers cannot ignore. In order to make it more convenient for consumers to recycle waste mobile communication products and promote resource recycling, FET and the Environmental Protection Administration signed a "Memorandum of Understanding on the Cooperative Recycling of Waste Mobile Communications Products," establishing cellphone recycling points at stores across Taiwan that recycle waste cellphones, PDAs, GPS and charging devices or other accessories free of charge, to be handed off to qualified operators for reuse.

	2016	2017	2018
Recycled cellphones	1,062	1,742	538
Recycled accessories (batteries / chargers/ cables) (kg)	50	117	111.5

# **Resale of Mobile Devices**

FET focused on developing a secondary market to attract a set group of customers, selling display products, out of season cellphones and accessories to second hand equipment dealers, or FET outlet stores, thereby energizing the second hand product market. In 2018, FET recycled 6,211 cellphones, reducing carbon emissions by  $76 \text{kg}^{40}$ .

	Resale to Second Hand Equipment Dealers	Resale at Outlet Stores
Cellphones	3,359	2,852
Tablet computers	439	266
Accessories	1,764	8,000
Total	5,562	11,118
Energy saved from cellphone resale (KWH)	73,898	62,744
Carbon emissions reduction from cellphone resale (tons)	41	35

# **Paperless Services**

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FET continues to promote digitization through electronic billing and forms, in an effort to implement paperless telecommunications services, as it works with customers to reduce unnecessary waste. Through the online billing provided by its mobile customer services APP, FET provides customers with a rewards program based on cost savings from electronic billing. As such, FET provides a variety of discounted goods to encourage consumers to use electronic billing. By 2018, a total of 2.65 million users were using electronic billing, representing 55% of the total. That represents annual savings of 79.5 million bills, the equivalent of a reduction in carbon emissions of 96.2 tons. It is estimated that in 2019 use of electronic billing will increase to 65%.

# Paperless Form Management System



<sup>40</sup> According to an announcement by Environmental Protection Administration, recycling a mobile phone saves about 22 kWh. The latest emission coefficient of electricity (2016) published by the Bureau of Energy, Ministry of Economic Affairs, was 0.554 kg of CO2e/kWh.



In 2018, 349 service outlets or more than 62% of FET outlets exclusively processed customer data using electronic forms. It is estimated that in 2019 this will increase to 78%, with 80% of retail stores using paperless forms before 2020, equivalent to a reduction in carbon emissions of about 8.6 tons.



#### Electronic Bill Users and Carbon Reduction Volume



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# 3-in-1 SIM Card

After considering the wide variety of cellphone SIM cards available, FET promotes a 3-in-1 SIM card that integrates Mini, Micro and Nano universal cards, thereby greatly reducing pollution from packaging and printing pigments. In addition, in December 2018, FET officially introduced SIM card simplification (the all-purpose SIM card). This removed 4G, 3G, Postpaid and Prepaid limits, improved inventory control and user experience, while also being more convenient for store sales. It is estimated that it could reduce card purchases by a further 5% (about 200,000 cards).

	3-in-1 SIM Card			Simplified SIM Card		
	Reduction in Store SIM Card Purchases %	Reduction in Use of ABS & HPVC Plastic (KG) <sup>45</sup>	Electricity Savings Converted into CO2 Emissions (KG) <sup>46</sup>	Reduction in Store SIM Card Purchases %	Reduction in Use of ABS & HPVC Plastic (KG)	Electricity Savings Converted into CO2 Emissions (KG)
2016	15%	2,750	17	-	-	-
2017	12%	1,650	10.2	12%	2,750	17
2018	14.7%	2,750	18.3	-	-	-

# 6.1.5 Base Station Environmental Impact Management

#### **Base Station Management Regulations**

FET base station and antenna installations are required to meet the regulations of the competent authority Efforts are also devoted to use shared structures, stations and antenna. This minimizes the number of antenna needed, reduces resource waste and proactively improves the landscape around base stations, while reducing the need to eliminate the visual impact of base stations and antenna. In 2018, 52.19% of base stations were shared stations<sup>47</sup>, 43.07% shared structures<sup>48</sup> and 4.74% independent stations. In 2018 the company also undertook disaster prevention strengthening work at its base stations.

In 2018, FET was fined 11 times and a total of NT\$5.5 million for violations related to base station installations. That represented two fewer cases and NT\$1 million less in fines than the previous year. The main reason for the fines was that urgent customer coverage requirements resulted in stations being activated while still in the process of applying for an operational license. In the future, FET hopes to improve its communications with customers and hold talks with the NCC to shorten the license application and thereby reduce the number of stations being activated before approval and related fines.

# **Tracking Electromagnetic radiation issues**

In order to directly address public concerns over electromagnetic radiations, FET maintains active interactions with the public and continues to participate in the "Base Station Work Group" that is part of the "Taiwan Telecommunications Industry Development Association" (TTIDA) established by the NCC and industry members. The company also works to educate the public on the issue of electromagnetic radiations, as a way of reducing public health concerns over base station. TTIDA related promotional/educational work includes:

# **Measuring Electromagnetic radiations**

A hotline provides the public with answers to questions on electromagnetic radiations and a service that measures such waves. In 2018, TTIDA provided advice on 546 electromagnetic related questions, the main ones being: are electromagnetic radiations dangerous to human health, the legality of base stations, and controls on base station numbers, electromagnetic radiation measurement processes, telephone pole electrical sub stations and satellite broadcasting, etc. In addition, 317 electromagnetic measurement services were provided, 64 conducted by FET. Together with requests from the public to conduct such testing, FET provided electromagnetic measurement services on 72 occasions at a cost of NT\$331,200. All test results passed Equivalent Isotopically Radiated Power (EIRP) and electric wave power density standards specified by NCC in mobile broadband base station technical regulations.

- <sup>41</sup> According to Environmental Protection Agency's product carbon footprint, one page of A4 paper has 0.0056 kg/CO2 of carbon emissions
- <sup>42</sup> Since the effect from 499 incident, FET has to process customer data through paper forms, which leads to decrease of electronic form usage in stores in 2018
- <sup>43</sup> Electronic form: In 2018, it reduces the waste of papers for 4.67 million \* 1.21 gram / 1000 / 1000 = 5.65 tons
- <sup>44</sup> Electronic bills: Number of user applications 2,650,000 people \* Annual saving 30 pieces of paper bills \* 1.21 gram /1000/1000 = 96.2 tons

 $^{\rm 45}$  Assume every SIM card will need 5.5 gram of plastics (ABS & HPVC)

- <sup>46</sup> Accroding to Environmental Protection Agency's, the latest electricity emission coefficient (2017) is 0.554 CO2e/kWh.
- <sup>47</sup> Refer to same or different mobile operators building base stations in the same building

<sup>48</sup> Refer to same or different mobile operators share the antenna to build base stations or preserved server space for other operators to build base stations
1

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#### **Electromagnetic radiation Education Activities**

Through CF broadcast, educational seminars, pamphlets and blogs, FET sought to ensure the public has access to accurate information on electromagnetic radiations to avoid social panic and ensure a reduction in the number of negative reports appearing in the media. In 2018, there were 285 protests against FET base stations, a drop of 33% from 2017. The company will continue to communicate and educate the public on the issue of electromagnetic radiations in order to reduce public concerns, as it works to establish good relations with local residents, communities and consumers based on mutual trust.



#### **Base Station Research Results**

In order to improve public understanding of mobile communications, FET provides access to correct knowledge on electromagnetic radiation on its official website. In 2018, the company conducted research with the Oriental Institute of Technology on the safety of electromagnetic radiations, launching a long-term research program into the impact of mobile base stations on human health, as a way of educating people and providing related scientific evidence. It is hoped this will ensure the public is better informed about mobile communications and dispel popular misconceptions about the dangers of radiation posed by base stations.



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In 2018, FET completed the first stage of its "Research Program into the Impact of Mobile Base Stations on Human Health." As part of this, real world testing of base station electromagnetic radiation intensity in Da'an District, Taipei City and Beimen District, Tainan City returned results that were lower than the electromagnetic intensity limits listed in the mobile broadband base station verification technical regulations drafted by the National Communications Commission (NCC). Moreover, no connection was established between the cancer incidence and mortality rate and the number of base stations built.

As part of its corporate social responsibility, FET will continue ongoing electromagnetic testing and education work, so as to provide the public with concrete scientific data. The company will also address those areas in which it receives fines, review past mistakes and in the future make necessary adjustments to it operations. FET received no penalty for excessive electromagnetic radiation in 2018.



# 6.2 Creating Social Value

FET continues to optimize its core business of telecommunications and make a contribution to the macro aspects of the economy, society and environment. In 2019, FET reinterpreted its brand statement of "Closing the Distance" with "For Every Thought, We Go Further," to convey the idea that we don't just reduce the distance between people, we also reduce the gap between people and technology. Through providing good communication quality, communications core technology and social care action, we hope to be a "connector with warmth" to further zero-distance communication and care among the general public.



- quality of the Taiwan's rural areas and the mountain areas.
- In 2018 Hualien's strong earthquake, FET provided care for the disaster area and donated NT\$30 million along with the Far Eastern Group to assist in disaster relief and reconstruction.
- · Cooperation with the Environmental Information Association to encourage the public to implement environmental protection concepts in the daily life and raise 26,106 green actions
- Join PaGamO to build environmental education and digital learning database to enhance the learning willingness of students in remote areas by learning through gameplay. A total of 26 schools and 984 students in rural areas of Taiwan benefited from this project.
- Cooperating with the Child Welfare League Foundation and joining hand with the brand name friDay, the fundraising activities are carried out at all of the stores in Taiwan, with accumulated fundraising amount of over NT\$40 million in recent 12 years.

Note: Statistics on the number of people affected by social charity activities accumulated with 2016 as the base year and up to the end of 2018, which includes Special Consumer Group rate plans and charity projects.

# 6.2.1 Investment in Communications infrastructure

FET has actively invested in construction and maintenance of the infrastructure and telecommunications facilities to ensure that the quality of communication does not vary due to natural disasters and urban and rural differences. In addition to the ongoing implementation of network and speed maintenance measures such as base stations infrastructure construction and regional spectrum adjustment, FET also continued to improve LTE signal coverage in remote areas and became the industry leader of telecom construction in rural areas. In the future, in order to expand the coverage of 5G to provide stable communication quality, FET plans to continue to build NB-IoT stations throughout Taiwan in order for NB-IoT signals and 4G services to cover the entire Taiwan.

# **Excellent communication quality maintenance**

To ensure good communication quality and network stability, FET regularly conducts telecommunications signal measurement each quarter and incorporates the measurement results into the future mobile network construction and adjustment decisions, and promptly improve the connection rate and transmission speed. In order to meet the growing data traffic demand for millions of users, FET continues to expand the 4G core network structure and capacity. FET has been officially expanding into 4.5G era in 2016 and is the first provider of 700/1800/2600 MHz best triple-band service in the Asian telecommunications market. In 2018, 2100MHz bands have been successively opened. On the basis of integrating the three-band network and initiating the 4.5G era, the four-band carrier aggregation technology will provide users with fast and stable network in the future. FET has continued to maintain a stable network in 2018, with 99.82% of the total availability of network. Network interruption by major network devices and technical incidents has not occurred.

Voice communication services	• In addition to tracking the signal problem areas with complaints from customers, FET carries out the actual road test of the whole area periodically to analyze the radio signal intensity and signal quality noise ratio distribution, and the antenna feeder engineering inspection, antenna coverage adjustment and wireless parameter adjustment and optimization in the weak signal area. FET's Dropped Call Rate (DCR) for 2018 was stable at 0.15%
Data communication services	<ul> <li>FET expanded the 1800/2600 MHz base station<sup>49</sup> in 2018 and provided multi-frequency wave composite services to enhance 4G network speed and 3G voice qualities and provide high-definition voice services for 4G Volte users.</li> <li>We continued to build 4G stations in different regions, including rural areas, scenic areas and metropolitan areas, to align the 3G network coverage with flagship areas.</li> <li>FET is committed to optimizing the coverage of indoor signals and expanding the capacity of metropolitan areas, improving signal congestion, and comprehensively improving the access speed, capacity and successful connection rate of 4G wireless services. At present, the successful connection rate of 4G access in the whole region has reached a stable performance level of 99.96%.</li> <li>For 3G services, FET continued to improve the 3G network in 2018 and solved the no-signal area due to protests in order to take over the difficult area with protests and provide customers with good signal quality. The successful connection rate of FET's 3G voice and packaging access has stable reached over 99.82%</li> </ul>

# **Establishment of new business**

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In order to improve the quality of NB-IoT service used by enterprise users, FET in 2018 optimized the NB-IoT signal and parameters for related service sites. In addition, 46 operators such as Gogoro and other third-party system integrators have joined FET to construct the IoT ecosystem. At present, NB-IoT applications include: intelligent street lights, geomagnetic parking, air detection, meters and other application management, and can meet the needs of data transmission of users using FET's NB-IoT. With the advent of 5G "Internet of Things" applications, a solid IoT network platform has been built first. At the same time, in order to coordinate with the national policy to promote the 5G plan, FET joined hands with the Industrial Technology Research Institute, Ericsson and the domestic telecommunications equipment manufacturers to form a "FET 5G Pioneer Team", and through the accumulated technical energy of 5G laboratory and the largest NB-IoT ecosystem in the country to demonstrate the potential of FET in 5G technology.

#### Investment in remote areas construction

FET's 4G network has covered 99% of Taiwan's population, with the signal spreading across 85 townships of Taiwan. We actively responded to the NCC's telecommunications service management regulations, and continued to invest in the "popularization of telecommunication services" every year, and we strive to increase access speed of data communication in remote areas to the level of metropolitan areas. Since 2014, with the cooperation of "NCC promotes the (purchase) construction of common-station mobile communication platform infrastructure for public service agencies", the application for subsidy for the construction of base stations for public service agencies in high-disaster potential areas or public buildings released from rural areas throughout the country has been put forward in order to improve the quality and coverage of communication services, effectively accelerate the construction of remote communication facilities and strengthen the stability of communication services when disaster occurs.

A total of 16 stations were completed by FET in 2018 for "Strengthening the Communication Infrastructure of Disaster Prevention and Relief Operations". A total of 12 stations were completed for "Popularizing the infrastructure of remote broadband access base" in 2018. Since the launch of LTE service in 2014, by 2018, LTE construction in more than 747 outlying islands and remote villages have been completed, and LTE signal coverage of more than 96% of remote areas has been achieved.

# Amount of telecommunications services in the telecommunications services



<sup>49</sup> 1800/2600MHz is one of the 4G band, which is a high-frequency signal, with the power of waves and the load of base stations can be more accessible.

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# i-Tribe Wireless Network Construction Plan

Since 2014, FET has participated in the project of "Constructing Wireless Broadband Environment in Aboriginal Areas" promoted by the Council of Indigenous Peoples. The goal is to build outdoor wireless network for the i-Tribe in the aboriginal villages. By the end of 2018, FET has assisted in the construction of outdoor wireless network for a total of 12 counties, cities and 115 tribes. Integrating the free wireless Internet service of i-Tribe and the user identity authentication of i-Taiwan wireless network helps the overall management of the Council of Indigenous Peoples' statistics of online users, network traffic, etc. The Group has enhanced the network bandwidth and wireless network coverage in the areas of the project, which in turn affects the medical, education, tourism and industry promotion.

# Construction and Operation Promotion Plan of Learning Cloud for Special Education in Nantou, Changhua

The construction of learning cloud for special education in Nantou, Changhua, focuses on the limited resources available to special education students, parents and teachers. Therefore, it is planned to construct a digital teaching platform suitable for teachers and students of special education. No matter on aspects of the course content. interaction between the two sides or outdoor teaching, are all assisted by mobile devices such as tablets. This project mainly aims at providing 4G mobile Internet service for special education classrooms in 20 schools in Changhua and Nantou, and strengthening the local signal sources. At the same time, it ensures that there are abundant network services available for teachers and students to carry out outdoor teaching in urban areas.

# "Mountaineer Project" by the Administration Division of Taroko National Park

According to the statistics of the National Fire Agency, Ministry of the Interior, the average number of rescue cases in mountain areas is 185 per year. Considering that the kev to rescue mountain accidents is basic communication, starting from 2015. FET has invested NT\$20 million to cooperate with local forest management offices to set up communication noticeboards with obvious signs and weather resistance in mountain areas. With 3 consecutive years' effort, FET has committed to the optimization of the communication guality of more than half of the popular climbing trails in Taiwan supervised by the forest administration offices of Luodong, Pingtung, Taitung, Hualien, Chiayi, Nantou, and Hsinchu, and nearly 400 pieces of communication noticeboards have been established to provide the most critical support for the rescue work in the mountainous area.



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# 6.2.2 Care System for Social Events

When major disasters occur, smooth communication can support the rescue, epidemic prevention and national security delivery tasks, and serve as a critical social resource. In addition to ensuring the smooth operation of the machinery room, base station and other telecommunication infrastructure in the first occurrence of the disaster, FET also integrates the resources of communications, stores, customers and Far Eastern Group, and solidifies social forces to implement disaster relief.



- Preferential rent reduction and extension of payment period for the vitims affected by severe disaster.
- prepaid cards, replacement SIM cards, and emergency communication services

On February 6, 2018, an earthquake of 6.0 Rui's scale occurred in Hualien, causing serious disasters. FET rushed into the disaster area at the first occurrence, assigned 46 staffs to assist in communication recovery and disaster relief care, dispatched additional base vehicles and set up care service stations, providing free communications and related supplies for daily life. FET subsidiary friDay Shopping gathered resources on the station, called on employees to donate money, and worked with manufacturers to donate materials needed by victims to send care to the disaster areas. FET also launched small donation by short code, calling on all people to donate through direct dial 591933 via mobile phone. Far East Group called on its subsidiaries, such as FET and others, to make a joint donation of NT\$ 30 million to assist in disaster relief and follow-up reconstruction for victims.

# 6.2.3 Charity Care Project

With environmental education, digital inclusion and social welfare as the three main axes of public charity input strategy, FET fully responds to the United Nations Sustainable Development Goals (UN SDGs) with the visions of poverty eradication (SDG1), health and well-being (SDG3), quality education (SDG4), reduction of inequality (SDG10) and climate action (SDG13).

The total value of charity care for the year	Unit: NT dollar
Direct input amount of public charity projects	\$8,595,405
Amount translated from employee volunteer	\$15,825,532
Value of in-kind donations	\$2,711,382
Other personnel and administrative expenses	\$6,109,480
Total	\$33,241,799



Charity Strategy	Strategy Description	Respond to UN Sustainable Development Goals	Business benefits KPI	Social/environmental benefits KPI
Environmental Education	As telecommunications service providers are greatly affected by climate change, FET has used its communication channels to appeal to the public to participate in environmental protection actions. Through education, services and products, public awareness and social resilience have been enhanced to jointly mitigate the impact of climate change.	4 гарая 13 км/ук С	<ul> <li>FET's green brand influence and brand image</li> <li>Number of valid customers for communication services and digital value-added services</li> <li>Customer participation in the community courses organized by FET stores</li> </ul>	<ul> <li>Climate change and environmental protection, and follow-up actions</li> <li>Number of Employees participation, Work-Life Satisfaction level</li> </ul>
Digital inclusion	As a telecommunications operator, FET takes the responsibility to reduce the digital deviation. Therefore, we help ensure the diversity and fairness of quality education and promote the lifelong learning opportunities with relevant digital technology.	4 name 10 scany.	<ul> <li>Number of Schools in Digital Learning Platform</li> <li>Number of valid customers for communication services and digital value-added services</li> <li>Customer conversion rate</li> </ul>	<ul> <li>Digital literacy coverage rate in rural areas</li> <li>Degree of beneficiary students' increasing interest in digital learning</li> <li>Beneficiary students' degree of participation</li> <li>Number of Volunteers and Volunteers' level of participation.</li> </ul>
Social Engagement	FET has worked hard to raise funds for disadvantaged groups and abandoned children in the past 11 years to improve their health care, living environment and basic needs. FET's goal is to end the expected death of children under the age of five and increase the survival rate of children.	1	Brand likelihood and brand preferences     Differentiation of FET and its competitors	<ul> <li>Donation Amount</li> <li>Child mortality rate</li> <li>Degree of improvement in children's emotional expression ability</li> </ul>

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Environmental and Social Protection

#### Cherish the Earth, Spread Love Far

Since 2015, FET continued to arouse attention of various parties to environmental issues through a series of activities such as "Cherish the Earth, Spread Love Far". Through such activities as environmental image collection, environmental green action and Cherish the Earth Summit, FET has strengthened its advocacy of environmental education activities. To deepen people's comprehension on the environmental issues and to influence them in making informed and responsible decisions, FET believes that only by letting children and general public to get involved in practical actions to understand environmental and ecological issues, can participants' observation and reflection be induced, then environmental education can be implemented and changes made.

In response to the trend of carbon reduction of the United Nations SDGs in 2017, Cherish the Earth Activity in 2018 continued to focus on three major core actions, namely, establishing FET's green culture, promoting environmental green education and advocating consumer green responsibility. It set the goal of raising 9,000 environmental green actions for the general public. Therefore, it encouraged FET's staffs, suppliers and the public to start from their daily lives and join in the crowd of green actions, fulfilling responsibilities as a citizen of the Earth, 26,106 green initiatives were raised by the end of the year.



#### **Promotion method**

Employees	<ul> <li>102 volunteers were recruited to participate in three beach cleaning activities. A total of 332.59 kilograms of marine garbage was collected.</li> <li>Every year, FET regularly promotes the activities related to environmental protection and energy saving in "Green Carnival", including body slimming in office environment, monthly cleaning inspection, double-sided printing to save paper consumption, introducing the automatic detection light switching system in conference rooms to reduce power consumption. Environmental protection and green actions are deep within the staffs and the working environment.</li> </ul>
User	•Call on users to use electronic bills to reduce more carbon emissions •FET launched an interactive marketing campaign through the O2O channel with virtual and physical integration in the wake of the World Cup craze in 2018. As long as you play creative interactive games online, you can go to FET store to collect environmental protection ocean yarn waterproof small bag for mobile phone with the same material as many World Cup sportswear, hoping to let the public to experience the special texture of environmental yarn, and then attach importance to environmental protection.
NGO	<ul> <li>In collaboration with the Environmental Information Association, millions of activities raised, including green actions eco-documentary collections, physical/online film exhibitions, enterprise joint beach cleanings and other activities from 2017 to 2019.</li> <li>Collaborate with the Transformation School to convene with 16 junior high schools in the Middle East and South China, and organized 15" Cherish the Earth" summit. Using carbon emissions reduction, plastic reduction and air pollution as the theme, the games were designed to bring the students to voice out the importance of environmental protection. Total of 417 teachers and students and 39 volunteers have participated.</li> </ul>
Public	<ul> <li>FET's volunteers visit the scene of the green expo. The Company asked the public to raise green action and invited the public to countersign for plastic reduction. A total of 620 people were invited to join the group of countersign for plastic reduction.</li> <li>Through the "FET, Love, Sustainability" Facebook social community group, we launched the event to the web community to engage in the events of environmental protection. The events were organized irregularly. The web community were invited to join and upload the environmental protection green action that they completed to the Internet. There were a total of 12,588 persons from web community motivated to join the green action.</li> </ul>

#### Adopt SROI evaluation to help manage the benefits from environmental education

In order to assess the impact of the activities on the society, FET has adopted the SROI (Social Return on Investment) method of evaluation on social investment in 2017 to help FET nvest resources more precisely to raise management efficiency and maximize social value. In 2017, we anticipated NTD\$3.17 social value was created for every NTD spent on "Cherish the Earth" activities, and according to the anticipated result, feedback, and suggestions from discussion with beneficiaries we adjusted and optimized the project activities. In 2018's recalculation, the SROI ratio of 2017's event increased from the original anticipation of NT\$3.17 to NT\$3.79, increased by as much as 20%. According to the results of the study, Cherish the Earth activities have produced positive and sustainable effect to FET, participation public, school children and volunteers.
#### 2018 "Cherish the Earth" Project Optimization Key Items

School Children	<ul> <li>The memory of school children is short and temporary, and the impact will decrease with time, therefore design green courses with long-term activities to increase the impact on the students.</li> <li>The school originally has environmental education courses, so the knowledge replacement is relatively high. Introducing more practices in life would enhance the subsequent practicality tostudents.</li> </ul>
Public	<ul> <li>Through innovative and creative means, communicate with stakeholders on environmental protection education topics Research shows that it is easier to generate impacts on the public.</li> <li>Through Butterfly Wants to Fly Eco Concert and Green Action market, the public can take the initiative to participate in green action and enhance the awareness of environmental issues.</li> </ul>
Volunteers	<ul> <li>In addition to joining the activities, the volunteers themselves found positive influence from participation, such as the attitude of helping people and giving back to the community.</li> <li>As far as possible, the link between volunteers and events will be strengthened. In addition to increasing number of people who care for environmental issues, such activities would raise employees' sense of identity with the Company.</li> </ul>



## **Revolutionize Education, Spread Love Far**

The M-shape society has affected the development of education in recent years, resulting in uneven resource allocation of urban and rural education. The rural area children are lacking of good learning environment. Therefore, FET has launched the "Go-through Education and Transfer Program" since 2017 and joint hand with NTU professor Mr. Benson Yeh and cooperate with the world's first online game learning platform PaGamO he developed. Putting "learning" into "game", this software, which invade more land through solving the questions, is promoted to primary schools in rural area raised the learning motivation of school children in rural area.

FET has cooperated with the Education Bureau of New Taipei City and Education Bureau of Tainan City respectively in 2018. Regional school with lesser opportunities for digital development in New Taipei City<sup>50</sup> and schools which have the willingness to join in Tainan City are selected to participate. The Company recruited the volunteers to devote time to accompany and teach the students in using the "PaGamO Online Game Platform". FET has integrated the mobile technology, remote cloud facilities, and APP games, and integrated thousands of questions from environmental education and digital learning questions database. Students not only learn about their own curricular courses, but also learn environment, digital, technology and telecommunications knowledge from a young age. In 2018, a total of 119 volunteers were mobilized at FET. The Company has helped the 26 schools in remote areas, 115 classes and 984 students in the northern, middle and southern parts to launch digital learning through a "click", and provide the warmest accompany to the children in remote areas.



### Save Abandoned Children, Spread Love Far

According to statistics from the Child Welfare League Foundation, In Taiwan, on average, there is 1.4 children still in nurturing stage being exposed to the status of needing adoption every day. And with the influence of having less children, the willingness of adoption from general public reached new low. Child waiting for adoption on average need to wait for more than a year to get a home. In order to help babies to receive proper care in the process, FET promoted the 12th 'Save Abandoned Children Spread the Love" campaign with Child Welfare League Foundation. The Company and Child Welfare League Foundation's exclusive design "Love's Miraculous Small House" building block toy was available for charity sale in all the stores of FET in Taiwan. The Company also cooperated with friDay Video and friDay Shopping to organize "Home Waiting Baby Online Exhibition" and "Shopping with Love" activities to bring out the issue of children waiting for adoption and call out for more general public to help home waiting baby. In addition, FET used the concept of "Home" to launch the "Accumulate my love, create his home charity money raising festival". Successfully transformed the traditional fundraising model to online and offline linking to create Taiwan's largest caring network.

FET's hopes to make use of core resources, including the use of channels, digital convergence, millions of users, the innovation power of the ICT industry to expand the power of influence to the society. In addition to the ongoing use of channel advantages for money raising in 2018, FET also initiated internal donations, calling for employees to donate monthly fixed maintenance and act as home waiting baby's foster parent and provide steady care to baby. FET has until now helped the alliance to raise funds of over NT\$40 million. It accounted for about 30% of the children's life care fund of the alliance. This helps to contribute to helping more than 1,400 home waiting babies to grown up in safety. In the future, FET will continue to exert the advantages of ICT industry and strive to promote social innovation and help more disadvantaged children, and call for more from the public together to help home waiting baby.

# Appendix

Material Operational Issues Environmental and Social Aspect Data Operating Financial Performance GRI Standards Index Third-party Assurance Statement

## Appendix

## **Material Operational Issues**

Based on the material topics indentified through materiality analysis in 2017, FET conducts annual review and adjustment in 2018 by referring telecom industry's material topics which are recogzined by institutional investors, peer companies and Sustainability Accounting Standards Board (SASB). The Company will also review major news events related to FET into consideration and adjust the material topics after comprehensive evaluation.

#### **Adjustment Process for Materiality Matrix**





#### Implications and changes of critical topics in 2018

Adjustment of Criti	cal Issues	Implications and Changes	
Operating performance	Name adjustment	Simplify the name to focus on the discussion of operating performance, and merge the business strategy	
Corporate governance and integrity	Robust corporate governance framework and trustworthy management provide the foundation for corporate sustainability.		
Risk management and emergency response	Unchanged	Changes in the external environment have given rise to financial risk, business risk and other new forms of risk, which may cause potential impact on company's continuous operation.	
Climate strategy	New issue	The Intergovernmental Panel on Climate Change (IPCC) issued a special report on warming up of 1.5 degrees, alarmming the significant impacts of global warming and extreme climate. Therefore, the impact of typhoon and extreme storm weather on FET's operation will increase. In addition, to reach Paris Agreement's goal of controlling the global warming under 2 degrees, Taiwan government has set up the Intended Nationally Determined Contributions, which covers FET's operation under the regulation. At the same time, institutional investors also start to put attention on how telecom industry can utilize its core capability to response to the climate change issue. Thus, FET has to actively response to the demand of CDP and TCFD guidance.	
Communication quality and network infrastructure	Unchanged	Good communication quality provides the foundation for telecommunication service and related applications and directly affect the customer experience and satisfaction.	

Adjustment of Critic	al Issues	Implications and Changes
Information security and customer privacy Unchanged protection		Given the increasing popularity of mobile Internet, mobile payment and cloud technology, information security has become the primary issue for telecommunication service providers, which is highly relevant with company reputation and customer trust.
Social Innovation	Unchanged	By providing inpositive products and convises have said to the society and environment. FET not only greates value but also improves lifestule quality for the public
Environmental innovation	Unchanged	By providing innovative products and services bene_cial to the society and environment, FET not only creates value but also improves lifestyle quality for the public.
Strategic innovation management	Name adjustment	In response to the ICT industry trend in 5G, Internet of Things and digital transformation, FET will increase the innovation and R&D efforts to the overall strategic level of the enterprise. Therefore, the name is adjusted accordingly.
Digital inclusion	Unchanged	Digital inclusion is the issue that ICT industry has to consider when pursuing growth. It includes improving user friendliness and fairness of services and products, addressing the needs of the socially disadvantaged and narrowing the gap between them and the public.
Quality customer experience	Unchanged	Our customers' trust and satisfaction are key drivers of sustainable growth for the Company.
Human rights issues management	$\bullet \rightarrow \bullet$	In response to the 499 rate plan incident for Taiwan's telecommunications industry this year, the stakeholders and the Company have increased the degree of concern on human rights issues. Therefore, the level of materiality is increased from basic to important level.
Energy management	Name adjustment	Merge the discussion of GHG emission management under the issue of climate strategy and simplify the name to focus on the management of energy saving and increasing energy efficiency.

## Explanation of impact boundary of various topics and their corresponding chapters

		Level of Materiality		Location of Economic, Environmental, and Social Impact								
Material Issue	Level of	Topic Serial No.	Topic	Topic		Caused Dire	ectly by FET	Cased by b	ousiness relationsh	ip with FET		)ther Indirect ip with FET
	<ul> <li>Materiality</li> </ul>		Торіс	FET Including NCIC	ARCOA	Suppliers/ Contractors/ Developers	Enterprise Customers	Consumers	Competent Authorities	Community Groups/NGOs		
Communication quality and network infrastructure		203	Indirect Economic Impacts	•	-							
Operating performance	_	201	Economic Performance	•	•							
Social Innovation	_	-	-	•		•	•					
Information security and customer privacy protection	Critical	418	Customer Privacy	•	•	•						
Strategic innovation management	_	-	-	•		•						
Risk management and emergency response	_	102	General Disclosure	•	•							

			FET Overview	Sustainable Developmen Strategy and Performan	nt Opera ce Analy	ting Environment sis and Performance	Responsible Governance	Stakeholder Management	Environmenta Social Protect									
		Lev	el of Materiality			Location of Econor	nic, Environmenta	l, and Social Impac	:									
Material Issue	Level of Materiality		Торіс		Caused Dire	ectly by FET	Cased by I	ousiness relationsh	ip with FET	Caused by C Relationsh	other Indirect ip with FET							
			materiality	,	Wateriality	wateriality	Waterlaity		Waterianty	Materiality	Wateriaity	Serial No.	Торіс	FET Including NCIC	ARCOA	Suppliers/ Contractors/ Developers	Enterprise Customers	Consumers
Corporate governance and integrity		205 206 415	Anti-corruption / Anti-competitive behavior /Public Policy	•	•	•												
Environmental innovation	Critical	-	-	•		•	٠											
Digital inclusion		-	-	•														
Digital inclusion experience		417	Marketing and Labeling	•	•													
Talent development and management		202 401 404 405	Market Presence/ Employment/ Training and Education/ Diversity and Equal Opportunity	•	•													
Response to government policies and regulatory changes		307 419	Environmental Compliance/ Socioeconomic Compliance	•	•				•									
Supply chain management	Important	204 308 414	Procurement Practices/ Supplier Environmental Assessment/ Supplier Social Assessment	•	•	•												
Brand image management		-	-	•	•													
Energy management		302	Energy	•	•	•	•	•										
Climate Strategy		201 305	Economic Performance/ Emissions	•	•	•												

		Level of Materiality		Location of Economic, Environmental, and Social Impact						
Material Issue	Level of	Topic Serial No.		Caused Dire	Caused Directly by FET Cased b		ousiness relationshi	ip with FET	Caused by Other Indirect Relationship with FET	
	Materiality		l Topic	FET Including NCIC	ARCOA	Suppliers/ Contractors/ Developers	Enterprise Customers	Consumers	Competent Authorities	Community Groups/NGOs
Human rights issues management	Important	403 406 409 412	Occupational Health and Safety/ Nondiscrimination/ Forced or Compulsory Labor/ Human Rights Assessment	•	•	•				
Communication and research on issues concerning electromagnetic radiation		413 416	Local Communities/ Customer Health and Safety	•						
Environmental resources management and application	Basic	301 306	Materials/ Effluents and Waste	•	•	•				
Transparent communication		-	-	•	•					
Community care and charitable investments		-	-	•	•					•

## Environmental and Social Aspect Data

## **Environmental Aspect Data**

	2016 results	2017 results	2018 results	2025 targets					
GHG emissions <sup>51</sup>									
GHG Emissions in CO2e (Scope 1 + Scope 2) (Tons/Year)	305,849.76	300,190.45	293,817.41	242,930.82 (It is 2030 target)					
-Direct GHG emissions (Scope 1)	9,428.30	5,830.39	4,999.63	-					
-Indirect GHG emissions (Scope 2)	296,421.46	294,360.06	288,817.78	-					
-External GHG emission (Scope 3)	-	1,425.62	94558.02 <sup>52</sup>	-					
Emission intensity (kg/number of subscribers)	41.63	41.94	40.97	-					

FET Overview	Sustainable Development Strategy and Performance		onsible Stakeholder rnance Management	Environmental and Social Protection
	2016 results	2017 results	2018 results	2025 targets
Energy Consumption				
Overall non-renewable energy consumption (GJ)	567,905.22	562,431.17	527,237.04	-
-Direct energy consumption — Gasoline (kL/year)	558.45	511.40	494.84	-
-Direct energy consumption — Diesel (kL/year)	97.98	91.99	94.80	-
-Indirect energy consumption (GJ)	561,430.77	556,446.22	521,402.92	-
Energy intensity (kWh/number of subscribers)	78.28	77.59	72.70	-
Base station power consumption per 1GB of traffic (Mcal/GB)	0.537	0.323	0.266	0.173
PUE in IDC server room	1.88	1.84	1.79	1.5
Average store electricity consumption — FET (GJ)	3.264	2.939	3.112	-
Average store electricity consumption — ARCOA(GJ)	1.357	1.317	1.246	-
Waste				
Total waste (tonnes)	393.77	420.57	383.36	-
Recycled waste (tonnes) / Recycled percentage	78.76 (23%)	124.85 (30%)	122.01 (32%)	-
ncinerated waste (tonnes)	270.84	264.03	261.35	-
andfilled waste (tonnes)	44.16	31.68	0	-
Vater				
/ater consumption (kL)	271,948	263,917	252,728	-

<sup>51</sup> The scope of ISO14064-1 inventory covers FET, NCIC and KGEx. This table also covers all ARCOA data. The following energy consumption table is the same.

<sup>52</sup> In 2018, the scope of category 3 emissions expanded due to increased inventory categories.

## Social Aspect Data

	2016 results	2017 results	2018 results	2025 target
Employee Structure Overview				
Full-time Employees 53	6,972	6,867	6,536	-
-Male	Male	3,207	3,085	-
-Female	Female	3,660	3,451	-
Part-time Employees	15	16	14	-
-Male	Male	10	11	-
-Female	Female	6	3	-
Temporary Workers	300	337	9	-
-Male	Male	101	6	-
-Female	Female	236	3	-
Employment of Disabled People	48	48	46	-
Percentage of females in management level	33%	33%	32%	35%
Employee Training and Development				
Employee training cost - FET				
-Total employee training costs (NT\$)	32,900,495	32,767,528	36,857,283	-
-Total employee training hours (hours)	335,017.90	399,980.08	402,407.36	-
-Average employee training costs (NT\$)	5,081.16	5,098.42	6010.65	-
-Average employee training hours (hours)	51.74	62.23	65.62	72

FET Overview	Sustainable Development Strategy and Performance	Operating Environment Analysis and Performance	Responsible Stakeholder Governance Management	Environmental and Social Protection
	2016 results	2017 results	2018 results	2025 target
Employee training cost - ARCOA				
-Total employee training costs (NT\$)	605,012	466,580	831,929	-
-Total employee training hours (hours)	5,651	6,073	5,940	-
-Average employee training costs (NT\$)	1,271	1,070	1,990	-
-Average employee training hours (hours)	11.9	13.9	14.2	-
Creating Social Value				
Accumulated number of people impacted by charity programs	10,858	46,937	799,391	6,900,000
Communication infrastructure investments (NTD \$millions)	7,083	4,676	4,161	-
-Amount invested in network infrastructure and equipment (NTD \$millions)	7,068	4,455	4,130	-
-Amount invested in of construction in remote areas (NTD \$millions)	15	221	31	-
Amount invested in social public welfare (NTD \$thousands)	21,688	24,336	20,913	-
-Amount invested in public welfare (NTD \$thousands)	15,690	20,404	15,754	-
-Amount raised (NTD \$thousands)	5,998	3,933	5,159	-
Number of volunteers involved	440	413	352	-
Fotal committed hours <sup>54</sup>	3,520	3,304	2,816	-

<sup>&</sup>lt;sup>54</sup> The duration of an activity a volunteer committed is regarded as a workday (8 hours), and the numbers are multiplied to calculate total committed hours.

## **Operating Financial Performance**

## **Distribution of Economic Value**

FET is committed to sharing the fruits of its operations with all stakeholders. Apart from income tax payment, after deducting losses covered, legal reserve and special reserve, at least 50% of the balance is distributable as dividend. The Board of Directors passed a resolution to approve the 2018 dividend distribution plan on February 20, 2019. Undistributed earnings from 2018 will be distributed as a cash dividend at a rate of NT\$3.75 per share. Also, we not only pursue revenue growth but also seek ways of giving back to society.

Payments to shareholders:	Cash dividend <sup>₅₅</sup>	Unit: NT\$ thousands	Paym	ents to employees: Er	mployee benefits	Unit: NT\$ thousands
2016	2016         2017           \$12,219,378         \$12,219,378			2016	2017	2018
\$12,219,378				\$7,073,044	\$7,430,312	\$7,492,670
Payments to suppliers: Pro	curement spending	Unit: NT\$ thousands	Paym	ients for income tax		Unit: NT\$ thousand
2016	2017	2018		2016	2017	2018
\$36,380,000	\$35,290,000	\$29,543,940		\$1,971,801	\$2,125,391	\$2,124,394
Government grants receive	ed: Government subsidy inco	me <sup>56</sup> Unit: NT\$ thousands	Socia	l investments: Charity	activities <sup>57</sup>	Unit: NT\$ thousands
2016	<b>2016 2017</b> \$6,104 \$87,107			2016	2017	2018
\$6,104				\$21,688	\$24,336	\$20,913

<sup>55</sup> Please refer to 2018 annual report for FET dividend policy

<sup>56</sup> Industrial Development Bureau of the Ministry of Economic: \$47,624 NT\$ thousands; Ministry Health and Welfare: NT\$52,576 thousands; National Communications Commission: NT\$31,651 thousands; Ministry of Labor: NT\$1,993 thousands

<sup>57</sup> Spending on public welfare includes expenditure on charitable projects in that year, public fundraising, and cash donations. Duplicated items are deducted to avoid double calculation.

ondensed Balance Sheet-by Cons	olidated						2019/03/31; Unit: NT\$' 00	
	Year		Financ	ial Information In Recent !	5 years		2019/01/01 ~ 2019/03/3	
Item		2014	2015	2016	2017	2018	(Note1)	
Current Assets		20,806,012	34,299,373	26,557,388	26,284,153	23,940,125	24,118,711	
Properties, Plants and Equipment		50,938,477	52,045,655	49,849,572	46,233,707	41,843,053	39,683,909	
Intangible assets		47,703,750	45,677,996	52,458,457	56,109,371	53,122,685	52,843,542	
Other Assets		4,259,948	4,858,147	3,941,905	4,079,124	7,910,646	17,039,522	
Total Assets		123,708,187	136,881,171	132,807,322	132,706,355	126,816,509	133,685,684	
Current	Before Distribution	22,675,815	21,683,305	30,980,704	30,391,974	25,621,259	25,835,906	
Liabilities	After Distribution	34,980,300	33,986,190	43,262,310	42,657,587	(Note 2)	(Note 2)	
Non-current Liabilities		27,479,371	42,538,970	30,104,017	31,868,168	27,159,067	31,469,055	
	Before Distribution	50,155,186	64,222,275	61,084,721	62,260,142	52,780,326	57,304,961	
Total Liabilities	After Distribution	62,459,671	76,525,160	73,366,327	74,525,755	(Note 2)	(Note 2)	
Equity Attributable to Owners of Far	Before Distribution	72,747,650	71,906,365	71,006,018	69,758,412	73,317,498	75,463,309	
EasTone	After Distribution	60,528,272	59,686,987	58,786,640	57,539,034	(Note 2)	(Note 2)	
Capital Stocks		32,585,008	32,585,008	32,585,008	32,585,008	32,585,008	32,585,008	
Capital Surplus	Before Distribution	14,009,061	12,058,158	10,166,874	8,143,345	5,820,041	5,820,041	
Capital Surplus	After Distribution	12,109,355	10,181,262	8,143,345	5,820,034	(Note 2)	(Note 2)	
Retained Earnings	Before Distribution	26,292,678	27,388,411	28,387,615	29,011,927	34,881,092	37,057,849	

17,045,929

18,191,766

19,115,860

(Note 2)

## **Consolidated Financial Statements**

Shoot by Concolidated Condo d Dala

After Distribution

15,973,006

## 2010/02/21. Linite NITE 000

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(Note 2)

Appendix

FET Overview

Sustainable Development Strategy and Performance

Operating Environment Analysis and Performance

Responsible Governance

Stakeholder Management



	Year		Financial Information In Recent 5 years				
Item		2014	2015	2016	2017	2018	(Note1)
Other Equity		(139,097)	(125,212)	(133,479)	18,132	31,357	411
Non-controlling Interest	Before Distribution	805,351	752,531	716,583	687,801	718,685	917,414
Non-controlling interest	After Distribution	720,244	669,024	654,355	641,566	(Note 2)	(Note 2)
Total Shareholders' Equity	Before Distribution	73,553,001	72,658,896	71,722,601	70,446,213	74,036,183	76,380,723
	After Distribution	61,248,516	60,356,011	59,440,995	58,180,600	(Note 2)	(Note 2)

Note:1 The financial statements for the first quarter of 2019 have been reviewed by CPA.

Note:2 The distribution of the 2018 earnings has not been approved by the Shareholders' Meeting.

#### 2019/03/31; Unit: Except EPS is NT dollar; others are NT\$'000 Financial Information In Recent 5 years Year 2019/01/01 ~ 2019/03/31 (Note1) 2014 2015 2016 2017 2018 Item Operating Revenues 94,175,600 97,293,218 94,344,266 92,069,681 86,634,971 20,819,459 Gross Profit 38,022,308 38,509,786 38,151,119 35,762,919 28,002,420 6,667,772 Operating Income 15,052,589 15,393,037 15,024,350 14,216,298 12,373,173 3,068,215 Non-Operating Income and Expenses (1,068,930)(1,455,171) (1,235,015)(1,053,726)(503,743) (206,193) Income before Tax 13,983,659 13,937,866 13,789,335 13,162,572 11,869,430 2,862,022 Net Income from Operating Business 11,565,631 11,534,251 11,410,675 10,853,643 9,424,776 2,250,997 Net Income (Loss) 11,565,631 11,534,251 11,410,675 10,853,643 9,424,776 2,250,997 Other Comprehensive Income Loss 12,734 (45,367) (42,178) 171,098 79,024 (31,112) (Net of income tax )

#### Condensed Comprehensive Income Statement – by Consolidated

	FET Overview	Sustainable Development Strategy and Performance	Operating Environment Analysis and Performance	Responsible Governance	Stakeholder Management	Environmental and Social Protection
Year		Financi	al Information In Recent 5	years		2019/01/01 ~ 2019/03/31
Item	2014	2015	2016	2017	2018	(Note1)
Total Comprehensive Income	11,578,365	11,488,884	11,368,497	11,024,741	9,503,800	2,219,885
Net Income Attributable to Owners of Far EasTone	11,482,985	11,485,695	11,391,303	10,856,682	9,381,351	2,231,542
Net Income Attributable to Non-Controlling Interest	82,646	48,556	19,372	(3,039)	43,425	19,455
Comprehensive Income Attributable to Owners of Far EasTone	11,495,619	11,440,332	11,347,860	11,027,319	9,459,897	2,200,596
Comprehensive Income Attributable to Non-Controlling Interest	82,746	48,552	20,637	(2,578)	43,903	19,289
Earning Per Share	3.52	3.52	3.50	3.33	2.88	0.68

Note 1: The financial statements for the first quarter of 2019 have been reviewed by CPA.

## Financial Ratio Analysis- by Consolidated

	Year		Financial Information In Recent 5 years				2019/01/01 ~ 2019/03/31
Item		2014	2015	2016	2017	2018	(Note1)
Financial	Debt to Asset Ratio	40.54	46.92	45.99	46.92	41.62	42.87
Structure (%)	Long-term Funds to Properties, Plants and Equipment Ratio	198.34	221.34	204.27	221.30	241.84	271.77
	Current Ratio (%)	91.75	158.18	85.72	86.48	93.44	93.35
Liquidity Analysis (%)	Quick Ratio (%)	73.40	131.59	73.85	67.94	74.87	81.57
	Times Interest Earned (times)	41.49	32.49	32.21	29.50	28.79	27.33
	Accounts Receivable Turnover (times)	11.23	11.67	11.26	10.43	9.74	9.78
Operating Performance	Average Collection Days	32.50	31.27	32.41	34.99	37.47	37.32
	Inventory Turnover (times)	7.59	7.97	7.56	7.27	6.96	9.44

	Year		Financi	al Information In Recent	5 years		2019/01/01 ~ 2019/03/31	
Item		2014	2015	2016	2017	2018	(Note1)	
	Accounts Payable Turnover (times)	10.85	12.06	12.94	10.52	10.64	11.76	
Operating	Inventory Turnover Days	48.08	45.79	48.28	50.20	52.44	38.66	
Performance	Properties, Plant and Equipment Turnover (times)	1.90	1.89	1.85	1.92	1.97	2.04	
	Total Assets Turnover (times)	0.77	0.75	0.70	0.69	0.67	0.64	
	Return on Assets (%)	9.72	9.13	8.73	8.46	7.53	7.18	
	Return on Equity (%)	15.65	15.78	15.81	15.27	13.05	11.97	
Profitability Analysis	Income before Tax to Capital ratio (%)	42.91	42.77	42.32	40.39	36.43	35.13	
	Net Income Ratio (%)	12.28	11.86	12.09	11.79	10.88	10.81	
	Earnings per share (NT\$)	3.52	3.52	3.50	3.33	2.88	0.68	
	Cash Flow Ratio (%)	112.83	97.09	87.39	81.76	90.02	30.99	
Cash flow	Cash Flow Equivalent Ratio (%)	85.04	79.19	75.75	71.86	92.38	96.66	
	Cash Reinvestment Ratio (%)	5.74	3.78	6.79	7.02	6.06	4.30	
	Operating Leverage	2.11	2.13	2.25	2.41	2.64	2.53	
Leverage Ratio	Financial Leverage	1.02	1.03	1.03	1.03	1.04	1.04	

Note: The financial statements for the first quarter of 2019 have been reviewed by CPA.

 GRI Standards Index	FET Overview	Sustainable Development Strategy and Performance	Operating Environment Analysis and Performance	Responsible Governance	Stakeholder Management	Environmental and Social Protection	Appendix	
GRI Standards 2016	Disclosure		Corresponding Chapte	r	Note		Page	

General Disclosures Core			
	Organizational profile		
	102-1 Name of the organization	1. FET Overview	8
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	102-3 Location of headquarters	1. FET Overview	8
	102-4 Location of operations	1. FET Overview	8
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	102-7 Scale of the organization	1. FET Overview	8
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GRI 102: General Disclosures	102-9 Supply chain	5.4.1 Supply Chain Overview	80
	102-10 Signi-cant changes to the organization and its supply chain	Report Profi¬le	6
	102-11 Precautionary Principle or approach	4.4 Business Risk Management	57
	102-12 External initiatives	4.5 External Participation	58
	102-13 Membership of associations	4.5 External Participation	58
	Strategy		
	102-14 Statement from senior decision-maker	Message from the Chairman and the President	4
	102-15 Key impacts, risks, and opportunities	3.1.2 Key Sustainability Risks	37
	Ethics and integrity		
	102-16 Values, principles, standards, and norms of behavior	4.3 Ethical Corporate Management	56

GRI Standards 2016	Disclosure	Corresponding Chapter	Note	Page					
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	Governance								
	102-18 Governance structure	4.1 Corporate Governance Framework		49					
	102-19 Delegating authority	4.1 Corporate Governance Framework		49					
	102-20 Executive-level responsibility for economic, environmental, and social topics	4.2 Implementation of Sustainable Governance		55					
	102-21 Consulting stakeholders on economic, environmental, and social topics	4.2 Implementation of Sustainable Governance		55					
	102-22 Composition of the highest governance body and its committees	4.1 Corporate Governance Framework		49					
	102-23 Chair of the highest governance body	4.1 Corporate Governance Framework		49					
	102-24 Nominating and selecting the highest governance body	4.1 Corporate Governance Framework		49					
GRI 102: General Disclosures	102-25 Conflicts of interest	4.1 Corporate Governance Framework		49					
	102-26 Role of highest governance body in setting purpose, values, and strategy	4.1 Corporate Governance Framework		49					
	102-27 Collective knowledge of highest governance body	4.1 Corporate Governance Framework		49					
	102-28 Evaluating the highest governance body's performance	4.1 Corporate Governance Framework		49					
	102-29 Identifying and managing economic, environmental, and social impacts	4.2 Implementation of Sustainable Governance 5.1 Key Stakeholders		55 60					
	102-30 Effectiveness of risk management processes	4.4 Business Risk Management		57					
	102-31 Review of economic, environmental, and social topics	4.4 Business Risk Management		57					
	102-32 Highest governance body's role in sustainability reporting	Report Profi—le		6					
	102-33 Communicating critical concerns	4.4 Business Risk Management		57					
	102-34 Nature and total number of critical concerns	4.4 Business Risk Management		57					

						Annendix	
FET Overview	Sustainable Development Strategy and Performance	Operating Environment Analysis and Performance	Responsible Governance	Stakeholder Management	Environmental and Social Protection		

GRI Standards 2016	Disclosure	Corresponding Chapter	Note	Page				
	102-35 Remuneration policies	4.1 Corporate Governance Framework		49				
	102-36 Process for determining remuneration	4.1 Corporate Governance Framework		49				
	Stakeholder Engagement							
	102-40 List of stakeholder groups	5.1 Key Stakeholders		60				
	102-41 Collective bargaining agreements	5.2 Employee Management		62				
	102-42 Identifying and selecting stakeholders	5.1 Key Stakeholders		60				
	102-43 Approach to stakeholder engagement	5.1 Key Stakeholders		60				
	102-44 Key topics and concerns raised	5.1 Key Stakeholders		60				
	Reporting practice							
GRI 102:	102-45 Entities included in the consolidated _nancial statements	Report Profile		6				
General Disclosures	102-46 Defining report content and topic Boundaries Appendix - Material Operational Issues			110				
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	102-48 Restatements of information	Report Profile		6				
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	102-53 Contact point for questions regarding the report	Report Profile		6				
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Management Approach				
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GRI 103: Management Approach	103-2 The management approach and its components			
	103-3 Evaluation of the management approach	<ul> <li>Disclosed in each material topics</li> </ul>		-
Material Topics				
Communications quality and network in	frastructure			
	103-2 The management approach and its components	6.2.1 Investments in Communication Infrastructure		10
GRI 103: Management Approach	103-3 Evaluation of the management approach	6.2.1 Investments in Communication Infrastructure		10
	203-1 Infrastructure investments and services supported	6.2.1 Investments in Communication Infrastructure		10
GRI 203: Indirect Economic Impacts	203-2 Signi_cant indirect economic impacts	6.1.5 Environmental Impact Management in Base Station		10
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	403-2 Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities		5.2.4 Human Rights and Wo	rkplace Safety			69
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Operating Environment Analysis and Performance Responsible Governance Appendix

## **Third-party Assurance Statement**

GRI Sustainability Reporting Standards (GRI Standards)

Account Ability 1000 (Account Ability 1000) Type 2

The International Integrated Reporting Framework ( <IR> Framework )

## ASSURANCE STATEMENT

## SGS TAIWAN LTD.'S REPORT ON SUSTAINABILITY ACTIVITIES IN THE FAR EASTONE TELECOMMUNICATIONS CO., LTD.'S INTEGRATED REPORT FOR 2018

NATURE AND SCOPE OF THE ASSURANCE/VERIFICATION

SGS Taiwan Ltd. (hereinafter referred to as SGS) was commissioned by FAR EASTONE TELECOMMUNICATIONS CO., LTD. (hereinafter referred to as FET) to conduct an independent assurance of the Integrated Report for 2018. The scope of the assurance, based on the SGS Sustainability Report Assurance methodology, included the text, and data in accompanying tables of the non-financial information contained in this report.

The information in the FET's Integrated Report of 2018 and its presentation are the responsibility of the management of FET. SGS has not been involved in the preparation of any of the material included in FET's. Integrated Report of 2018.

Our responsibility is to express an opinion on the text, data, graphs and statements within the scope of verification with the intention to inform all FET's stakeholders.

The SGS protocols are based upon internationally recognized guidance, including the Principles contained within the Global Reporting Initiative Sustainability Reporting Standards (GRI Standards) 101: Foundation 2016 for accuracy and reliability and the guidance on levels of assurance contained within the AA1000 series of standards and guidance for Assurance Providers.

This report has been assured using our protocols for

- evaluation of content veracity of the sustainability performance information based on the materiality
  determination at a high level of scrutiny for FET and moderate level of scrutiny for subsidiaries, joint
  ventures, and applicable aspect boundaries outside of the organization covered by this report;
- AA1000 Assurance Standard (2008) Type 2 evaluation of the report content and supporting management systems against the AA1000 Accountability Principles (2008); and
- evaluation of the report against the requirements of Global Reporting Initiative Sustainability Reporting Standards (100, 200, 300 and 400 series) claimed in the GRI content index as material and in accordance with
- evaluation of the report against the IIRC International <IR> Framework (Chinese version 2015) requirements for content elements.

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

#### STATEMENT OF INDEPENDENCE AND COMPETENCE

The SGS Group of companies is the world leader in inspection, testing and verification, operating in more than 140 countries and providing services including management systems and service certification; quality, environmental, social and ethical auditing and training; environmental, social and sustainability report assurance. SGS affirm our independence from FET, being free from bias and conflicts of interest with the organisation, its subsidiaries and stakeholders. The assurance team was assembled based on their knowledge, experience and qualifications for this assignment, and comprised auditors registered with ISO 26000, ISO 20121, ISO 50001, SA8000, REA, QMS, EMS, SMS, GPMS, CFP, WFP, GHG Verification and GHG Validation Lead Auditors and experience on the SRA Assurance service provisions.

#### VERIFICATION/ ASSURANCE OPINION

On the basis of the methodology described and the verification work performed, we are satisfied that the information and data contained within FET's Integrated Report of 2018 verified is accurate, reliable and provides a fair and balanced representation of FET sustainability activities in 01/01/2018 to 12/31/2018.

The assurance team is of the opinion that the Report can be used by the Reporting Organisation's Stakeholders. We believe that the organisation has chosen an appropriate level of assurance for this stage in their reporting. In our opinion, the contents of the report meet the requirements of GRI Standards in accordance with Core Option and AA1000 Assurance Standard (2008) Type 2, High level assurance. The report also appropriately responds to the content elements requirements of The IIRC International «IR> Framework.

AA1000 ACCOUNTABILITY PRINCIPLES (2008) CONCLUSIONS, FINDINGS AND RECOMMENDATIONS

#### Inclusivity

FET has demonstrated a good commitment to stakeholder inclusivity and stakeholder engagement. A variety of engagement efforts such as survey and communication to employees, customers, investors, suppliers, CSR experts, and other stakeholders are implemented to underpin the organization's understanding of stakeholder concerns.

#### Materiality

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

#### Responsiveness

The report includes coverage given to stakeholder engagement and channels for stakeholder feedback. Formal process for documenting stakeholder engagement outcomes is recommended for future reporting.

GLOBAL REPORTING INITIATIVE REPORTING STANDARDS CONCLUSIONS, FINDINGS AND RECOMMENDATIONS

The report, FET's Integrated Report of 2018, is adequately in line with the GRI Standards in accordance with Core Option. The material topics and their boundaries within and outside of the organization are properly defined in accordance with GRI's Reporting Principles for Defining Report Content. Disclosures of identified material topics and boundaries, and stakeholder engagement, GRI 102-40 to GRI 102-47, are correctly located in content index and report. In the future, we recommend FET to get reasonably estimable economic, environmental, and/or social impacts identified through sound investigation by people with recognized expertise, or by expert bodies with recognized credentials.

Signed: For and on behalf of SGS Taiwan Ltd.





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