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**FUJITSU GENERAL LIMITED** 

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https://www.fujitsu-general.com/jp/environment/report/index.html

The proper nouns such as product names described in this report are trademark or registered trademark of each company.

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#### Concerning future projections, forecasts and plans

This report describes not only past and present facts related to Fujitsu General Group but also future projections, forecasts and plans. Such projections, forecasts and plans are based on the information available when the report was prepared, and therefore, future results of business activities and other new developments may differ depending on the change of various situations, for which we ask our readers' understanding.

# **Editing Policy**

The "Fujitsu General Group Environmental Report 2019" reports the basic concept of environmental activities that Fujitsu General Group aims to realize a sustainable society and the contents and achievements of activities in FY2018. We prepared the report with the "Environmental Action Plan Stage VIII" as a core summarizing the environmental problem recognition and activity approach.

#### Report covered

Report centered on the activities of FY2018 (April 1, 2018 - March 31, 2019) including a part of contents in other period.

#### Organizations covered

The coverage is of Fujitsu General and its consolidated subsidiaries. However, for environmental performance data, some targets differ depending on the summary items

>> List of report target organization (refer to p.42)

#### ■ References Guidelines

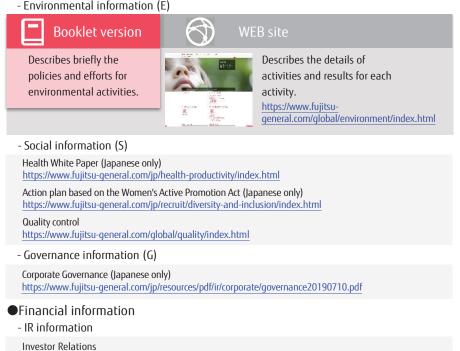
- GRI "GRI Standards"
- "Environmental Reporting Guidelines 2018" by The Ministry of Environment (Japan)
- "Environmental Accounting Guidelines 2005" by The Ministry of Environment (Japan)

#### Information disclosure system

The Fujitsu General Group's corporate activity information discloses a variety of information to stakeholders. The policies and efforts for environmental activities are briefly described in this report and concrete activities and results are introduced on the website.

#### Non-financial information

- Environmental information (E)



### Integrated report (Financial and non-financial

information)

Describes environmental, social and governance activities with high importance in addition to financial information such as management strategy for long-term growth and enhancement of corporate value and business results.



(Japanese only) https://www.fujitsu-general.com/jp/csr/ir-report/index.html

#### Published

In November, 2019 (Next time: In September, 2020/Last time: In September, 2018)

https://www.fujitsu-general.com/global/ir/index.html

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# Overview of Fujitsu General Group

# Еигоре

51,851 million yen Net sales

#### GHG emission

◆Emission by own business activity

341 t-co<sub>2</sub>

Emission by usage of sales products

4,066 kt-CO<sub>2</sub>

# Asia/Greater China

36,141 million yen Net sales

#### **GHG** emission

- ◆Emission by own business activity
- 63,118 t-CO<sub>2</sub>
- ◆Emission by usage of sales products

13,245 kt-CO<sub>2</sub>

# Middle East/Africa

16,969 million yen Net sales

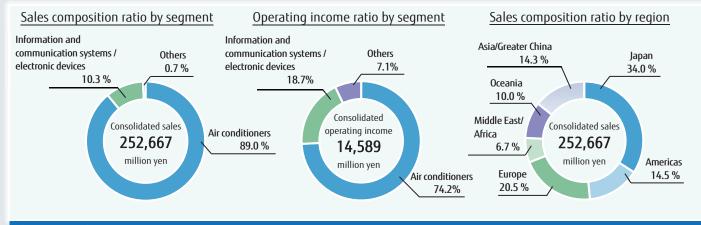
#### **GHG** emission

◆Emission by own business activity

87 t-co<sub>2</sub>

◆Emission by usage of sales products

10,489 kt-CO<sub>2</sub>



#### Corporate Overview

**FUJITSU GENERAL LIMITED** Name

Company representative

Etsuro Saito, President and Representative

**Head office** 

3-3-17, Suenaga, Takatsu, Kawasaki, Kanagawa

**Established** 

January 15, 1936

location

213-8502, Japan

### \*Figures are sales in FY2018

# Japan

85,972 million yen Net sales

#### **GHG** emission

◆Emission by own business activity

14,226 t-CO<sub>2</sub>

◆Emission by usage of sales products

4,230 kt-CO<sub>2</sub>

# **Americas**

Net sales

36,473 million yen

#### **GHG** emission

◆Emission by own business activity

64 t-co<sub>2</sub>

Emission by usage of sales products

2,140 kt-CO<sub>2</sub>

# **Oceania**

Net sales

25,258 million yen

#### **GHG** emission

◆Emission by own business activity

1,130 t-CO<sub>2</sub>

◆Emission by usage of sales products

3,726 kt-CO<sub>2</sub>





Capital

18,089 million yen

**Employees** 

7,392(Consolidated): 4,916(Male) / 2,476(Female) 1,609 (Unconsolidated) : 1,425(Male) / 184(Female)

(As of March 31, 2019)

# **TOP Message**



Corporate philosophy

# -Living together for our future-

We will contribute to the realization of comfortable, safe, secure and sustainable society by providing new value close to our customers and society.

Our group reestablished the "FUJITSU GENERAL Way Corporate Philosophy" at the end of last year.

In order for us to survive in a complex, varied and unpredictable era called VUCA, it was necessary to clarify the aim of our company, mission to fulfil for our customers and society and worth of existence and also the way of thinking to realize them as well as to gather the power as a compass for all employees to challenge the rough sea of the modern time.

In the international society, due to the adoption of the practical guidelines of the "SDGs (Sustainable Development Goals) and the "Paris Agreement" which is a framework of the countermeasures against global warming, companies are required to demonstrate innovations for the challenges facing the world. The Fujitsu General Group aims to become a corporate group that contributes to the realization of a comfortable, safe, secure and sustainable society based on the newly established corporate philosophy.

As a manufacturer since our founding, we have always grown with technological advances and innovations, have put many world's first and industry's first technologies into practical use and created many advanced products. At present, our business is concentrating on air conditioners, information & communication systems and electronic devices, and has undergone significant development. However, we are not limited to pursuing short-term products. Looking 10years or 20 years ahead, we will work to create new value for the realization of a society where future children can live brightly and with hope.

Fujitsu General Group established the "Medium-term Environmental Plan" in 2016 as a goal to reduce greenhouse gas emission by 2030 and at the same time, is promoting the "Environmental Protection" Program" for achieving the goal. We will aim to further reduce the environmental burden and enhance the corporate value by steadily promoting the activities toward the achievement of goals.

We will continue to be close to our customers and society and live the future together with people around the world and irreplaceable employees.

> Etsuro Saito President and Representative Director Fujitsu General Limited

# Corporate philosophy · vision

#### **FUJITSU GENERAL Way**

The "Fujitsu General Way Corporate Philosophy" is a basic guideline for the sustainable development of the Fujitsu General Group and expresses what we should aim for and our mission and value for existence to fulfil for customers and society. It is also a compass for the judgement when everyone of Fujitsu General Group acts.

Our Mission

# Living together for our future

Through innovation and technology, we deliver a brighter future with the peace of mind to our customers and societies around the world.



# Act Spontaneously

We embrace new challenges by investing in ourselves for personal growth, and through continuous creativity with a spontaneous attitude.

## Develop Our Team

We respect and value our people, and optimize their abilities through fostering culture and diversity, and utilizing a collaborative effort focused on communication.

# Value Integrity

To achieve our goals, we always act with integrity and shared ethics.

Data Overview Materials

#### Fujitsu General Group Environmental Policy

Fujitsu General Group Environmental Policy was established in 2003 as the environmental management corporate vision and corporate guidelines and revised in 2012 according to the change of social environment.

### Philosophy

The Fujitsu General Group recognizes that global environmental protection is a vitally important business issue. We promote the sustainable development of society by contributing to creating a secure and comfortable society, and by providing people around the world with a future of prosperity and dreams.

In addition, while observing all environmental regulations in our business operations, we are actively pursuing environmental protection activities on our own initiative. Through our individual and collective actions, we will strive to safeguard a rich natural environment for future generations.

### **Principles**

- We help customers and society reduce the environmental impact of their business activities and improve environmental efficiency by providing thorough and secure products and services through the pursuit of advanced technologies.
- We strive to reduce the environmental impact of our products throughout their entire lifecycle.
- We are committed to conserving energy and natural resources, and practice the 3Rs approach (reduce, reuse, recycle) to create best-of-breed eco-friendly products.
- We seek to reduce risks to human health and the environment from the use of chemical substances and waste.
- We disclose environment-related information on our business activities, products and services, and we utilize the resulting feedback to critique ourselves in order to further improve our environmental programs.
- We encourage our employees to work on global environmental conservation such as tackling climate change and the preservation of biodiversity through their business and civic activities to be role models in society.

# Specifying materiality

### Materiality analysis

In promoting ESG activities including environmental activities, Fujitsu General Group analyzes the "interest of stakeholders and influence" and "importance to our company", specifies the materiality (important issues) and promotes the business activities.

Process to specify materiality

#### Step2 Step3 Step1 Specifies materiality by interest and Extracts important issues of our Extracts issues from the influence of stakeholders and the company based on the corporate perspective of stakeholders from importance for our company. philosophy, management policy, GRI standards, SDGs, etc. etc.

#### Analysis results of materiality

Promotes the activities by specifying the issues with high importance as important themes.

		Promotion of thorough compliance and governance			
d cid	1	`			
ylor		Water and biodiversity	Efficient use of resources	Respect for human rights	
ers	אַרוּכוּ	Prevention of air pollution	Stakeholders engagement	Response to climate change	
stakeholders				(Improvement of energy saving performance) Product safety and reliability	
				Pursuit of customer satisfaction	
nterest and influence of		Chemical substance management	Supply-chain management	Promotion of diversity	
t and influ			(CSR procurement)	Promotion of safety and sanitary for workers	
st and			Community contribution	Creation of new value	
tere					
-			Information security	Improvement of environment for work motivation	
			Reduction of disposed articles		
i i	5				
	L	High	Fairy high	> Extremely high	
		nign	r arry mgn	Extremely high	

Importance to our company

#### Priority themes concerning environmental activities

Priority themes	Main activities	
Realization of sustainable society	Response to climate change (Improvement of energy saving performance)	Most important
sustainable society	Efficient use of resources	

# Mid-Term Environmental Action Plan

Fujitsu General Group established the "Mid-Term Environmental Action Plan" in 2016 with FY2030 as the final target year as a concrete plan to implement measures for the "Fujitsu General Group Environmental Policy" and for the climate change which is the highest priority theme in materiality analysis. In order to realize a sustainable society, we aim to achieve both reduction of environmental burden and enhancement of corporate value by sharing the goals to be achieved in the medium term by all employees while contributing to the achievement of SDGs.

### 1. Activities for the customers and society

#### 28% reduction of $CO_2$ emission from use of our products in Japan by FY2030 (compared to FY2013)

In order to enhance the capability to develop high value-added air conditioners with excellent energy saving performance while contributing to reduction of the environmental burden and pushing forward enhancement of the product competitiveness, we are aiming at reducing the average CO<sub>2</sub> emission from use of one unit of our air conditioner in Japan by 28% by FY2030 (compared to FY2013). As for the air conditioners for overseas markets, we will develop the products with higher energy saving performance and strive to reduce the environmental burden.

### 2. Activities for reducing our own environmental burdens 30% reduction of CO<sub>2</sub> emission associated with the business activities of our entire group by FY2030 (compared to FY2013)

By reducing potential wastes in every business processes while pursuing improvement and reform by reviewing the processes, we are aiming at reducing  $30\% CO_2$  emission in the consolidated sales basic unit by FY2030 (compared to FY2013).

# Environmental Action Plan Stage IX (FY2019-2022)

Fujitsu General Group established the "Environmental Action Plan Stage IX" to work on from FY2019 to FY2022 to achieve the "Medium-Term Environmental Action Plan" up to FY2030. We will continuously work on the four pillars listed in the Environmental Action Plan Stage VIII (FY2016-2018) "Measures against global warming", "Resources circulation" substance management" and "Contribution to environmental society" and at the same time, strengthen the measures to deal with environmental issues along with the change in the social trends by establishing "Reduction of greenhouse gas emission including supply chain", "Expanded use of reusable energy", "Strengthening of CSR procurement  $^{(Note\,1)}$  system" as new themes.

Main themes	Risks
<ul> <li>(1) Climate change issues</li> <li>Worldwide intense heat</li> <li>Increase of abnormal weather</li> <li>Greenhouse gas reduction on Scope3</li> </ul>	<ul> <li>Change in air conditioner demand due to bad weather, etc.</li> <li>Increase of technology development cost</li> </ul>
<ul><li>(2) Material resource depletion</li><li>Steel, copper, aluminum, crude oil, rare metal</li></ul>	<ul><li>Increase of material procurement</li><li>Unstable material procurement</li></ul>
<ul><li>(3) Waste problem</li><li>Marine pollution by microplastics</li><li>Waste import regulation into China, etc.</li></ul>	<ul><li>Strengthening of related regulations</li><li>Increase in waste disposal cost</li></ul>
<ul><li>(4) Water resource issues</li><li>Desertification due to depletion of water sources</li><li>Water source contamination problem</li></ul>	<ul><li>Increase in water cost</li><li>Impact on operation by strengthening of related regulations</li></ul>
<ul> <li>(5) Chemical substance regulations for products</li> <li>· Compliance with regulations</li> <li>· Strengthening of CSR procurement</li> </ul>	<ul> <li>Restricted sales by strengthened regulations</li> <li>Increase of investigation cost of regulated substances in parts/materials</li> </ul>
<ul><li>(6) Biodiversity conservation</li><li>Destruction of natural environment in the supply chain</li></ul>	<ul> <li>Impact on corporate value by pursuing from stakeholders</li> <li>Impact on parts and material procurement</li> </ul>

(Note 1): To seek corporate social responsibility such as compliance with laws and regulations in consideration of depletion of resources, environment, society and human right from suppliers of parts, components and raw materials.

#### **SDGs**

In the "United Nations Sustainable Development Summit" held at the United Nations Headquarters in September, 2015, the "2030 Agenda for Sustainable Development" was adopted as a long-term guideline of development from 2016 to 2030. The "sustainable development goals" which are the core of this document are SDGs. The SDGs are common goals for the international society consisting of 17 goals and 169 targets (concrete goals). SUSTAINABLE DEVELOPMENT

Opportunity	New activities in the Environmental Action Plan Stage IX	Related goals of SDGs
<ul> <li>Expanded air conditioner market. Sales expansion.</li> <li>Contribution to global warming countermeasures by increasing supply of energy-saving products</li> </ul>	<measures against="" global="" warming=""> <ul> <li>Expansion of activity scope to all categories in Scope3</li> <li>Expansion of use of energy saving</li> </ul></measures>	7 -244-5-2450 8 8 251-5 11 20-5-5 12 0-5-86 13 88281-5 12 0-5-96 13 88281-5 14 0-5-96 15 0-5-96 16 0-5-96 17 0-5-96 18 0-5-96
<ul><li>Promotion of product resource saving</li><li>Promotion of recycling</li></ul>	<resource circulation=""> • Expansion of activity scope to all categories in Scope3</resource>	12 248 RE 269 RE
<ul> <li>Pursuit of waste recycling (Improvement of recycling technology)</li> </ul>		12 3/48#E
· Cost reduction by saving water		6 を全体をとける を世界がは 12 つくる単位 このかり現代
Building and strengthening of sustainable procurement system	<chemical management="" substance="">⊠  • Building CSR procurement system</chemical>	12 つくられた 〇〇〇
Building and strengthening of sustainable procurement system	<contribution environmental="" society="" to=""></contribution>	15 NORPA 935

17 GOALS TO TRANSFORM OUR WORLD

# Environmental Action Plan Stage VIII (FY2016-2018)

In FY2018, as the final fiscal year of the Environmental Action Plan Stage VIII which started in FY2016, we almost cleared the target through the improvement of product power by strengthening development and the thorough waste removal by the promotion of the company-wide "AKASURI" campaign (Note 1).

	Core of activities	Theme	Key activities	Activity index
	Measures against global warming	Increase of contribution volume of $\text{CO}_2$ reduction	Pursuit of energy saving performance	Reduction of $\mathrm{CO}_2$ emission when using product (in Japan)
	Resource circulation	Effective use of resources*	Improvement of product power	Resource saving design (Note 2) (Product, Packaging materials, Performance)
ety				Increase of use of recycling materials
soci				① Closed recycling
and				② Use of recycled fluorocarbons in service
ers				Improvement of decomposition/selection capability
Activities for the customers and society				Internal production rate of refrigerator compressor decomposition     Metal recovery rate
튄				③ Selling price increase of 5 items
ities fo				Increase of reuse (Recycling of recovered fluorocarbons)
ctivi	Chemical substance	Promotion of parts/materials with	Strengthening of management structure	EMS construction support at all overseas parts suppliers
⋖	management	less environmental burden	in supply chain	Strengthening of chemical substance management system (RoHS, REACH)
	Contribution to environmental society	Promotion of activities at suppliers	Expansion of activities in supply chain	Promotion of biodiversity conservation activities at suppliers
	Measures against	Pursuit of energy usage efficiency	Thoroughgoing elimination of waste	Reduction of power consumption of evaluation test equipment
	global warming			Reduction of electricity usage (during production)
				Reduction of gasoline and light oil usage (during production)
				Reduction of LPG usage (during production)
SI				Reduction of product transfer between warehouses
rder				Improvement of product transportation efficiency (in Japan)
ıtal bu				Improvement of efficiency of business trips
ucing our own environmental burdens	Resource circulation	Streamlining of resource usage	Thoroughgoing elimination of waste	Reduction of water usage
wn e				Reduction of disposed articles
0 Jn				① Reduction of disposal volume
ucing o				② Reduction of total disposal article generation
ctivities for red	Chemical substance management	Reduction of specified chemical substance emission	Selection of disposed products, switching to alternative products	Reduction of emission of specified chemical substances used at production
	Contribution to environmental society	Promotion of initiatives in business activities	Tie-up/collaboration with local governments, NPO, etc.	Implementation of contribution activities rooted in local community

 $<sup>(</sup>Note\ 1)\ \ \ : Company wide\ activity\ to\ reduce\ environmental\ burden\ and\ build\ up\ foundation\ for\ high\ profitability$ 

<sup>(</sup>Note 2) : More than 10% lighter or more compact design with volume by total mass or external dimensions compared with conventional products of equivalent function

<sup>\*</sup> The content has been changed due to the review of the theme name.

 $\bigcirc$ : Goal achievement  $\bigcirc$ : Smooth  $\triangle$ : Stagnant  $\times$ : Unachieved

Goals for FY2016 - 2018 (compared to FY2013)	FY2018 results		SDGs	Related page
More than 8% reduction in deemed total amount	0.02% reduction	×	11 EARHORD 13 RAREN:	p.15
More than 15% achieved per number of development models	27.4%	0		
① More than 100 tons/year	① 100 tons	0		
<b>②100%</b>	② 100% achieved	0	12 つくる責任 つかう責任	p.18 p.19
① More than 86%	① 98%	0		p.20
② More than 80%	② 93%	0		
3 More than 10%	③ More than 10 % achieved	0		
More than 98%	98.4%	0		
Rate above EMS construction level II more than 90%	90%	0	40	
Rate of properly implemented management 100%	89.8%	×	12 OCERE	p.29
Level up of activity	(75 companies level up out of 98 companies)	0	15 808046 	p.29
More than 10% reduction in total amount	30% reduction	0		
More than 6% reduction in production basic unit	Domestic: 10.5% reduction Overseas: 0.5% reduction	$\triangle$	7 2345-53450 0 83504	
More than 6% reduction in production basic unit	Domestic: 21.0% reduction Overseas: 71.5% reduction	$\circ$	7 まれまーをみなに 8 物をがいる 経済成長も	
More than 6% reduction in production basic unit	Domestic: 49.5% reduction Overseas: 4.7% increase	$\triangle$		p.15
More than 50% reduction in horizontal swing ratio	6% reduction	×	12 つくる責任 13 気候変動に つかう責任	p.16 p.17
More than 10% reduction per sales quantity	18.8% reduction	$\circ$		p.17
More than 10% reduction in the number of business trips per sales amount	10% reduction (Installed Office365)	0		
More than 6% reduction in total working hour basic unit (office)	9.6% increase	×		
More than 6% reduction in production basic unit (factory)	Domestic: 15.4% reduction Overseas: 6.3% increase	$\triangle$	6 ※全年を142 つく6 月日 つく6 月日 つく6 月日 日本 ウルラ月日	p.19
① Recycling rate more than 99%	Domestic: 88.9% Overseas: 94.2%	×	4 00	
② More than 20% reduction in production basic unit	Domestic: 2.0% increase Overseas: 18.7% reduction	×		
Suppressed to less than 30% in total amount	Implemented re-examination of substances subject to reduction	×	12 OCORE	p.21
Setting activity targets for each office	Beautification activity around business office (All business offices)	0		
	Conservation activities of rare plant outside the area (head office)	0	15 #0### # ~~	p.23 p.24 p.25
	Biodiversity conservation activities through biotope (Hamamatsu Business Office)	0		p.23

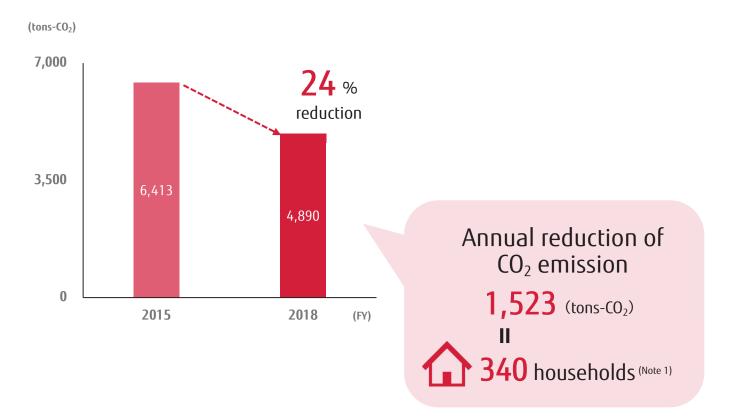
# Activities for reducing greenhouse gas (GHG) emission

### Pursuit of energy saving performance

Fujitsu General Group believes to be able to contribute to the sustainable society by developing the products with improved energy saving performance which leads to the reduction of greenhouse gas emissions and providing them to customers. As a result of improving energy saving performance of newly developed products, the  $CO_2$  emission at the time of using air conditioner products developed and sold for Japan in FY2018 was reduced by 0.02% compared with FY2013. Toward the achievement of goals of the Environmental Protection Program Stage VIII, we will continue to develop the products pursuing further energy saving performance and contribute to the reduction of greenhouse gas emissions.

#### Reduction of power consumption of evaluation test equipment

The laboratory which evaluates the performance of air conditioners consumes a lot of electricity to measure the cooling/heating performance by changing the temperature condition on indoor unit side and outdoor unit side. Therefore, the conditioner with high power consumption used in the test preparation work was changed to room air conditioner with high energy-saving performance or spot cooler in FY2016. In addition, we are continuously reducing power consumption by optimizing pre-operating time in the test preparation work and adopting timer operation during holidays and nights. Through these activities, we reduced CO<sub>2</sub> emission by 1,523 tons (24%) in FY2018 compared to FY2015.



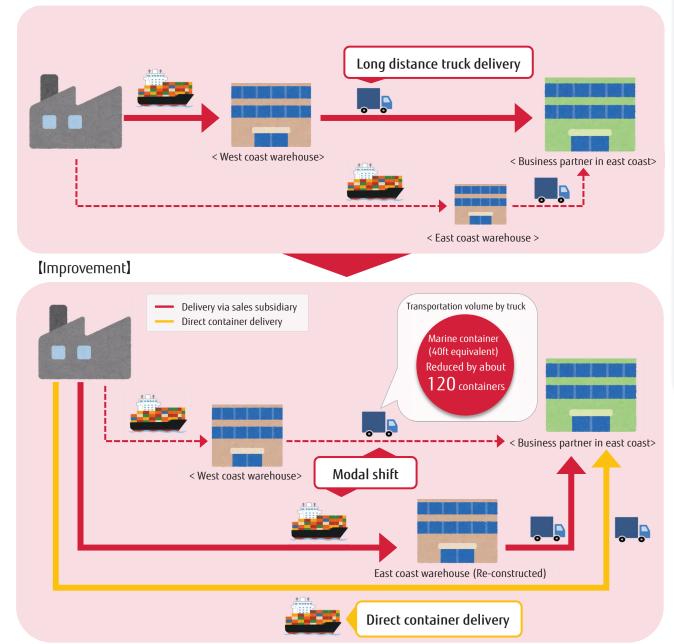
(Note 1): Calculated by annual CO2 emission per household = about 4,480kg-CO2. (Confirmed report of FY2017 by National Institute for Environment Studies, Greenhouse Gas Inventory Office of Japan)

#### Reduction of long distance truck delivery

The Fujitsu General Group is working on the improvement of transportation efficiency by reducing long distance delivery in Japan and overseas. In North America, we have started a thorough review of logistics since 2017. Conventionally, long distance delivery by truck was carried out from the west coast warehouse to the east coast business partners. However, it has been changed to the marine transportation from the production base to the east coast warehouse by improving the east coast warehouse and enhancing the inventory capacity. As a result of this modal shift initiative, the long distances truck delivery was reduced by about 120 containers equivalent to 40ft in FY2018 compared to FY2016.

Furthermore, we are actively working on the direct container shipment to major customers' warehouses accounting for 40% of sales in North America.

#### [Conventional]



#### Introduction of solar power generation system

The Fujitsu General Group promotes the use of renewable energy for electricity used in business activities. FUJITSU GENERAL ENGINEERING (THAILAND) CO.,LTD. has newly installed a solar panel on the roof. By the operation of the solar power generation system, approximately 5% of the electricity used by the company can be switched to renewable energy and the reduction of CO<sub>2</sub> emission can be expected by 62 tons per year.



Solar panel newly installed on the roof of FUJITSU GENERAL ENGINEERING (THAILAND) CO.,LTD.

Annual reduction of CO<sub>2</sub> emission **62** (tons-CO<sub>2</sub>)

households (Note 1)

### Efficiency improvement of business trips

Fujitsu General Group is working on the reduction of the number of business trips and reduction of environmental burden by positively introducing and utilizing IT. In FY2018, Office365 was provided for the Japanese staff at all domestic and overseas bases. By switching from various conferences for which people of various bases were gathered to the head office to web conferences, energy consumption along with the number of business trips and movement of people has been reduced.

In the domestic sales and service departments, by utilizing Skype actively for meetings between the head office and branch offices, training sessions for sales and service staff, contact with teleworking sales staff, the reduction of travel expense and time and the improvement of communication were realized.



Web conference

(Note 1): Calculated by annual CO2 emission per household = about 4,480kq-CO2. (Confirmed report of FY2017 by National Institute for Environment Studies, Greenhouse Gas Inventory Office of Japan)

Data Overview • Materials

# Effective use of resources

### Promotion of resource saving design

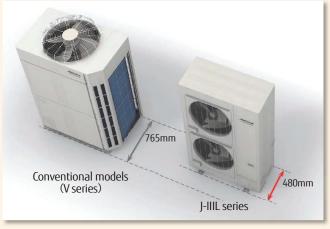
Based on the belief that it is important to efficiently utilize the resources used for our products, Fujitsu General Group is promoting a resource saving design at the stage of product design such as reduction in size and weight and reduction in the number of parts.

#### Introduction of case example

"AIRSTAGE" J-IIIL series (AJY 162LELAH), multi air conditioning system for store/office in Europe

#### Realized the industry's smallest (Note 2) compact outdoor unit

We realized the industry's smallest compact outdoor unit in the 18HP class by reducing the depth of outdoor unit to 480mm by changing the heat exhaust port of outdoor unit from vertical blow type to horizontal blow two fan type and optimizing the components such as the adoption of the original high density heat exchanger. We improved the workability of installation by reducing the installation area by about 45% compared with the conventional models and making it easier to carry in the elevator when delivering and thus, it has become easier to install in an invisible place such as between buildings, in a small space like balcony or a place covered with a blind fence.



Realized compact outdoor unit

### Refrigerant saving design

We reviewed the structure and capacity of the heat exchanger of the outdoor unit, and achieved refrigerant saving by about 18% compared to our conventional model. (In case of model case of our estimation, the amount of refrigerant was reduced from conventional 27.9kg to 23.0kg)



 "AIRSTAGE" is a registered trademark of Fujitsu General Ltd. (Note 2): As of November 28, 2018. According to our company's survey. In the 18HP class. 1,638mm (Height) x 1,080mm (Width) x 480mm (Depth).

### Promotion of recycling

Fuji Eco Cycle Co., Ltd. is promoting the recycling of collected used products. As part of that, we were able to recycle the door packing of refrigerator disposed conventionally as waste by decomposing and selecting manually into PVC resin and magnets from April 2018. However, continuous shipment has become difficult due to the stricter import restrictions on waste in various Asian countries. Therefore, we newly developed a processing contractor that can make door packing into pellet and started shipment in FY2019.

In the future, we will continue to contribute to the efficient use of resources while responding quickly to the changes in the external environment.



Door packing recovered from refrigerator door



Sorted into PVC resin and magnet by handwork



Sorted PVC resin



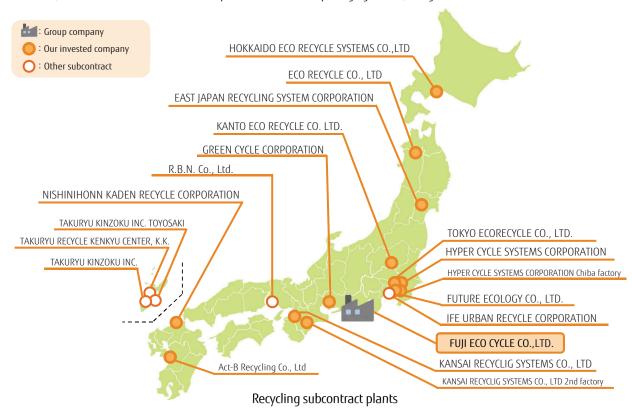
Sorted magnet

# **Electric Home Appliance Recycling**

### Electric Home Appliance Recycling (Japan)

Fujitsu General established designated pick-up locations at 332 places in Japan in collaboration with other electric home appliance makers, and are collecting used products of own company (air conditioner, TV, refrigerator/freezer, washing machine, clothing dryer). As to these used products, we are subcontracting recycling plants at 19 locations nationwide to recycle materials and collect CFCs.

In FY2018, the estimated collection volume of plastic containers and packaging was 13,700kg.



### Packaging Recycling (Japan)

Out of the products sold in Japan, packaging materials except cardboard are recycled through The Japan Containers and Packaging Recycling Association. In FY2018, the estimated collection volume of plastic containers and packaging was 13,700kg.

# Product Recycling (other than Japan)

In various countries and areas in the world, legislation and designing of framework are progressing. For the export products, Fujitsu General is promoting the activities to comply with the recycling system of each destination country and area for export.



Indication of mark according to the "WEEE Directive" of EU (Products for EU area)

# Reduction of chemical substance emission

#### Reduction of emissions of key chemical substances used during production

Fujitsu General Group is striving to reduce the emissions of key chemical substances during production. The Fujitsu General Electronics Limited worked on the total abolishment of the use of toluene in the supply chain. In FY2018, the use of current components containing toluene was terminated and totally abolished at the end of the fiscal year.



- Chemical substance management at factories -

Chemical substance management at FUJITSU GENERAL (SHANGHAI) CO., LTD.

### Obtaining information on chemical substances

Fujitsu General Group is conducting the investigation of chemical substance for business partners. In FY2018, along with the termination of the support of AIS (Note 1)/MSDSPlus (Note 2), we transferred to the successor scheme chemSHERPA (Note 3). As for the transition, we conducted a briefing session for domestic and overseas business partners. The information obtained will be shared within Fujitsu General Group and thoroughly managed by the in-house system.



Briefing session for business partners at FUJITSU GENERAL (THAILAND) CO., LTD.

(Note 1) AIS: (Article Information Sheet) Transmission sheet of chemical substance contained in molded articles.

(Note 2) MSDS Plus: (Material Safety Data Sheet Plus) Transmission sheet of chemical substance contained in chemical substance/compounding agent. (Note 3) chemSHERPA: (Chemical information SHaring and Exchange under Reporting Partnership in supply chain) A scheme that facilitates sharing information on chemical substances in products

Data Overview· Materials

# Environmental activities/enlightenment activities for employees

### Environmental education and enlightening system for employees

Fujitsu General Group conducts systematic environmental education and enlightenment in order to promote the enhancement of environmental awareness and positive activities for environment.

	New employee	General employee	Executive staff	Management level
Enlightenment	nment Environment month, Lecture meeting, Seminar, etc.			
	New employee training		Executive staff training	
Education	Education by departme	ent (occasional)		1
	Internal auditor trainir	ng		

#### Environmental enlightenment activities

The Fujitsu General Group is implementing an environmental month event in June every year aiming to improve environmental awareness and knowledge for all employees. In FY2018, "AKASURI Motto Contest" was held for all employees. 29 works were submitted, and as a result of voting on the in-house intranet, one grand prize and two secretariat prizes were selected. The selected mottos are posted in the company in the hope to raise employee awareness. Also, during the same month, e-learning with the theme of "SDGs" was held. We will continue to raise awareness of environmental issues through such event.



Akasuri Motto Contest Grand Prize

#### **Environmental education**



Environmental education at Kawasaki Head Office (FY2018 new employee training)

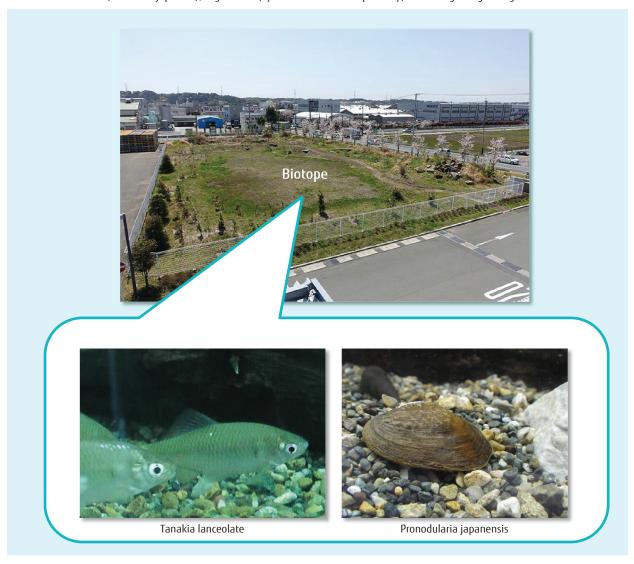
The Fujitsu General Group is implementing environmental education in the new employee training and executive staff training which are a basic human resource education. In FY2018, as departmental education, a briefing session of system operation of product environmental assessment and life cycle assessment was held for the product development staff in Japan and overseas aiming at the reduction of environmental burden of total life cycle of products.

Also, as an internal auditor training for ISO14001, the training by external lecturer was held for the purpose of developing new internal auditors.

# Communication with society

### Establishment of ecosystem network with biotope

Hamamatsu Business Office opened a biotope in the green area of the premises in FY2012 and are maintaining it. In the biotope, Yaritanago (Tanakia lanceolate) and Matsukasagai (Pronodularia japanensis) which are rare species designated as endangered species IA (Note 1) in the Shizuoka Prefecture RDB are conserved and at present, the natural breeding is confirmed. There are many other animals and plants including Minamimedaka (Oryzias latipes or Japanese rice fish, semi-endangered species in Shizuoka Prefecture RDB), Shirobanasakuratade (Persicaria japonica), Higanbana (Lycoris radiate or red spider lily) inhabiting and growing.



Whole view of the biotope of Hamamatsu Business Office, and Yaritanago and Matsukasagai which are conserved outside the growing area.

For more information, visit our website.

Establishment of ecosystem network with biotope

https://www.fujitsu-general.com/global/environment/business/biodiversity/index.html

(Note 1): Species with extremely high risk of extinction in the near future in the wild

Data Overview Materials

### Rare plants conservation activity

Kawasaki Head Office is working on the biodiversity conservation by protecting and cultivating local rare plants. In collaboration with the "Eco-city Takatsu" promotion project sponsored by Takatsu-ku, Kawasaki City, we evacuated Ebine (Calanthe discolor),

species of orchid, which is rare plant endangered to be stolen, from the forest of Kawasaki City, and are conserving and cultivating in the premises of Kawasaki head office with the advice of expert. In the future, as soon as the proliferation of the Ebine is confirmed, we will continue to contribute to the local society by returning them to the forest where the Ebine inhabit.





Ebine growing with expert advice in the premises of Kawasaki Head Office

# Supporting for and exchanging with local communities

Fujitsu General Group is positively engaged in the activities to deepen the support for and exchange with local communities. Fuji Eco Cycle Co., Ltd. is holding plant tour meetings for local schools and municipalities to deepen their understanding of the household electrical appliance recycling system.





Plant tour at Fuji Eco Cycle Co., Ltd.

#### Water resource conservation activities

Fujitsu General Group participates in regional activities to conserve the water resources around our business sites. FGA (THAILAND) CO., LTD. participated in the "Environmental Quality Monitoring Project" organized by Thailand Industrial Estate Corporation and carried out the garbage collection in the nearby residential area and coast aiming to restore marine coastal resources and enhance the awareness of conservation.

Also, Matsubara Business Office participated in the "Yamato River/Ishikawa Clean Operation" organized by the River Environment Division of Osaka Prefecture. The number of participants is increasing year by year, and 20 people including employees, their families and business partners participated in the activity this time and collected garbage such as plastic pieces and empty cans. The water quality is improving and trout have been moving up to this river since several years ago.



"Environmental Quality Monitoring Project" at FGA (THAILAND) CO., LTD.



"Yamato River/Ishi River Cleanup Strategy" at Matsubara **Business Office** 

#### Afforestation activities

Fujitsu General Group is working on the conservation of a sustainable natural environment through afforestation and Satoyama (Village) activities. As an event of "World Environmental Day", FGA (THAILAND) CO., LTD. carried out afforestation activities around the office and participated in the mangrove conservation project implemented on the nearby river.





Afforestation activities around the office (left) and "Mangrove conservation project" (right) at FGA (THAILAND) CO., LTD.

Data Overview • Materials

#### Commendation from outside

Our air conditioner "nocrias" Z/M series and "KP" series received an internationally prestigious "Red Dot Design Award: Product Design 2019". The "Red Dot Design Award", one of the world's three major design awards along with "iF Design Award" (Germany) and "IDEA Design Award" (America), is an international design award sponsored by the "Nordrhein-Westfalen Design Center", a design organization in Germany, and in the "Product" category, excellent designs that have been commercialized worldwide within the past two years are judged according to nine evaluation criteria of design innovation, functionality, quality, ergonomics, durability, ecology, etc. In the "Product Design" category this time, there were approximately 5,500 entries from 55 countries and regions around the world and about 1,700 products were awarded. Our "nocria" Z/M series and "KP" series were also evaluated as excellent products.



Logo mark (left), "nocria® Z/M series (upper right), "KP" series (lower right)

For more information, visit our website.

PRESS RELEASE: Awarded the internationally prestigious design award "Red dot design award 2019" (Japanese only)

https://www.fujitsu-general.com/jp/news/2019/03/18-Y09-35/index.html

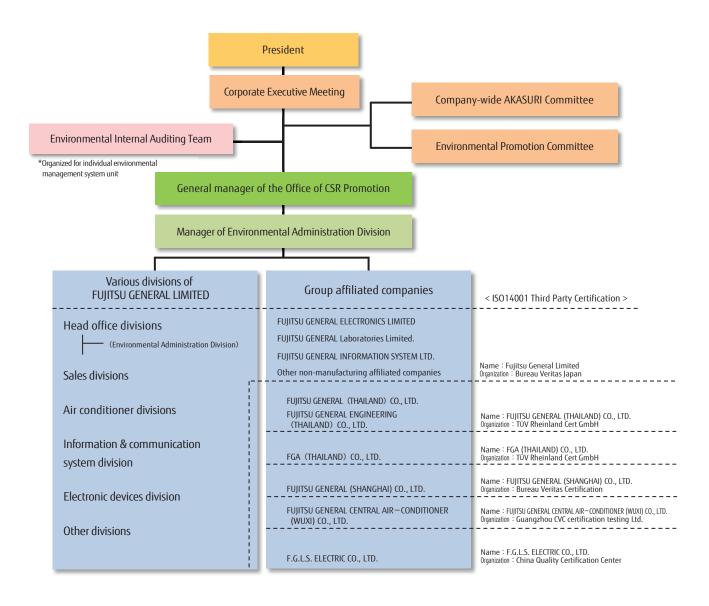
is a worldwide trademark of FUJITSU GENERAL LIMITED.

# **Environmental Management**

#### Environmental management promotion structure

The Fujitsu General Group established "Company-wide Akasuri Committee" chaired by the president as forum for solving crossorganizational issues related to environmental management and furthermore, "Environmental Promotion Committee" chaired by the general manager of the Office of CSR Promotion as a forum for discussing individual organizational environmental issues.

In addition, Fujitsu General Group is promoting environmental management by establishing the environmental management system based on the International Standard ISO14001. Within the group, domestic and overseas sales group companies acquired an integrated certification by the third parties and the group is promoting the environmental management in unity. Meanwhile, overseas manufacturing group companies established the environmental management system at each company (factory). We are promoting the environmental management by acquiring the third party certification.



#### Construction and operation of environmental management system

The Environmental Management System (EMS) of Fujitsu General Group consists of the integrated certification which our company, domestic group companies and overseas sales companies acquired jointly and individual certifications of five overseas production companies which acquired the international standard ISO14001 independently. In any case, "significant environmental aspects", "compliance obligations" and "risks and opportunities" related to the activities of each organization are identified, and taking those factors into consideration, we establish environmental goals and formulate action plan for activities. We regularly evaluate whether the goals are achieved or not as a result of implementing the activities.

In FY2018, as the transition to ISO14001:2015 was completed in FY2017, we deepened the understanding for the new standards at each related class and worked on the activities to reduce environmental impact and responded to the environmental issues efficiently and effectively.

Also, regarding the matters which were pointed out as nonconforming as a result of external audit and internal audit of EMS, we have completed corrective actions and as for the matters which were pointed out as to be observed and improved, we are striving to improve the management level by clarifying the points to be reviewed.

### Implementation of internal audit and results

The ISO14001:2015 requires contributing to environmental consideration and environmental protection through the primary operations of company.

In the internal audit of FY2018, the second year since the introduction of ISO14001:2015, we implemented the auditing focusing on whether the top management is tackling the environmental activities with leadership after understanding the status of each organization required by this Standard and whether they understand and observe the necessary legal compliance matters. As a result, some "nonconformities" related to compliance obligation (laws and regulations) were pointed out but corrective measures were completed for all matters.

#### ■ Result of FY2018 internal environmental auditing

Category	Number of indications/ improvements
Incompatibility concerning deviation risk of environmental laws	8
Incompatibility concerning other environmental risk	33

### Implementation of external audit and results

From August to September 2018, the first year surveillance audit was held based on ISO14001:2015 for our company, domestic group companies and overseas sales companies which is subject to the integrated certification. As a result, "nonconformities" related to the compliance obligation (legal regulations) were pointed out at overseas sales subsidiaries. Regarding the indicated matters including the "nonconformities" related to other environmental risk, the relevant audit division and ISO secretary office took corrective measures in cooperation and are maintaining the certification. Furthermore, we notified to relevant departments for the cross-organizational understanding.

Also, at the five overseas production companies which are independently certified, first year surveillance audit was held according to each individual schedule and certified.

#### ■ Result of FY2018 external environmental auditing

Category	Number of indications/ improvements
Incompatibility concerning deviation risk of environmental laws	4
Incompatibility concerning other environmental risk	44

# Green procurement

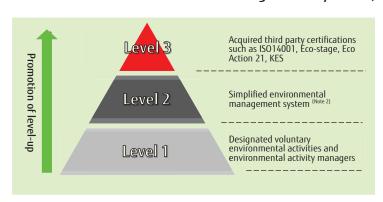
#### Procurement activities based on green procurement standards

Fujitsu General Group is promoting green procurement activities in cooperation with Fujitsu Group companies and promoting the procurement from suppliers that comply with the requirement of green procurement based on the "Fujitsu Group Green Procurement Standards" common to Fujitsu Group. Also, regarding the environmental management system,  $CO_2$  emission reduction, water resource conservation and biodiversity conservation activities of suppliers, we are monitoring with the environmental investigation slip common to Fujitsu Group and requesting them to promote the activities.

#### ■Requirements to suppliers for green procurement

Requirer	nents	Suppliers of components (Note 1)	Suppliers of other than components
(1)	Construction of environmental management system (EMS)	0	0
(2)	Complying with Fujitsu Group regulations for designated chemical substance	0	-
(3)	Construction of product component chemical substance management system (CMS)	0	-
(4)	CO <sub>2</sub> emission control/reduction initiatives	0	0
(5)	Biodiversity conservation initiatives	0	0
(6)	Efforts for conservation of water resources	0	0

#### Construction of environmental management system (EMS)



The Fujitsu General Group is requesting suppliers the construction of environmental management system (EMS) to promote the environmental conservation activity by improving continuously. The environmental management system of suppliers is categorized according to the construction level, Level 3 (Acquisition of third party certificate of ISO14001, etc.) in principle, but we are supporting suppliers of Level 1 and 2 for construction and operation of environmental management systems.

### Construction of product component chemical substance management system (CMS (Note 3))

In order to ensure the compliance with laws and regulations concerning chemical substances contained in products, we are requesting suppliers to construct CMS based on the "Guidelines for the chemical substances in products" of JAMP (Note 4).

Regarding CMS of suppliers, auditing staff of Fujitsu General Group are visiting suppliers and checking the situations of establishment and operation and if necessary, supporting the level-up as needed.

For more information, visit our website.

Fujitsu Group Green Procurement Standard

Web https://www.fujitsu-general.com/global/procurement/green.html

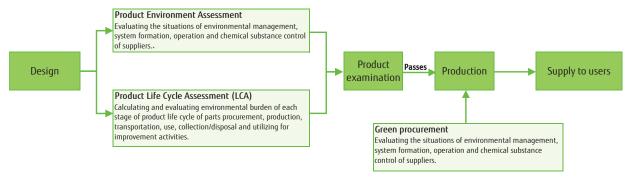
(Note 1): Suppliers who supply components of Fujitsu Group products or OEM/ODM products

(Note 2) : Suppliers' own environmental management system (Note 3) : Chemical substance Management System (Note 4) : (Joint Article Management Promotion-consortium)

# Environmental assessment of products

#### Environmental assessment system

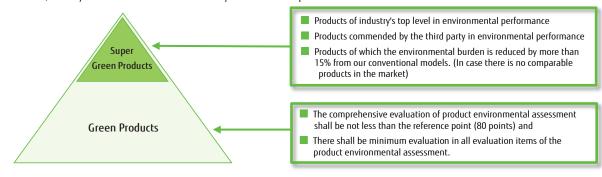
As the influence and risk on the environment of products are related to the various work process of Fujitsu General Group, we are implementing the assessment covering the whole value chain.



#### Standard and Evaluation of Product Environment Assessment

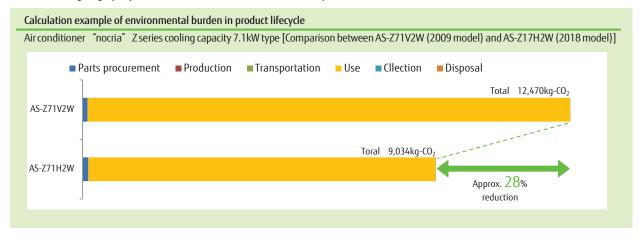
A product with a total environmental assessment score of more than the standard score (80 points) and a product that does not have a minimum rating for all evaluation items is defined as a "green product". And among them, the products which have the top level (Note 5) of environmental performance are designated as "Super Green Products".

In FY2018, twenty three new models were newly certified as Super Green Products.



# Product Life Cycle Assessment (LCA)

We are working on the reduction of environmental burden at each stage by assessing the environmental burden of product lifecycle at the time of designing by Fujitsu General's own automatic calculation system.



(Note 5): In case of the first place, first place tie, or a close second

# Activities for reduction of environmental risks

#### Activities for noise and vibration prevention

In order to prevent noise and vibration, the Fujitsu General Group's production and home appliance recycling group companies are continuously implementing soundproofing measures for equipment that can be a noise source.

#### Activities for soil pollution prevention

For the construction of "Innovation & Communication Center" at Kawasaki Head Office, which was completed in June 2019, we conducted a soil survey based on the Soil Contamination Countermeasure Act and the Ordinance related to Conservation of Living Environment such as Kawasaki City Pollution Prevention. As a result of collecting and analyzing the soil of 136 blocks with area of 10m x 10m as one block, we found noncompliance in 50 blocks and the Class 1 Designated Hazardous Substances exceeding the groundwater environment standard at 14 spots as for the groundwater. We reported the result of the soil investigation of Class 1, Class 2 and Class 3 Designated Hazardous Substances and the groundwater investigation to Kawasaki City.

In addition, for one block where the Class 1 Specified Hazardous Substance exceeds the wastewater standard, we cleared the standard value by purifying by the biotechnological method and completed the report to the local government. We will continue to implement the observation and monitor at the observation well.





Injection of biological agent (left) and Water quality measurement (right) at Kawasaki Head Office

### Activities for air pollution prevention

To prevent air pollution, the business offices and factories possessing smoke generating facilities are regularly measuring the amount of smoke such as NOx, SOx, etc. In addition, for the CFC emission control law, we are working on the proper management of business use air conditioners and refrigeration/freezing equipment and the grasp of the amount of CFC leakage, as well as stipulating internal regulations.



Collection of air quality sample of exhaust duct at FGA (THAILAND) CO., LTD.

management

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### Activities for water pollution prevention



In order to conserve the water quality for surrounding water area, we carry out the proper management by strictly observing the waste water standards such as related laws and ordinances and regularly measuring pH, COD, SS (Note 1). The Aomori Business Office installed a groundwater purification facility and conducts purification and progress measurement every year as organic solvent exceeding statutory standards was detected from groundwater in the soil and groundwater examination conducted in 1999 (then Aomori Fujitsu General Ltd.).

Collecting water quality sample from wastewater treatment system at FGA (THAILAND) CO., LTD.

### Activities for chemical substance pollution prevention

To prevent pollution by chemical substance, the procedure to prevent the diffusion at the time of leakage is checked periodically. Also, the equipment using polychlorinated biphenyl which was used in the factory premises in the past and the parts containing polychlorinated biphenyl used for the collected products are stored properly in the special storage warehouse of the head office until destruction treatment is carried out.



Training to handle lubricating oil leakage accident at Aomori Business Office



Inside the polychlorinated biphenyl storage warehouse at Kawasaki Head Office

# Environmental performance data

### Material Balance (FY2018 Actual Results)

#### **INPUT Suppliers OUTPUT** Atmospheric emissions 887,158 GJ Energy Fujitsu General Greenhouse gas 56,271 t-CO<sub>2</sub> Electricity 74,058 MWh Group CO<sub>2</sub> 38,838 t-CO<sub>2</sub> Fluorocarbon: 17,433 t-CO<sub>2</sub> Renewable energy 533 MWh NOx 13.6 t S0x 1 6 0 City Gas 181,777 m<sup>3</sup> Design Wastes 9,101 t LPG 2,067 t LNG 266 t Final disposal amount Effective utilization / Others 319 kL Light oil 159 kI Petrol 1.126 t Procure-Valuable quantity Heavy oil - A 34 kL 53 kL ment 120,365 t Raw materials Water (Displacement) 407,000 m<sup>3</sup> 95,281 t 10,971 t BOD COD 39.1 t 91.8 t Packing material 12.050 t 2.063 t Manufac-Chemical substance emission - Volune of movement 453,000 m<sup>3</sup> Chemical substance (Note 1) 2.67 t 1,554,069 GJ Transport Energy Atmospheric emissions Vehicle fuel Marine transportation fuel CO<sub>2</sub> 110,915 t-CO<sub>2</sub> 567,717 GJ 955,036 GJ 31,316 GJ Aviation fuel (jet fuel) Customers CO<sub>2</sub> emission during product use (Note 3) 37,896 kt-CO<sub>2</sub> Power consumption during product use (Note 2) 73.515 GWh Product recycling disposed quantit 378,001 units Recycling Recycling CRT type TV LCD / Plasma type TV Disposal amount Reuse for our products 162 units 17,197 t Air-conditioner Refrigerator / Freezer Other reuse 274,679 units 95,817 units 15,325 t 136 t Washing machine / Cloth dryer 5,219 units

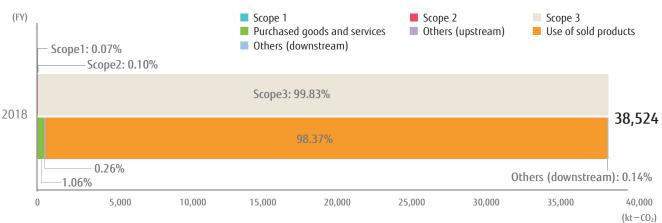
- (Note 1): Aggregation concerning PRTR Law subject substance
- (Note 2): Power consumption during product use: Total amount of power consumed by our products during operation time (estimated value)
- (Note 3): CO<sub>2</sub> emission during product use: Total of emission during operating period of our products

management

Data Overview · Materials

# CO<sub>2</sub> emission of value chain (Report of greenhouse gas emission based on GHG protocol)

 $\blacksquare$  SCOPE 1, 2, 3 CO<sub>2</sub> emission



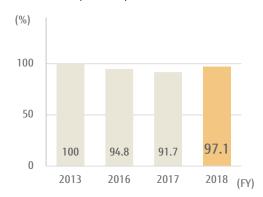
Scope		Category	Emissions (t-CO <sub>2</sub> ) FY2018	Ratio to total
Scope 1	Direct emission	n associated with in-house use of fuel	25,985	0.07%
Scope 2	Indirect emission by the compan	on associated with use of electricity and heat purchased y <sup>(Note 4)</sup>	40,233	0.10%
Scope 3	Other indirect of	emission	38,457,963	99.83%
	Category 1	Purchased goods and services	409,703	1.06%
	Category 2	Capital goods	25,888	0.07%
	Category 3	Fuel and energy related activities not included in Scope 1 or 2	2,622	0.01%
Hashraam	Category 4	Transportation and delivery (upstream)	64,272	0.17%
Upstream	Category 5	Waste generated in operations	1,141	0.003%
	Category 6	Business travel	1,501	0.004%
	Category 7	Employee commuting	273	0.001%
	Category 8	Leased assets (upstream)	525	0.001%
	Category 9	Transportation and delivery (downstream)	47,907	0.12%
Down	Category 10	Processing of sold products	13	0.00003%
stream	Category 11	Use of sold products	37,896,244	98.37%
	Category 12	End-of-life treatment of sold products	7,874	0.02%
Total			38,524,181	100.0%

(Note 4): Calculated by emission index of electricity based on contract

<sup>\*</sup>The total may not match as the numbers are rounded off.

#### Environmental Action Plan: Basic unit management of greenhouse gas

#### ■Electricity consumption of evaluation test facility



#### ■Electricity consumption in domestic production bases

#### ■Greenhouse gas emissions associated with Product logistics in Japan (estimated value)



■Electricity consumption in overseas production bases

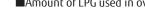


■Amount of petroleum used in domestic production bases \*

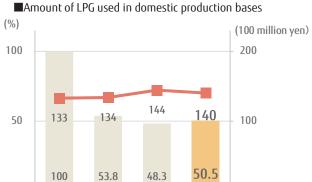


■Amount of petroleum used in overseas production bases \*









2017

#### ■Amount of LPG used in overseas production bases \*



<sup>\*</sup>As a result of close examination of the data, some of the actual figures published in FY2018 have been revised.

(FY)

2018

0

2013

2016

### Environmental Action Plan: Basic unit management of water · wastes





#### ■Reduction of water use at domestic production bases

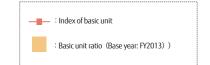




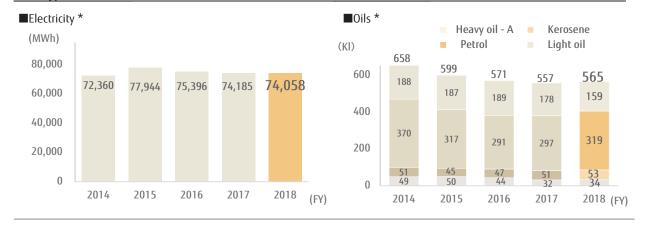


#### ■Reduction of water use at domestic offices

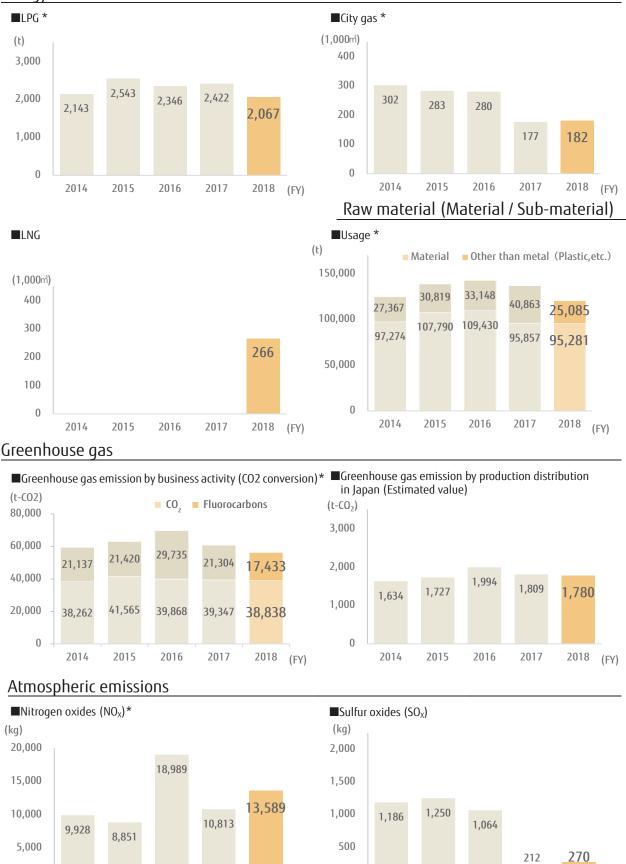




#### Energy



### Energy (continued)



<sup>\*</sup>As a result of close examination of the data, some of the actual figures published in FY2018 have been revised.

2018 (FY)

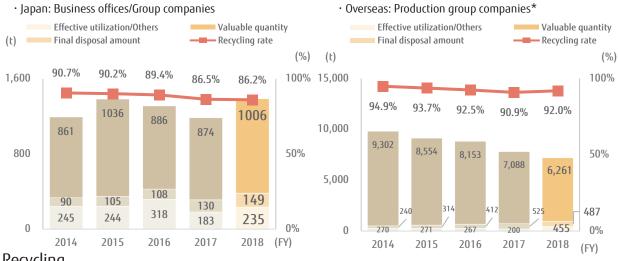
(FY)

#### Water

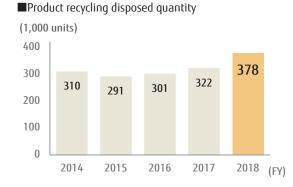


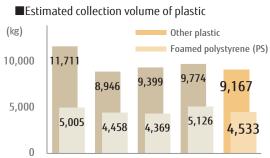
#### Wastes





### Recycling





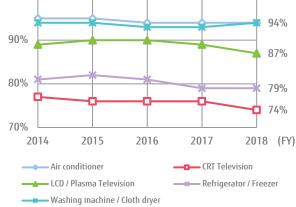
2016

2017

2015

2014

### ■Product recycling rate 100%



(FY)

2018

<sup>\*</sup>As a result of close examination of the data, some of the actual figures published in FY2018 have been revised.

### Electric home appliance recycling results (FY2018)

■ For details, refer to this page.

Electric home appliance recycling results (Japanese only)

Web https://www.fujitsu-general.com/jp/environment/recycle/home-electronics/recycle-report.html

#### ■ Recycling results

ltem	Air-conditioner	1	ΓV	Refrigerator	Washing machine	
itelli	CRT type LC		LCD / Plasma type	Freezer	Cloth dryer	
Accepting quantity at specified acceptance place	273,478 units	2,096 units	157 units	95,171 units	5,187 units	
Product recycling disposed quantity	274,679 units	2,124 units	162 units	95,817 units	5,219 units	
Product recycling disposed weight	11,256 t	49 t	2 t	5,691 t	199 t	
Product recycling weight	10,685 t	37 t	2 t	4,514 t	187 t	
Product recycling rate	94 %	74 %	87 %	79 %	94 %	

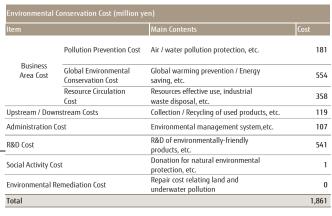
#### ■ Situation of collection of refrigerant Fluorocarbons

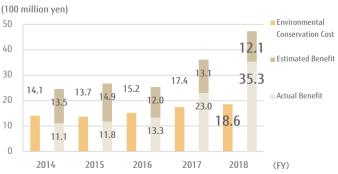
	Air-conditioner	Refrigerator / Freezer
Accepting quantity at designated collection sites	181,291 kg	5,914 kg
Weight shipped to subcontractor of	180,613 kg	5,927 kg
Recycling and reuse weight	133,593 kg	2,832 kg
Destruction weight	46,408 kg	3,066 kg

### Chemical substance handling amount (PRTR Law subject substance) (FY2018)

Chemical substance	CAS number	Handling amount
styrene	100-42-5	1,882 kg_
tricresyl phosphate	1330-78-5	279 kg_
toluene	108-88-3	149 kg_
methylenebis	101-68-8	220 kg_
lead	7439-92-1	145 kg

## Environmental Accounting (FY2018)





Economic Benefit Associated with Environmental Conservation Activities (million yen)						
Item	Main Contents	Cost				
Estimated Benefit	Assumed effect by control of environmental protection facility and development of environmentally-friendly products	1,206				
Actual Benefit	Profit on sale of valued articles, reduction of waste disposal cost, gain on sales of surplus electricity, etc.	3,526				
Total		4,732				

#### Cost and economic effect in FY2018

In FY2018, the environmental conservation cost was 1.86 billion yen (7% increase from the previous year) and the economic effect accompanying environmental conservation measures was 4.73 billion yen (31% increase from the previous year).

The substantial economic effect increased by the cost reduction effect by VE, reduction of purchased electric power due to the introduction of solar power generation, gain on sales of surplus electricity and reduction of electricity by reviewing the contract electric power volume in Kawasaki head office area and Hamamatsu area.

# Environmental performance date calculation standard

■ Subject period: April 1, 2018 - March 31, 2019

Raw materials

Scope: Fujitsu General Group and its consolidated subsidiaries (For details, refer to "List of report target organization" in Data Overview).

Calculation method

Purchase of raw materials per year

Unit

#### Material balance

INPUT Indicator

	Raw material	5	t	Purchase of raw materials per year
	Chemical substances	Volume of PRTR- targeted substances	t	For the substances covered by the PRTR Law (Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof) handled totals are provided for those substances handled in quantities exceeding 100kg annually per business site.
Design/ Procurement/	Water usage		$m^3$	Annual usage of water, industrial water, groundwater (except for groundwater used for snow melting or purification measures) $ \frac{1}{2} \left( \frac{1}{2} - \frac{1}{2} \right) = \frac{1}{2} \left( 1$
Manufacturing	Energy consumption		GJ	(Annual usage of electricity, fuel and gas) x Unit calorific value for each type of energy* *Guidelines for calculating total greenhouse gas emissions (2007) (Ministry of the Environment)
		Electricity	MWh	Annual electricity usage
		Oils	kℓ	Annual usage of heavy oil A, fuel oil, light oil, gasoline
		LPG	t	Annual LPG usage
		City gas	m <sup>3</sup>	Annual city gas usage
Logistics	Energy	Vehicle fuel	GJ	Transport ton-kilometer x Improved ton-kilometer method fuel consumption basic unit* $\times$ 10 <sup>-3</sup> x Unit calorific value*  *Guidelines on calculation method related to CO <sub>2</sub> emissions in the logistics field  (Ministry of the Economy, Trade and Industry/Ministry of Land, Infrastructure, Transport and Tourism)
Logistics	consumption	Marine transportation fuel Aviation fuel (jet fuel)	GJ	Transport ton-kilometer x Conventional ton-kilometer method $CO_2$ emission basic unit* $\times 10^{-6}$ / Emission potential* $\times 12/44$ *Guidelines on calculation method related to $CO_2$ emissions in the logistics field (Ministry of the Economy, Trade and Industry/Ministry of Land, Infrastructure, Transport and Tourism)
Usage	Energy consumption		MWh	Annual power consumption of products sold x Number of units sold x Product life
OUTPUT				
Indicator			Unit	Calculation method
	Atmospheric discharge	CO <sub>2</sub> emissions	t-CO <sub>2</sub>	(Annual usage of electricity, fuel and gas) x CO <sub>2</sub> emission potential per energy*  *CO <sub>2</sub> emission basic unit at end of use (The Federation of Electric Power companies of Japan)  Domestic: 0.407t-CO <sub>2</sub> /MWh (FY2002 emission basic unit)  Overseas: 0.410t-CO <sub>2</sub> /MWh (FY2006 emission basic unit)
		Greenhous gas emissions other than CO <sub>2</sub>	t-CO <sub>2</sub>	Annual emissions of fluorocarbons x Global warming potential* *Intergovernmental Panel on Climate Change (4th Report) (IPCC)
		NOx emissions	kg	NOx concentration x $10^{-6}$ x Dray gas emissions x Operating time x $46/22.4$
		SOx emissions	kg	SOx concentration x $10^{-6}$ x Dray gas emissions x Operating time x $64/22.4$
Design/ Procurement/	Water discharge	Water discharge	$m^3$	Annual water discharges into public waterways and sewers (except for groundwater used for snow melting or purification measures)
Manufacturing		BOD emissions	t	BOD concentration x Water discharge x10 <sup>-6</sup>
		COD emissions	t	COD concentration x Water discharge x 10 <sup>-6</sup>
	Chemical substances	Emissions of PRTR- targeted substances	t	For the substances covered by the PRTR Law (Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof) released totals are provided for those substances handled in quantities exceeding 100kg annually per business site.
	Waste	Total emissions	t	Total of general wastes, effective use of industrial wastes, waste disposal and valuable sales amount
		Final disposal volume	t	General disposal and industrial disposal processed by landfilling
Logistics	Atmospheric discharge	CO <sub>2</sub> emissions	t-CO <sub>2</sub>	Transport ton-kilometer x Improved ton-kilometer method fuel consumption basic unit* x 10 <sup>-3</sup> x Unit heat emissions* x Emission potential* x 44/12  Transport weight and transport distance x Emission factor per ton-kilometer or fuel*  *Guidelines for Calculation Method on CO <sub>2</sub> Emissions in the Logistics Field  (Ministry of Economy, Trade and Industry/Ministry of Land, Infrastructure, Transport and Tourism)
Usage	Atmospheric discharge	CO <sub>2</sub> emissions	t-CO <sub>2</sub>	Annual power consumption of products sold x Number of units sold x Product life x Basic unit per power consumption* *GHG Protocol Emission Factor Database (GHG Protocol)
	Disposal volu	me	t	Total weight of our products for which action necessary for recycling was implemented
	Reuse for our	products	t	Total weight of parts/materials reused for our products
Recycling				Takal wai ahk af aasta/matariala sawaad far akhar khan aya aradyata
Recycling	Reuse for oth	ers	t	Total weight of parts/materials reused for other than our products

## Scope1, 2, 3

Scope		Category	Calculation method
Scope 1	Indirect emission associated with use of electricity and heat purchased by the company		Total of $CO_2$ emissions from fuel and gas consumption (combustion) and greenhouse gas emission other than $CO_2$ emissions mainly at business offices owned by the company
Scope 2			${\rm CO_2}$ emissions from consumption (purchase) of electricity and heat mainly at business offices owned by the company
Scope 3			
			Purchase amount of components within this fiscal year x Basic unit per purchase amount* *Embodied Energy and Emission Intensity Data for Japan Using Input—Output Tables (3EID) (National Institute for Environmental Studies)
	Category 2	Capital goods	Capital goods procurement amount x Basic unit per amount*  *Basic Guidelines on Accounting for Greenhouse Gas Emissions throughout the Supply Chain (Ministry of the Environment, Ministry of Economy, Trade and Industry)
	Category 3	Fuel and energy related activities not included in Scope 1 or 2	Annual procurement amount of fuel oil, gas, electricity · heat purchased (consumed) at business offices owned by the company x Basic unit by type of energy*  *Basic Guidelines on Accounting for Greenhouse Gas Emissions throughout the Supply Chain (Ministry of the Environment, Ministry of Economy, Trade and Industry)
	Category 4 Transportation and delivery (upstream)  Category 5 Waste generated in operations		Transport weight and transport distance related to shipper's transportation x Ton-kilometer or emission factor per fuel*  *Guidelines on calculation method related to CO, emissions in the logistics field (Ministry of the Economy, Trade and Industry/Ministry of Land, Infrastructure, Transport and Tourism)
			Annual disposal · recycling amount by type and disposal method of wastes discharged by business offices owned by the company x Basic unit per disposal · recycling amount*  *Basic Guidelines on Accounting for Greenhouse Gas Emissions throughout the Supply Chain (Ministry of the Environment, Ministry of Economy, Trade and Industry)
	Category 6	Business travel	Annual business travel days for domestic and overseas business travel of employees enrolled in Japanx Basic unit by type of business travel*  *Basic Guidelines on Accounting for Greenhouse Gas Emissions throughout the Supply Chain (Ministry of the Environment, Ministry of Economy, Trade and Industry)
	Category 7	Employee commuting	Commuting and transportation expenses of employees enrolled in Japan x Basic unit by means of transportation*  *Basic Guidelines on Accounting for Greenhouse Gas Emissions throughout the Supply Chain (Ministry of the Environment, Ministry of Economy, Trade and Industry)
	Category 8	Leased assets (upstream)	Leased assets rented x Basic unit per amount*  *Basic Guidelines on Accounting for Greenhouse Gas Emissions throughout the Supply Chain (Ministry of the Environment, Ministry of Economy, Trade and Industry)
	Category 9	Transportation and delivery (downstream)	Transport weight and transport distance x Emission factor per ton-kilometer or fuel*  *Guidelines on calculation method related to CO, emissions in the logistics field (Ministry of the Economy, Trade and Industry/Ministry of Land, Infrastructure, Transport and Tourism)
	Category 10	Processing of sold products	Product weight x Basic unit per manufacturing process of assembling products* *JLCA data book (LCA Japan Forum)
	Category 11 Use of sold products		Annual power consumption of products sold x Number of units sold x Product life x Basic unit per power consumption*  *GHG Protocol Emission Factor Database (GHG Protocol)  Product weight x Number of units sold x Basic unit per product weight (created by the company)
	Category 12	End-of-life treatment of sold products	Product weight of products sold x Annual number of products sold x Basic unit per product weight*  *Basic Guidelines on Accounting for Greenhouse Gas Emissions throughout the Supply Chain (Ministry of the Environment, Ministry of Economy, Trade and Industry)

## Environmental Action Plan: Basic unit management of greenhouse gas · water · wastes

Item	Indicator	Unit	Calculation method
Electricity usage of evaluation test facilities	Reduction rate of electricity usage per facility operation rate in evaluation test facilities	%	Electricity consumption of evaluation test equipment per equipment operation rate in the relevant year/ Electricity consumption of evaluation test equipment per equipment operation rate in FY2013 x 100
Energy (electricity/oils/LPG) usage of production bases	Reduction rate of energy usage per production volume in production bases	%	Energy consumption per production volume of production bases in the relevant year/ Energy consumption per production volume of production bases in FY2013 x 100
Greenhouse gas related to domestic product logistics Indicator	Reduction rate of CO <sub>2</sub> emission per sales volume in domestic logistics	%	Logistics $CO_2$ emissions per domestic sales volume in the relevant year/ Logistics $CO_2$ emissions per domestic sales volume in FY2013 x 100
Total waste generation of production bases	Reduction rate of total waste generation per production volume in production bases	%	Total waste generation per production output of production base relevant year/Total waste generation per production output of production base in FY2013 x 100
Water usage of production bases	Reduction rate of water usage per production volume in production bases	%	Water usage per production volume at production bases in the relevant year/Water usage per production volume at production bases in FY2013 x 100
Water usage of domestic offices	Reduction rate of water usage per total working hours in domestic offices	%	Water usage per total working hours at domestic offices in the relevant year/Water usage per total working hours at domestic offices in FY2013 x 100

# List of report target organization

■ Organizations covered: The coverage is of Fujitsu General and its consolidated subsidiaries. However, for environmental performance data, some targets differ depending on the summary items.

		Environmental		Greenhouse gas Atmospheric discharge		Atmospheric discharge	Water			Raw		Chemical
Company name		accounting	Energy	Business activities	Logistics	NOx/SOx	Usage/Discharge	BOD	COD		Wastes	substances
Fujitsu General Limited	Kawasaki Head Office	✓	✓	✓		✓	✓				1	
	Aomori Business Office	✓	1	1		1	✓	1	1	1	1	1
	Hamamatsu Business Office	✓	1	1			1			1	1	
	Matsubara Business Office	✓	1	1			✓				1	
	Sales/Service bases (64 bases)	1	1	1	✓		✓				1	
Domestic group companies (10 companies)												
Fujitsu General Electronics Limited		✓	✓	1		✓	✓	1	1	1	1	✓
Fujitsu General Central Air-Conditioner Co., Ltd. (Present: Business succession to FGOT)		1	✓	1			✓				1	
Fujitsu General EMC Laboratory Limited		1	1	1			✓				1	
Fuji Eco Cycle Co., Ltd.		✓	1	1			✓	1	1		1	
Fujitsu General Laboratories Limited		✓	1	1			✓				1	
Fujitsu General Residential Equipment Ltd.		✓	1	1			✓				1	
Fujitsu General Field Sales Ltd.		1	1	1			1				/	
F E S Ltd. (Present: Absorbed by Seiwakai Ltd.)		1	/	/			/				1	
Fujitsu General Heartware Ltd.		1	/	/			<b>✓</b>				/	
Seiwakai Ltd.		<b>✓</b>	/	1			✓				/	
Overseas group companies (18 companies)												
Fujitsu General (Shanghai) Co., Ltd.		✓	1	1		✓	✓	1	1	1	1	
Fujitsu General Central Air-Conditioner (Wuxi) C	o., Ltd.	✓	1	1		1	✓	1	/	1	1	
Wuxi Fujitsu General Mechanical & Engineering	Co., Ltd.	✓	1	1			1	1	/		/	
F.G.L.S. Electric Co., Ltd.		✓ *										
Fujitsu General (Thailand) Co.,Ltd.		✓	1	1		✓	1	/	/	1	1	
FGA (Thailand) Co.,Ltd.		1	1	1		1	1	1	/	1	/	
Fujitsu General Engineering (Thailand) Co.,Ltd.		✓ *	1	1		1	1					
Fujitsu General America,Inc.		✓ *	1	1								
Fujitsu General do Brasil Ltda.		✓ *	1	1		1	1				/	
Fujitsu General (U.K.) Co.,Ltd.		✓ *	1	1		1						
Fujitsu General Air Conditioning (UK) Ltd.		✓ *	1	1		1	/				1	
Fujitsu General (Euro) GmbH		✓ *	1	1		1	/				1	
Fujitsu General (Middle East) Fze		✓ *	1	1		1					1	
Fujitsu General (Asia) Pte. Ltd.		✓ *	<b>✓</b>	/							1	
Fujitsu General (Aust.) Pty Ltd.		✓ *	1	/		1	✓				1	
Fujitsu General New Zealand Ltd.		✓ *	/	/		1						
Fujitsu General Orient International Electronics	Sales (Shanghai) Co., Ltd.	✓ *	/	<b>✓</b>		1	✓				/	
Fujitsu General (Taiwan) Co.,Ltd.		✓ *	/	<b>✓</b>		1	✓				/	

<sup>\*</sup> Expenses concerning maintenance/management and environment are not applied.

## Introduction of business center

#### **Domestic**

### Fujitsu General Electronics Limited

#### **Overview**

[Location] 3-1 Aisari, Ichinoseki-shi, Iwate 021-0853, Japan [Line of business] Development, manufacture of electronic devices and manufacture of information and communication equipment

#### Main environmental activities

Pursuing the reduction of environmental burden of office and factory including enhancement of production efficiency along with the development of environmentally-friendly products. Also, working positively on the recycling of wastes as well as the thorough control of chemical substances necessary for the production of electronic devices.





### Fuji Eco Cycle Co., Ltd.

#### **Overview**

[Location] 1930-4 Nakagawa, Hosoe-cho, Kita-ku, Hamamatsu-shi, Shizuoka 431-1304, Japan

[Line of business]

HAMAMATSU BUSINESS OFFICE: Product maintenance of air conditioners FUJI ECO CYCLE CO., LTD. : Business related to recycling of used electric household appliances (air conditioners, televisions, refrigerators, freezers, washing machines)

#### Main environmental activities

The business office is near Hamanako Prefectural Natural Park including the habitat of rare wild animals, and operating the business in consideration for the natural environment and harmony. Also, conducting the creature monitoring at the biotope along with the activity of recycling without using water.



### Matsubara Business Office

#### **Overview**

[Location] 2-1-45 Nishinono, Matsubara-shi, Osaka 580-0004, Japan

[Line of business] Sales and service in Kansai area and distribution of West Japan service parts

#### Main environmental activities

As a center of sales and service activity in Kansai district, aiming at the reduction of social environmental burden through products and services in the relation with customers.

Also, working on the enhancement of operation efficiency of company business cars in the metropolitan area as well as the reduction of environmental burden in the office.

Data Overview · Materials

### Aomori Business Office

#### Overview

[Location] 67-2 Aza Arakumanai, Shichinohe-machi, Kamikita-gun, Aomori 039-2501, Japan

[Line of business] Manufacture of fan motors

#### Main environmental activities

In the surrounding area of the business office, there are rich ecosystems remaining such as ranch and farmland spreading in the neighborhood and Hotokenuma (wetland registered as Ramsar Conservation site) where many rare wild animals are inhabiting. To harmonize and protect such environments, the business office is working on the thorough control and reduction of use regarding the chemical substances such as organic solvent used in the production process of motor.



Fujitsu General Laboratories Limited Fujitsu General Residential Equipment Ltd. Fujitsu General OS Technology Limited Fujitsu General Field Sales Ltd. Fujitsu General EMC Laboratory Limited Fujitsu General Heartware Ltd. Seiwakai Ltd.

#### Kawasaki Head Office

#### Overview

[Location] 3-3-17, Suenaga, Takatsu-ku, Kawasaki, Kanagawa 213-8502 Japan

[Line of business] Development, manufacture, sales and service of products and parts in both fields of air conditioners and information and communication system

#### Main environmental activities

The head office is assuming an important role to control the environmental management of the whole Fujitsu General Group and functioning as a core of the development of products and sales strategy at present. Also, the management strategy contributing to

the reduction of the social environmental burden and the enhancement of environmental efficiency is developed globally from the head office.



#### **Business office**

#### Kawasaki Head Office

[Location] 3-3-17, Suenaga, Takatsu-ku, Kawasaki, Kanagawa 213-8502 Japan [Line of business] Development, manufacture, sales and service of products and parts in both fields of air conditioners and information and communication system

#### Hamamatsu Business Office

[Location] 1930-4 Nakagawa, Hosoe-cho, Kita-ku, Hamamatsu-shi, Shizuoka 431-1304, Japan

[Line of business] Product maintenance of air conditioners

#### Matsubara Business Office

[Location] 2-1-45 Nishinono, Matsubara-shi, Osaka 580-0004, Japan [Line of business] Sales and service in Kansai area and distribution of West Japan service parts

#### Aomori Business Office

[Location] 67-2 Aza Arakumanai, Shichinohe-machi, Kamikita-gun, Aomori 039-2501, Japan

[Line of business] Manufacture of various electric motors and die-casting parts and all other machine processing

#### Affiliated Companies

#### Fujitsu General Electronics Limited

[Location] 3-1 Aisari, Ichinoseki-shi, Iwate 021-0853, Japan [Line of business] Development, manufacture of electronic devices and manufacture of information and communication equipment

#### Fujitsu General Laboratories Limited

[Location] 3-3-17, Suenaga, Takatsu-ku, Kawasaki, Kanagawa 213-8502 Japan [Line of business] Air conditioners, refrigeration system related research, development, design, and consulting

#### Fujitsu General Residential Equipment Ltd.

[Location] 3-3-17, Suenaga, Takatsu-ku, Kawasaki, Kanagawa 213-8502 Japan [Line of business] Air conditioner sales, installation

#### Fujitsu General OS Technology Limited

[Location] 3-3-17, Suenaga, Takatsu-ku, Kawasaki, Kanagawa 213-8502 Japan [Line of business] Solutions for food service industry, medical information services for outpatients and solutions for agricultural information

#### Fujitsu General Field Sales Ltd.

[Location] 3-3-17, Suenaga, Takatsu-ku, Kawasaki, Kanagawa 213-8502 Japan [Line of business] Staff placement and contract work

#### Fuji Eco Cycle Co., Ltd.

[Location] 1930-4 Nakagawa, Hosoe-cho, Kita-ku, Hamamatsu-shi, Shizuoka 431-1304 Japan

[Line of business] Business related to recycling of used electric household appliances (air-conditioners, televisions, refrigerators, freezers, washing machines)

#### Fujitsu General EMC Laboratory Limited

[Location] 3-3-17, Suenaga, Takatsu-ku, Kawasaki, Kanagawa 213-8502 Japan [Line of business] Radio interference measurement and measurement contracting work, radio interference measurement equipment leasing, consulting work, etc.

#### Fujitsu General Heartware Ltd.

[Location] 3-3-17, Suenaga, Takatsu-ku, Kawasaki, Kanagawa 213-8502 Japar [Line of business] Subcontracting services such as goods management, transportation, packing and dispatching operations, cleaning, recycling of garbage, greening assistance, contract work such as document organization

#### Seiwakai Ltd.

[Location] 3-3-17, Suenaga, Takatsu-ku, Kawasaki, Kanagawa 213-8502 Japar [Line of business] Agent for all types of insurance, copying machine services, and operation of in-company sales outlets

## Introduction of business center

#### **Overseas**

### Fujitsu General (Shanghai) Co., Ltd.



[Location] No. 1720 Hui Cheng South Rd., Jading Shanghai 201821, China [Line of business] Manufacture and development of air conditioners

#### Main environmental activities

Promoting the conversion of refrigerant used for air conditioners to the ones with less environmental burden. Also, we are strengthening the preventive measures against fluorocarbons leakage in the production process. Working on the improvement of lighting efficiency in the factory (changing to LED) and the review of air conditioning facility for energy saving.

- Europe
- · Fujitsu General (U.K.) Co.,Ltd.
- · Fujitsu General Air Conditioning (UK) Ltd.
  - Fujitsu General (Euro) GmbH

China

Fujitsu General Electronics (Suzhou) Co., Ltd.

F.G.L.S. Electric Co., Ltd.

Fujitsu General Limited

Fujitsu General Commercial Air Conditioning Italia S.p.A.

■ Middle East

Fujitsu General Orient International Electronics Sales (Shanghai) Co.,Ltd.

Fujitsu General (Taiwan) Co.,Ltd.

Fujitsu General (Middle East) FZE

ABS Aircon Engineers Private Limited

Fujitsu General (India) Private Limited

Asia

Fujitsu General Engineering (Thailand) Co., Ltd.

Fujitsu General (Asia) Pte. Ltd.

#### Oceania

- · Fujitsu General (Aust.) Pty Ltd.
- · Precise Air Group (Holdings) Pty Limited

Fujitsu General New Zealand Ltd.

Fujitsu General (Thailand) Co.,Ltd.



[Location] Laem Chabang Industrial Estate, I-EA-T, Free Zone 1,

92/9 (92/10) Moo 2, Thungsukhla, Sriracha, Chonburi



FGA (Thailand) Co.,Ltd.

[Location] Laem Chabang Industrial Estate, I-EA-T, Free Zone 2, 212 Moo 3, Thungsukhla, Sriracha, Chonburi 20230, Thailand

[Line of business] Manufacture of key components for air conditioners

#### Main environmental activities

20230. Thailand

Working on the reduction of CO₂ emission through the reduction of energy consumption by increasing efficiency of lighting in the factory (introduction of LED illumination) and preventive measures of CFC leakage. Also, promoting the social contribution by staff volunteer activities including planting activity to regenerate the mangrove trees of the shore tideland and cleaning activity of the Pattaya beach and

### temples.

**Overview** 

[Line of business] Manufacture of air conditioners

Data Överview · Materials

Manufacturing Companies

Fujitsu General (Shanghai) Co., Ltd.

[Location] No. 1720 Hui Cheng South Rd., Jading Shanghai 201821, China [Line of business] Manufacture and development of air conditioners

Fujitsu General Central Air-Conditioner (Wuxi) Co., Ltd.

[Location] No.10 Lijiang Road, New District, Wuxi Jiangsu 214028, China [Line of business] Manufacture of air conditioners and sales in China

F.G.L.S. Electric Co., Ltd.

[Location] No.8, Jiangzhou Road, Economic Develop Zone, Jingiang, Jiangsu 214500 China

[Line of business] Manufacture of key components for air conditioners and sales in China

Fujitsu General (Thailand) Co.,Ltd.

Fujitsu General Engineering (Thailand) Co.,Ltd.

[Location] Laem Chabang Industrial Estate, I-EA-T, Free Zone 1, 92/9 (92/10) Moo 2, Thungsukhla, Sriracha, Chonburi 20230, Thailand [Line of business] Manufacture and development of air conditioners

FGA (Thailand) Co.,Ltd.

[Location] Laem Chabang Industrial Estate,I-EA-T, Free Zone 2, 212 Moo 3, Thungsukhla, Sriracha, Chonburi 20230, Thailand [Line of business] Manufacture of key components for air conditioners

#### Overseas sales companies

#### Americas

Fujitsu General America, Inc.

[Location] 353, Route 46 West, Fairfield, N.J. 07004, U.S.A. [Line of business] Sales of air conditioners in North and Central America

Fujitsu General Do Brasil Ltda.

[Location] Rua Treze de Maio, 1633 - 2º andar - Bela Vista, São Paulo, SP, CEP 01327-905, Brasil

[Line of business] Sales of air conditioners in South America

• Fujitsu General (U.K.) Co.,Ltd. [Location] First Floor Unit 330, Centennial Park, Centennial Avenue, Elstree, Hertfordshire, WD6 3TI, U.K.

[Line of business] Sales of air conditioners in Europe

Fujitsu General Air Conditioning (UK) Ltd.

[Location] Unit 150, Centennial Park, Centennial Avenue, Elstree, Hertfordshire, WD6 3SG, U.K.

[Line of business] Sales of air conditioners in Europe

Fujitsu General (Euro) GmbH

[Location] Fritz-Vomfelde-Straße 26-32, 40547 Düsseldorf, Germany [Line of business] Sales of air conditioners in Europe

 Fujitsu General Commercial Air Conditioning Italia S.p.A. [Location] Via Galileo Galilei 40, 20092 Cinisello Balsamo (MI), Italy [Line of business] Sales of air conditioners in Europe

Fujitsu General (Middle East) FZE

[Location] P.O.BOX 17547, S/R S3B4SR06, Jebel Ali FZE South, Dubai, U.A.E. [Line of business] Sales of air conditioners in Middle East and Africa

• Fujitsu General (Taiwan) Co.,Ltd. [Location] 4F. -1, No.416 Sec.2, Chongde Rd., Beitun District, Taichung 40653. Taiwan

[Line of business] Sales of air conditioners in Taiwan.

 Fujitsu General Orient International Electronics Sales (Shanghai) Co., Ltd. [Location] Room 409, West Wing, GC Tower, No.577 Pudian Road, Pudong Shanghai, 200122, China

[Line of business] Sales of air conditioners in China

Fujitsu General Electronics (Suzhou) Co., Ltd.

[Location] Unit A, Room 2803, No.1,SovereignBuilding, No. 8 SuzhouDadaoxi Road, Suzhou Industrial Park, Suzhou, Jiangsu, 215021, China [Line of business] Sales of electronic devices in China

Asia/Oceania

Fujitsu General (Asia) Pte. Ltd.

[Location] 25 Pandan Crescent #02-10 TIC Tech Centre, Singapore 128477 [Line of business] Sales of air conditioners in Asia

Fujitsu General (India) Private Limited

[Location] Room No. 713, 455 (313), Block No. 75, 7th Floor, Anna Salai, Teynampet, Chennai - 600018 Tamil Nadu, INDIA [Line of business] Sales of air conditioners in India

ABS Aircon Engineers Private Limited

[Location] No.63/4, Basava Sadana, Vishwanatha Rao Road, Madhavanagar, Off. Race Course Road, Bangalore - 560001 Karnataka, India [Line of business] Design, construction and service maintenance of air conditioning facility

Fujitsu General (Aust.) Pty Ltd.

[Location] 1 Telopea Place, Eastern Creek, NSW 2766, Australia [Line of business] Sales of air conditioners in Oceania

Precise Air Group (Holdings) Pty Limited [Location] 2 Hill Road, Homebush, NSW 2140 Australia [Line of business] Design, construction and service maintenance of air conditioning facility

Fujitsu General New Zealand Ltd.

[Location] 109 Port Rd., Seaview, Lower Hutt, New Zealand [Line of business] Sales of air conditioners in Oceania



Fujitsu General America, Inc.

■ Fujitsu General Central Air-Conditioner (Wuxi) Co., Ltd.

Fujitsu General Do Brasil Ltda.

#### **Overview**

[Location] No.10 Lijiang Road, New District, Wuxi Jiangsu 214028,

[Line of business] Manufacture of air conditioners and sales in China

#### Main environmental activities

Strengthening the countermeasures against leakage of fluorocarbons along with energy saving and resource saving. In addition, striving to control greenhouse gas by thoroughly collecting and recycling refrigerant in the manufacturing process as well as production and sales expansion of the models adopting R-32 refrigerant with less environmental burden.



# Reference table of "GRI Standards" by GRI

### Disclosure items

#### I. Universal Standards

GRI 102: General Disclosures

<ul><li>GKI 102: General Disclo</li><li>1. Organizational profile</li></ul>	suies	(Description Page)
102-1 Name of the organization	a. Name of the organization.	P.3,4
102-2 Activities, brands, products, and services	a. A description of the organization's activities. b. Primary brands, products, and services, including an explanation of any products or services that are banned in certain markets.	P.3,4, 43~46
102-3 Location of headquarters	a. Location of the organization's headquarters.	P.3,4,44
102-4 Location of operations	a. Number of countries where the organization operates, and the names of countries where it has significant operations and/or that are relevant to the topics covered in the report.	P.3,4, 43~46
102-5 Ownership and legal form	a. Nature of ownership and legal form.	P.42~46
102-6 Markets served	a. Markets served, including: i. geographic locations where products and services are offered; ii. sectors served; iii. types of customers and beneficiaries.	P.3,4
102-7 Scale of the organization	a. Scale of the organization, including: i. total number of employees; ii. total number of operations; iii. total number of operations; iii. net sales (for private sector organizations) or net revenues (for public sector organizations); iv. total capitalization (for private sector organizations) broken down in terms of debt and equity; v. quantity of products or services provided.	P.3,4
102-8 Information on employees and other workers	a. Total number of employees by employment contract (permanent and temporary), by gender. b. Total number of employees by employment contract (permanent and temporary), by region. c. Total number of employees by employment type (full-time and part-time), by gender. d. Whether a significant portion of the organization's activities are performed by workers who are not employees. If applicable, a description of the nature and scale of work performed by workers who are not employees. e. Any significant variations in the numbers reported in Disclosures 102-8-a, 102-8-b, and 102-8-c (such as seasonal variations in the tourism or agricultural industries). f. An explanation of how the data have been compiled, including any assumptions made.	Not applicable
102-9 Supply chain	a. A description of the organization's supply chain, including its main elements as they relate to the organization's activities, primary brands, products, and services.	P.29
102-10 Significant changes to the organization and its supply chain	a. Significant changes to the organization's size, structure, ownership, or supply chain, including: i. Changes in the location of, or changes in, operations, including facility openings, closings, and expansions; ii. Changes in the share capital structure and other capital formation, maintenance, and alteration operations (for private sector organizations); iii. Changes in the location of suppliers, the structure of the supply chain, or relationships with suppliers, including selection and termination.	P.42
102-11 Precautionary Principle or approach	a. Whether and how the organization applies the Precautionary Principle or approach.	P.31,32
102-12 External initiatives	a. A list of externally-developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes, or which it endorses.	Not applicable
102-13 Membership of associations	a. A list of the main memberships of industry or other associations, and national or international advocacy organizations.	It will be described next time
2. Strategy		
102-14 Statement from senior decision-maker	a. A statement from the most senior decision-maker of the organization (such as CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and its strategy for addressing sustainability.	P.5,6
102-15 Key impacts, risks, and opportunities	a. A description of key impacts, risks, and opportunities.	P.9
3. Ethics and integrity		
102-16 Values, principles, standards, and norms of behavior	a. A description of the organization's values, principles, standards, and norms of behavior.	P.7,8
102-17 Mechanisms for advice and concerns about ethics	a. A description of internal and external mechanisms for: i. seeking advice about ethical and lawful behavior, and organizational integrity; ii. reporting concerns about unethical or unlawful behavior, and organizational integrity.	P.27

P.9,27

P.27,28

P.27,28

Data Overview · Materials

4. Governance (Description Page) 102-18 a. Governance structure of the organization, including committees of the highest governance body. P.27 Governance structure b. Committees responsible for decision-making on economic, environmental, and social topics. 102-19 a. Process for delegating authority for economic, environmental, and social topics from the highest P.27 Delegating authority governance body to senior executives and other employees. 102-20 a. Whether the organization has appointed an executive-level position or positions with Executive-level responsibility for P.27 responsibility for economic, environmental, and social topics. economic, environmental, and social b. Whether post holders report directly to the highest governance body. topics 102-21 a. Processes for consultation between stakeholders and the highest governance body on economic, Consulting stakeholders on economic, environmental, and social topics. P.27 b. If consultation is delegated, describe to whom it is delegated and how the resulting feedback is provided environmental. and social topics to the highest governance body. a. Composition of the highest governance body and its committees by: ii. independence; iii. tenure on the governance body: 102-22 iv. number of each individual's other significant positions and commitments, and the Composition of the highest governance Not applicable nature of the commitments: body and its committees vi. membership of under-represented social groups; vii. competencies relating to economic, environmental, and social topics; viii. stakeholder representation. a. Whether the chair of the highest governance body is also an executive officer in the organization. 102-23 b. If the chair is also an executive officer, describe his or her function within the organization's management Not applicable Chair of the highest governance body and the reasons for this arrangement a. Nomination and selection processes for the highest governance body and its committees. b. Criteria used for nominating and selecting highest governance body members, including whether and 102-24 how: Nominating and selecting the highest i. stakeholders (including shareholders) are involved; Not applicable ii. diversity is considered; governance body iii. independence is considered; iv. expertise and experience relating to economic, environmental, and social topics are considered. a. Processes for the highest governance body to ensure conflicts of interest are avoided and managed. b. Whether conflicts of interest are disclosed to stakeholders, including, as a minimum: 102-25 i. Cross-board membership; Not applicable Conflicts of interest ii. Cross-shareholding with suppliers and other stakeholders; iii. Existence of controlling shareholder; iv. Related party disclosures. 102-26 a. Highest governance body's and senior executives' roles in the development, approval, and Role of highest governance body in updating of the organization's purpose, value or mission statements, strategies, policies, Not applicable and goals related to economic, environmental, and social topics. setting purpose, values, and strategy 102-27 a. Measures taken to develop and enhance the highest governance body's collective knowledge of P.27 Collective knowledge of highest economic, environmental, and social topics. governance body a. Processes for evaluating the highest governance body's performance with respect to governance of economic, environmental, and social topics. 102-28 b. Whether such evaluation is independent or not, and its frequency. P.27 Evaluating the highest governance Whether such evaluation is a self-assessment. body's performance d. Actions taken in response to evaluation of the highest governance body's performance with respect to governance of economic, environmental, and social topics, including, as a minimum,

and social topics	then impacts, fisks, and opportunities.	
Highest governance body's role in	a. The highest committee or position that formally reviews and approves the organization's sustainability report and ensures that all material topics are covered.	P.27,28
102-33 Communicating critical concerns	a. Process for communicating critical concerns to the highest governance body.	P.27,28

a. Highest governance body's role in reviewing the effectiveness of the organization's risk

management processes for economic, environmental, and social topics.

a. Highest governance body's role in identifying and managing economic, environmental, and social topics

and their impacts, risks, and opportunities - including its role in the implementation of due diligence

b. Whether stakeholder consultation is used to support the highest governance body's identification and management of economic, environmental, and social topics and their impacts, risks, and opportunities.

a. Frequency of the highest governance body's review of economic, environmental, and social topics and

changes in membership and organizational practice.

Identifying and managing economic, environmental, and social impacts

Effectiveness of risk management

Review of economic, environmental,

102-30

processes 102-31

4. Governance (continued)		(Description Page)
102-34 Nature and total number of critical concerns	<ul> <li>a. Total number and nature of critical concerns that were communicated to the highest governance body.</li> <li>b. Mechanism(s) used to address and resolve critical concerns.</li> </ul>	P.28
102-35 Remuneration policies	a. Remuneration policies for the highest governance body and senior executives for the following types of remuneration: i. Fixed pay and variable pay, including performance-based pay, equity-based pay, bonuses, and deferred or vested shares; ii. Sign-on bonuses or recruitment incentive payments; iii. Termination payments; iv. Clawbacks; v. Retirement benefits, including the difference between benefit schemes and contribution rates for the highest governance body, senior executives, and all other employees. b. How performance criteria in the remuneration policies relate to the highest governance body's and senior executives' objectives for economic, environmental, and social topics.	Not applicable
102-36 Process for determining remuneration	a. Process for determining remuneration. b. Whether remuneration consultants are involved in determining remuneration and whether they are independent of management. c. Any other relationships that the remuneration consultants have with the organization.	Not applicable
102-37 Stakeholders' involvement in remuneration	a. How stakeholders' views are sought and taken into account regarding remuneration. b. If applicable, the results of votes on remuneration policies and proposals.	Not applicable
102-38 Annual total compensation ratio	a. Ratio of the annual total compensation for the organization's highest-paid individual in each country of significant operations to the median annual total compensation for all employees (excluding the highest-paid individual) in the same country.	Not applicable
102-39 Percentage increase in annual total compensation ratio	a. Ratio of the percentage increase in annual total compensation for the organization's highest-paid individual in each country of significant operations to the median percentage increase in annual total compensation for all employees (excluding the highest-paid individual) in the same country.	Not applicable
5. Stakeholder engagement		
102-40 List of stakeholder groups	a. A list of stakeholder groups engaged by the organization.	Not applicable
102-41 Collective bargaining agreements	a. Percentage of total employees covered by collective bargaining agreements.	Information unavailable
102-42 Identifying and selecting stakeholders	a. The basis for identifying and selecting stakeholders with whom to engage.	Not applicable
102-43 Approach to stakeholder engagement	a. The organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process.	P.23~26
102-44 Key topics and concerns raised	a. Key topics and concerns that have been raised through stakeholder engagement, including: i. how the organization has responded to those key topics and concerns, including through its reporting; ii. the stakeholder groups that raised each of the key topics and concerns.	Not applicable
6. Reporting practice		•
102-45 Entities included in the consolidated financial statements	a. A list of all entities included in the organization's consolidated financial statements or equivalent documents.     b. Whether any entity included in the organization's consolidated financial statements or equivalent documents is not covered by the report.	P.2,42
102-46 Defining report content and topic Boundaries	a. An explanation of the process for defining the report content and the topic Boundaries. b. An explanation of how the organization has implemented the Reporting Principles for defining report content.	p.2,9
102-47 List of material topics	a. A list of the material topics identified in the process for defining report content.	p.9
102-48 Restatements of information	a. The effect of any restatements of information given in previous reports, and the reasons for such restatements.	P.33~39
102-49 Changes in reporting	a. Significant changes from previous reporting periods in the list of material topics and topic Boundaries.	Not applicable
102-50 Reporting period	a. Reporting period for the information provided.	P.2
102-51 Date of most recent report	a. If applicable, the date of the most recent previous report.	P.2
102-52 Reporting cycle	a. Reporting cycle.	P.2
102-53 Contact point for questions regarding the report	a. The contact point for questions regarding the report or its contents.	back cover

6. Reporting practice (continued)

(Description Page)

102-54 Claims of reporting in accordance with the GRI Standards	a. The claim made by the organization, if it has prepared a report in accordance with the GRI Standards, either: i. This report has been prepared in accordance with the GRI Standards: Core option'; ii. This report has been prepared in accordance with the GRI Standards: Comprehensive option'.	p.2
102-55 GRI content index	a. The GRI content index, which specifies each of the GRI Standards used and lists all disclosures included in the report. b. For each disclosure, the content index shall include: i. the number of the disclosure (for disclosures covered by the GRI Standards); ii. the page number(s) or URL(s) where the information can be found, either within the report or in other published materials; iii. if applicable, and where permitted, the reason(s) for omission when a required disclosure cannot be made.	P.47~54
102-56 External assurance	a. A description of the organization's policy and current practice with regard to seeking external assurance for the report. b. If the report has been externally assured: i. A reference to the external assurance report, statements, or opinions. If not included in the assurance report accompanying the sustainability report, a description of what has and what has not been assured and on what basis, including the assurance standards used, the level of assurance obtained, and any limitations of the assurance process; ii. The relationship between the organization and the assurance provider; iii. Whether and how the highest governance body or senior executives are involved in seeking external assurance for the organization's sustainability report.	Not applicable

#### GRI 103: Management Approach

103-1 Explanation of the material topic and its Boundary	a. An explanation of why the topic is material. b. The Boundary for the material topic, which includes a description of: i. where the impacts occur; ii. the organization's involvement with the impacts. For example, whether the organization has caused or contributed to the impacts, or is directly linked to the impacts through its business relationships. c. Any specific limitation regarding the topic Boundary.	P.9
103-2 The management approach and its components	For each material topic, the reporting organization shall report the following information: a. An explanation of how the organization manages the topic. b. A statement of the purpose of the management approach. c. A description of the following, if the management approach includes that component: i. Policies ii. Commitments iii. Goals and targets iv. Responsibilities v. Resources vi. Grievance mechanisms vii. Specific actions, such as processes, projects, programs and initiatives	P.10~14,27
103-3 Evaluation of the management approach	a. An explanation of how the organization evaluates the management approach, including: i. the mechanisms for evaluating the effectiveness of the management approach; ii. the results of the evaluation of the management approach; iii. any related adjustments to the management approach.	P.11~14, 27,28

### II. Topic-specific Standards

### GRI 300: Environmental Standards

GRI 301: Materials (Description Page)

301-1 Materials used by weight or volume	a. Total weight or volume of materials that are used to produce and package the organization's primary products and services during the reporting period, by: i. non-renewable materials used; ii. renewable materials used.	P.33,37
301-2 Recycled input materials used	a. Percentage of recycled input materials used to manufacture the organization's primary products and services.	P.33
	a. Percentage of reclaimed products and their packaging materials for each product category. b. How the data for this disclosure have been collected.	P.33,38,39

GRI 302: Energy (Description Page)

diti 302. Elicigy		(
302-1 Energy consumption within the organization	a. Total fuel consumption within the organization from non-renewable sources, in joules or multiples, and including fuel types used. b. Total fuel consumption within the organization from renewable sources, in joules or multiples, and including fuel types used. c. In joules, watt-hours or multiples, the total: i. electricity consumption iii. cooling consumption iii. cooling consumption iv. steam consumption d. In joules, watt-hours or multiples, the total: i. electricity sold ii. heating sold iii. cooling sold iiv. steam sold e. Total energy consumption within the organization, in joules or multiples. f. Standards, methodologies, assumptions, and/or calculation tools used. g. Source of the conversion factors used.	P.33,36,37,40
302-2 Energy consumption outside of the organization	a. Energy consumption outside of the organization, in joules or multiples. b. Standards, methodologies, assumptions, and/or calculation tools used. c. Source of the conversion factors used.	P.33,40
302-3 Energy intensity	a. Energy intensity ratio for the organization. b. Organization-specific metric (the denominator) chosen to calculate the ratio. c. Types of energy included in the intensity ratio; whether fuel, electricity, heating, cooling, steam, or all. d. Whether the ratio uses energy consumption within the organization, outside of it, or both.	P.35,41
302-4 Reduction of energy consumption	a. Amount of reductions in energy consumption achieved as a direct result of conservation and efficiency initiatives, in joules or multiples. b. Types of energy included in the reductions; whether fuel, electricity, heating, cooling, steam, or all. c. Basis for calculating reductions in energy consumption, such as base year or baseline, including the rationale for choosing it. d. Standards, methodologies, assumptions, and/or calculation tools used.	P.15~17,36, 37,40
302-5 Reductions in energy requirements of products and services	a. Reductions in energy requirements of sold products and services achieved during the reporting period, in joules or multiples. b. Basis for calculating reductions in energy consumption, such as base year or baseline, including the rationale for choosing it. c. Standards, methodologies, assumptions, and/or calculation tools used.	P.15,30,40

#### GRI 303: Water

303-1 Water withdrawal by source	a. Total volume of water withdrawn, with a breakdown by the following sources: i. Surface water, including water from wetlands, rivers, lakes, and oceans; ii. Ground water; iii. Rainwater collected directly and stored by the organization; iv. Waste water from another organization; v. Municipal water supplies or other public or private water utilities. b. Standards, methodologies, and assumptions used.	P.33,38,40
303-2 Water sources significantly affected by withdrawal of water	a. Total number of water sources significantly affected by withdrawal by type: i. Size of the water source; ii. Whether the source is designated as a nationally or internationally protected area; iii. Biodiversity value (such as species diversity and endemism, and total number of protected species); iv. Value or importance of the water source to local communities and indigenous peoples. b. Standards, methodologies, and assumptions used.	Information unavailable
303-3 Water recycled and reused	a. Total volume of water recycled and reused by the organization. b. Total volume of water recycled and reused as a percentage of the total water withdrawal as specified in Disclosure 303-1. c. Standards, methodologies, and assumptions used.	Information unavailable

Data Overview · Materials

GRI 304: Biodiversity (Description Page) a. For each operational site owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas, the following information: i. Geographic location; ii. Subsurface and underground land that may be owned, leased, or managed by the organization: 304-1 iii. Position in relation to the protected area (in the area, adjacent to, or containing Operational sites owned, leased, portions of the protected area) or the high biodiversity value area outside protected areas; managed in, or adjacent to, protected P.44 iv. Type of operation (office, manufacturing or production, or extractive); areas and areas of high biodiversity v. Size of operational site in km2 (or another unit, if appropriate); value outside protected areas vi. Biodiversity value characterized by the attribute of the protected area or area of high biodiversity value outside the protected area (terrestrial, freshwater, or maritime ecosystem); vii. Biodiversity value characterized by listing of protected status (such as IUCN Protected Area Management Categories, Ramsar Convention, national legislation). a. Nature of significant direct and indirect impacts on biodiversity with reference to one or more of the following i. Construction or use of manufacturing plants, mines, and transport infrastructure; ii. Pollution (introduction of substances that do not naturally occur in the habitat from point and non-point iii. Introduction of invasive species, pests, and pathogens; 304-2 iv. Reduction of species: Significant impacts of activities, v. Habitat conversion; Not applicable products, and services on biodiversity vi. Changes in ecological processes outside the natural range of variation (such as salinity or changes in b. Significant direct and indirect positive and negative impacts with reference to the following: Species affected; ii. Extent of areas impacted; iii. Duration of impacts; iv. Reversibility or irreversibility of the impacts. a. Size and location of all habitat areas protected or restored, and whether the success of the restoration measure was or is approved by independent external professionals. 304-3 b. Whether partnerships exist with third parties to protect or restore habitat areas distinct from where the P.23,24 Habitats protected or restored organization has overseen and implemented restoration or protection measures. c. Status of each area based on its condition at the close of the reporting period. d. Standards, methodologies, and assumptions used. a. Total number of IUCN Red List species and national conservation list species with habitats in areas affected by the operations of the organization, by level of extinction risk: 304-4 i. Critically endangered IUCN Red List species and national ii. Endangered P.23,24 conservation list species with habitats iii. Vulnerable in areas affected by operations iv. Near threatened v. Least concern GRI 305: Emissions a. Gross direct (Scope 1) GHG emissions in metric tons of CO<sub>2</sub> equivalent. b. Gases included in the calculation; whether  $CO_2$ ,  $CH_4$ ,  $N_2O$ , HFCs, PFCs,  $SF_6$ ,  $NF_3$ , or all. c. Biogenic  $CO_2$  emissions in metric tons of  $CO_2$  equivalent. d. Base year for the calculation, if applicable, including: i. the rationale for choosing it; ii, emissions in the base year: P.33,34,37,40,41 Direct (Scope 1) GHG emissions iii. the context for any significant changes in emissions that triggered recalculations of base year emissions e. Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the

f. Consolidation approach for emissions: whether equity share, financial control, or operational control,

c. If available, the gases included in the calculation; whether  $CO_2$ ,  $CH_4$ ,  $N_2O$ , HFCs, PFCs,  $SF_6$ ,  $NF_3$ , or all.

e. Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the

f. Consolidation approach for emissions; whether equity share, financial control, or operational control.

a. Gross location-based energy indirect (Scope 2) GHG emissions in metric tons of  $CO_2$  equivalent. b. If applicable, gross market-based energy indirect (Scope 2) GHG emissions in metric tons of  $CO_2$ 

iii. the context for any significant changes in emissions that triggered recalculations of base year

g. Standards, methodologies, assumptions, and/or calculation tools used.

g. Standards, methodologies, assumptions, and/or calculation tools used.

d. Base year for the calculation, if applicable, including:

equivalent.

GWP source.

Energy indirect (Scope 2) GHG

emissions

i. the rationale for choosing it;

ii. emissions in the base vear:

P.33.34.40.41

GRI 305: Emissions (continued)

(Description Page)

diti 505. Ellissions (continue		(bescription rage)
305-3 Other indirect (Scope 3) GHG emissions	a. Gross other indirect (Scope 3) GHG emissions in metric tons of $CO_2$ equivalent. b. If available, the gases included in the calculation; whether $CO_2$ , $CH_4$ , $N_2O$ , HFCs, PFCs, $SF_6$ , $NF_3$ , or all. c. Biogenic $CO_2$ emissions in metric tons of $CO_2$ equivalent. d. Other indirect (Scope 3) GHG emissions categories and activities included in the calculation. e. Base year for the calculation, if applicable, including: i. the rationale for choosing it; ii. emissions in the base year; iii. the context for any significant changes in emissions that triggered recalculations of base year emissions. f. Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source. g. Standards, methodologies, assumptions, and/or calculation tools used.	P.33,34,37,40,41
305-4 GHG emissions intensity	a. GHG emissions intensity ratio for the organization. b. Organization-specific metric (the denominator) chosen to calculate the ratio. c. Types of GHG emissions included in the intensity ratio; whether direct (Scope 1), energy indirect (Scope 2), and/or other indirect (Scope 3). d. Gases included in the calculation; whether CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O, HFCs, PFCs, SF <sub>6</sub> , NF <sub>3</sub> , or all.	P.35,41
305-5 Reduction of GHG emissions	a. GHG emissions reduced as a direct result of reduction initiatives, in metric tons of CO <sub>2</sub> equivalent. b. Gases included in the calculation; whether CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O, HFCs, PFCs, SF <sub>6</sub> , NF <sub>3</sub> , or all. c. Base year or baseline, including the rationale for choosing it. d. Scopes in which reductions took place; whether direct (Scope 1), energy indirect (Scope 2), and/or other indirect (Scope 3). e. Standards, methodologies, assumptions, and/or calculation tools used.	P.15~17,37, 40,41
305-6 Emissions of ozone-depleting substances (ODS)	a. Production, imports, and exports of ODS in metric tons of CFC-11 (trichlorofluoromethane) equivalent. b. Substances included in the calculation. c. Source of the emission factors used. d. Standards, methodologies, assumptions, and/or calculation tools used.	P.33,37,40
305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	a. Significant air emissions, in kilograms or multiples, for each of the following: i. NOx iii. SOx iii. Persistent organic pollutants (POP) iv. Volatile organic compounds (VOC) v. Hazardous air pollutants (HAP) vi. Particulate matter (PM) vii. Other standard categories of air emissions identified in relevant regulations b. Source of the emission factors used. c. Standards, methodologies, assumptions, and/or calculation tools used.	P.33,37,40

#### GRI 306: Effluents and Waste

306-1 Water discharge by quality and destination	a. Total volume of planned and unplanned water discharges by: i. destination; ii. quality of the water, including treatment method; iii. whether the water was reused by another organization. b. Standards, methodologies, and assumptions used.	P.33,37,40
306-2 Waste by type and disposal method	a. Total weight of hazardous waste, with a breakdown by the following disposal methods where applicable: i. Reuse ii. Recycling iii. Composting iv. Recovery, including energy recovery v. Incineration (mass burn) vi. Deep well injection vii. Landfill viii. On-site storage ix. Other (to be specified by the organization) b. Total weight of non-hazardous waste, with a breakdown by the following disposal methods where applicable: i. Reuse ii. Recycling iii. Composting iv. Recovery, including energy recovery v. Incineration (mass burn) vi. Deep well injection vii. Landfill viii. On-site storage ix. Other (to be specified by the organization) c. How the waste disposal method has been determined: i. Disposed of directly by the organization, or otherwise directly confirmed ii. Information provided by the waste disposal contractor	P.33,38~40

### GRI 306: Effluents and Waste (continued)

(Description Page)

306-3 Significant spills	ii. Volume of spill;	Not applicable *There is no significant spill.
306-4 Transport of hazardous waste	· ·	Information unavailable *We have not collected the data requested.
306-5 Water bodies affected by water discharges and/or runoff	a. Water bodies and related habitats that are significantly affected by water discharges and/or runoff, including information on: i. the size of the water body and related habitat; ii. whether the water body and related habitat is designated as a nationally or internationally protected area; iii. the biodiversity value, such as total number of protected species.	Information unavailable

#### GRI 307: Environmental Compliance

laws and regulations	a. Significant fines and non-monetary sanctions for non-compliance with environmental laws and/or regulations in terms of: i. total monetary value of significant fines; ii. total number of non-monetary sanctions; iii. cases brought through dispute resolution mechanisms. b. If the organization has not identified any non-compliance with environmental laws and/or regulations, a brief statement of this fact is sufficient.	P.28
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#### GRI 308: Supplier Environmental Assessment

308-1 New suppliers that were screened using environmental criteria	a. Percentage of new suppliers that were screened using environmental criteria.	P.29
	a. Number of suppliers assessed for environmental impacts. b. Number of suppliers identified as having significant actual and potential negative environmental impacts. c. Significant actual and potential negative environmental impacts identified in the supply chain. d. Percentage of suppliers identified as having significant actual and potential negative environmental impacts with which improvements were agreed upon as a result of assessment. e. Percentage of suppliers identified as having significant actual and potential negative environmental impacts with which relationships were terminated as a result of assessment, and why.	P.29