



## INNOVATION & GLOBALIZATION

- Providing a Brand New Tomorrow to Everyone on Earth -



# FUJITSU GENERAL GROUP ENVIRONMENTAL REPORT 2018

FUJITSU GENERAL LIMITED

# Editing Policy

The “Fujitsu General Group Environmental Report 2018” 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 FY2017. 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 FY2017 (April 1, 2017 - March 31, 2018) including a part of contents in other period.

## ■ Reporting media

Fujitsu General Group reports environmental activities on our website and booklet. Also, on our website, we publish the “Environmental Report” (PDF version) with same contents as the booklet version.

### Web

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

## ■ 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.36)

## ■ References Guidelines

- GRI “GRI Standards”

“Environmental Reporting Guidelines 2012” by The Ministry of Environment (Japan)

“Environmental Accounting Guidelines 2005” by The Ministry of Environment (Japan)

## ■ Published

In September, 2018 (Next time: In September, 2019/Last time: In September, 2017)

## 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.

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## **INNOVATION & GLOBALIZATION** — Providing a Brand New Tomorrow to Everyone on Earth —

We will contribute to the realization of sustainable society by brushing up and enhancing 3 powers of “technological power, realization power and human power”

In the international society, due to the adoption of the “Paris Agreement” which is a framework of the countermeasures against global warming and the “SDGs (Sustainable Development Goals)” advocated by the United Nations, enterprises are required to contribute to the sustainable economic growth and the solution of social problems through innovation to cope with the global environmental issues and widening inequality that the world faces. In addition, the business environment surrounding us is changing drastically and, with the technological innovation such as IoT, big data analysis, AI, robot, etc. as background, the competitive environment of enterprises has changed dramatically and the business restructuring is taking place beyond the conventional framework of industry. Looking at this change, the value for our customers is shifting from “things” which is the conventional competitive axis to “experience” which is the invisible value such as experience or personal experience and from “ownership” to “use”, and it is important to think about how to provide value of our company by making full use of the ideas and communication methods.

In the market of air conditioning equipment which is the main products of Fujitsu General, the strengthening of environmental regulations and the heightening of power saving consciousness are progressing and spreading not only in the developed countries but also across the world. As a manufacturer, we continue to evolve technologies such as air flow control and automatic operation that further improve energy efficiency and realize both operation efficiency and comfort and we are constantly developing together with progress and innovation of technology. In the future as well, we will continue to challenge the “INNOVATION” which is the creation of new value through innovative technologies ahead of the era with a view to the future in ten or twenty years. Also, we have expanded our air conditioner business into overseas markets since 1971 ahead of other companies and at present, are selling products to about 110 countries around the world, and the overseas sales account for 75% of the total sales of the company. We believe that we can contribute to the sustainable development of society by offering high value-added products pursuing high energy saving and resource saving performance to customers around the world.

Fujitsu General Group established the “Mid-term Environmental Action Plan” in 2016 as a goal to reduce greenhouse gas emission by 2030 and at the same time, is promoting the “Environmental Action Plan Stage VIII (FY2016 - 2018)” as a 3-year activity for achieving the “Mid-term Environmental Plan”. We will aim to further reduce the environmental burden and enhance the corporate value by steadily promoting the activities toward the achievement of goals.

With “INNOVATION & GLOBALIZATION — Providing a Brand New Tomorrow to Everyone on Earth —” as a management slogan, Fujitsu General Group will contribute to the realization of sustainable society by brushing up and enhancing 3 powers of “technological power, realization power and human power” and create “new value”.

Etsuro Saito  
President and Representative Director  
Fujitsu General Limited



# Corporate vision · Mid-term Environmental Action Plan

## Corporate Vision

Fujitsu General is based on the common corporate vision as a member of Fujitsu Group and established “FUJITSU GENERAL Way” and “Fujitsu General Group Environmental Policy” rearranging “FUJITSU Way” and “Fujitsu Group Environmental Policy” of Fujitsu Limited for Fujitsu General Limited. Fujitsu General Group employees are practicing these vision and policy in daily activities.

### FUJITSU GENERAL Way

FUJITSU GENERAL Way expresses the common practice of action that all the Fujitsu General Group employees should share and implement. United by a common philosophy and guidelines, The Fujitsu General Group aims to contribute to the creation of a comfortable and safe society.

<b>Corporate Vision</b>	Through our constant pursuit of innovation, the Fujitsu General Group contributes to the creation of a comfortable and safe society and brings about a prosperous future that fulfills the dreams of people throughout the world.	<b>Managements Vision</b>	<ul style="list-style-type: none"> <li>• The Fujitsu General Group enlarges its business to worldwide</li> <li>• The Fujitsu General Group coexists with the world's people in harmony</li> <li>• The Fujitsu General Group operates its business with open communication</li> </ul>		
<b>Corporate Values</b>	<b>What we strive for</b>		<b>Principles</b>		
	<b>Society and Environment</b>	In all our actions, we save the earth and contribute to society.		<b>Global Citizenship</b>	We act as good global citizens, attuned to the needs of society and the environment.
	<b>Profit and Growth</b>	We meet the expectations of customers, employees and shareholders		<b>Customer-Centric Perspective</b>	We think from the customer's perspective and act with sincerity.
	<b>Shareholders and Investors</b>	We continuously increase our corporate value.		<b>Firsthand Understanding</b>	We act based on a firsthand understanding of the actual situation.
	<b>Global Perspective</b>	We think and act from a global perspective.		<b>Spirit of Challenge</b>	We set highest goals and strive to achieve them.
	<b>What we value</b>			<b>Speed and Agility</b>	We act flexibly and promptly to achieve our objectives.
	<b>Employees</b>	We respect diversity and support individual growth.		<b>Teamwork</b>	We share common objectives across organizations, work as a team and act as responsible members of the team.
	<b>Customers</b>	We will be their valued and trusted partner.		<b>Code of Conduct</b>	■ We respect human rights.
	<b>Business Partners</b>	We build mutually beneficial relationships.			■ We comply with all laws and regulations.
	<b>Technology</b>	We create new value through innovation.			■ We act with fairness in our business dealings.
<b>Quality</b>	We meet expectations of customers and society and enhance our reputation.	■ We protect and respect intellectual property.			
			■ We maintain confidentiality.		
			■ We do not use our position in our organization for personal gain.		

# Environmental Policy

## 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.

# Corporate vision · Mid-term Environmental Action Plan

## Mid-Term Environmental Action Plan

### Mid-Term Environmental Action Plan

Fujitsu General Group established the “Mid-Term Environmental Action Plan” in 2016 as a concrete plan to realize “Fujitsu General Group Environmental Policy” with FY2030 as the final target year. 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<sub>2</sub> 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<sub>2</sub> emission in the consolidated sales basic unit by FY2030 (compared to FY2013).



## Toward the solution for environmental issues (Activities for SDGs)

Fujitsu General Group will contribute to the achievement of SDGs through business activities as well as product and services by achieving the Medium-term Environmental Plan.

### 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).



## SDGs deeply concerned with the environmental activities of Fujitsu General Group



# Environmental Action Plan Stage VIII











In FY2017, as the intermediate year of the “Environmental Protection Program Stage VIII” which started in FY2016, we nearly achieved the goal by the improvement of product power by the strengthening of development structure and the thoroughgoing elimination of waste by the companywide promotion of the AKASURI Campaign<sup>(\*)</sup>. Regarding the themes of which the goal has not been achieved or activities are stagnant, we will strengthen the efforts for achieving in the final year.

	Core of activities	Theme	Key activities	Activity index
Activities for the customers and society	Measures against global warming	Increase of contribution volume of CO <sub>2</sub> reduction	Pursuit of energy saving performance	Reduction of CO <sub>2</sub> emission when using product (in Japan)
	Resource circulation	Improvement of 3R technology	Improvement of product power	Resource saving design <sup>(*)</sup> (Product, Packaging materials, Performance) Increase of use of recycling materials ① Closed recycling ② Use of recycled fluorocarbons in service Improvement of decomposition/selection capability ① Internal production rate of refrigerator compressor decomposition ② Metal recovery rate ③ Selling price increase of 5 items Increase of reuse (Recycling of recovered fluorocarbons)
	Chemical substance management	Promotion of parts/materials with less environmental burden	Strengthening of management structure in supply chain	EMS construction support at all overseas parts suppliers 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
Activities for reducing our own environmental burdens	Measures against global warming	Pursuit of energy usage efficiency	Thoroughgoing elimination of waste	Reduction of power consumption of evaluation test equipment Reduction of electricity usage (during production) Reduction of gasoline and light oil usage (during production) Reduction of LPG usage (during production) Reduction of product transfer between warehouses Improvement of product transportation efficiency (in Japan) Improvement of efficiency of business trips
	Resource circulation	Streamlining of resource usage	Thoroughgoing elimination of waste	Reduction of water usage  Reduction of office supplies  Reduction of disposed articles ① Reduction of disposal volume ② Reduction of total disposal article generation
	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

(\*) Companywide activity to reduce environmental burden and build up foundation for high profitability

(\*) More than 10% lighter or more compact design with volume by total mass or external dimensions compared with conventional products of equivalent function

◎ : Goal achievement ○ : Smooth △ : Stagnant × : Unachieved

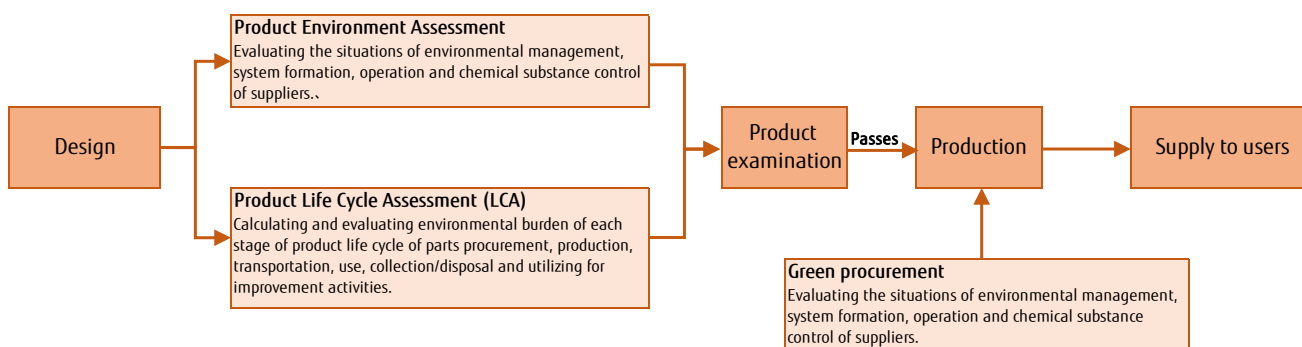
Goals for FY2016 - 2018 (compared to FY2013)	FY2017 results		SDGs	Related page
More than 8% reduction in deemed total amount	1.0% reduction	△	 	P.13
More than 15% achieved per number of development models	17.3%	◎		P.14 P.15 P.16
① More than 100 tons/year	① 117 tons	◎		
② 100%	② 100% achieved	◎		
① More than 86%	① 98%	◎		
② More than 80%	② 93%	◎		
③ More than 10%	③ More than 10 % achieved	◎		
More than 98%	98.4%	◎		
Rate above EMS construction level II more than 90%	89%	△		P.25
Rate of properly implemented management 100%	90%	△		
Level up of activity	37.7% (26 companies level up out of 69 companies)	○		P.25
More than 10% reduction in total amount	30% reduction	◎	 	P.17 P.18
More than 6% reduction in production basic unit	Domestic: 9.8% reduction Overseas: 5.2% reduction	○		
More than 6% reduction in production basic unit	Domestic: 27.2% reduction Overseas: 72.9% reduction	◎		
More than 6% reduction in production basic unit	Domestic: 51.7% reduction Overseas: 11.2% reduction	◎		
More than 50% reduction in horizontal swing ratio	29% reduction (horizontal swing ratio 8.4%→6.0%)	○		
More than 10% reduction per sales quantity	11.2% reduction	◎		
More than 10% reduction in the number of business trips per sales amount	Introduction of TV conference system by utilizing IT	○	 	
① Domestic office: Water consumption by employees per total working hours reduced by 6%	17.3% increase	×	 	P.19
② Factory centers: Water consumption per production amount reduced by 6%	Domestic: 18.0% reduction Overseas: 2.2% reduction	○		
Waste of purchase of office supplies reduced by more than 50%	Establishment of Internal comprehensive management structure	○		
① Recycling rate more than 99%	Domestic: 89.4% Overseas: 94.8%	×		
② More than 20% reduction in production basic unit	Domestic: 3.7% reduction Overseas: 7.5% reduction	△		
Suppressed to less than 30% in total amount	Readjustment of substances subject to further reduction	△		P.20
Setting activity targets for each office	Beautification activity around business office (All business offices)	○		P.22
	Conservation activities of rare plant outside the area (head office)	○		P.21
	Biodiversity conservation activities through biotope (Hamamatsu Business Office)	○		P.20

# Environmental Action Plan Stage VIII

## Activities for the customers and society

### Environmental assessment system

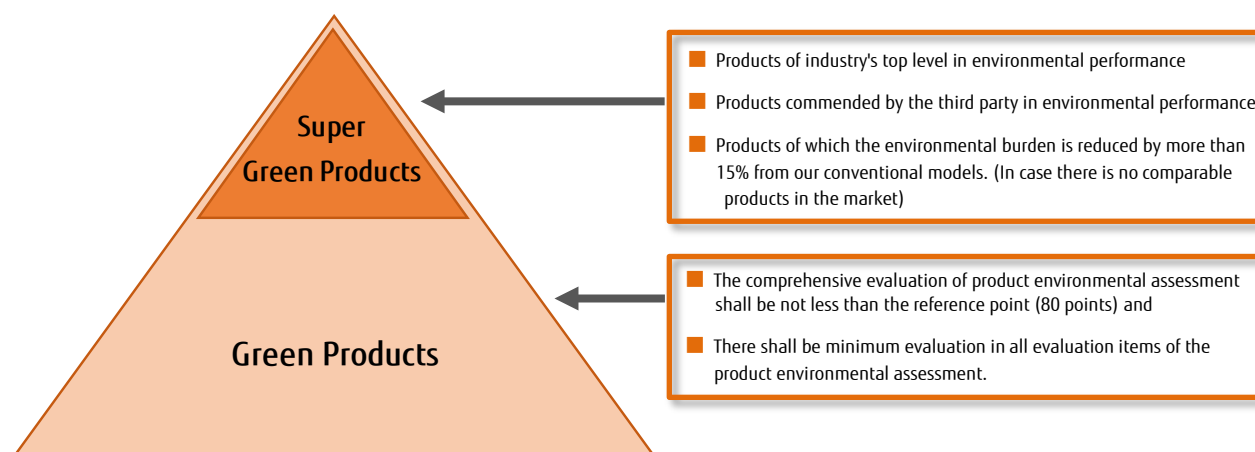
As the influence and risk on the environment of products are related to the various work process of Fujitsu General Group, we are implementing the assessment covering the whole value chain.



### Standard and Evaluation of Product Environment Assessment

"Green Products" are the products of which overall assessment score is higher than standard point (80 points) and there is no lowest point in all assessment items. And among them, the products which have the top level <sup>(\*)</sup> of environmental performance are designated as "Super Green Products".

In FY2017, five new models were newly certified as Super Green Products.



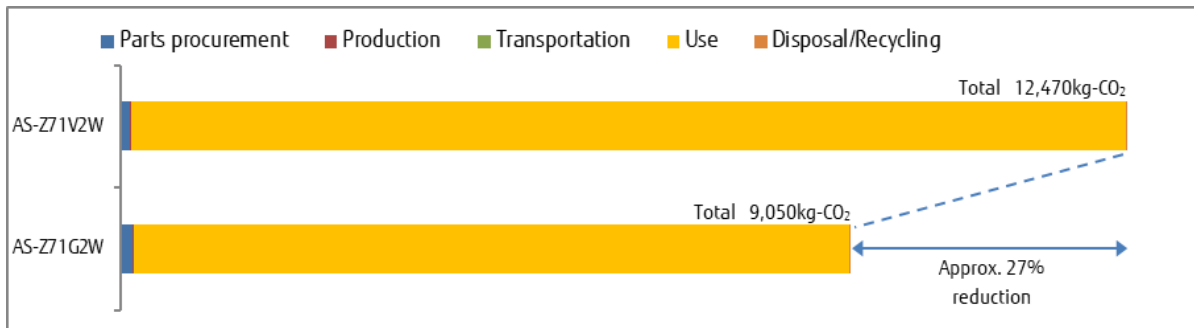
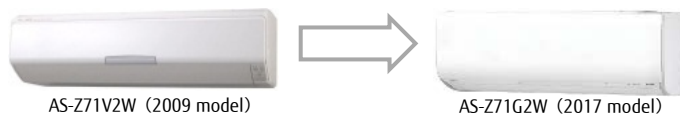
(\*1) In case of the first place, first place tie, or a close second

## 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.

### Calculation example of environmental burden in product lifecycle

(Air conditioner "nocria\*" Z-series of cooling capacity 7.1kW type)



# Environmental Action Plan Stage VIII

## Activities for the customers and society

### Measures against global warming

#### 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<sub>2</sub> emission at the time of using air conditioner products developed and sold for Japan in FY2017 was reduced by 1% 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.

#### Introduction of case examples

Room air conditioner for Japan, "nocria" Z series (Indoor unit: AS-Z40H2W/Outdoor unit: AO-Z40H2)



#### ■ Cross flow fan adopted for indoor unit

Larger in size compared with conventional model realizing high power and energy saving



#### Realization of improvement of energy saving performance and reduction of weight

By developing a large-diameter cross flow fan of 115mm in diameter, improvement of air blowing performance by changing layout of heat exchanger was realized. As a result, we reduced annual power consumption by about 2.8% compared with conventional models <sup>(\*)</sup> and realized energy saving standard achievement rate of 146% (Target year FY2010).

In addition, by mounting a new automatic filter cleaning unit with streamlined shape and structure of dust box and reduced number of parts and a board with reduced parts height, the depth of the product was reduced and the weight of indoor unit was reduced by about 5.5% compared with our conventional models <sup>(\*)</sup> by making heat exchanger thinner.

● "nocria" is a worldwide trademark of FUJITSU GENERAL LIMITED.

(\*) Conventional models AS-Z40G2W

## Resource circulation

### Promotion of resource saving design

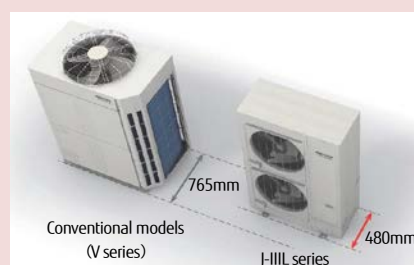
Based on the belief that it is important to efficiently utilize the resources used for our products, Fujitsu General Group is promoting a resource saving design at the stage of product design such as reduction in size and weight and reduction in the number of parts.

#### Introduction of case example

“AIRSTAGE®” J-III series (AJY144LELAH), multi air conditioning system for store/office in Europe [Super Green Product certified product in FY2017]



#### ■ Realized compact outdoor unit



#### Realized the industry's smallest <sup>(\*)</sup> compact outdoor unit

We realized the industry's smallest compact outdoor unit in the 16HP 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.

#### Refrigerant saving design

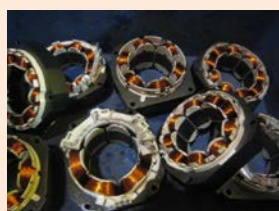
We realized refrigerant saving by about 14% by reviewing the structure and capacity of heat exchanger of the outdoor unit. (In case of system consisting of 40 indoor units, the amount of refrigerant was reduced from conventional 28.9kg to 24.8kg).

### Improvement of decomposing/sorting ability

At Fuji Eco Cycle Co., Ltd., we developed technologies to sort the collected products per material in detail and are striving to improve the recycling rate. In FY2017, we produced our original cutting machine of the concentrated winding stator included in the compressor of refrigerator, by which it became possible to disassemble the concentrated winding stator which was impossible in the past, so that sorting for each material has become possible. In the future as well, we will improve the accuracy of decomposing/sorting while enhancing the 3R technologies and contribute to the efficient use of resources.

#### ■ Improvement of material sorting accuracy by our original cutting machine

(Left: Cutting machine. Right: Concentrated winding stator)



(Before cutting)



(After cutting)

● “AIRSTAGE” is a registered trademark of Fujitsu General Ltd.

(\*) According to our company's survey as of March 30, 2018. In 16HP class, 1,638mm (H) x 1,080mm (W) x 480mm (D).

# Environmental Action Plan Stage VIII

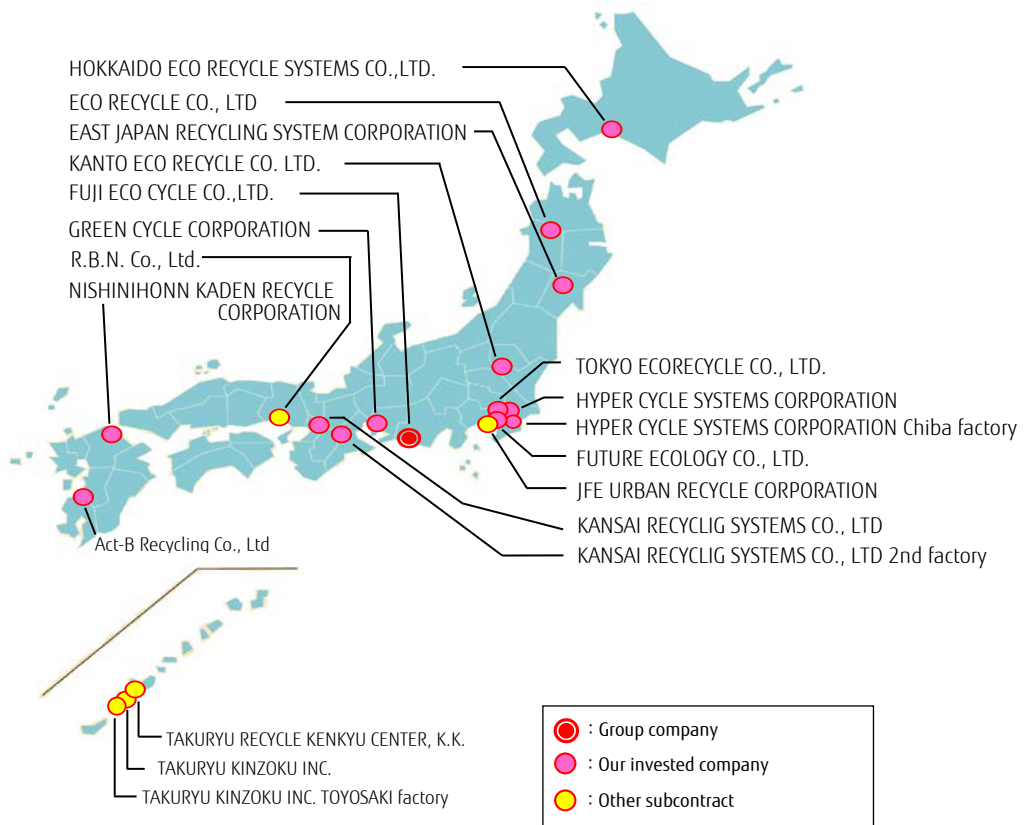
## Activities for the customers and society

### Resource circulation

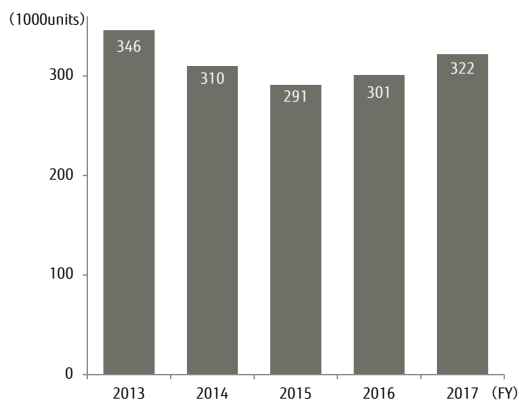
#### Electric Home Appliance Recycling (Japan)

Fujitsu General established about 340 specified collection places all over the country jointly with other electric home appliance makers and is collecting the used appliances of our company (air conditioners, televisions, refrigerators / freezers, washing machines / cloth dryers). As to these used products, we are implementing the recycling and collection of fluorocarbons by subcontracting to recycling plants at 19 places of the country.

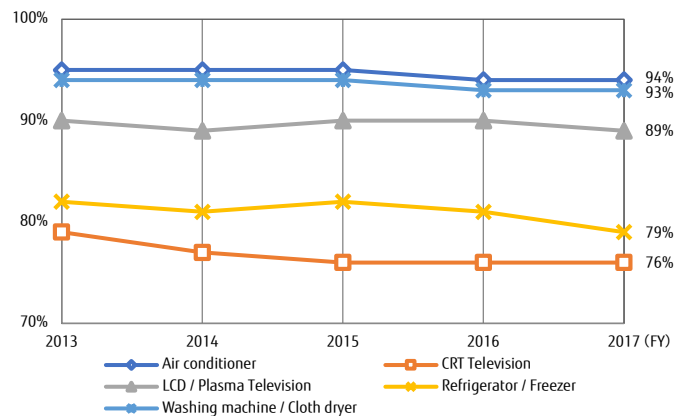
#### Recycling subcontract plants



#### Product recycling disposed quantity



#### Product recycling rate

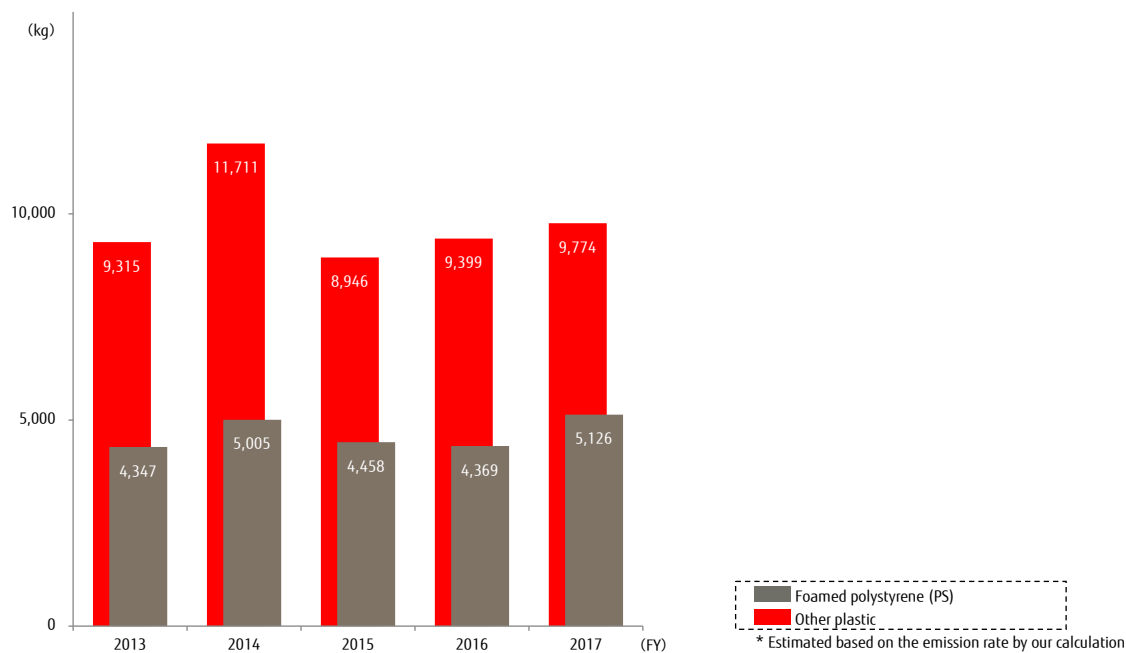




## Packaging Recycling (Japan)

Out of the products sold in Japan, packaging materials except cardboard are recycled through The Japan Containers and Packaging Recycling Association. The estimated collection volume of plastic packaging in FY2017 is 14,900 kg. Fujitsu General will continue to reduce the packaging of products in the future.

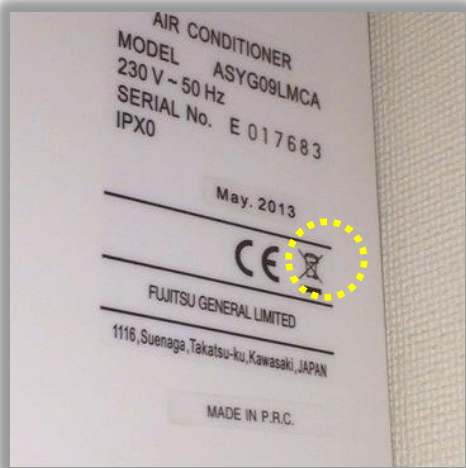
### ■ Estimated collection volume of plastic



## 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)



# Environmental Action Plan Stage VIII

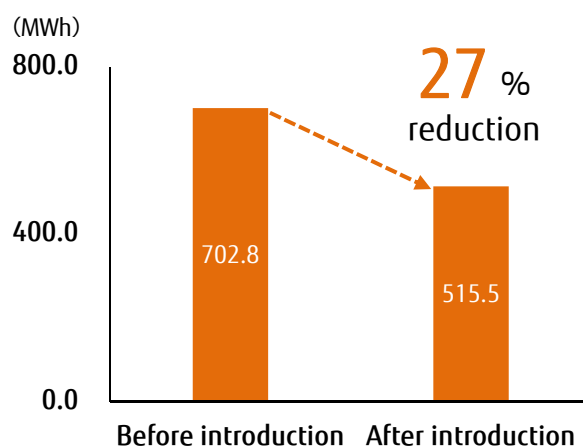
## Activities for reducing our own environmental burdens

### Measures against global warming

#### Introduction of solar power generation system

Hamamatsu Business Office installed solar panels in the building of Fuji Eco Cycle Co., Ltd. in its premises in FY2017 and started solar power generation. By the operation of the solar power generation system, we switched about 27% of power generation to renewable energy after introduction. Also, a part of the electric power generation is supplied to Hamamatsu Business Office, and expect to reduce CO<sub>2</sub> emission by 275 tons per year in the whole business office.

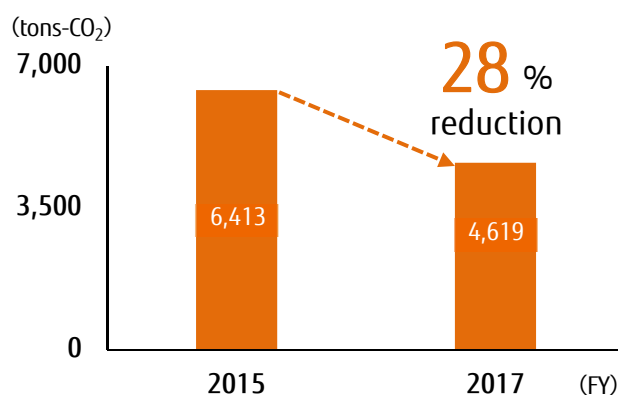
#### ■Solar panel installed on the roof of Fuji Eco Cycle Co., Ltd. and its effect (Left: Solar panel Right: Effect of introducing solar power generation system)



#### Thorough efficient operation of test room

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, from FY2016, we are continuously optimizing the preliminary operation time in the test preparation work and thoroughly utilizing timer operation on holidays and at night time. In addition, we reduced the power consumption by stopping the operation of harmony machine used for the test preparation work which consumes high power and switching to air conditioners with high energy saving performance and spot coolers. Through these activities, we reduced CO<sub>2</sub> emission by 1,794 tons (28%) in FY2017 compared to FY2015.

#### ■Effects by thorough efficient operation of test room



Annual reduction of CO<sub>2</sub> emission

1,794 (tons -CO<sub>2</sub>)

||



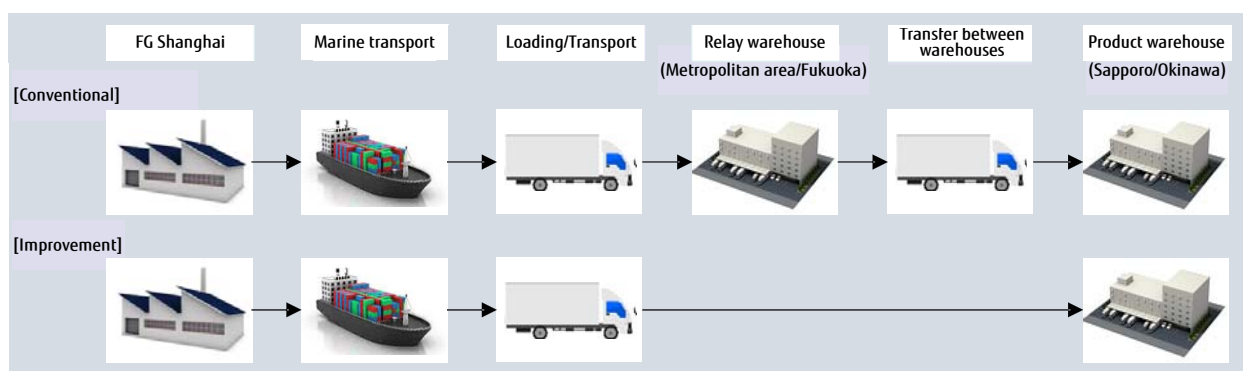
Equivalent to annual CO<sub>2</sub> emission of about 363 households<sup>(\*)</sup>

(\*)1 Calculated by annual CO<sub>2</sub> emission per household = about 4,940kg-CO<sub>2</sub>. (Confirmed report of FY2015 by National Institute for Environment Studies, Greenhouse Gas Inventory Office of Japan)

## Improvement of product transport efficiency

We worked on the improvement of transport efficiency by reducing long distance deliveries in the product transport in Japan. In order to reduce the long distance deliveries from our own product warehouse to the outside of jurisdiction area, we implemented various measures such as optimization of inventory placement, direct loading by container ship to Hokkaido and Okinawa area, modal shift of long distance transport from truck to JR cargo. As a result, the transport efficiency per sales quantity improved by 11.2% compared with FY2013.

### ■ Direct loading for Hokkaido/Okinawa area



## 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 FY2017, we changed various meetings conventionally held at head office by gathering members from each office to Web conference by introducing Office365 to all domestic bases and some of overseas bases, and we reduced the number of business trips and energy consumption related with the movement of people.

In the future, by extending the introduction of Office 365 to all overseas bases and positively utilizing, we strive to reduce the energy consumption.

### ■ Web conference



# Environmental Action Plan Stage VIII

## Activities for reducing our own environmental burdens

### Resource circulation

#### Reduction of water consumption

In order to reduce the water consumption for business activities, Fujitsu General Group is promoting the activities such as installing a human sensor in the restroom of toilet, reuse of leakage water from pump and use of rain water. FGA (THAILAND) CO., LTD. installed a rain water tank of 5,000L and switched half of water used for toilet to rain water, by which water of 240kL was saved in a year.

#### Reduction of wastes

Fujitsu General Group is working on the sorting, collecting and disposing thoroughly in accordance with the waste disposal rules of each country and area. FUJITSU GENERAL (THAILAND) CO., LTD. is continuously working on the reduction of waste liquid by separating and collecting oil from waste liquid of cooled water generated in the cutting process. Also, Fuji Eco Cycle Co., Ltd. built our own dust injection device to recycle the fine dust, which were caused when crushing the household electric appliances, and were conventionally waste, as a fuel by mixing them with urethane and solidifying, by which about 48 tons of wastes were reduced in a year.

#### ■Efforts for reducing wastes



Dust collecting device introduced at Fuji Eco Cycle Co., Ltd.



Dust

Mix dust and urethane and put into a solidifying device.



Solidify and ship as fuel

## Chemical substance management

### 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.

Fujitsu General Electronics Limited, one of our group companies, is working on the total abolition of use of toluene in the supply chain. In FY2017, one of two business partners using toluene switched to a substitute. The remaining company also switched to a substitute in FY2018, and the total abolition of use of toluene is expected to be achieved by the end of FY2018.

## Contribution to environmental 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, many animals and plants such as *Sparganium fallax* Graebn. (RDB endangered species II in Shizuoka Prefecture), *Patrinia scabiosifolia* Fisch. ex Trevir., *Cercion calamorum* are inhabiting and growing. Also, by thinning out too many plants and removing alien species, we are improving the environment that can bring in native species inhabiting around the biotope.

#### ■Animals and plants inhabiting and growing in the biotope

(Upper right: *Sparganium fallax* Graebn., Upper left: *Patrinia scabiosifolia* Fisch. ex Trevir., Lower: *Cercion calamorum*)



# Environmental Action Plan Stage VIII

## Activities for reducing our own environmental burdens

### Contribution to environmental society

#### Afforestation activities

Fujitsu General Group is working on the conservation of a sustainable natural environment through afforestation and Satoyama (Village) activities. FUJITSU GENERAL (THAILAND) CO., LTD. holds every year an event aimed at promoting interchange between employees and their families through social contribution activities. In FY2017, we planted 2,000 seedlings of broadleaf trees and fruit trees altogether in the Bang Lamung Nature Reserve.

FGA (THAILAND) CO., LTD. participated in the afforestation activity sponsored by the industrial estate where the office is located and planted tropical flower tree "Golden Shower Tree".

#### ■Afforestation activities

(Top: Afforestation activity at FUJITSU GENERAL (THAILAND) CO., LTD. Bottom: Planting of "Golden Shower Tree" at FGA (THAILAND) CO., LTD.)



## Water resource conservation activities

Fujitsu General Group participates in regional activities to conserve the water resources around our business sites. Matsubara Business Office participated in the “Yamato River/Ishi River Cleanup Strategy” sponsored by the Osaka Prefecture River Environmental Department. 23 people, mainly our employees, participated in the activities 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.

### ■ “Yamato River/Ishi River Cleanup Strategy” at Matsubara Business 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.



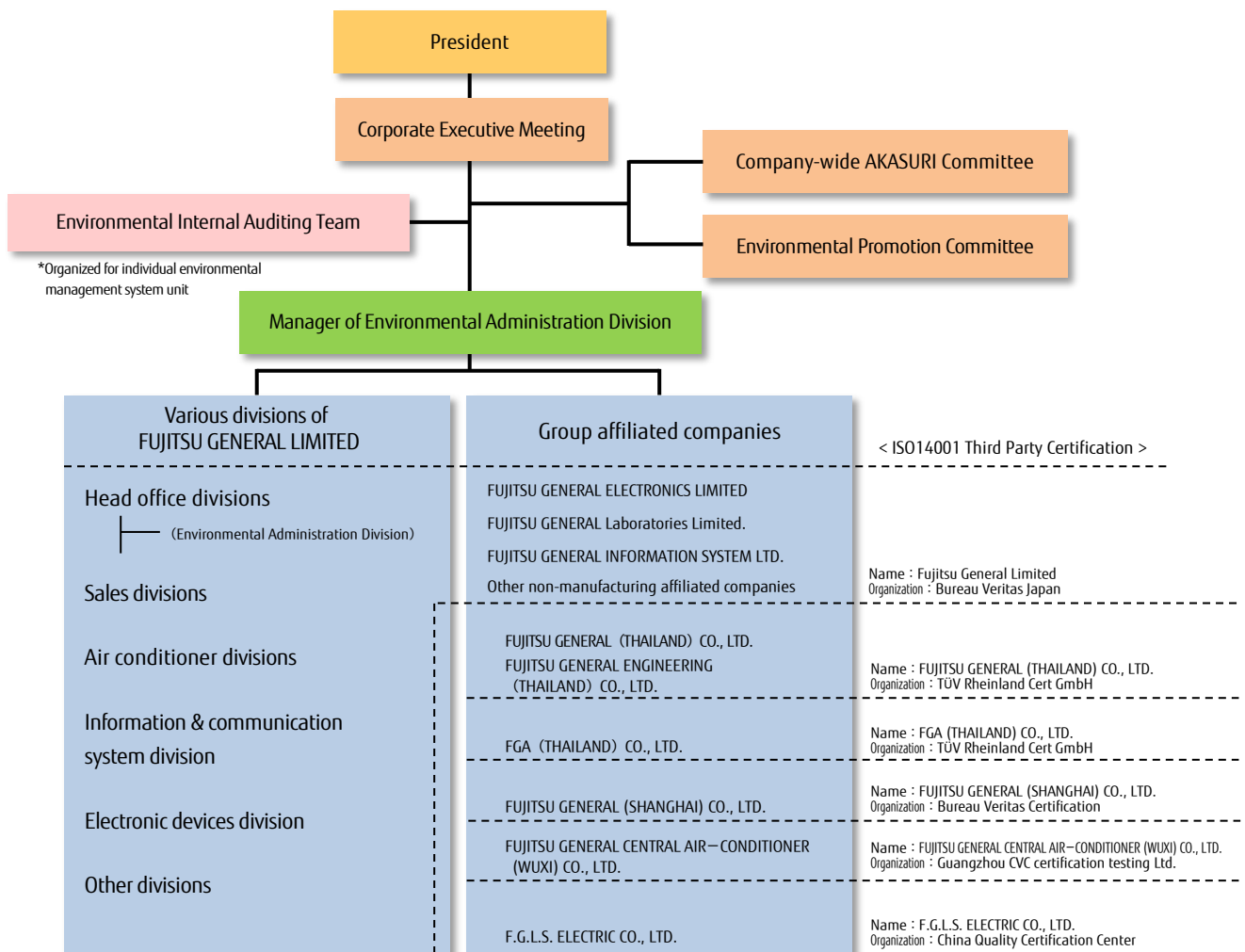
# Environmental Management

## Environmental Management

### Environmental management promotion structure

Fujitsu General Group established the “Companywide AKASURI Committee” chaired by the president as a place to solve cross-organizational issues concerning environmental management and the “Environmental Promotion Committee” chaired by the general manager of quality assurance and environment as a place to discuss environmental issues of individual organizations.

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 is comprised of an integrated certification acquired by Fujitsu General, domestic affiliated companies and non-manufacturing overseas companies, and five overseas manufacturing companies which independently acquired the International Standard ISO14001.

In FY2017, the transition examination to ISO14001:2015 version standard was completed at all sites, and the maintenance and continuation of certification was approved. As to all matters pointed out as noncompliant as a result of EMS audit, the corrective measures were completed and regarding the observation matters to be improved, we will clarify the points to be reviewed and strive to enhance the level of management.

## Implementation of internal audit and results

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

In the internal audit of FY2017, the auditing was implemented focusing on to what extent the contents of standards transfer of environmental management are understood and how the efforts for environmental consideration are incorporated into the process of operations.

### ■Result of FY2017 internal environmental auditing

Category	Number of indications/ improvements
Incompatibility concerning deviation risk of environmental laws	0
Incompatibility concerning other environmental risk	22

## Implementation of external audit and results

In September, 2017, the transition examination of to ISO14001:2015 version standard was implemented for domestic and overseas sales companies by external examination organization. As a result, there was one indication of “nonconformity” of regulations relating to firefighting check. Including the nonconformity regarding other environmental risk, the relevant audited departments and environmental departments examined and implemented the measures in cooperation. Furthermore, the cross-organizational examination was made by notifying to relevant departments.

In addition, five overseas manufacturing companies which are to be independently certified have been certified sequentially from 2016 to 2017.

### ■Result of FY2017 external environmental auditing

Category	Number of indications/ improvements
Incompatibility concerning deviation risk of environmental laws	1
Incompatibility concerning other environmental risk	5

# Environmental Management

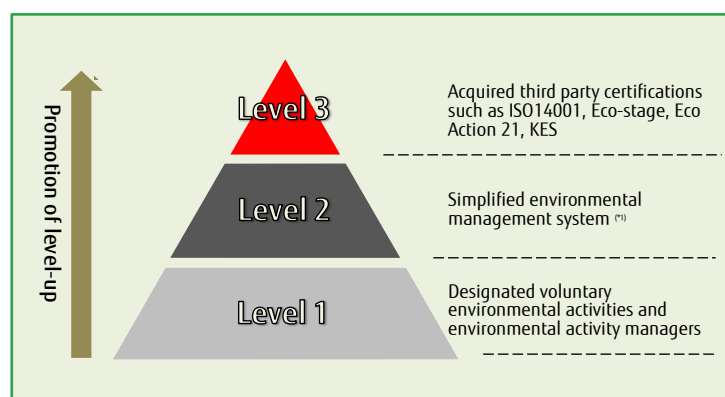
## Green procurement

### 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<sub>2</sub> 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.

### Construction of environmental management system (EMS)

We, at whole Fujitsu General Group, are asking all our suppliers for the establishment of environmental management system. The environmental management systems of the suppliers are classified by the level of establishment and we are assisting the establishment and operation of environmental management system for the suppliers of level 1.



### Obtaining information on chemical substances

Fujitsu General Group investigated the component chemical substances by AIS<sup>(\*)</sup>/MSDSPlus<sup>(\*\*)</sup> which JAMP<sup>(\*\*\*)</sup> provides to suppliers, and the information obtained is share within the Fujitsu General Group by the internal system, and the related persons can check the information at any time as needed. Also, as AIS/MSDSPlus support was terminated in June, 2018, we transferred to the succeeding scheme chemSHERPA<sup>(\*\*\*)</sup>.

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

In order to ensure the compliance with laws and regulations concerning chemical substances contained in products, we are requesting suppliers to construct CMS<sup>(\*\*\*)</sup> based on the “Guidelines for the chemical substances in products” of JAMP.

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.

(\*) Simplified environmental management system: Suppliers' own environmental management system.

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

(\*\*\*) MSDS Plus: (Material Safety Data Sheet Plus) Transmission sheet of chemical substance contained in chemical substance/compounding agent.

(\*\*\*\*) JAMP: (Joint Article Management Promotion-consortium)

(\*\*\*\*\*) chemSHERPA : (Chemical information SHaring and Exchange under Reporting Partnership in supply chain) A scheme that facilitates sharing information on chemical substances in products

(\*\*\*\*\*) CMS: Chemical substance Management System

## Activities for reduction of environmental risks

### Activities for noise and vibration prevention

To prevent noise and vibration, group companies of production and recycling are strictly observing the standards of relevant laws and ordinances, and regularly measuring noise and vibration level.

### 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 NO<sub>x</sub>, SO<sub>x</sub>, 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.

### Activities for soil pollution prevention

At Kawasaki head office, in constructing the Technology Research Building (tentative name) to be completed in June, 2019, we implemented a soil survey based on the Soil Contamination Countermeasures Act and the ordinance concerning the 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.

As for one block where Class 1 Designated Hazardous Substances exceeds the wastewater standards, the purification by the bio-process method was carried out and we are monitoring the change-with-time of concentration in the observation well.

#### ■ Survey of soil contamination

(Left: Sampling of soil gas    Right: Injection of biological agent)



# Environmental Management

## Activities for reduction of environmental risks

### 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 <sup>(\*)</sup>. 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.). In FY2017, in order to prevent freezing during winter season, we added a heater with a freeze prevention sensor to the piping inside the purification facility and made the bypass of the pipe so that the remaining water will not accumulate in the piping when stopping the pumping.

### 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.

#### ■Activities for preventing chemical substance pollution

(Left: Training to handle lubricating oil leakage accident at Aomori Business Office)  
(Right: Inside the polychlorinated biphenyl storage warehouse at head office)



(\*) Suspended substances (Fine particles of insoluble solids with a particle diameter of less than 2mm suspended in the water)

## Environmental education/enlightenment activities

### 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	Environment month, Lecture meeting, Seminar, etc.			
General education	New employee training		Executive staff training	
Professional education	Education by department (occasional)			
	Internal auditor training			

### Environmental enlightenment activities

Fujitsu General Group holds lecture meetings to improve employees' environmental awareness. At the head office, we endorse the purpose of the activity of "Kawasaki Eco-drive Declaration" promoted by Kawasaki City where the head office is located and conducted an eco-drive seminar for employees of sales and service departments who use company car for business and made a "Kawasaki Eco-drive Declaration" in May, 2017. We are conducting the enlightenment activities widely inside and outside the company such as by putting eco-drive sticker on the company shuttle bus and company cars in Kawasaki area.

#### ■Environmental enlightenment activity

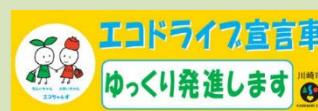
(Left: Eco-drive lecture meeting Right: Kawasaki Eco-drive Declaration Certificate reception ceremony)



#### What is "Kawasaki Eco-drive Declaration" ?

It is an environmental policy of Kawasaki City to promote the eco-driving through implementation of seminars and distribution of stickers for business operators and individuals who use cars in Kawasaki City.

#### ■Eco-drive sticker



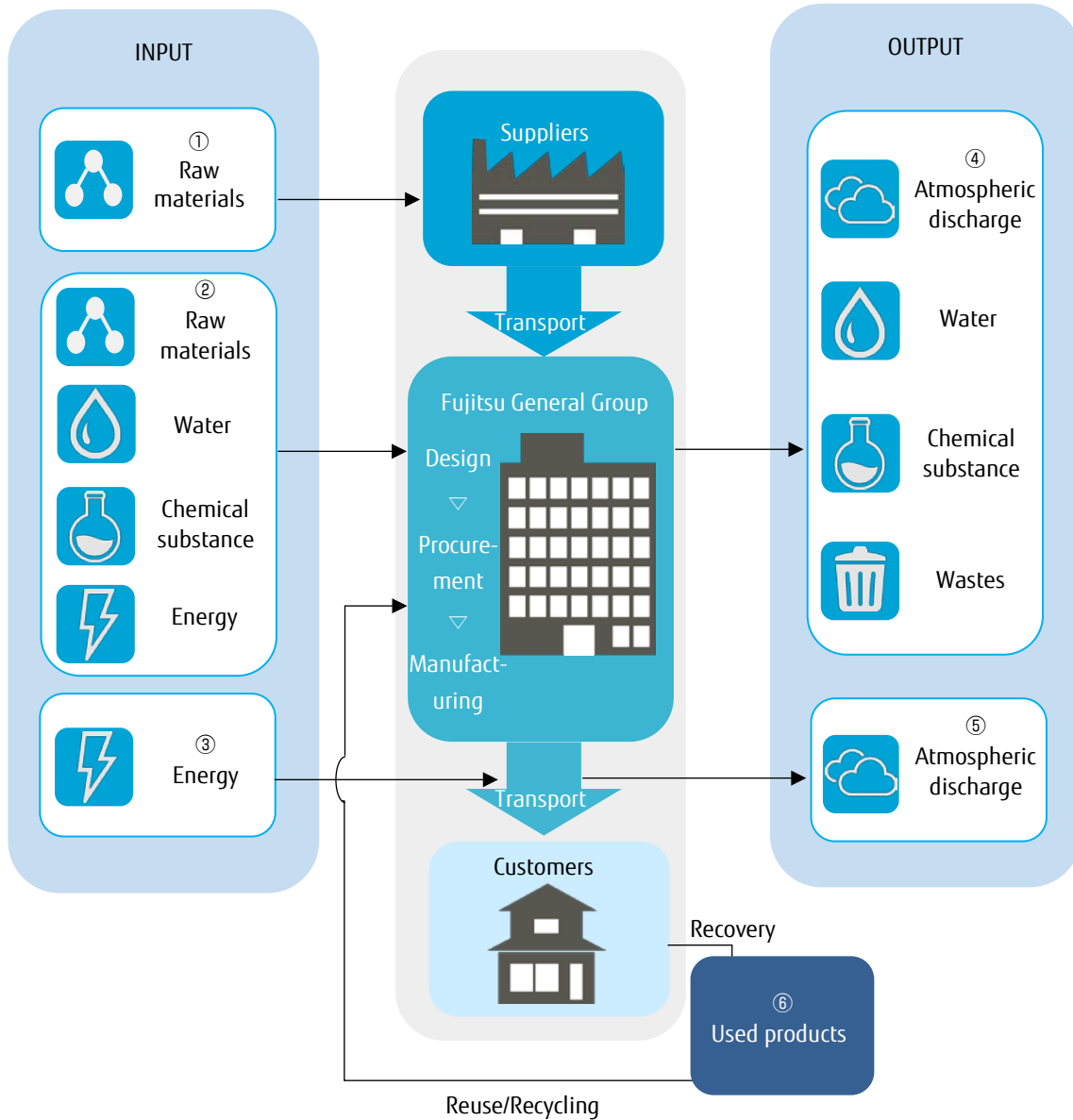
### Environmental professional education

Fujitsu General Group conducts environmental professional education for employees engaged in environmental work. In FY2017, we conducted the education specialized in the revision of standard of ISO14001 (2015 edition) for employees engaged in environmental matters of each department. Also, we conducted training by external lecturer for the purpose to train internal auditors and improve their skill.

# Data Overview

## Environmental performance data

### Material Balance (FY2017 Actual Results)



#### INPUT/OUTPUT DATA

① ② Design/Procurement/Manufacturing	
<b>Raw materials</b>	
Metal	95,910 t
Plastics	24,425 t
Others	8,698 t
<b>Chemical substance</b>	
PRTR	2.43 t
<b>Water</b>	
	465,000 m <sup>3</sup>
<b>Energy</b>	
Total	877,747 GJ
Electricity	74,075 MWh
Oils	161 ke
LPG	2,417 t
City gas	294,000 m <sup>3</sup>

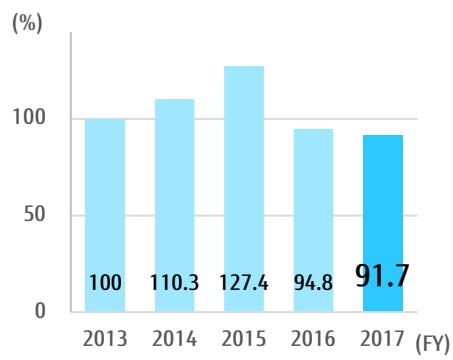
③ Logistics	
<b>Energy</b>	
Fuel	25,499 GJ
④ Design/Procurement/Manufacturing	
<b>Atmospheric discharge</b>	
Total greenhouse gas discharge	79,343 t-CO <sub>2</sub>
CO <sub>2</sub>	38,425 t-CO <sub>2</sub>
Greenhouse gas discharge other than CO <sub>2</sub>	40,918 t-CO <sub>2</sub>
NO <sub>x</sub>	2.1 t
SO <sub>x</sub>	0.1 t
<b>Water (Displacement)</b>	
Total	437,000 m <sup>3</sup>
BOD	0.03 t
COD	0.02 t

④ Design/Procurement/Manufacturing (continued)	
<b>Chemical substance</b>	
PRTR	2.05 t
<b>Wastes</b>	
Total discharge	10,156 t
Final discharge amount	599 t
⑤ Logistics	
<b>Atmospheric discharge</b>	
CO <sub>2</sub>	1,809 t-CO <sub>2</sub>
⑥ Recycling	
Disposal amount	15,012 t
Reuse for our products	117 t
Other reuse	13,210 t
Fluorocarbons regeneration amount	105 t

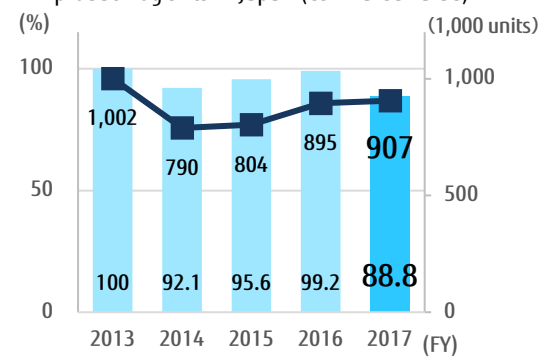


## Environmental Action Plan: Greenhouse gas basic unit control

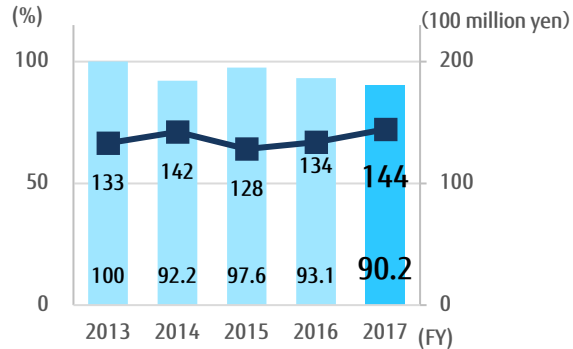
■ Electricity consumption of evaluation test facility



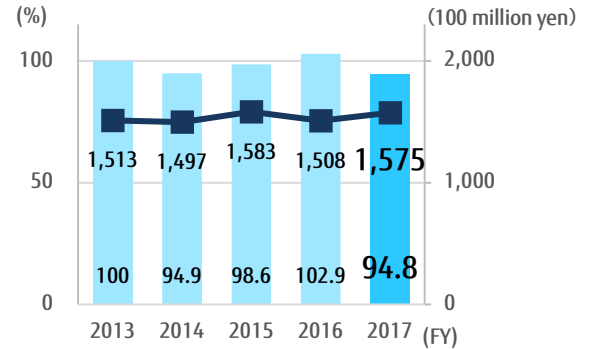
■ Greenhouse gas emissions associated with product logistics in Japan (estimated value)



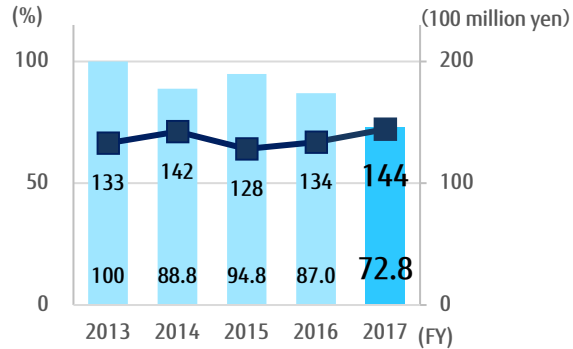
■ Electricity consumption in domestic production bases



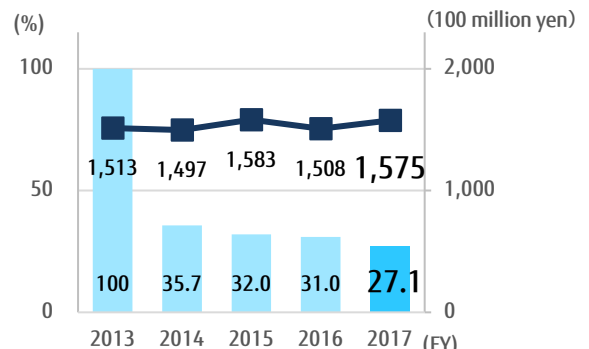
■ Electricity consumption in overseas production bases



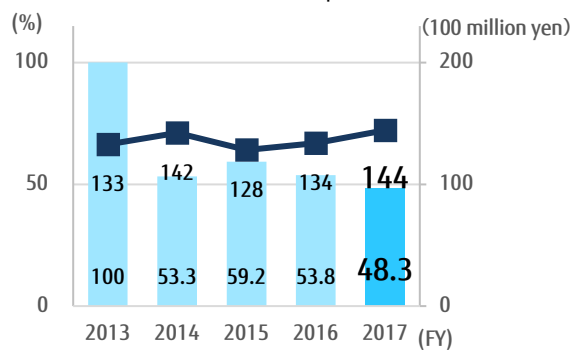
■ Amount of petroleum used in domestic production bases



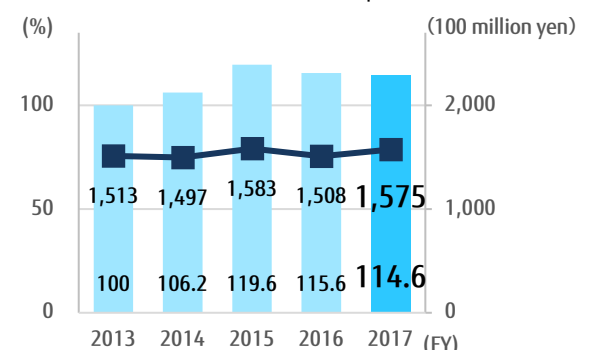
■ Amount of petroleum used in overseas production bases



■ Amount of LPG used in domestic production bases



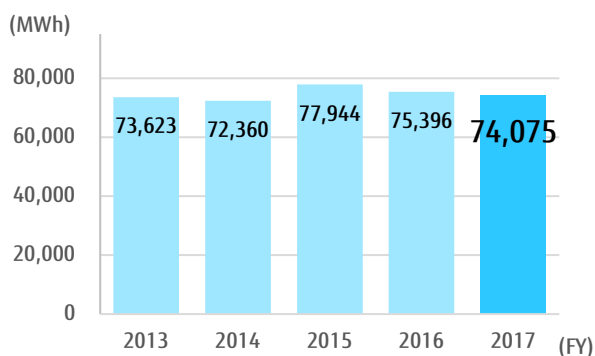
■ Amount of LPG used in overseas production bases



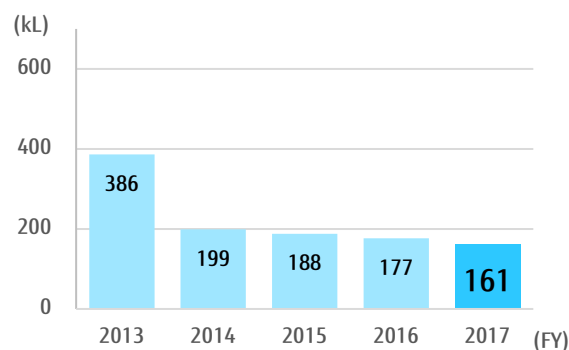
# Data Overview

## Energy

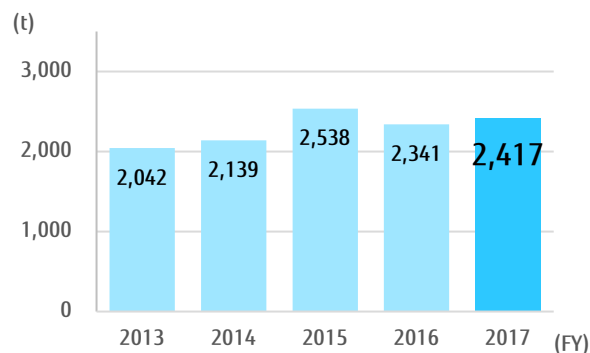
■ Electricity



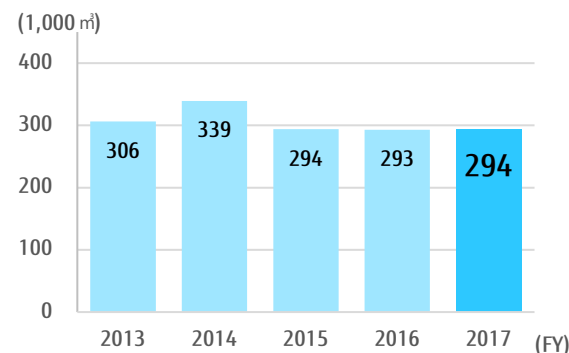
■ Oils



■ LPG

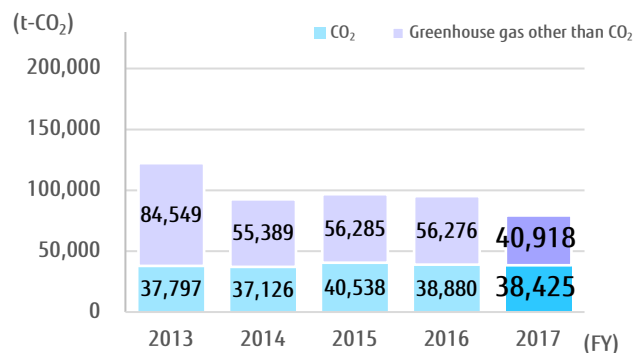


■ City gas

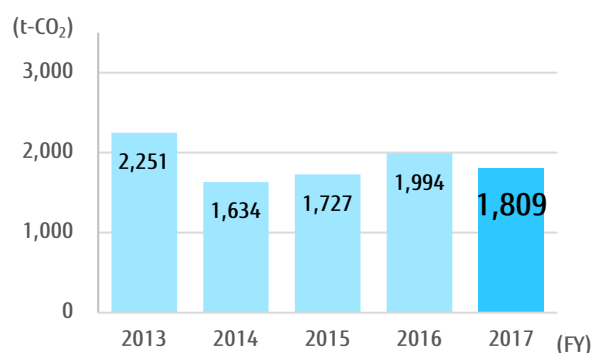


## Greenhouse gas \*

■ Greenhouse gas emission by business activity (CO<sub>2</sub> conversion)



■ Greenhouse gas emission by production distribution in Japan (Estimated value)



\* As a result of scrutinizing the data, we corrected some of the figures of actual results described in FY2017 Environmental Report.

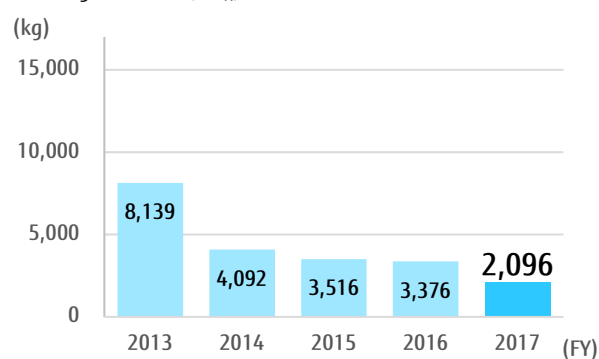
< Correction > ■ Greenhouse gas emission related with business activities (FY2016 results) 38,026t-CO<sub>2</sub> → 38,880 t-CO<sub>2</sub>

■ Greenhouse gas emission related with product logistics in Japan (FY2015 results) 1,740 t-CO<sub>2</sub> → 1,727 t-CO<sub>2</sub>  
 (FY2016 results) 2,051 t-CO<sub>2</sub> → 1,994 t-CO<sub>2</sub>

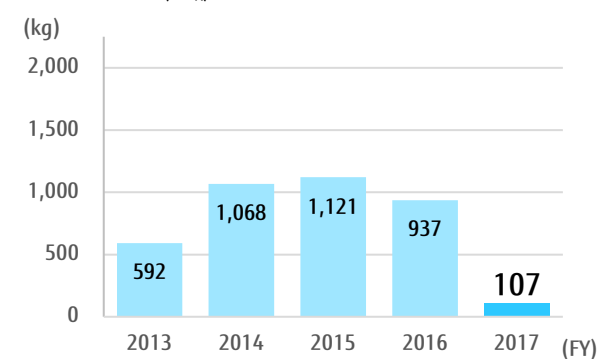


## Atmospheric emissions

■ Nitrogen oxides (NO<sub>x</sub>)

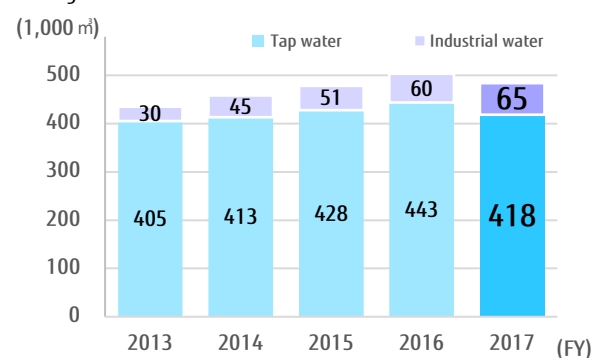


■ Sulfur oxides (SO<sub>x</sub>)

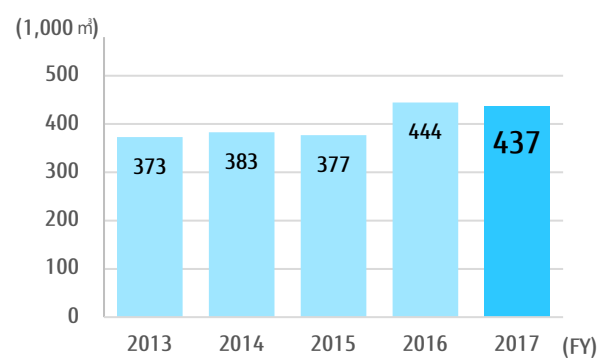


## Water

■ Usage \*



■ Emission

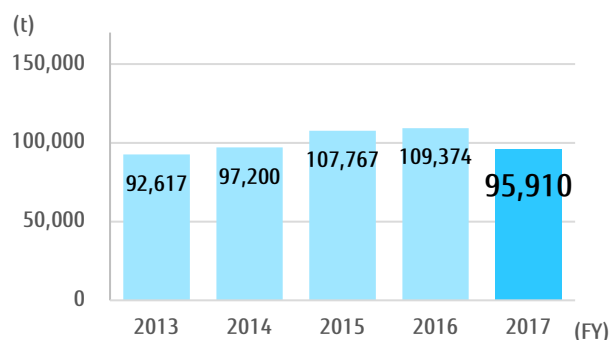


\* As a result of scrutinizing the data, we corrected some of the figures of actual results described in FY2017 Environmental Report.

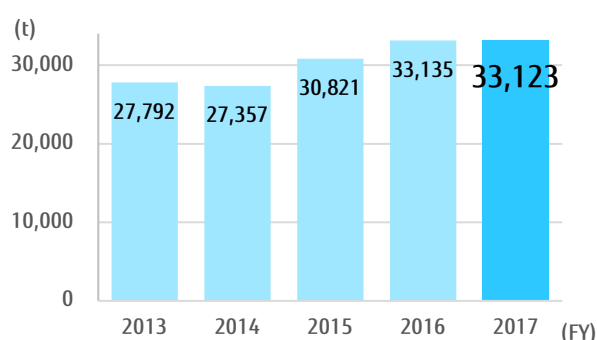
< Correction > ■ Usage (FY2016 results) 441,000 m<sup>3</sup> → 443,000 m<sup>3</sup>

## Raw material (Material / Sub-material)

■ Metal



■ Other than metal (Plastic, etc.) \*



\* As a result of scrutinizing the data, we corrected some of the figures of actual results described in FY2017 Environmental Report.

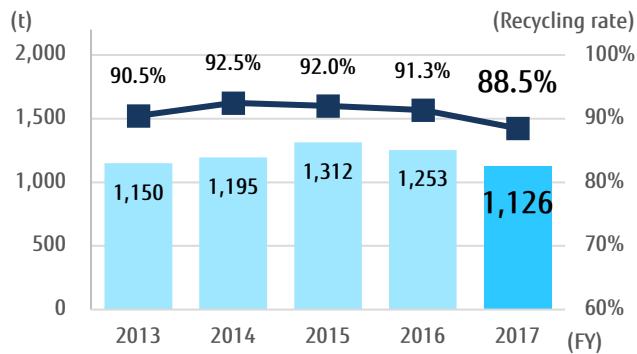
< Correction > ■ Usage of other than metal (plastic, etc.) (FY2013 results) 25,379 t → 27,792 t (FY2014 results) 24,501 t → 27,357 t  
(FY2015 results) 27,117 t → 30,821 t (FY2016 results) 29,025 t → 33,135 t

# Data Overview

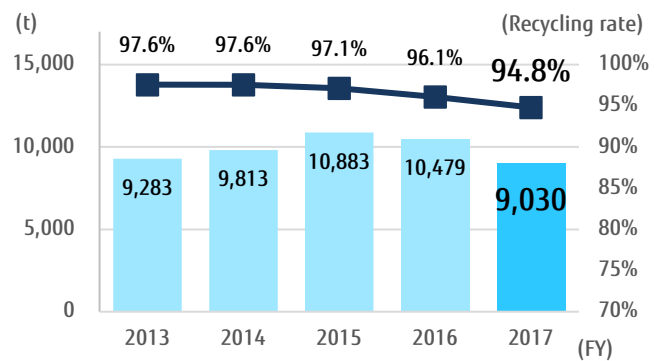
## Wastes

### ■ Total emission

• Japan: Business offices/Group companies

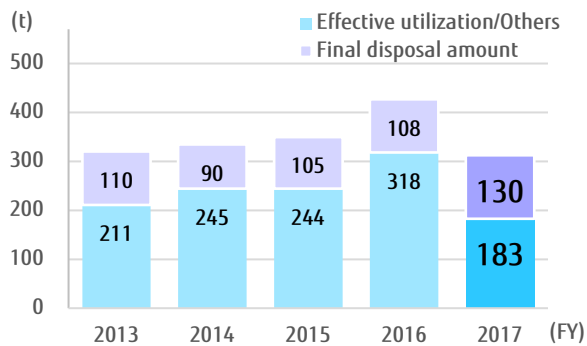


• Overseas: Production group companies

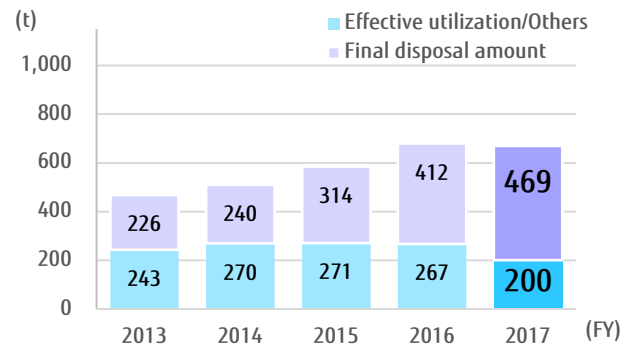


### ■ Waste volume

• Japan: Business offices/Group companies

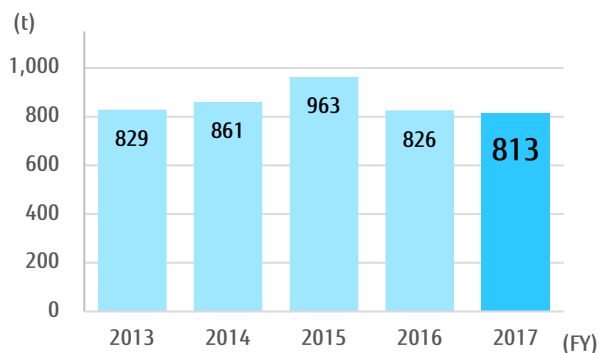


• Overseas: Production group companies

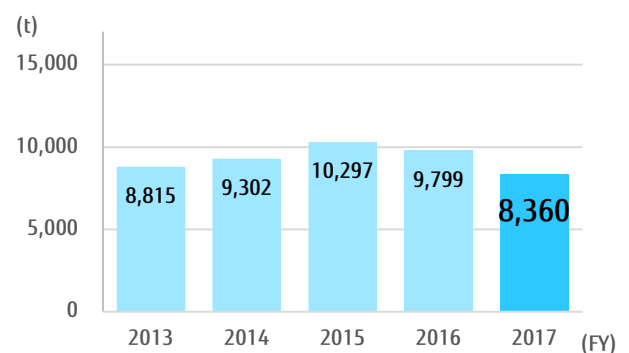


### ■ Valuable quantity

• Japan: Business offices/Group companies



• Overseas: Production group companies



## Chemical substance handling amount (PRTR Law subject substance) (FY2017)

Chemical substance	CAS number	Handling amount
styrene	100-42-5	1,897 kg
tricresyl phosphate	1330-78-5	152 kg
toluene	108-88-3	149 kg
methylenebis	101-68-8	120 kg
lead	7439-92-1	115 kg

## Electric home appliance recycling results (FY2017)

For details, refer to this page.

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

### Recycling results

Item	Air-conditioner	TV		Refrigerator Freezer	Washing machine Cloth dryer
		CRT type	LCD / Plasma type		
Accepting quantity at specified acceptance place	222,081 units	1,922 units	152 units	96,240 units	5,231 units
Product recycling disposed quantity	219,185 units	1,884 units	155 units	95,343 units	5,228 units
Product recycling disposed weight	8,938 t	45 t	2 t	5,829 t	198 t
Product recycling weight	8,449 t	34 t	2 t	4,658 t	184 t
Product recycling rate	94 %	76 %	89 %	79 %	93 %

### Situation of collection of refrigerant Fluorocarbons

	Air-conditioner	Refrigerator Freezer
Accepting quantity at designated collection sites	145,089 kg	6,793 kg
Weight shipped to subcontractor of destruction	144,954 kg	6,718 kg
Recycling and reuse weight	102,288 kg	2,952 kg
Destruction weight	40,987 kg	3,820 kg

## Environmental Accounting (FY2017)

Environmental Conservation Cost (million yen)		
Item	Main Contents	Cost
Business Area Cost	Pollution Prevention Cost	Air / water pollution prevention, etc. 165
	Global Environmental Conservation Cost	Global warming prevention / Energy saving, etc. 520
	Resource Circulation Cost	Resources effective use, industrial waste disposal, etc. 273
Upstream / Downstream Costs		Collection / Recycling of used products, etc. 69
Administration Cost		Environmental management system, etc. 84
R&D Cost		R&D of environmentally-friendly products, etc. 427
Social Activity Cost		Donation for natural environmental protection, etc. 2
Environmental Remediation Cost		Repair cost relating to land and groundwater pollution 0
<b>Total</b>		<b>1,540</b>

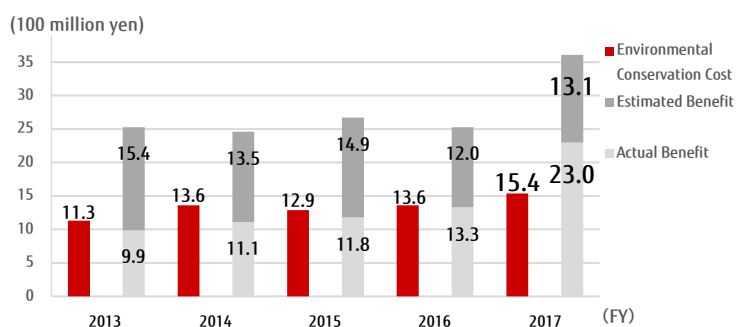
Economic Benefit Associated with Environmental Conservation Activities (million yen)		
Item	Main Contents	Benefit
Estimated Benefit	Assumed effect by control of environmental protection facility and development of environmentally-friendly products	1,312
Actual Benefit	Profit on sale of valued articles, reduction of waste disposal cost, gain on sales of surplus electricity, etc.	2,298
<b>Total</b>		<b>3,610</b>

### Cost and economic effect in FY2017

In FY2017, the environmental conservation cost was 1.54 billion yen (13% increase from the previous year) and the economic effect accompanying environmental conservation measures was 3.61 billion yen (43% increase from the previous year).

As the special feature of FY2017, the environmental conservation cost increased due to the introduction of solar power generation system in the business area and the introduction of IT tools relating to the work style reform of indirect departments.

In addition, reduction of purchased electric power due to the introduction of solar power generation, gain on sales of surplus electricity generated during non-working hours, and reduction of electricity by switching to new electric power in Kawasaki head office area and Hamamatsu area were added to new substantial economic effect.



# Data Overview

## Environmental performance data calculation standard

■ Subject period: April 1, 2017 - March 31, 2018

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

### Material balance

#### INPUT

Indicator		Unit	Calculation method	
	Raw materials	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/ Manufacturing	Water usage	m <sup>3</sup>	Annual usage of water, industrial water, groundwater (except for groundwater used for snow melting or purification measures)	
	Energy consumption	GJ	Annual usage of electricity, fuel and gas) x unit calorific value for each type of energy* *Unit calorific value: Based on Ministry of the Environment "Guidelines for calculating total greenhouse gas emissions (2007)"	
		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 consumption	GJ	Transport ton-kilometer x improved ton-kilometer method fuel consumption basic unit x 10 <sup>-3</sup> x unit calorific value. (Source: Ministry of Economy, Trade and Industry/Ministry of Land, Infrastructure, Transport and Tourism "Guidelines for Calculation Method on CO <sub>2</sub> Emissions in the Logistics Field" )	

#### OUTPUT

Indicator		Unit	Calculation method
Design/ Procurement/ Manufacturing	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 potential: Based on the Federation of Electric Power companies of Japan "CO <sub>2</sub> emission basic unit at end of use" . Domestic: 0.407t-CO <sub>2</sub> /MWh (FY2002 emission basic unit) Overseas: 0.410t-CO <sub>2</sub> /MWh (FY2006 emission basic unit)
		Greenhouse gas emissions other than CO <sub>2</sub>	t-CO <sub>2</sub> Annual emissions of fluorocarbons x Global warming potential* *Global warming potential: IPCC "Intergovernmental Panel on Climate Change (4th Report)"
		NOx emissions	kg NOx concentration x 10 <sup>-6</sup> x Dray gas emissions x Operating time x 46/22.4 x 10 <sup>-3</sup>
		SOx emissions	kg SOx concentration x 10 <sup>-6</sup> x Dray gas emissions x Operating time x 64/22.4 x 10 <sup>-3</sup>
	Water discharge	Water discharge	m <sup>3</sup>
BOD emissions		t	BOD concentration x Water discharge x 10 <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 (Source: Ministry of Economy, Trade and Industry/Ministry of Land, Infrastructure, Transport and Tourism "Guidelines for Calculation Method on CO <sub>2</sub> Emissions in the Logistics Field" )
Recycling	Disposal volume	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
	Reuse for others	t	Total weight of parts/materials reused for other than our products
	Fluorocarbons recycling volume	kg	Weight of fluorocarbons reproduced or reused out of fluorocarbons used as refrigerant

### Environmental Action Plan: Greenhouse Gas Basic Unit Management

Item	Indicator	Unit	Calculation method
Electricity usage of evaluation test facilities	Electricity usage reduction rate 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	Energy usage reduction rate 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	CO <sub>2</sub> emission reduction rate per sales volume in domestic logistics	%	Logistics CO <sub>2</sub> emissions per domestic sales volume in the relevant year/ Logistics CO <sub>2</sub> emissions per domestic sales volume in FY2013 x 100

# Data Overview

## 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.

Company name	Environmental accounting	Energy	Greenhouse gas		Atmospheric discharge NO <sub>x</sub> /SO <sub>x</sub>	Water			Raw materials	Wastes	Chemical substances
			Business activities	Logistics		Usage/Discharge	BOD	COD			
Fujitsu General Limited	Kawasaki Head Office	✓	✓	✓	✓	✓				✓	
	Aomori Business Office	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Hamamatsu Business Office	✓	✓	✓		✓	✓		✓	✓	
	Matsubara Business Office	✓	✓	✓		✓				✓	
	Sales/Service bases (56 bases)	✓	✓	✓	✓	✓				✓	
<b>Domestic group companies (10 companies)</b>											
Fujitsu General Electronics Limited	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
Fujitsu General Information System Ltd.	✓	✓	✓			✓				✓	
Fujitsu General EMC Laboratory Limited	✓	✓	✓			✓				✓	
Fuji Eco Cycle Co., Ltd	✓	✓	✓			✓	✓	✓		✓	
Fujitsu General Laboratories Limited	✓	✓	✓		✓	✓				✓	
Fujitsu General Residential Equipment Ltd	✓	✓	✓		✓	✓				✓	
Fujitsu General Field Sales Ltd.	✓	✓	✓		✓	✓				✓	
F E S Ltd.	✓	✓	✓		✓	✓				✓	
Fujitsu General Heartware Ltd	✓	✓	✓		✓	✓				✓	
Seiwakai Ltd.	✓	✓	✓		✓	✓				✓	
<b>Overseas group companies (18 companies)</b>											
Fujitsu General (Shanghai) Co., Ltd.	✓	✓	✓			✓			✓	✓	
Fujitsu General Central Air-Conditioner Co., Ltd.	✓	✓	✓		✓	✓			✓	✓	
Wuxi Fujitsu General Mechanical & Engineering Co., Ltd.	✓	✓	✓		✓	✓			✓	✓	
F.G.L.S. Electric Co., Ltd	✓*										
Fujitsu General (Thailand) Co.,Ltd.	✓	✓	✓		✓	✓			✓		
FGA (Thailand) Co.,Ltd.	✓	✓	✓		✓	✓			✓		
Fujitsu General Engineering (Thailand) Co.,Ltd.	✓*	✓	✓			✓					
Fujitsu General America, Inc.	✓*	✓	✓								
Fujitsu General do Brasil Ltda.	✓*	✓	✓			✓					
Fujitsu General (U.K.) Co.,Ltd.	✓*	✓	✓								
Fujitsu General Air Conditioning (UK) Ltd.	✓*	✓	✓			✓					
Fujitsu General (Euro) GmbH	✓*	✓	✓			✓					
Fujitsu General (Middle East) Fze	✓*	✓	✓								
Fujitsu General (Asia) Pte. Ltd.	✓*	✓	✓								
Fujitsu General (Aust.) Pty Ltd.	✓*	✓	✓						✓		
Fujitsu General New Zealand Ltd.	✓*	✓	✓								
Fujitsu General Orient International Electronics Sales (Shanghai) Co., Ltd.	✓*	✓	✓			✓					
Fujitsu General (Taiwan) Co.,Ltd.	✓*	✓	✓			✓					

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

# Introduction of business center

## Domestic

### ● FUJITSU GENERAL ELECTRONICS LIMITED

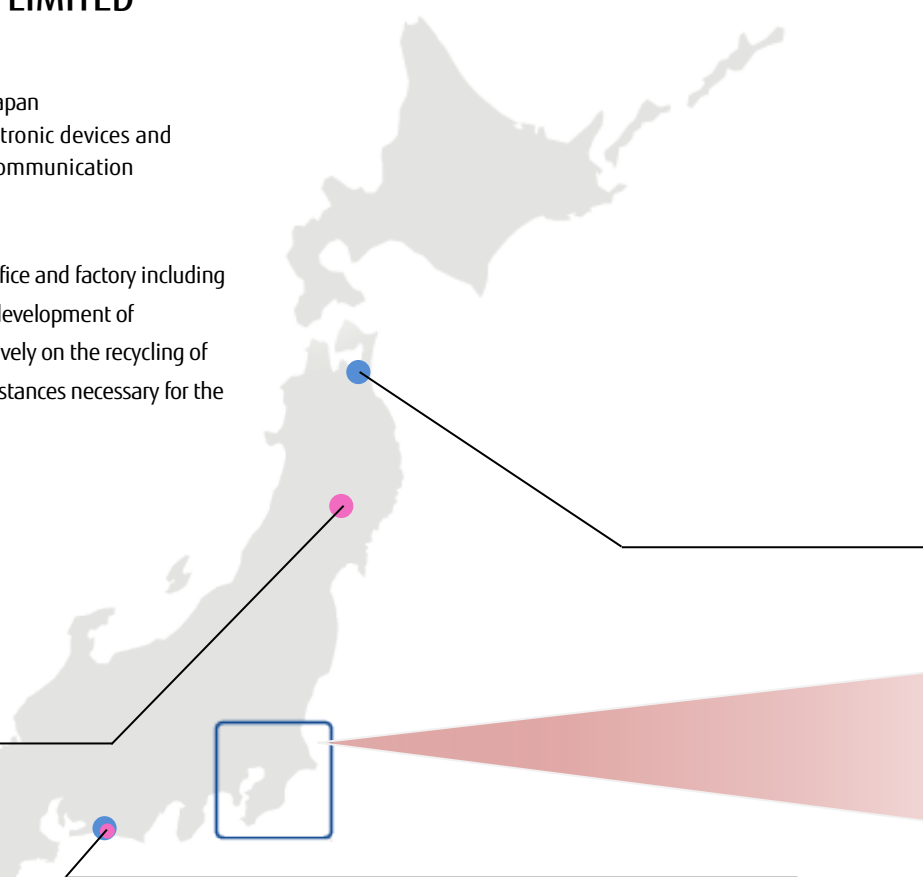
#### Overview

[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.



### ● 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.

### ● HAMAMATSU BUSINESS OFFICE

### ● 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.



## ● AOMORI BUSINESS OFFICE

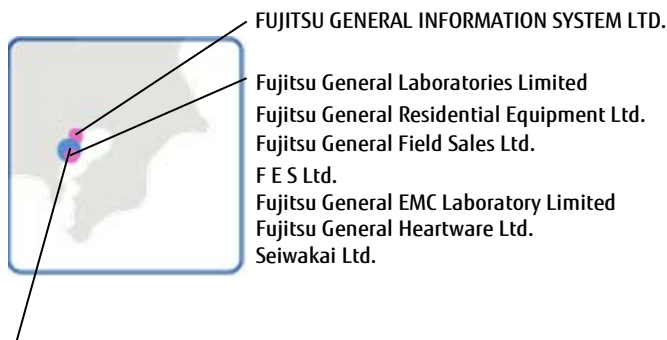
### Overview

[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.



## ● 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

#### ● 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 INFORMATION SYSTEM LTD.

[Location] Dainitakatoribiru, 2-3-31, Shibaura, Minato-ku 108-0023, Japan  
 [Line of business] Sales and service contract work for sorting data processing systems, marking systems (label printers), office equipment, OA equipment, etc.

#### ● 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

#### ● F E S Ltd.

[Location] 3-3-17, Suenaga, Takatsu-ku, Kawasaki, Kanagawa 213-8502 Japan  
 [Line of business] Office equipment, vehicle and other leasing, real estate

#### ● 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 Japan  
 [Line of business] Goods management, cleaning services, copying machine services

#### ● Seiwakai Ltd.

[Location] 3-3-17, Suenaga, Takatsu-ku, Kawasaki, Kanagawa 213-8502 Japan  
 [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 CENTRAL AIR-CONDITIONER (WUXI) CO., LTD.



### Overview

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

[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.

• FUJITSU GENERAL (U.K.) CO., LIMITED  
• FUJITSU GENERAL AIR CONDITIONING (U.K.) LIMITED

• FUJITSU GENERAL (EURO) GmbH

FUJITSU GENERAL (MIDDLE EAST) FZE

FUJITSU GENERAL (TAIWAN) CO., LTD.

FUJITSU GENERAL (ASIA) PTE. LTD.

FUJITSU GENERAL LIMITED

FUJITSU GENERAL (AUST.) PTY LIMITED

FUJITSU GENERAL NEW ZEALAND LIMITED

## FUJITSU GENERAL (THAILAND) CO., LTD.

### Overview

[Location] Laem Chabang Industrial Estate, I-EA-T, Free Zone 1, 92/9 (92/10) Moo 2, Thungskukhla, Sriracha, Chonburi 20230, Thailand

[Line of business] Manufacture of air conditioners

### Main environmental activities

Working on the reduction of CO<sub>2</sub> 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.



## FGA (Thailand) CO.,LTD.

### Overview

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

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







FUJITSU GENERAL AMERICA, INC.

FUJITSU GENERAL DO BRASIL LTDA.

## ■ FUJITSU GENERAL (SHANGHAI) CO., LTD.

### Overview

[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.



## 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, Thungskhla, 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,

Thungskhla, Sriracha, Chonburi 20230, Thailand

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

## Overseas sales companies

### ■ America

#### ● 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 - 2ª andar - Bela Vista, São Paulo, SP, CEP 01327-905, Brasil

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

### ■ Europe

#### ● FUJITSU GENERAL (U.K.) CO., LIMITED

[Location] First Floor Unit 330, Centennial Park, Centennial Avenue, Elstree, Hertfordshire, WD6 3TJ, U.K.

[Line of business] Sales of air conditioners in Europe

#### ● FUJITSU GENERAL AIR CONDITIONING (U.K.) LIMITED

[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] Wertfstraße 20, D-40549 Düsseldorf, Germany

[Line of business] Sales of air conditioners in Europe

### ■ Middle East

#### ● 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

### ■ Asia/Oceania

#### ● FUJITSU GENERAL (AUST.) PTY LIMITED

[Location] Eastern Creek Drive, Eastern Creek, NSW 2766, Australia

[Line of business] Sales of air conditioners in Oceania

#### ● FUJITSU GENERAL NEW ZEALAND LIMITED

[Location] 109 Port Rd., Seaview, Lower Hutt, New Zealand

[Line of business] Sales of air conditioners in 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 (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

# Reference table of Environmental Reporting Guidelines

## Reference table of “GRI Standards” by GRI

### Disclosure items

#### I. Universal Standards

#### GRI 102: General Disclosures

##### 1. Organizational profile

(Description Page)

102-1 Name of the organization	a. Name of the organization.	P.50
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.50
102-3 Location of headquarters	a. Location of the organization's headquarters.	P.50
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.37~40,50
102-5 Ownership and legal form	a. Nature of ownership and legal form.	P.50
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.50
102-7 Scale of the organization	a. Scale of the organization, including: i. total number of employees; ii. 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.50
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.	P.50
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.25
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.	Not applicable
102-11 Precautionary Principle or approach	a. Whether and how the organization applies the Precautionary Principle or approach.	P.26,27
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.3,4
102-15 Key impacts, risks, and opportunities	a. A description of key impacts, risks, and opportunities.	P.8,23~28

##### 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.5,6
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.23

## 4. Governance

(Description Page)

102-18 Governance structure	a. Governance structure of the organization, including committees of the highest governance body. b. Committees responsible for decision-making on economic, environmental, and social topics.	P.23
102-19 Delegating authority	a. Process for delegating authority for economic, environmental, and social topics from the highest governance body to senior executives and other employees.	P.23
102-20 Executive-level responsibility for economic, environmental, and social topics	a. Whether the organization has appointed an executive-level position or positions with responsibility for economic, environmental, and social topics. b. Whether post holders report directly to the highest governance body.	P.23
102-21 Consulting stakeholders on economic, environmental, and social topics	a. Processes for consultation between stakeholders and the highest governance body on economic, environmental, and social topics. b. If consultation is delegated, describe to whom it is delegated and how the resulting feedback is provided to the highest governance body.	P.23
102-22 Composition of the highest governance body and its committees	a. Composition of the highest governance body and its committees by: i. executive or non-executive; ii. independence; iii. tenure on the governance body; iv. number of each individual's other significant positions and commitments, and the nature of the commitments; v. gender; vi. membership of under-represented social groups; vii. competencies relating to economic, environmental, and social topics; viii. stakeholder representation.	Not applicable
102-23 Chair of the highest governance body	a. Whether the chair of the highest governance body is also an executive officer in the organization. b. If the chair is also an executive officer, describe his or her function within the organization's management and the reasons for this arrangement.	Not applicable
102-24 Nominating and selecting the highest governance body	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 how: i. stakeholders (including shareholders) are involved; ii. diversity is considered; iii. independence is considered; iv. expertise and experience relating to economic, environmental, and social topics are considered.	Not applicable
102-25 Conflicts of interest	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: i. Cross-board membership; ii. Cross-shareholding with suppliers and other stakeholders; iii. Existence of controlling shareholder; iv. Related party disclosures.	Not applicable
102-26 Role of highest governance body in setting purpose, values, and strategy	a. Highest governance body's and senior executives' roles in the development, approval, and updating of the organization's purpose, value or mission statements, strategies, policies, and goals related to economic, environmental, and social topics.	P.3,4
102-27 Collective knowledge of highest governance body	a. Measures taken to develop and enhance the highest governance body's collective knowledge of economic, environmental, and social topics.	P.23
102-28 Evaluating the highest governance body's performance	a. Processes for evaluating the highest governance body's performance with respect to governance of economic, environmental, and social topics. b. Whether such evaluation is independent or not, and its frequency. c. Whether such evaluation is a self-assessment. 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, changes in membership and organizational practice.	P.23
102-29 Identifying and managing economic, environmental, and social impacts	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 processes. 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.	P.23
102-30 Effectiveness of risk management processes	a. Highest governance body's role in reviewing the effectiveness of the organization's risk management processes for economic, environmental, and social topics.	P.23
102-31 Review of economic, environmental, and social topics	a. Frequency of the highest governance body's review of economic, environmental, and social topics and their impacts, risks, and opportunities.	P.23
102-32 Highest governance body's role in sustainability reporting	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.23
102-33 Communicating critical concerns	a. Process for communicating critical concerns to the highest governance body.	P.23

# Reference table of Environmental Reporting Guidelines

## Reference table of “GRI Standards” by GRI

### 4. Governance (continued)

(Description Page)

102-34 Nature and total number of critical concerns	a. Total number and nature of critical concerns that were communicated to the highest governance body. b. Mechanism(s) used to address and resolve critical concerns.	Not applicable
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.	P.5
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.21,22
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.1,36
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.1
102-47 List of material topics	a. A list of the material topics identified in the process for defining report content.	P.5-10
102-48 Restatements of information	a. The effect of any restatements of information given in previous reports, and the reasons for such restatements.	Not applicable
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.1
102-51 Date of most recent report	a. If applicable, the date of the most recent previous report.	P.1
102-52 Reporting cycle	a. Reporting cycle.	P.1

## 6. Reporting practice (continued)

(Description Page)

102-53 Contact point for questions regarding the report	a. The contact point for questions regarding the report or its contents.	back cover
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.1
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.41-48
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.5~10
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.25~28
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.9, 10, 23

## II. Topic-specific Standards

## GRI 300: Environmental Standards

## GRI 301: Materials

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.29, 32
301-2 Recycled input materials used	a. Percentage of recycled input materials used to manufacture the organization's primary products and services.	P.34
301-3 Reclaimed products and their packaging materials	a. Percentage of reclaimed products and their packaging materials for each product category. b. How the data for this disclosure have been collected.	P.16, 34

# Reference table of Environmental Reporting Guidelines

## Reference table of “GRI Standards” by GRI

GRI 302: Energy		(Description Page)
302-1 Energy consumption within the organization	<ul style="list-style-type: none"> <li>a. Total fuel consumption within the organization from non-renewable sources, in joules or multiples, and including fuel types used.</li> <li>b. Total fuel consumption within the organization from renewable sources, in joules or multiples, and including fuel types used.</li> <li>c. In joules, watt-hours or multiples, the total:               <ul style="list-style-type: none"> <li>i. electricity consumption</li> <li>ii. heating consumption</li> <li>iii. cooling consumption</li> <li>iv. steam consumption</li> </ul> </li> <li>d. In joules, watt-hours or multiples, the total:               <ul style="list-style-type: none"> <li>i. electricity sold</li> <li>ii. heating sold</li> <li>iii. cooling sold</li> <li>iv. steam sold</li> </ul> </li> <li>e. Total energy consumption within the organization, in joules or multiples.</li> <li>f. Standards, methodologies, assumptions, and/or calculation tools used.</li> <li>g. Source of the conversion factors used.</li> </ul>	P.29,31,35
302-2 Energy consumption outside of the organization	<ul style="list-style-type: none"> <li>a. Energy consumption outside of the organization, in joules or multiples.</li> <li>b. Standards, methodologies, assumptions, and/or calculation tools used.</li> <li>c. Source of the conversion factors used.</li> </ul>	P.29,35
302-3 Energy intensity	<ul style="list-style-type: none"> <li>a. Energy intensity ratio for the organization.</li> <li>b. Organization-specific metric (the denominator) chosen to calculate the ratio.</li> <li>c. Types of energy included in the intensity ratio; whether fuel, electricity, heating, cooling, steam, or all.</li> <li>d. Whether the ratio uses energy consumption within the organization, outside of it, or both.</li> </ul>	P.30,35
302-4 Reduction of energy consumption	<ul style="list-style-type: none"> <li>a. Amount of reductions in energy consumption achieved as a direct result of conservation and efficiency initiatives, in joules or multiples.</li> <li>b. Types of energy included in the reductions; whether fuel, electricity, heating, cooling, steam, or all.</li> <li>c. Basis for calculating reductions in energy consumption, such as base year or baseline, including the rationale for choosing it.</li> <li>d. Standards, methodologies, assumptions, and/or calculation tools used.</li> </ul>	P.13,17,18,35
302-5 Reductions in energy requirements of products and services	<ul style="list-style-type: none"> <li>a. Reductions in energy requirements of sold products and services achieved during the reporting period, in joules or multiples.</li> <li>b. Basis for calculating reductions in energy consumption, such as base year or baseline, including the rationale for choosing it.</li> <li>c. Standards, methodologies, assumptions, and/or calculation tools used.</li> </ul>	P.12,13,14,35

### GRI 303: Water

303-1 Water withdrawal by source	<ul style="list-style-type: none"> <li>a. Total volume of water withdrawn, with a breakdown by the following sources:               <ul style="list-style-type: none"> <li>i. Surface water, including water from wetlands, rivers, lakes, and oceans;</li> <li>ii. Ground water;</li> <li>iii. Rainwater collected directly and stored by the organization;</li> <li>iv. Waste water from another organization;</li> <li>v. Municipal water supplies or other public or private water utilities.</li> </ul> </li> <li>b. Standards, methodologies, and assumptions used.</li> </ul>	P.29,32,35
303-2 Water sources significantly affected by withdrawal of water	<ul style="list-style-type: none"> <li>a. Total number of water sources significantly affected by withdrawal by type:               <ul style="list-style-type: none"> <li>i. Size of the water source;</li> <li>ii. Whether the source is designated as a nationally or internationally protected area;</li> <li>iii. Biodiversity value (such as species diversity and endemism, and total number of protected species);</li> <li>iv. Value or importance of the water source to local communities and indigenous peoples.</li> </ul> </li> <li>b. Standards, methodologies, and assumptions used.</li> </ul>	P.19
303-3 Water recycled and reused	<ul style="list-style-type: none"> <li>a. Total volume of water recycled and reused by the organization.</li> <li>b. Total volume of water recycled and reused as a percentage of the total water withdrawal as specified in Disclosure 303-1.</li> <li>c. Standards, methodologies, and assumptions used.</li> </ul>	Information unavailable

GRI 304: Biodiversity

(Description Page)

<p>304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas</p>	<p>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; iii. Position in relation to the protected area (in the area, adjacent to, or containing portions of the protected area) or the high biodiversity value area outside protected areas; iv. Type of operation (office, manufacturing or production, or extractive); v. Size of operational site in km2 (or another unit, if appropriate); 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).</p>	<p>Not applicable</p>
<p>304-2 Significant impacts of activities, products, and services on biodiversity</p>	<p>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 sources); iii. Introduction of invasive species, pests, and pathogens; iv. Reduction of species; v. Habitat conversion; vi. Changes in ecological processes outside the natural range of variation (such as salinity or changes in groundwater level). b. Significant direct and indirect positive and negative impacts with reference to the following: i. Species affected; ii. Extent of areas impacted; iii. Duration of impacts; iv. Reversibility or irreversibility of the impacts.</p>	<p>Not applicable</p>
<p>304-3 Habitats protected or restored</p>	<p>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. b. Whether partnerships exist with third parties to protect or restore habitat areas distinct from where the 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.</p>	<p>P.20</p>
<p>304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations</p>	<p>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: i. Critically endangered ii. Endangered iii. Vulnerable iv. Near threatened v. Least concern</p>	<p>P.20</p>

GRI 305: Emissions

<p>305-1 Direct (Scope 1) GHG emissions</p>	<p>a. Gross direct (Scope 1) GHG emissions in metric tons of CO2 equivalent. b. Gases included in the calculation; whether CO2, CH4, N2O, HFCs, PFCs, SF6, NF3, or all. c. Biogenic CO2 emissions in metric tons of CO2 equivalent. d. 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. e. Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source. f. Consolidation approach for emissions; whether equity share, financial control, or operational control. g. Standards, methodologies, assumptions, and/or calculation tools used.</p>	<p>P.29,31,35</p>
<p>305-2 Energy indirect (Scope 2) GHG emissions</p>	<p>a. Gross location-based energy indirect (Scope 2) GHG emissions in metric tons of CO2 equivalent. b. If applicable, gross market-based energy indirect (Scope 2) GHG emissions in metric tons of CO2 equivalent. c. If available, the gases included in the calculation; whether CO2, CH4, N2O, HFCs, PFCs, SF6, NF3, or all. d. 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. e. Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source. f. Consolidation approach for emissions; whether equity share, financial control, or operational control. g. Standards, methodologies, assumptions, and/or calculation tools used.</p>	<p>P.29,31,35</p>

# Reference table of Environmental Reporting Guidelines

## Reference table of “GRI Standards” by GRI

### GRI 305: Emissions (continued)

(Description Page)

<p>305-3 Other indirect (Scope 3) GHG emissions</p>	<p>a. Gross other indirect (Scope 3) GHG emissions in metric tons of CO<sub>2</sub> equivalent.  b. If available, the 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. Biogenic CO<sub>2</sub> emissions in metric tons of CO<sub>2</sub> 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>	<p>P.29,31,35</p>
<p>305-4 GHG emissions intensity</p>	<p>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>	<p>P.30,35</p>
<p>305-5 Reduction of GHG emissions</p>	<p>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>	<p>P.29,31,35</p>
<p>305-6 Emissions of ozone-depleting substances (ODS)</p>	<p>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>	<p>P.29,31,35</p>
<p>305-7 Nitrogen oxides (NO<sub>x</sub>), sulfur oxides (SO<sub>x</sub>), and other significant air emissions</p>	<p>a. Significant air emissions, in kilograms or multiples, for each of the following:  i. NO<sub>x</sub>  ii. SO<sub>x</sub>  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>	<p>P.29,32,35</p>

### GRI 306: Effluents and Waste

<p>306-1 Water discharge by quality and destination</p>	<p>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>	<p>P.29,32,35</p>
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## GRI 306: Effluents and Waste (continued)

(Description Page)

306-2 Waste by type and disposal method	<p>a. Total weight of hazardous waste, with a breakdown by the following disposal methods where applicable:</p> <ul style="list-style-type: none"> <li>i. Reuse</li> <li>ii. Recycling</li> <li>iii. Composting</li> <li>iv. Recovery, including energy recovery</li> <li>v. Incineration (mass burn)</li> <li>vi. Deep well injection</li> <li>vii. Landfill</li> <li>viii. On-site storage</li> <li>ix. Other (to be specified by the organization)</li> </ul> <p>b. Total weight of non-hazardous waste, with a breakdown by the following disposal methods where applicable:</p> <ul style="list-style-type: none"> <li>i. Reuse</li> <li>ii. Recycling</li> <li>iii. Composting</li> <li>iv. Recovery, including energy recovery</li> <li>v. Incineration (mass burn)</li> <li>vi. Deep well injection</li> <li>vii. Landfill</li> <li>viii. On-site storage</li> <li>ix. Other (to be specified by the organization)</li> </ul> <p>c. How the waste disposal method has been determined:</p> <ul style="list-style-type: none"> <li>i. Disposed of directly by the organization, or otherwise directly confirmed</li> <li>ii. Information provided by the waste disposal contractor</li> <li>iii. Organizational defaults of the waste disposal contractor</li> </ul>	P.29,33,34
306-3 Significant spills	<p>a. Total number and total volume of recorded significant spills.</p> <p>b. The following additional information for each spill that was reported in the organization's financial statements:</p> <ul style="list-style-type: none"> <li>i. Location of spill;</li> <li>ii. Volume of spill;</li> <li>iii. Material of spill, categorized by: oil spills (soil or water surfaces), fuel spills (soil or water surfaces), spills of wastes (soil or water surfaces), spills of chemicals (mostly soil or water surfaces), and other (to be specified by the organization).</li> </ul> <p>c. Impacts of significant spills.</p>	Not applicable *There is no significant spill.
306-4 Transport of hazardous waste	<p>a. Total weight for each of the following:</p> <ul style="list-style-type: none"> <li>i. Hazardous waste transported</li> <li>ii. Hazardous waste imported</li> <li>iii. Hazardous waste exported</li> <li>iv. Hazardous waste treated</li> </ul> <p>b. Percentage of hazardous waste shipped internationally.</p> <p>c. Standards, methodologies, and assumptions used.</p>	Information unavailable *We have not collected the data requested.
306-5 Water bodies affected by water discharges and/or runoff	<p>a. Water bodies and related habitats that are significantly affected by water discharges and/or runoff, including information on:</p> <ul style="list-style-type: none"> <li>i. the size of the water body and related habitat;</li> <li>ii. whether the water body and related habitat is designated as a nationally or internationally protected area;</li> <li>iii. the biodiversity value, such as total number of protected species.</li> </ul>	Information unavailable

## GRI 307: Environmental Compliance

307-1 Non-compliance with environmental laws and regulations	<p>a. Significant fines and non-monetary sanctions for non-compliance with environmental laws and/or regulations in terms of:</p> <ul style="list-style-type: none"> <li>i. total monetary value of significant fines;</li> <li>ii. total number of non-monetary sanctions;</li> <li>iii. cases brought through dispute resolution mechanisms.</li> </ul> <p>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>	P.24
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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.25
308-2 Negative environmental impacts in the supply chain and actions taken	<p>a. Number of suppliers assessed for environmental impacts.</p> <p>b. Number of suppliers identified as having significant actual and potential negative environmental impacts.</p> <p>c. Significant actual and potential negative environmental impacts identified in the supply chain.</p> <p>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.</p> <p>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>	P.25

# Reference table of Environmental Reporting Guidelines

## Reference table of “Environmental Reporting Guidelines 2012” by Ministry of the Environment, Government of Japan

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	(3) Reporting policies	P.1
	(4) Policies for selecting a type of the report	P.1
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	(2) Overview of Key Performance Indicators (KPI) trends	P.30~34
	(3) Summary of activities to address an individual environmental issue	P.9,10
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### Information and Indicators on how Environmentally Focused Management including Environmental Management is working

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	(2) Material issues, visions and business strategies	P.7~10
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	(3) Compliance with environmental regulations	P.23~28
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### Information and Indicators on Environmental Impacts of Business Activities and Environmental Initiatives Undertaken to Mitigate them

1. Resources used and energy consumption	(1) Total energy consumption and initiatives to reduce it	P.17,18,29,31
	(2) Total materials used and initiatives to reduce them	P.14,29,32
	(3) Water withdrawal and initiatives to reduce it	P.19,29,32
2. Recycled input resources (within the organizational boundary)		P.19
3. Products and services and environmental impacts arising from production	(1) Total products manufactured or goods sold	P.29
	(2) Greenhouse gas emissions and initiatives to reduce them	P.13,17,18,29,31
	(3) Total water discharge and initiatives to reduce it	P.19,27,29,32
	(4) Effluents and nuisance, and initiatives to reduce them	P.26,29,32
	(5) Release and transfer of chemical substances and initiatives to reduce them	P.20,25,27,29,34
	(6) Total weight of waste generated, waste disposed by land filling or incineration and initiatives to reduce them	P.14,19,29,33
	(7) Significant spills of hazardous substances and measures taken for preventing them	P.27
4. Conservation of biological diversity and the sustainable use of its components		P.20~22

### Information and Indicators on the economic and Social Context of Environmentally Focused Management

1. Economic Contexts of environmentally focused management	(1) Economic contexts in an enterprise	P.34
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2. Social Contexts of Environmentally focused management		P.21,22,50

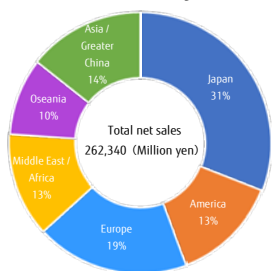
### Miscellaneous Contents to be disclosed

1. Events after the reporting period	(1) Events after the reporting period	N/A
	(2) Extraordinary events	N/A
2. Assurance and other measures to enhance reliability of environmental information		None

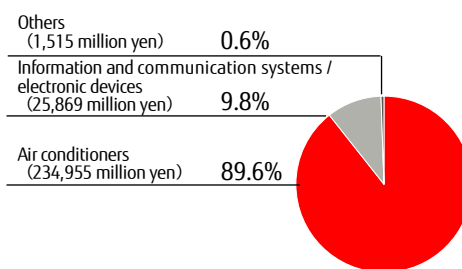
# Overview of Fujitsu General Group (As of March 31, 2018)

<b>Name</b>	FUJITSU GENERAL LIMITED	<b>Capital</b>	18,089 million yen
<b>Head office location</b>	3-3-17, Suenaga, Takatsu, Kawasaki, Kanagawa 213-8502, Japan	<b>Employees</b>	7,392 (Consolidated) : 4,916(Male) / 2,476(Female)
<b>Company representative</b>	Etsuro Saito, President and Representative Director		1,609 (Unconsolidated) : 1,425(Male) / 184(Female)
<b>Established</b>	January 15, 1936	<b>Directors</b>	13 (including 4 External Directors)
<b>Main business</b>	Development, production, sales and service of products and parts for both of air conditioners and information and communication system/electronic devices fields.	<b>Consolidated</b>	29 companies
- Main products, systems, services -		<b>Equity-method affiliates</b>	3 companies
■ Air conditioners	Room air conditioners, multi air conditioning system for buildings, heat-pump type hot water heating system, air conditioning-related products	<b>Net sales</b>	262,340million yen (Consolidated) 210,151million yen (Unconsolidated)
■ Information and communication systems / electronic	Fire-fighting system, disaster prevention system, POS system, video system, in-vehicle camera, electronic parts, unit products	<b>Listed stock exchange</b>	Tokyo Stock Exchange (1st division)
■ Others	Recycling of electric home appliances, radio interference measurements and consulting		

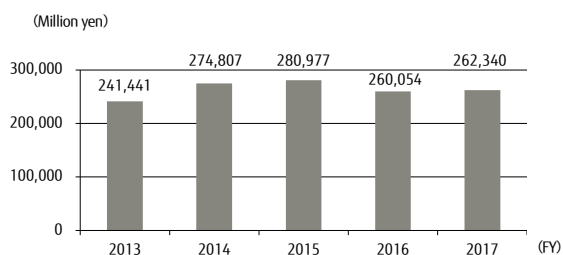
## ■ Sales by area in FY2017



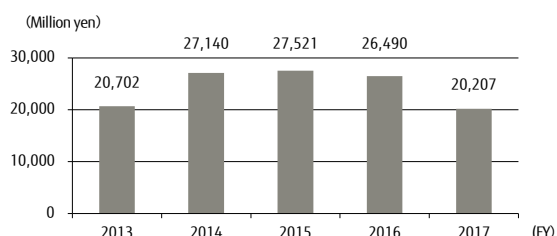
## ■ Sales by business segment in FY2017



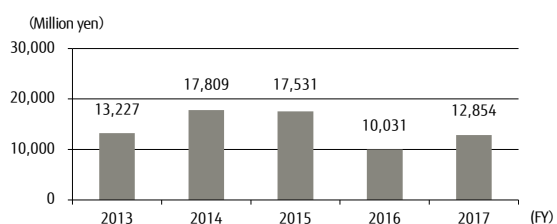
## ■ Net sales



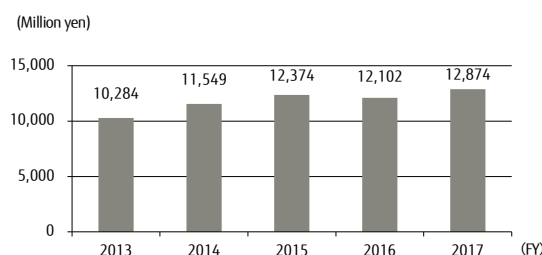
## ■ Operating income



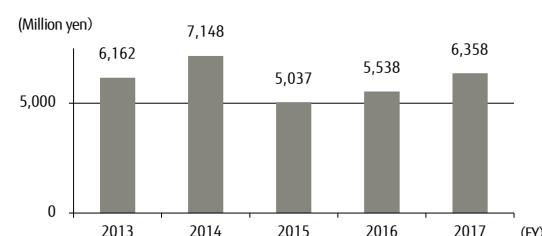
## ■ Net income



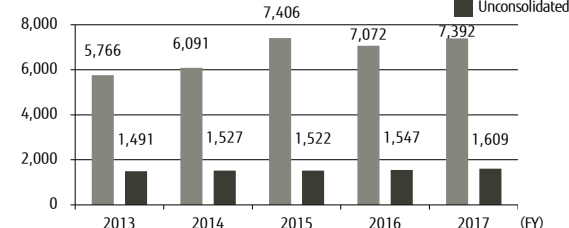
## ■ Research & Development cost



## ■ Capital investment



## ■ Number of employees



# FUJITSU GENERAL LIMITED

<Contact Information for Inquiries>

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

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