

Innovation & Globalization
Providing a Brand New Tomorrow to Everyone on Earth

A low-angle photograph of a dense forest of tall, thin trees with vibrant green foliage, looking up towards the sky. The trees are closely packed, and the sunlight filters through the leaves, creating a dappled light effect.

FUJITSU GENERAL GROUP
ENVIRONMENTAL REPORT
2017

FUJITSU GENERAL LIMITED

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(Photo of front cover)

Ikuta Ryokuchi Park

(Kawasaki City, Kanagawa Prefecture: about 6km
northwest of Kawasaki Head Office)



Ikuta Ryokuchi Park is an urban planning green area decided on city planning in 1941, and has a lush natural environment representing the metropolitan area. In the Ikuta green area, there are valuable natural resources such as woodlands mainly with *Quercus acutissima* and *Quercus serrata*, wetlands and valley springs in the valley part, and beautiful scenery integrated with old satoyama environment, surrounding agricultural land, forest, etc. is taken over to now. Especially, in the central area, valuable creatures that can be seen in limited area in the city such as *Luciola cruciata* and *Lefua echigonia* are inhabiting.

Top Message

We will contribute to the sustainable development of society by providing a brand new tomorrow to everyone on earth with "INNOVATION & GLOBALIZATION" as a banner



Trend in the international society

In 2016, the Paris Agreement came into effect showing the global direction toward a low-carbon society. With such a global trend as background, it is predicted that we continue to be required to comply with the introduction of energy saving regulations in various countries and respond to the stricter standards.

In addition, regarding the business environment surrounding us, the industry and social structures have changed dramatically due to the progress of new technologies such as IoT, AI, robotics and life science, and now, it can be said that we have entered the unpredictable "Revolution Era" without compass when the existing business models are no more valid.

Challenge for constant management innovation

Air conditioning equipment, the main product of Fujitsu General, accounts for a large percentage of energy consumption in offices and homes. 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 are constantly developing together with progress and innovation of technology. In the future, too, without pursuing only short-term results, 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.

We have expanded our air conditioner business into overseas markets since 1971 ahead of other companies and at present, marking the 80th anniversary of the foundation, are selling products to about 110 countries around the world, and the overseas sales account for 70% of the total sales of the company. We believe that we can contribute to the reduction

of environmental burden by offering high value-added products excelling in high energy saving performance to customers around the world. With our management slogan "INNOVATION & GLOBALIZATION" as a banner, we will contribute to the sustainable development of society through business activities while enhancing 3 powers of "technological power, realization power and human power" and challenging constant management innovation.

Promotion of environmental management

The Fujitsu General Group started the "Environmental Action Plan Stage VIII" in April, 2016. In the new Environmental Action Plan, we will promote the environmental management with four major challenges of activities of "Measures against global warming", "Resource circulation", "Chemical substance management" and "Contribution to environmental society". Also, we set up an "AKASURI Campaign" in which all divisions in the company share the issues and work on the reduction of environmental burden from the viewpoint of total optimization and are promoting the activities to contribute to the reduction of environmental burden by thorough waste reduction.

Fujitsu General Group will continue to strive to create new value and leave rich nature for the next generation.

Etsuro Saito
President and Representative Director
Fujitsu General Limited

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.

Corporate Vision	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.	Managements Vision	<ul style="list-style-type: none"> · The Fujitsu General Group enlarges its business to worldwide · The Fujitsu General Group coexists with the world's people in harmony · The Fujitsu General Group operates its business with open communication 		
Corporate Values	What we strive for		Principles		
	Society and Environment	In all our actions, we save the earth and contribute to society.		Global Citizenship	We act as good global citizens, attuned to the needs of society and the environment.
	Profit and Growth	We meet the expectations of customers, employees and shareholders		Customer-Centric Perspective	We think from the customer's perspective and act with sincerity.
	Shareholders and Investors	We continuously increase our corporate value.		Firsthand Understanding	We act based on a firsthand understanding of the actual situation.
	Global Perspective	We think and act from a global perspective.		Spirit of Challenge	We set highest goals and strive to achieve them.
	What we value			Speed and Agility	We act flexibly and promptly to achieve our objectives.
	Employees	We respect diversity and support individual growth.		Teamwork	We share common objectives across organizations, work as a team and act as responsible members of the team.
	Customers	We will be their valued and trusted partner.		Code of Conduct	■ We respect human rights.
	Business Partners	We build mutually beneficial relationships.			■ We comply with all laws and regulations.
	Technology	We create new value through innovation.			■ We act with fairness in our business dealings.
Quality	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.

Mid-Term Environmental Action Plan

Fujitsu General Group established in 2016 the "Mid-Term Environmental Action Plan" as a concrete plan to realize "Fujitsu General Group Environmental Policy with FY2030 as the final target year. With all the employees sharing the goals to be achieved in the medium term, we will aim to realize both reduction of environmental burden and enhancement of corporate value by working on "Strengthening of product power" and "Enhancement of management efficiency".

1. Activities for the customers and society

28% reduction of CO₂ 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 CO₂ 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 CO₂ 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% CO₂ emission in the consolidated sales basic unit by FY2030 (compared to FY2013).

Environmental Action Plan Stage VIII (FY 2016~2018)

As the 3-year activities toward the achievement of "Mid-term Environmental Plan", we established the "Environmental Action Plan Stage VIII" in April, 2016 and are promoting the environmental management. In the "Environmental Action Plan Stage VIII", we set four major challenges of activities of "Measures against global warming", "Resource circulation", "Chemical substance management" and "Contribution to environmental society" and are promoting the environmental activities with both reduction of environmental burden and enhancement of corporate value as a banner.

Measures against global warming

As an effort to reduce CO₂ emissions at the time of product use, the design department pursued energy saving performance in the product development and the sales department promoted the activities on the theme of the sales expansion of air conditioners with high energy saving performance. We will continue to work on achieving the mid-term environmental plan.

In addition, in order to improve energy consumption efficiency, we promoted the activities focusing on reducing waste taking the environment into consideration such as creating a system for efficient operation of laboratories with high power consumption and switching the electricity used at the head office and Hamamatsu Business Office to new electricity with less environmental burden when generating power.

Resource circulation

As an effort to improve 3R (Reduce, Reuse and Recycle) technology, Fuji Eco Cycle Co., Ltd., which carries out the recycling of household appliances, started the activity to recycle the refrigerant recovered from air conditioners and reuse it as a refrigerant for filling at the time of new installation and maintenance in the domestic market.

Also, in order to streamline resource utilization, we promoted the activities to raise the ratio of recycling process

conducted by our company setting the theme of improving the separation and selection capability of disposed household electrical appliances.

Chemical substance management

In order to reduce emissions of specified chemical substances, the design and production departments switched the rust inhibitors applied to the products in the production process of motors to the alternatives with low organic solvent (toluene, xylene) content.

Also, in order to promote procurement of materials with less environmental burden, the procurement department is conducting guidance and information sharing which strengthens the chemical substance management system at suppliers.

Contribution to environmental society

As to the efforts at our business offices, we expanded the scope of activities by developing company-wide activities leading to coexistence with local communities such as beautification activities around the premises and eco-driving practices.

In our efforts for suppliers, we also supported their efforts to conserve biodiversity and conducted information sharing.

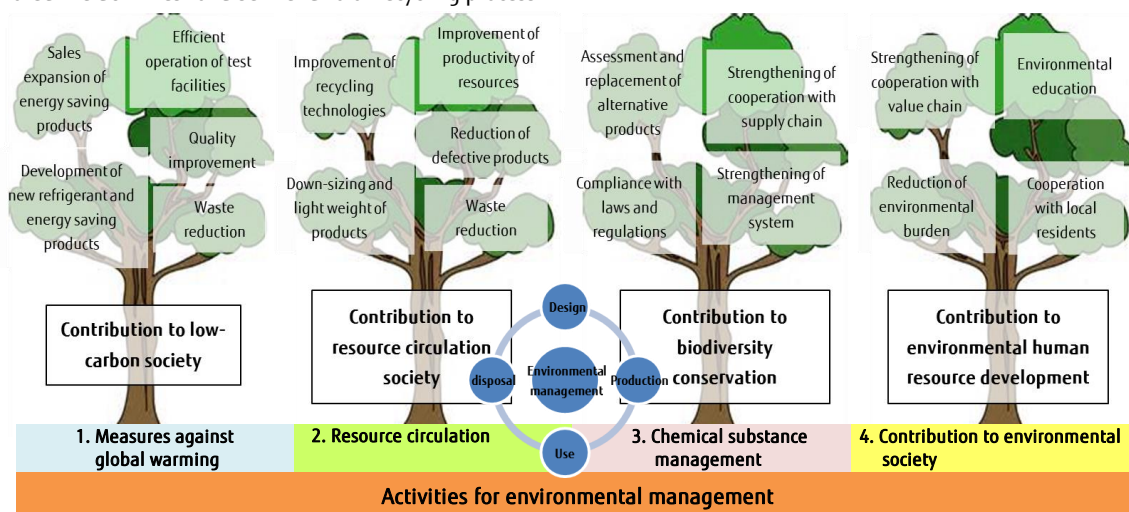


Image on the activities of Fujitsu General Group for environmental management

(Note 1) Based on the power consumption of the room air conditioners for domestic market in FY2013, the reduction ratio was assumed from the sales volume and degree of improvement in power consumption in that year.

Department	Theme	FY2018 target (Compared to FY2013)	FY2016 results	Related page
1. Measures against global warming				
1) Increase of contribution volume of CO₂ reduction				P.14
Design/Sales	Reduction of CO ₂ emission when using product	More than 8% reduction	1.3% reduction	P.15
2) Improvement of energy consumption efficiency				P.8
Design	Reduction of electricity of assessment test facility	More than 10% reduction	5.2% reduction	
Production	Reduction of electricity usage	More than 6% reduction in production basic unit	Domestic: 6.9% reduction Overseas: 2.9% increase	
	Reduction of gasoline and light oil usage	More than 6% reduction in production basic unit	Domestic: 13.0% reduction Overseas: 69.0% reduction	
	Reduction of LPG usage	More than 6% reduction in production basic unit	Domestic: 46.2% reduction Overseas: 15.6% increase	
Sales/Logistics	Improvement of product transportation efficiency	More than 10% reduction per sales quantity	0.8% reduction	
2. Resource circulation				
1) Improvement of 3R technology				P.9 P.10
Design/Service	Increase of use of recycling materials ① Closed recycling ② Use of recycled fluorocarbons in service	① More than 100 tons/year ② 100%	① 111 tons ② 100% (East area)	
Recycling	Improvement of decomposition/selection capability (Recycling rate) ① Internal production rate of refrigerator compressor decomposition ② Metal recovery rate	① More than 86% ② More than 80%	① 90% ② 93%	
	Increase of reuse (Recycling of recovered fluorocarbons)	More than 98%	99%	
2) Streamlining of resource usage				P.9
All departments	Reduction of water usage	More than 6% reduction in each basic unit index	<Factories> Domestic: 9.7% reduction Overseas: 15.0% increase <Offices> 6.8% increase	
		Reduction of disposed articles ① Reduction of disposal volume ② Reduction of total disposal article generation	① Recycling rate more than 99% ② More than 20% reduction in production basic unit	① Domestic : 91.3% Overseas : 96.1% ② Domestic : 6.7% reduction Overseas : 7.9% increase
3. Chemical substance management				
1) Reduction of specified chemical substance emission				P.11
Design/Production	Reduction of emission of specified chemical substances ^(Note 1) used at production	Less than 30% (Less than 395kg)	61.6% (810kg)	
2) Promotion of parts/materials with less environmental burden				P.15
Procurement	EMS ^(Note 2) establishment at all overseas suppliers (Ratio of suppliers of higher than EMS establishment Level II)	Higher than 90% ① Confirmation of the level of supplier ② Individual guidance	① Completed ② Started guidance	
		Strengthening of chemical substance management system in supply chain (Rate of suppliers where the management is implemented properly)	100%	100%
4. Contribution to environmental society				
1) Promotion of activities at business offices				P.11 P.12
All departments	Implementation of contribution activities rooted in local community	Target setting for each business office ① Beautification activity around business office (All business offices) ② Promotion of use of rain water (All business offices) ③ Protection of rare plants (Head office)	① Implemented ② Checking present situation ③ Checking the cooperation with local government	
2) Promotion of activities at suppliers				P.12
Procurement	Promotion of activities for bio diversity conservation at suppliers (Based on Fujitsu Group Green Procurement Standard)	Level-up of activities at suppliers ① Statement of activities for bio diversity conservation ② Actual results of substantial activities	① Checking present situation of suppliers ② Studying support measures for activities	

(Note 1) Specified chemical substance: Two substances, xylene and toluene, identified as chemical substance to be specified for reduction as a result of assessment of hazard and usage by Fujitsu General Group.

(Note 2) EMS: Environmental Management System

Company-wide AKASURI Campaign

In parallel with the "Environmental Action Plan Stage VIII", we started the "Company-wide AKASURI Campaign" as a company-wide activity to reduce environmental burden and establish a foundation for high profitability. We aim to offer comfortable and safe products and services which do not let our customers consume wasteful electricity and are reviewing the working style in our own business activities and promoting environmental management to enhance energy and resource utilization efficiency through "AKASURI" to reduce various wastes in our business activities crossing the boundaries of organization.

Reducing wastes by design

With the aim of creating the product which can contribute to the sustainable development of society, we are working to enhance our technological capabilities to realize improvement in both energy saving performance and comfort, and are promoting the reduction of wastes focusing on the Improvement of design quality as it is said that "many quality problems are caused by design fault". We will further promote the environmentally conscious design such as resource saving design.

Cost reduction/Promotion of VE

In the strategic procurement of key components, we will further work on the cooperation with business partners or the development of sound proposal environment.

In addition, by deepening the collaboration between business partners and design and procurement departments, we will expand the activities such as cost reduction in the early stage of development, ease of making in the production process, reduction of environmental burden during transportation through local procurement of parts and promote the green procurement considering resource saving.

Strengthening of production technologies

We will continuously work on the manpower saving by the elimination of wastes in the production process, automation and improvement of business process and strengthen production technologies such as internal production of production equipment and jigs. Increasing the efficiency of energy and raw material usage and reducing wastes will directly lead to the reduction in environmental burden.

Reducing logistics cost thoroughly

Reducing logistics cost will trigger a review of transportation of things such as modal shift and joint delivery. By reviewing transportation method, we can suppress the wasteful consumption of energy leading to the reduction of environmental burden. We will review procurement logistics

and sales logistics from scratch including the improvement of system and aim at thorough reduction.

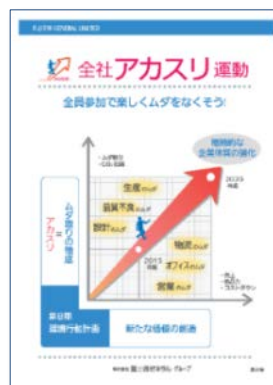
Strengthening maintenance service

In order to strengthen the maintenance service, we are promoting the improvement by sharing the problems among service, design and procurement departments crossing the boundaries of organization. By this activity, we will promote the improvement of efficiency of maintenance service through the strengthening of service system and enhancement of repair skills.

AKASURI in the office

In the indirect departments, we will eliminate the waste of waiting time for approval and the waste of forwarding time as well as promoting the paperless activity by digitizing approval procedures. Furthermore, we are thoroughly reducing the wastes hidden in work by habituating the behaviors conscious of environmental management such as recommending stand-up meetings and activity to improve efficiency of meetings and enhance the contents as well as the efforts to unify the purchase and management of office supplies within the company to eliminate the waste of duplicate purchase between the departments.

All departments and employees will detect the wastes of work with the consciousness of persons concerned and create the corporate culture to always improve through the promotion of AKASURI Campaign.



Promotion poster



Logo mark

Activities in Business Operations

Measures against global warming

Activities at production bases

Reduction of LPG usage in production process

LPG is used in many processes of air conditioners such as painting, drying of heat exchanger, brazing process of copper piping. Then, we verified the past method to use LPG and took thorough efforts to eliminate wastes.

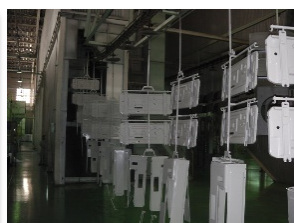
Fujitsu General (Shanghai) Co., Ltd. carried out the measures to reduce the consumption of LPG by stopping the operation of boiler and drying furnace in the assembly process of heat exchangers during breaks.

Fujitsu General (Thailand) Co., Ltd. adopted a pretreatment agent which can be painted at room temperature in the painting process and reduced the use of LPG without using boilers by eliminating the heating process.

Also, FGA (Thailand) Co., Ltd. saved fuel by updating aluminum die-cast melting and holding furnace from LPG only type to hybrid type which can be commonly used with electricity. By these efforts, we reduced the amount of LPG used in FG Group by about 315 tons per year.



Drying furnace of Fujitsu General (Shanghai) Co., Ltd.



Painting process of Fujitsu General (Thailand) Co., Ltd.



Aluminum die-cast melting and holding furnace of FGA (Thailand) Co., Ltd.

Reduction of power consumption by updating to energy saving air conditioners

Fujitsu General Group is working on the reduction of power consumption by positively adopting air conditioners with high energy saving performance developed by our company.

Fujitsu General Central Air-Conditioner (WUXI) Co., Ltd. reduced the number of indoor units by updating multi air conditioning system for buildings (VRF) and reduced the power consumption by about 60MWh per year which is equivalent to 41% of the pre-renewal power.

Also, Fujitsu General (Thailand) Co., Ltd. updated 35 single air conditioners to VRF and reduced approximately 41MWh per year which is equivalent to 13% of the power before renewal.

Activities at Kawasaki Head Office

Reduction of electricity by efficient operation of laboratory

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. Then, we analyzed the use conditions of the laboratory and reviewed the operation rule such as optimization of the preliminary operation time in the test preparation work and system to operate the timer on holidays and at nighttime. Furthermore, we implemented the measures to save electricity by changing the harmony equipment in the test room to room air conditioners with high energy saving performance.

As a result, we reduced approximately 640MWh per year which is equivalent to 5.2% of the electricity used for the laboratory in FY2013.



Air conditioner evaluation test room at the head office

Resource circulation

Water resources

Water conservation by water leakage prevention

Fujitsu General Group is working on the reduction of water usage through thorough inspection of the facilities and by making employees conscious.

Fujitsu General (Thailand) Co., Ltd. updated the water supply main pipe from steel pipe to polyethylene pipe at the time of toilet refurbishment to prevent further water leakage.

Also, at the manufacturing group companies where large number of employees are working, the water saving is called for through education and poster notice on the bulletin board to maintain the water saving awareness of workers.



Before updating
(inside dotted line: steel pipe)



After updating
(inside dotted line: polyethylene pipe)

Maintenance of main water supply pipe of Fujitsu General (Thailand)



Water saving poster at Fujitsu General (Thailand)

Activity to reduce wastes

The thorough sorting of the wastes is practiced at group companies of each country and area and such item as the used fluorescent tube of which the environmental pollution by mercury is concerned is disposed appropriately.



Waste sorting sites in group companies
(Left: Shed for fluorescent lamps at FUJITSU GENERAL (SHANGHAI),
Right: Shed for wastes at FGA (THAILAND))

Efforts for reuse

Regeneration of recovered Fluorocarbons

Fuji Eco Cycle Co., Ltd. opened a fluorocarbons recycling factory of Chukyo Freon Co., Ltd. in Hamamatsu Business Office in May, 2016 in order to recycle the fluorocarbons recovered from air conditioners and refrigerators as reusable fluorocarbons. This factory regenerates fluorocarbons by removing the impurities using a fluorocarbons regeneration device from the refrigerant mainly recovered by Fuji Eco Cycle.

Also, the fluorocarbons after regeneration is analyzed by analyzer for the quality assurance to ensure the quality equal to unused fluorocarbons.

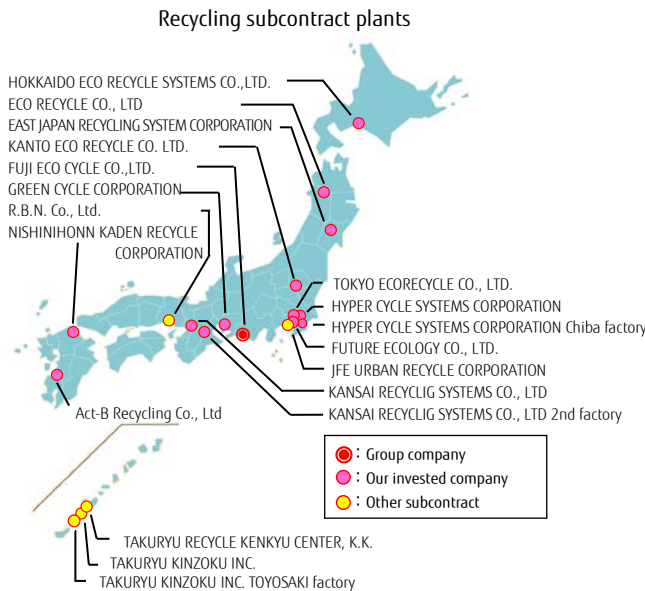
The regenerated fluorocarbons has been delivered mainly to Chukyo and Tokai areas from June, 2016 for the service of air conditioners in Japan.



Fluorocarbons regeneration device in Hamamatsu Business Office

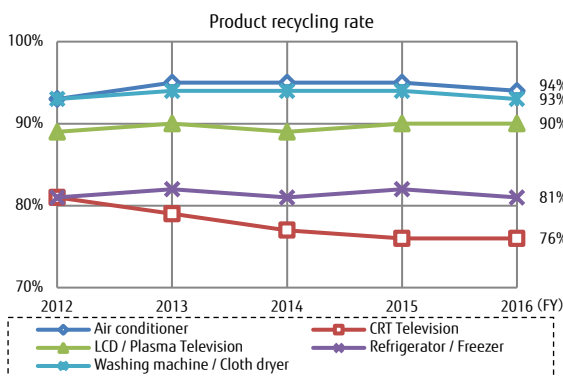
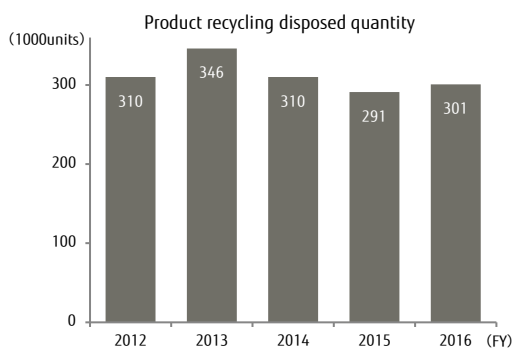
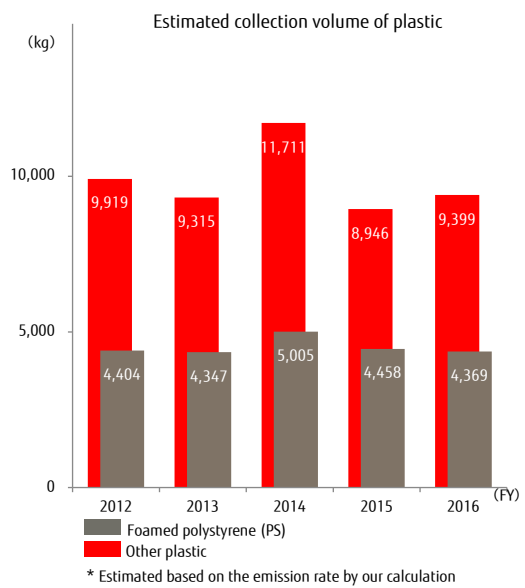
Electric Home Appliance Recycling (Japan)

Fujitsu General established about 344 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.



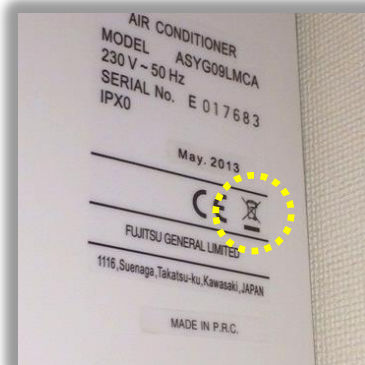
Packaging Recycling (Japan)

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 FY2016 is 13,768 kg. Fujitsu General will continue to reduce the packaging of products in the future.



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.

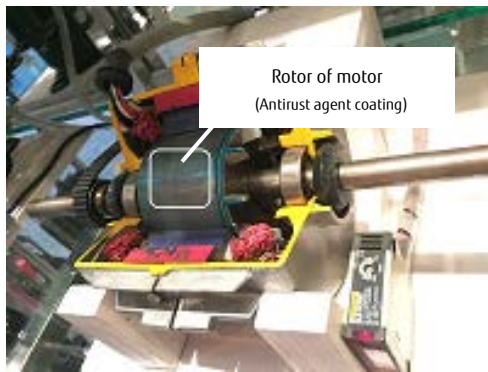


Indication of mark according to the "WEEE Directive" of EU (Products for EU area)

Chemical substance management /Contribution to environmental society

Activity to reduce chemical substance

Currently, the motors used for air conditioners are manufactured by Aomori Business Office and group companies F.G.L.S. Electric Co., Ltd. and FGA (Thailand) Co., Ltd. In the production process of motors, antirust agent which contains organic solvent such as Xylene and Toluene is used and so, the replacement to the agent with low content rate of organic solvent is under examination. Also, Fujitsu General Electronics Limited is working on the reduction of emissions with supply chain by asking parts suppliers to replace Toluene.



Cut sample of motor

Conservation of biodiversity

Expansion of green area in the premises by planting trees

As the trees in the industrial estate are limited to street trees and green areas in the premises, Fujitsu General (Thailand) Co., Ltd. is expanding the living environment of creature and also planting trees in the premises and widening the green spaces so as to be used as a place for recreation for employees.



Planting of trees at Fujitsu General (Thailand)

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. At present, the natural breeding of released *Tanakia lanceolata* (Shizuoka Prefecture RDB endangered IA) has been confirmed and endemic plants and animals are inhabiting and growing such as endemic species of *Broussonetia Kazinoki*, *Prunella vulgaris*. We will contribute to the establishment of ecosystem network with surrounding area of the office and the realization of preservation of rare creature while continuing the maintenance.



External view of the biotope of Hamamatsu Business Office



Animals and plants inhabiting and growing in the biotope
(Left: *Tanakia lanceolata*, Right: *Broussonetia Kazinoki*)

Participation in social activities concerning environment

Participation in volunteer activities of Fujitsu Limited

Fujitsu Limited is conducting a volunteer activity jointly with Kawasaki City to prevent the forest devastation in the special green space conservation area which is a precious nature remaining in the city suburbs. The employees of Fujitsu General are also participating. In FY2016, we cooperated to create a sunny environment in the undergrowth by cutting young trees of evergreen trees.



Green space conservation activity in Kawasaki City

Weeding and cleaning activities for community

Fujitsu General Group regularly carries out weeding and cleaning activities around the offices. At the head office, cleaning of the walkway from SAKADO railway crossing adjacent to the office to the motorcycle garage of the head office and the sideway from JR MUSASHI MIZONOKUCH Station to MUSASHI SHINJO Station is conducted. Also, Fujitsu Electronics Limited is conducting cleaning activity around JR ICHINOSEKI Station and weeding work around the office



Weeding and cleaning activities at each business office
(Upper left: Head office, Upper right: Aomori Business Office, Lower: FGEL)

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.

Fujitsu General New Zealand Ltd., a sales subsidiary, is positively supporting various projects in the local community setting the policy of the "Business to contribute to the local community" and in FY2016, donated air conditioners in support of a housing support activity for people living in an inferior living environment by NGO group Habitat For Humanity^(Note 1).

Also, 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.



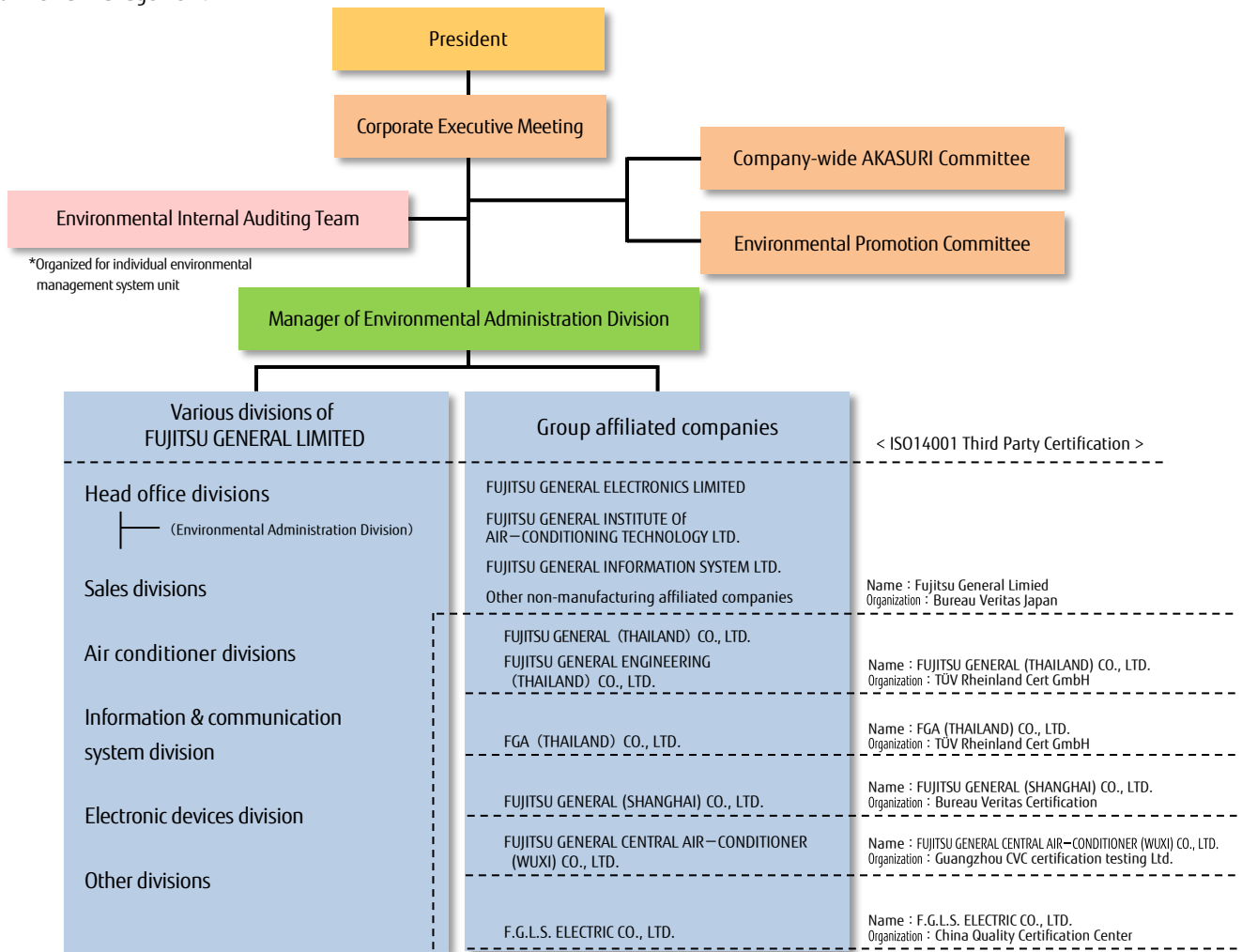
Plant tour meeting of Fuji Eco Cycle

(Note 1): International NGO group working in more than 70 countries in the world

Environmental Management Governance Framework

Framework of Environmental Management

Fujitsu General Group assumes the environmental management system based on ISO14001 a base of the foundation of environmental management. Within the group, the sales companies in Japan and abroad acquired the integrated certification of the third party certification. On the other hand, the overseas manufacturing companies acquired the third party certification by each company (factory) individually. Also, we established the Company-wide AKASURI Committee and Environmental Promotion Committee to promote environmental management.



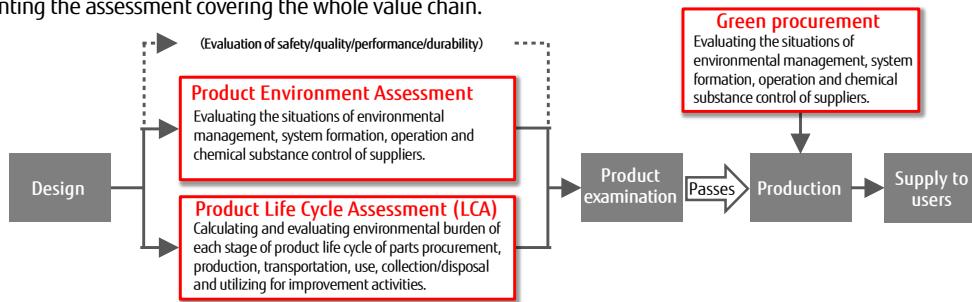
History of Environmental Activities

- 1978 : Environmental Pollution Prevention Committee established.
- 1986 : Green land garden built on the warehouse remained site.
- 1991 : Environmental Protection Promoting Committee established.
- 1993 : "Fujitsu General Commitment to the Environment" established.
Environmental Action Plan started.
- 1995 : Operation of Product Environmental Assessment started.
- 1998 : Acquisition of ISO14001 third party certification started.
The measures for electric home appliance recycling started.
- 1999 : "Environmental Report" published.
- 2000 : Environmental Administration Division established.
Operating company of electric home appliance recycling established in joint venture.
Operation of "Environmental accounting" started.
- 2003 : "Fujitsu General Group Environmental Policy" established.
- 2012 : "Fujitsu General Group Environmental Policy" revised.
"Fujitsu General Group Biodiversity Action Principles" established.
"Biotope" established at Hamamatsu Business Office.
- 2013 : Acquired ISO14001 third party certification for all business areas of group.

Environmental Assessment of Products

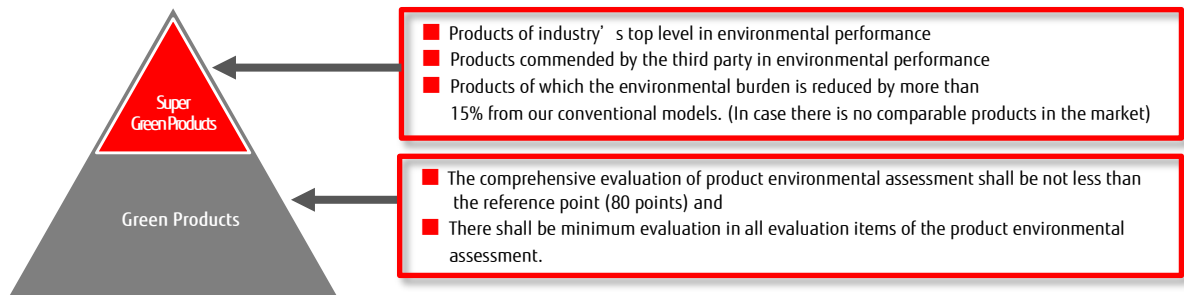
Various Assessment Systems regarding Product Environment

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

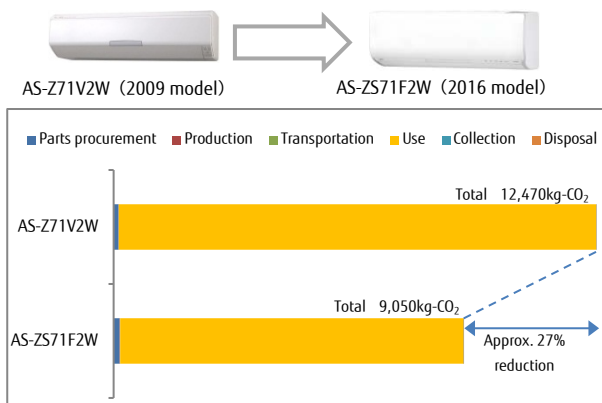
"Green Products" are the products of which overall assessment score is higher than standard point (80 points) and there is no lowest point in all assessment items. And among them, the products which have the top level ^(Note1) of environmental performance are designated as "Super Green Products".



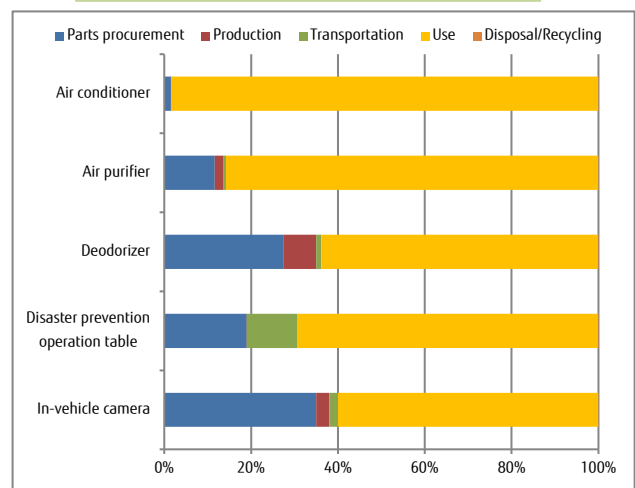
Product Life Cycle Assessment (LCA)

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

Calculation example of environmental burden in product lifecycle
(Air conditioner "nocria" Z-series of cooling capacity 7.1kW type)



Percentage of CO₂ emission in product life cycle ^(Note 2)



(Note 1): In case of the first place, first place tie, or a close second

(Note 2): Ratio of each life cycle stage of representative products of each product group when CO₂ emission of entire life cycle is set to be 100.

Introduction of development example of the super green product

Room air conditioner “nocria®” GN series
(AS-GN22/25G-W, AS-GN28/40/56G2W)

[Reason for certification] The product has the best environmental performance in the industry



“nocria” GN series enabled the heating operation even at the outside temperature of -25°C by utilizing the technology corresponding to cold area cultivated in overseas market in addition to realizing warm and comfortable air conditioning with high heating capacity.

Improvement of energy saving performance

We realized high energy saving performance and heating capacity by installing interleave PAM inverter that has expanded the output range of the maximum voltage and minimum voltage of compressor and adopting the newly designed high efficiency compressor.



High efficiency compressor



Interleave PAM inverter

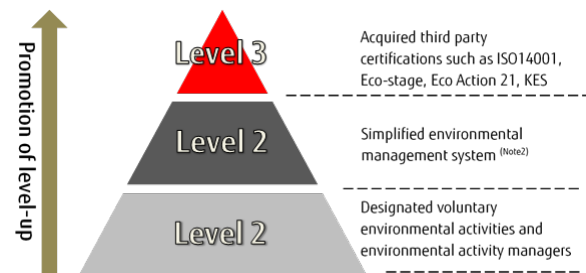
Adoption of new refrigerant R32

The refrigerant R32 which has global warming potential of about $\frac{1}{3}$ ^(Note 1) compared with conventional refrigerant (R410A) for air conditioner is adopted. In order to realize sustainable comfortable life, we are pursuing the consideration for global warming as well as energy saving performance and comfort.

Green procurement

Environment burden in manufacturing process of parts / software

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.



Management of chemical substance contained in parts

Fujitsu General Group is implementing the survey of the contained chemical substance by AIS ^(Note 3)/MSDS Plus ^(Note 4) provided by JAMP ^(Note 5) and at the same time, asking suppliers to establish CMS ^(Note 6) based on the “Product contained chemical substance guideline” .

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.

(Note 1) Source: “IPCC 4th Assessment Report” Global Warming Potential (GWP). Comparison of Global Warming Potential 2090 (R410A) and 675 (R32).

(Note 2) Simplified environmental management system: Suppliers’ own environmental management system.

(Note 3) JAMP: (Joint Article Management Promotion-consortium)

(Note 4) AIS: (Article Information Sheet) Transmission sheet of chemical substance contained in molded articles.

(Note 5) MSDS Plus: (Material Safety Data Sheet Plus) Transmission sheet of chemical substance contained in chemical substance/compounding agent.

(Note 6) CMS: Chemical substance Management System

Antipollution measures/ Emergency response drill

Activities for pollution prevention

Noise / Vibration

Both noise and vibration levels at the manufacturing and recycling group companies are largely below the regulation level.

Also, there was no introduction of facility / instrument in FY2016 which is increasing factor of noise and vibration.

Measures against air pollution

Regular checks are carried out at business offices and factories which have smoke generation facility. Also, regular inspections of duct for local exhaust are conducted and filter exchange is made as necessary to prevent air pollution.



Duct inspection at Fujitsu General Central Air-conditioner (WUXI) Co., Ltd.

Emergency response drill

Measures against fire / disaster prevention

Each company of Fujitsu General Group is verifying the risk of environmental pollution in case of fire and implementing the training periodically. Especially, in the group companies manufacturing air conditioners where many plastic parts and materials are stored and the discharge of harmful gas due to combustion by fire is concerned, hands-on training focusing the experience is conducted in cooperation with fire-fighting organization in the area where the factory resides.



Fire-fighting drill at Fujitsu General Central Air-conditioner (WUXI) Co.,

Measures for oil leakage

The business offices and group companies storing boiler fuel and oil such as heavy oil for power generation in an emergency are conducting accident handling training periodically assuming the leakage accident.



Heavy oil leakage accident response drill at head office

Prevention of pollution of chemical substance

To prevent pollution by chemical substance, the procedure to prevent the diffusion at the time of leakage is checked periodically.

Also, the equipment using polychlorinated biphenyl which was used in the factory premises in the past and the parts containing polychlorinated biphenyl used for the collected products are stored properly in the special storage warehouse of the head office until destruction treatment is carried out.



Training to handle lubricating oil leakage accident at Aomori Business Office



Inside the polychlorinated biphenyl storage warehouse at head office

Measures against large-scale disaster

As Hamamatsu Business Office is situated in the seismic center area (estimated maximum seismic intensity 7) of Nankai Trough giant earthquake and visited by many people, the measures at the time of suffering is an important issue. Therefore, the training supposing the outbreak of large-scale disaster is conducted with the participation of all people working in the office.



Disaster evacuation drill at Hamamatsu Business Office

Environmental Auditing / Environmental Education

Environmental Auditing

Internal environmental auditing

For the purpose of the assessment management of environmental management risk by the top management, the Internal environmental auditing is implemented for every third party certification range of ISO14001 (group integrated certification and 5 individual certifications). Also, at the manufacturing business office (1 place), manufacturing group company (1 company) and recycling group company (1 company), each individual internal environmental auditing is established, and the environmental internal auditing is implemented for each business office and group company.

Furthermore, to implement high quality auditing, the maintenance and enhancement of ability of environmental internal auditors are made through the training of auditors.

Result of FY2016 internal environmental auditing

Category	Number of indications/ improvements
Incompatibility concerning deviation risk of environmental laws	13
Incompatibility concerning other environmental risk	11
Recommendation of implementation of improvement	67

External environmental auditing

External auditing by ISO14001 examination company is conducted periodically as a whole group area to keep the fairness of environmental management system.

Result of FY2016 external environmental auditing

Category	Number of indications/ improvements
Incompatibility concerning deviation risk of environmental laws	2
Incompatibility concerning other environmental risk	7
Recommendation of implementation of improvement	3



External environmental auditing of Fujitsu General (Shanghai) Co., Ltd

Environmental Education / Enlightenment

Environment education

Fujitsu General is conducting the environmental education at the new employee training and executive staff training which is the basic education of human resources and also implementing the environmental education systematically at various work places.

In order to train internal environmental auditors and improve their skills, we invite external lecturers to educate auditors.



Internal auditor training

Environmental enlightenment for employees

Eco driving measurement using fuel meter was conducted from June to August targeting some of the cars of sales and service departments that are company cars for business operation. Although the effect varied due to the difference in driving distance and the use of air conditioner, the overall fuel economy improved. We received some positive opinions from participants such as, "I would like to extend Eco driving to my friends in the workplace".



Fuel meter installed

Result of eco driving measurement at sales and service departments

Type of car	Normal driving (May)	Eco driving (June to Aug)	Improvement rate
A Compact van	14.4km/L	17.1km/L	19%
B Compact van	14.5km/L	14.7km/L	1%
C Light one-box car	12.2km/L	10.4km/L	-15%
D Light one-box car	9.3km/L	9.5km/L	2%

Environmental Communication

Environmental Report

Fujitsu General has been publishing environmental report every year since 1999 reporting the environmental activities of Fujitsu General Group along with the message of Top Management.

Also, as the transmission of environmental information via website is enriched, the environmental report can be obtained by anybody on the website.



Environmental page on the website



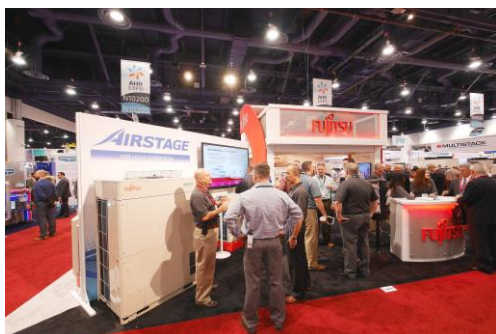
Environmental Report

Introduction of products' environmental technologies

We introduce environmental technologies of products through catalogs, product introduction pages on websites and exhibitions.



Product introduction page (website)



At the air conditioner exhibition (AHR EXPO 2017, America)

Communication with suppliers

Introduction of environmental performance for dealers

We arrange the explanation meeting for suppliers to introduce the environmental performance of the products to many customers. Fujitsu General (Taiwan) Co., Ltd. held a new product presentation and explained the environmental performance of new products.



At the new product presentation (Taiwan)

Measures for chemical substances contained in the products

To control the chemical substances contained in the products by the supply chain as a whole, we are introducing the chemical substance control system of Fujitsu General Group to suppliers and also asking for the cooperation regarding the establishment of chemical substance control system at suppliers.

Green Procurement Directions/ Specified Chemical Substances List

Fujitsu General is promoting green procurement activities in tie-up with Fujitsu Group companies and requesting for transactions in accordance with "Green Procurement Directions" and "Specified Chemical Substances List" that are shared by Fujitsu Group.

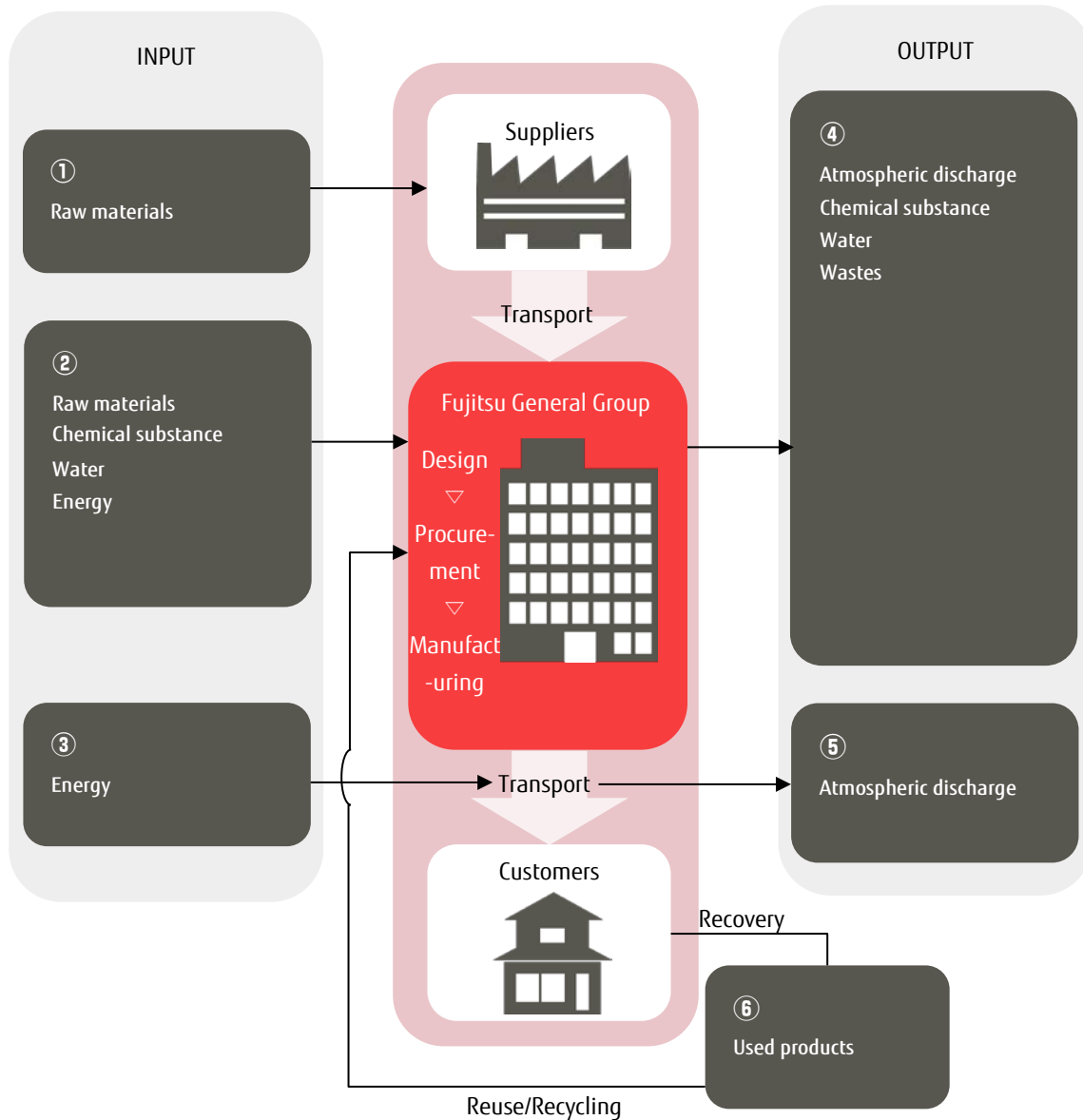


Green Procurement Guidelines (left), Specified chemical substances (right)

Data Overview

Environmental performance data

Material Balance (FY2016 Actual Results)

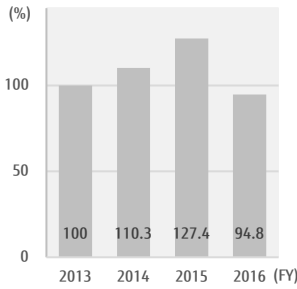


INPUT/OUTPUT DATA

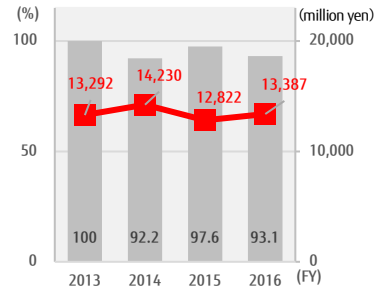
① ② Design/Procurement/Manufacturing		③ Logistics		④ Design/Procurement/Manufacturing (continued)	
Raw materials		Energy		Chemical substance	
Metal	109,374 t	Fuel	28,629 GJ	PRTR	1.67 t
Plastics	23,135 t	④ Design/Procurement/Manufacturing		Wastes	
Others	5,890 t	Atmospheric discharge		Total discharge	11,732 t
Chemical substance		Total greenhouse gas discharge	94,302 t-CO ₂	Final discharge amount	520 t
PRTR	1.78 t	CO ₂	38,026 t-CO ₂	⑤ Logistics	
Water		Greenhouse gas discharge other than CO ₂	56,276 t-CO ₂	Atmospheric discharge	
Water	501,000 m ³	NO _x	3.38 t	CO ₂	2,051 t-CO ₂
Energy		SO _x	0.94 t	⑥ Recycling	
Total	887,666 GJ	Water (Displacement)		Disposal amount	14,342 t
Electricity	75,396 MWh	Total	445,000 m ³	Reuse for our products	111 t
Oils	177 kℓ	BOD	0.06 t	Other reuse	12,631 t
LPG	2,341 t	COD	0.04 t	Fluorocarbons regeneration amount	94 t
City gas	293,000 m ³				

Environmental Action Plan: Greenhouse gas basic unit control

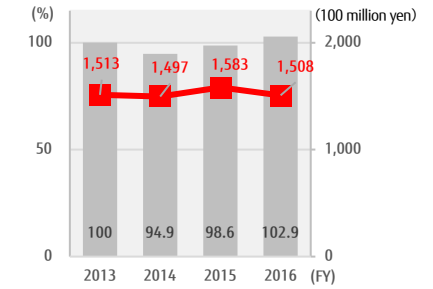
■ Electricity consumption of evaluation test facility



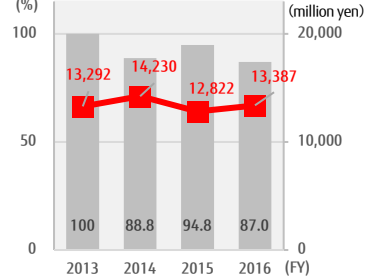
■ Electricity consumption in domestic production bases



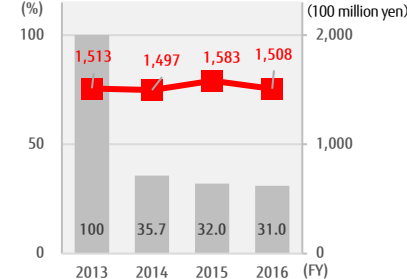
■ Electricity consumption in overseas production bases



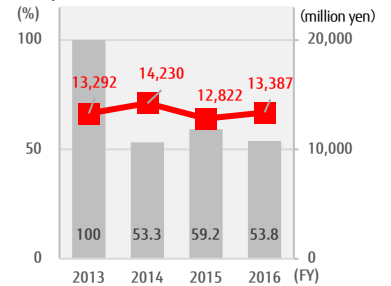
■ Amount of petroleum used in domestic production bases



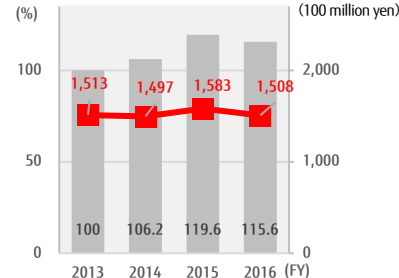
■ Amount of petroleum used in overseas production bases



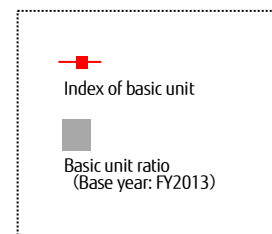
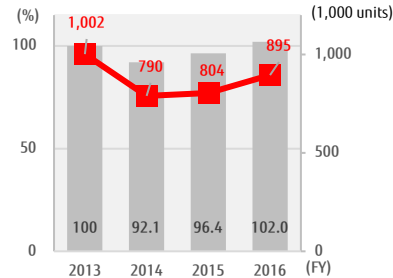
■ Amount of LPG used in domestic production bases



■ Amount of LPG used in overseas production bases

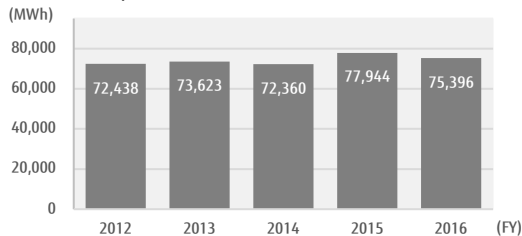


■ Greenhouse gas emissions associated with product logistics in Japan (estimated value)

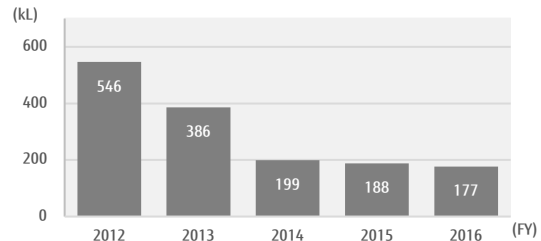


Energy

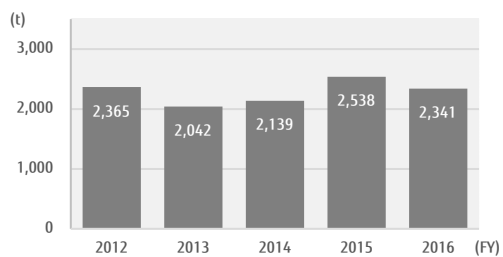
■ Electricity



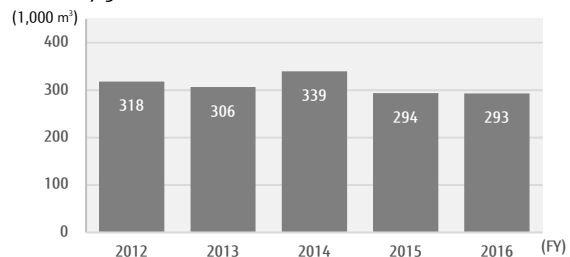
■ Oils



■ LPG

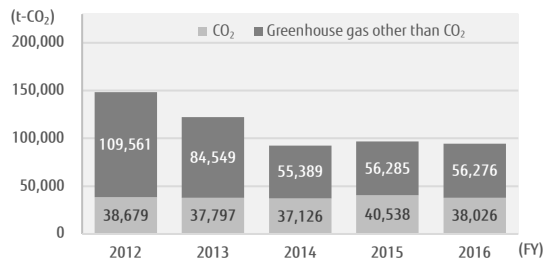


■ City gas

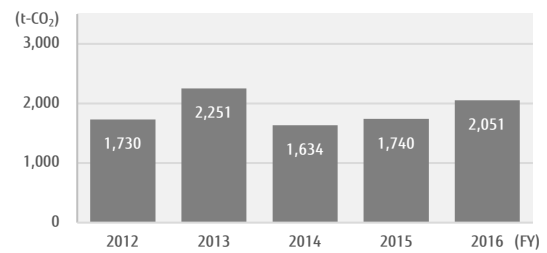


Greenhouse gas

■ Greenhouse gas emission by business activity (CO₂ conversion)

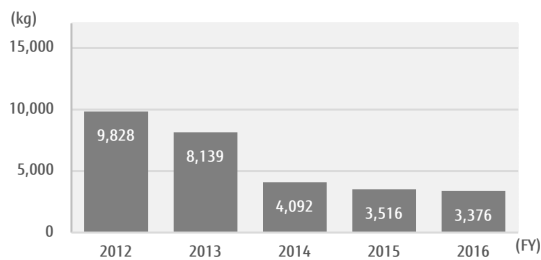


■ Greenhouse gas emission by production distribution in Japan (Estimated value)

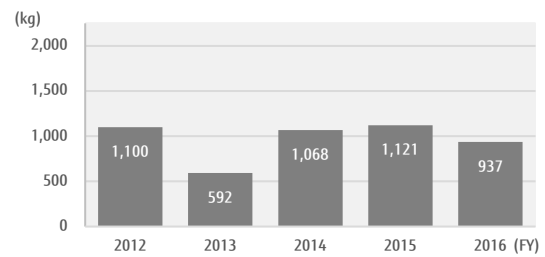


Atmospheric emissions

■ Nitrogen oxides (NO_x)

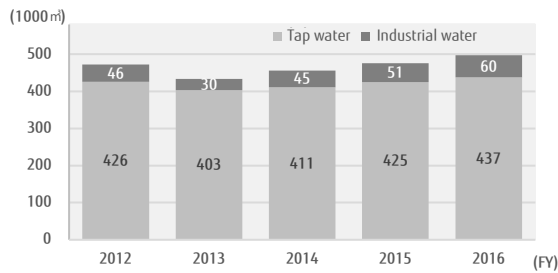


■ Sulfur oxides (SO_x)

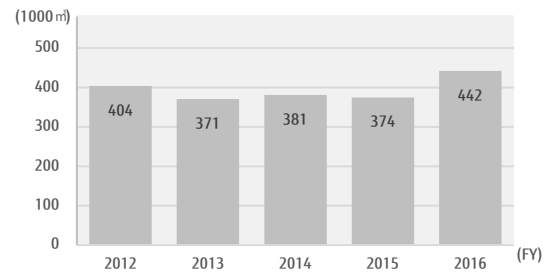


Water

■ Usage

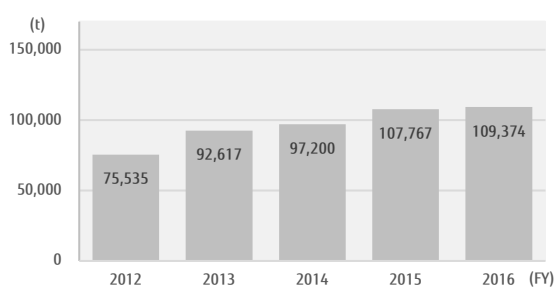


■ Emission

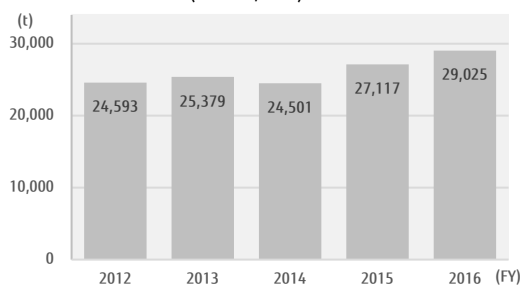


Raw material (Material / Sub-material)

■ Metal



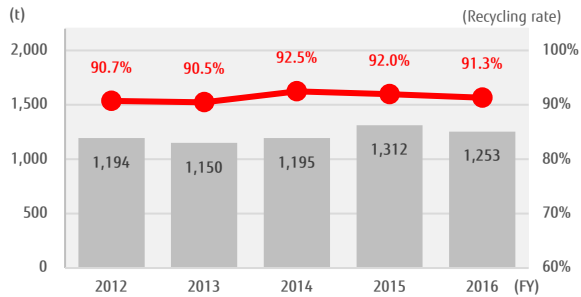
■ Other than metal (Plastic, etc.)



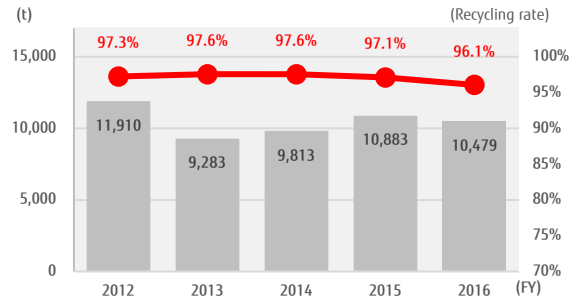
Wastes

■ Total emission

· Japan: Business offices/Group companies

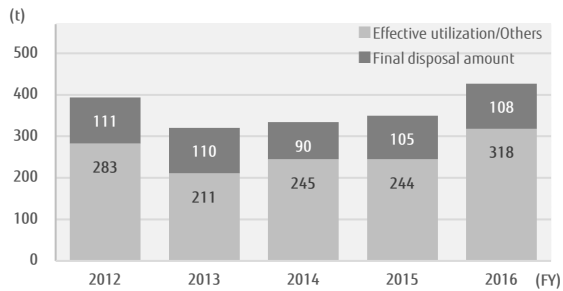


· Overseas: Production group companies

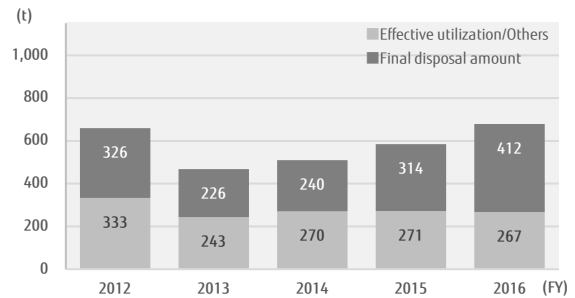


■ Waste volume

· Japan: Business offices/Group companies

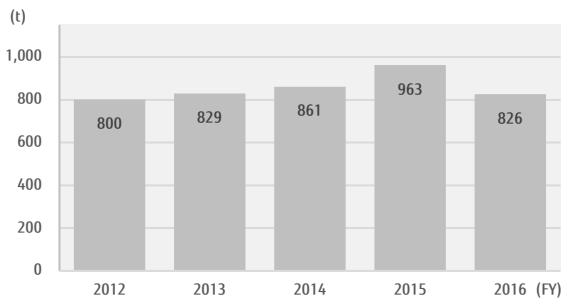


· Overseas: Production group companies

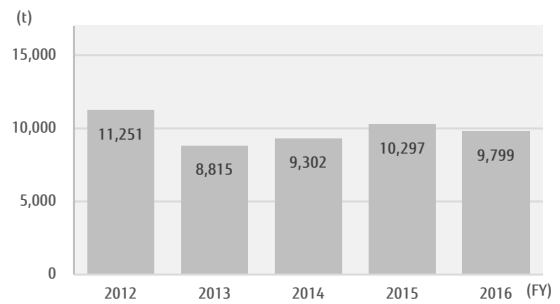


■ Valuable quantity

· Japan: Business offices/Group companies



· Overseas: Production group companies



Chemical substance handling amount (PRTR Law subject substance) (FY2016)

Chemical substance	CAS number	Handling amount
styrene	100-42-5	1,415 kg
toluene	108-88-3	250 kg
lead	7439-92-1	115 kg

Electric home appliance recycling results (FY2016)

■ Recycling results

Item	Air-conditioner	TV		Refrigerator Freezer	Washing machine Cloth dryer
		CRT type	LCD / Plasma type		
Accepting quantity at specified acceptance place	192,897 units	2,072 units	161 units	101,985 units	5,577 units
Product recycling disposed quantity	189,906 units	2,049 units	163 units	103,106 units	5,591 units
Product recycling disposed weight	7,782 t	49 t	3 t	6,299 t	209 t
Product recycling weight	7,382 t	37 t	2 t	5,125 t	196 t
Product recycling rate	94 %	76 %	90 %	81 %	93 %

■ Reuse situation by parts / material

Item	Air-conditioner	TV		Refrigerator Freezer	Washing machine Cloth dryer
		CRT type	LCD / Plasma type		
Iron	1,778 t	5 t	1 t	2,486 t	91 t
Copper	513 t	2 t	0 t	136 t	5 t
Aluminum	1,048 t	0 t	0 t	80 t	3 t
Composite of nonferrous, iron, etc.	2,539 t	0 t	0 t	768 t	19 t
CRT glass	—	17 t	—	—	—
Other valuable items	1,503 t	12 t	1 t	1,653 t	75 t
Total weight	7,382 t	37 t	2 t	5,125 t	196 t

■ Situation of collection of refrigerant Fluorocarbons

	Air-conditioner	Refrigerator Freezer
Accepting quantity at designated collection sites	125,618 kg	8,021 kg
Weight shipped to subcontractor of destruction	125,182 kg	8,073 kg
Recycling and reuse weight	90,525 kg	3,368 kg
Destruction weight	34,059 kg	4,629 kg

■ Situation of collection of Fluorocarbons contained in heat insulation material

	Refrigerator Freezer
Collection weight	10,169 kg
Weight shipped to subcontractor of destruction	10,247 kg
Destruction weight	10,347 kg

Environmental Accounting (FY2016)

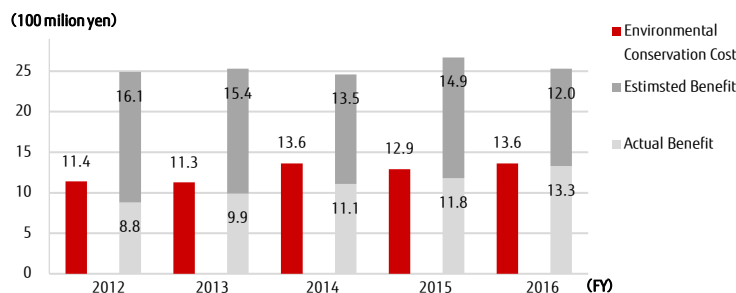
Environmental Conservation Cost (million yen)		
Item	Main Contents	Cost
Business Area Cost	Pollution Prevention Cost	Air / water pollution prevention, etc. 155
	Global Environmental Conservation Cost	Global warming prevention / Energy saving, etc. 505
	Resource Circulation Cost	Resources effective use, industrial waste disposal, etc. 247
Upstream / Downstream Costs	Collection / Recycling of used products, etc.	35
Administration Cost	Environmental management system, etc.	46
R&D Cost	R&D of environmentally-friendly products, etc.	372
Social Activity Cost	Donation for natural environmental protection, etc.	2
Environmental Remediation Cost	Repair cost relating to land and groundwater pollution	0
Total		1,362

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	1,197
Actual Benefit	Profit on sale of valued articles, reduction of waste disposal cost, etc.	1,328
Total		2,525

Cost and economic effect in FY2016

As a result of summarization of FY2016, the environmental conservation cost was 1.36 billion-yen (5% increase from the previous year), and the economic effect of environmental conservation measures was 2.53 billion yen (5% decrease from the previous year).

The environmental conservation cost increased due to the increased research and development costs to respond quickly to the global energy saving regulations and refrigerant regulations and updating of analytical instruments to strengthen chemical substance management systems.



Environmental performance data definitions

■ Subject period: April 1, 2016 - March 31, 2017

■ Scope: Fujitsu General Group and its consolidated subsidiaries (For details, refer to "organizations covered" in Editing policy).

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 ³
		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	ke
		Annual usage of heavy oil A, fuel oil, light oil, gasoline
	LPG	t
		Annual LPG usage
	City gas	m ³
		Annual city gas usage
Logistics	Energy consumption	GJ
		Transport ton-kilometer x improved ton-kilometer method fuel consumption basic unit x 10 ⁻³ x unit calorific value. (Source: Ministry of Economy, Trade and Industry/Ministry of Land, Infrastructure, Transport and Tourism "Guidelines for Calculation Method on CO ₂ Emissions in the Logistics Field")

OUTPUT

Indicator	Unit	Calculation method
Atmospheric discharge	CO ₂ emissions	t-CO ₂
		(Annual usage of electricity, fuel and gas) x CO ₂ emission potential per energy* * CO ₂ emission potential: Based on the Federation of Electric Power companies of Japan "CO ₂ emission basic unit at end of use" Domestic: 0.407t-CO ₂ /MWh (FY2002 emission basic unit) Overseas: 0.410t-CO ₂ /MWh (FY2006 emission basic unit)
Greenhouse gas emissions other than CO ₂	t-CO ₂	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 ⁻⁶ x Dray gas emissions x Operating time x 46/22.4 x 10 ⁻³
SOx emissions	kg	SOx concentration x 10 ⁻⁶ x Dray gas emissions x Operating time x 46/22.4 x 10 ⁻³
Design/Procurement/Manufacturing	Water discharge	m ³
		Annual water discharges into public waterways and sewers (except for groundwater used for snow melting or purification measures)
	BOD emissions	t
		BOD concentration x Water discharge x 10 ⁻⁶
	COD emissions	t
		COD concentration x Water discharge x 10 ⁻⁶
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 ₂ emissions
		t-CO ₂
		Transport ton-kilometer x Improved ton-kilometer method fuel consumption basic unit x 10 ³ 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 ₂ 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	t
		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 ₂ emission reduction rate per sales volume in domestic logistics	%	Logistics CO ₂ emissions per domestic sales volume in the relevant year/ Logistics CO ₂ emissions per domestic sales volume in FY2013 x 100

Introduction of Business Offices

HEAD OFFICE

Overview

Constructed In 1955 as Kawasaki Factory by Yaou Electric Co., Ltd. which is a predecessor of current Fujitsu General Limited. After starting from the production of radio, audio, TV and expanding to wireless communication equipment and home electric appliances, it has become the head office in 1958, and is now assuming a role of the R&D base of products and systems along with a core company of Fujitsu General Group.

■ Location : 3-3-17, Suenaga, Takatsu-ku, Kawasaki, Kanagawa 213-8502 Japan

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.

AOMORI BUSINESS OFFICE

Overview

Started as a factory of Noheji General Co., Ltd. which was established in 1967 and turned to current Aomori Business Office in 2006. Operating consistently as a motor manufacturing factory since the establishment. After the Shichinohe-Towada Station of the Tohoku Shinkansen was opened in the adjoining land in 2010, the surrounding environment is substantially changing.

■ Location : 67-2 Aza Arakumanai, Shichinohe-machi, Kamikita-gun, Aomori 039-2501, Japan

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.

HAMAMATSU BUSINESS OFFICE

Overview

Started as an air conditioner factory (completed in 1977) of Chubu General Co., Ltd. which was established in 1973 and had been assuming an important role as the development and manufacturing base of domestic and overseas air conditioners for a long time.

Turned to current Hamamatsu Business Office in 2001, and along with the overseas transfer of the manufacturing base, Fuji Eco Cycle Ltd. (home electric appliances recycling plant) moved in the business office in 2010. Currently operating as a base for the repair of the products and recycling business.

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

Main environmental activities

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

MATSUBARA BUSINESS OFFICE

Overview

Started as a factory of General Lighting Equipment Co., Ltd. Which was established in 1957 and after the termination of production, operated as product service support office in Kansai district. In 2013 when the premises were renovated, integrated sales function which has been scattered.

■ Location : 2-1-45 Nishinono, Matsubara-shi, Osaka 580-0004, Japan

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.

Introduction of Group Companies

Manufacturing group companies

FUJITSU GENERAL ELECTRONICS LIMITED

Corporate Overview

Established in 1964 as General Denshi Kogyo manufacturing radios and audio equipment. Integrated the electronic device division of Fujitsu General in 1999 and currently manufacturing in-vehicle cameras, robot controllers and electronic devices and information & communication system equipment, etc.

■ Location : 3-1 Aisari, Ichinoseki-shi, Iwate 021-0853, Japan

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.

FUJITSU GENERAL (SHANGHAI) CO., LTD.

Corporate Overview

Fujitsu General (Shanghai) Co., Ltd. started operation in 1996. Now manufacturing mainly room air conditioners (1.5 million sets per year). Reinforced the technical center to assume the design of air conditioner products in 2013 aiming to contribute to the society by high quality and high performance air conditioners with a motto of "Quality First, Customer First" under the consistent management from design to production.

■ Location : No. 1720 Hui Cheng South Rd., Jading Shanghai 201821, China

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 review of the improvement of lighting efficiency (changing to LED) of air conditioning facility in the factory.

FUJITSU GENERAL (THAILAND) CO., LTD.

Corporate Overview

Established in the Laem Chabang Industrial Estate, Sriracha, Chonburi, Thailand in 1991. Manufacturing variety of air conditioners from room air conditioners to multi air conditioners for buildings. As the factory is located adjacent to Laem Chabang harbor, efficient shipping work is possible.

■ Location : Laem Chabang Industrial Estate, I-EA-T, Free Zone 1 92/9 Moo 2, Thungsohkhla, Sriracha, Chonburi, Thailand

Main environmental activities

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

FUJITSU GENERAL CENTRAL AIR-CONDITIONER (WUXI) CO., LTD

Corporate Overview

Fujitsu General Central Air-Conditioner (Wuxi) Co., Ltd. was established in 2006 and is operating the business of R&D, products, sales, installation and maintenance of multi air conditioning system for buildings in the most advanced factory which was constructed in 2008. Will provide comfort with the excellent products made by the high technology and experience and protect the global environment.

■ Location : No.10 Lijiang Road, New District, Wuxi Jiangsu 214028, China

Main environmental activities

We are strengthening the countermeasures against leakage of fluorocarbons along with energy saving and resource saving. In addition, we are 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.

FGA (THAILAND) CO., LTD.

Corporate Overview

Established in 1998 with the purpose of manufacturing motors for air conditioner in the neighborhood of Fujitsu General (Thailand) Co., Ltd.

- Location : Laem Chabang Industrial Estate, I-EA-T, Free Zone 2 212 Moo 3, Thungskhla, Sriracha, Chonburi, Thailand



FUJITSU GENERAL ENGINEERING (THAILAND) CO., LTD.

Corporate Overview

Established in 1999 as a company to conduct research and development of air conditioners. In 2016, the R&D Center (total floor area of 10,000m²) which is the largest in Thailand as a development facility of air conditioners was completed and the full-scale operation started in November.

- Location : Laem Chabang Industrial Estate, I-EA-T, Free Zone 1 92/9 Moo 2, Thungskhla, Sriracha, Chonburi, Thailand



F.G.L.S. ELECTRIC CO., LTD.

Corporate Overview

Established in 2003 in partnership with Little Swan Group in China.

The production items are brushless DC motors, AC inverter motors and related electronic parts having production capacity of 5 million sets per year.

- Location : No.8, Jiangzhou Road, Economic Develop Zone, Jingjiang, Jiangsu 214500, China



Main non-manufacturing group companies

FUJITSU GENERAL INFORMATION SYSTEM LTD.

Corporate Overview

Providing solution service making use of resources of Fujitsu Group. Especially, making proposal aiming at the "establishment of energy saving and comfortable environment" for JA fruits sorting depots, offices, stores, factories, etc.

- Software development, sales and service contract of office and OA apparatus, telecommunications service contract handling agency for telephone, digital communication, etc.
- Location : 2-3-31, Shibaura, Minato-ku, Tokyo 108-0023, Japan

FUJITSU GENERAL EMC LABORATORY LIMITED

Corporate Overview

Corresponding with latest facility and ample experience to customers' requests regarding conforming tests and applications for various regulations and support and consulting on various noises.

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



FUJI ECO CYCLE CO., LTD.

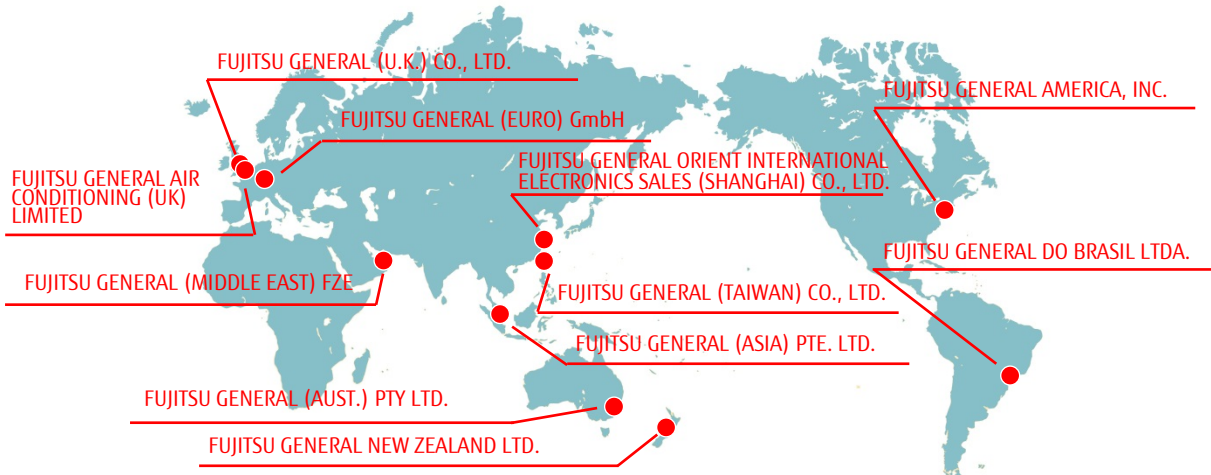
Corporate Overview

Established in 2000 in joint venture with Envipro Holdings, Inc. (recycling company) consisting of 5 home electric makers. Disposing used home electric appliances on the consignment basis from various home electric makers.

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



Sales group companies (Overseas)



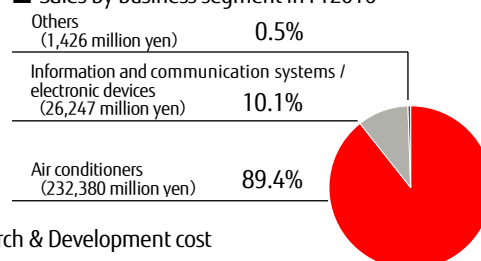
Overview of Fujitsu General Group (As of March 31, 2017)

Name	FUJITSU GENERAL LIMITED
Head office location	3-3-17, Suenaga, Takatsu, Kawasaki, Kanagawa 213-8502, Japan
Company representative	Etsuro Saito, President and Representative Director (As of June 20, 2017)
Established	January 15, 1936
Main business	Development, production, sales and service of products and parts for both of air conditioners and information and communication system/electronic devices fields.
Capital	18,089 million yen
Employees	7,072 (Consolidated) 1,547 (Unconsolidated)
Directors	13 (including 4 External Directors) As of June 20, 2017
Consolidated	29 companies
Equity-method affiliates	3 companies
Net sales	260,054million yen (Consolidated) 207,694million yen (Unconsolidated)
Listed stock exchange	Tokyo Stock Exchange (1st division)

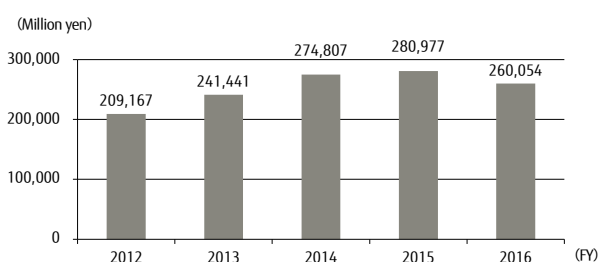
■ Main products, systems, services

- Air conditioners
Room air conditioners, multi air conditioning system for buildings, heat-pump type hot water heating system, air conditioning-related products
- Information and communication systems / electronic
Fire-fighting system, disaster prevention system, POS system, video system, in-vehicle camera, electronic parts, unit products
- Others
Recycling of electric home appliances, radio interference measurements and consulting

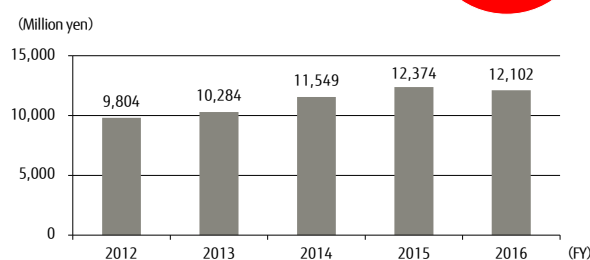
■ Sales by business segment in FY2016



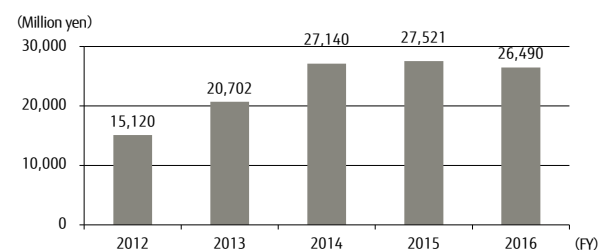
■ Net sales



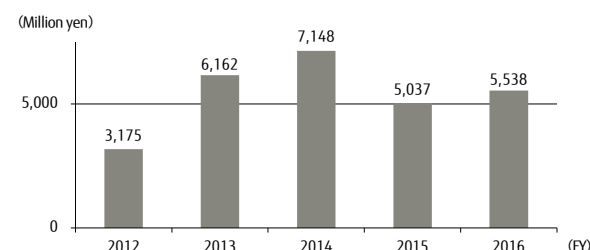
■ Research & Development cost



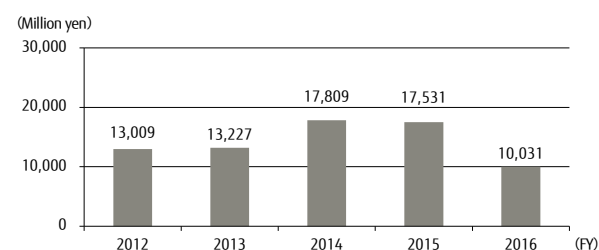
■ Operating income



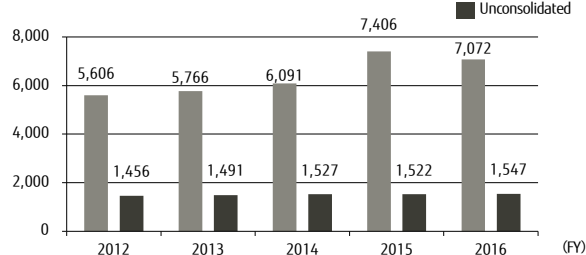
■ Capital investment



■ Net income



■ Number of employees



Editing Policy

The "Fujitsu General Group Environmental Report 2017" 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 FY2016. 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 FY2016 (April 1, 2016 - March 31, 2017) 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 <http://www.fujitsu-general.com/jp/corporate/eco/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

Company name	Environmental accounting	Energy	Greenhouse gas		Atmospheric discharge NO _x /SO _x	Water			Raw materials	Wastes	Chemical substances
			Business activities	Logistics		Usage/Drain	BOD	COD			
Fujitsu General Limited											
Kawasaki Head Office	✓	✓	✓		✓	✓				✓	
Aomori Business Office	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
Hamamatsu Business Office	✓	✓	✓		✓	✓	✓		✓	✓	
Matsubara Business Office	✓	✓	✓		✓	✓	✓		✓	✓	
Sales/Service bases (56 bases)	✓	✓	✓	✓		✓				✓	
Domestic group companies (10 companies)											
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.	✓	✓	✓	✓	✓	✓				✓	
Overseas group companies (18 companies)											
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.		✓	✓	✓							

References Guidelines

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

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

Concerning future projections, forecasts and plans

This report not only describes past and present facts related to Fujitsu General Group but also includes future projections, forecasts and plans. Such projections, forecasts and plans are based on data available when the report was prepared, and therefore, future results of operating 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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Reference table of “Environmental Reporting Guidelines 2012” by Ministry of the Environment, Government of Japan

Report Parameters and Summary

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Information and Indicators on how Environmentally Focused Management including Environmental Management is working

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	(2) Total materials used and initiatives to reduce them	P.19,22
	(3) Water withdrawal and initiatives to reduce it	P.9,19,21
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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.20
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2. Social Contexts of Environmentally focused management		P.12,28

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

FUJITSU GENERAL LIMITED

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<http://www.fujitsu-general.com/jp/corporate/eco/>

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