

Fujitsu Components Group Environmental Report FY2019

The Fujitsu Components Group recognizes environmental management as one of the most important roles and contributes to build a sustainable society and participate in the global environmental conservation by striving to reduce harmful environmental impact generated by products or services offered throughout the business activities.

1. Greeting

The Fujitsu Components Group has been conducting activities that reduce the environmental impact since 1998. These activities are based on our principle *“We shall keep the best corporate activities while improving our coexistence with the environment”*.

The Paris Agreement was adopted at the Conference of Parties (COP21) as a new international framework for greenhouse gas reduction in the post-2020 period, and it took effect in November 2016. Global momentum for the environment is rising such as adoption of the Sustainable Development Goals (SDGs) in 2015.

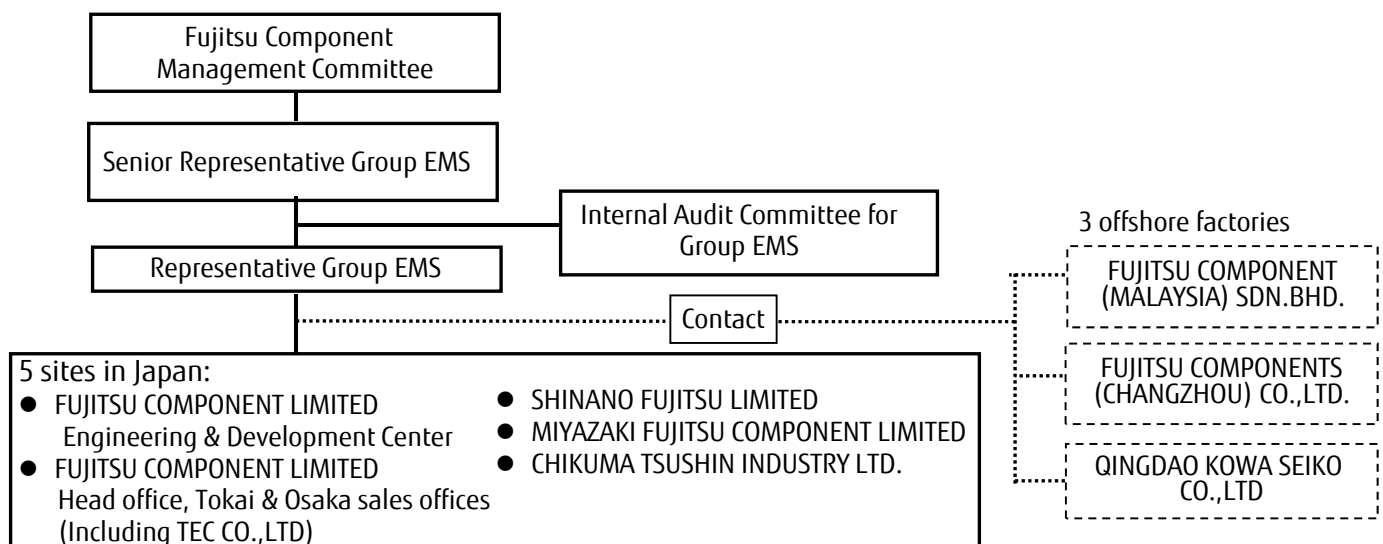
The Fujitsu Components Group continues to adopt measures that limit the environmental impact by developing energy efficient products and proper utilization of resources, streamlining the manufacturing process, recycling waste into valuable resources, and environmental protection through socially responsible activities.

In parallel, the Fujitsu Components Group responds to the business environment and customers' requirements immediately to carry out these environmental activities. We strive to realize the human and environmental friendly society through our products.



Masahiro Kinoshita
President and Representative
Corporate Officer, CSO

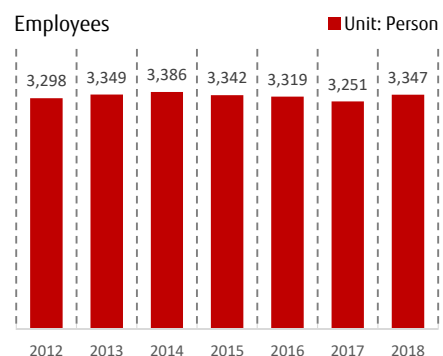
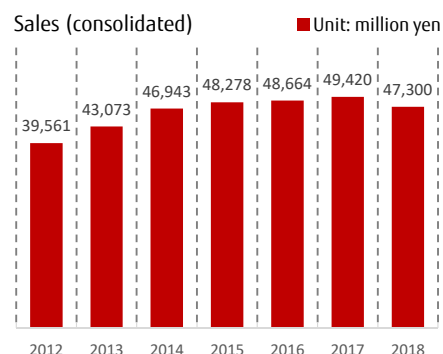
2. Organization for Environmental Activities



Note: Takamisawa Electric Co., Ltd. was removed from the FY2019 Environmental Report because of business transfer.

3. Group Profile

Head Office address	FUJITSU COMPONENT LIMITED Shinagawa Seaside Park Tower, 12-4, Higashi-shinagawa 4-chome, Shinagawa-ku, Tokyo 140-0002, Japan
President and Representative Corporate Officer, CSO	Masahiro Kinoshita
Founded	September 17, 2001
Main Business	Manufacturing and sales of relays, keyboards, touch panels, pointing devices, thermal printers, server console switches, cross technology products (unit products)
Capital	500 million yen (as of January 31, 2019)
Sales	43.4 billion yen (consolidated FY2018)
Financial Year End	March 31
Employees	3,347 (consolidated as of March 31, 2019)
Group Composition	The Group is composed of total 15 companies; 6 Japanese companies including 1 sales company, and 9 overseas companies including 6 sales companies



4. Environmental Policy & Environmental Protection Program

■ Fujitsu Components Group Environmental Policy

Principle

The Fujitsu Components Group, recognizes the value and importance of protecting the global environment as one of the most important issues. Our environmental philosophy is: We shall adhere to the best corporate activities while improving our coexistence with the environment. As an enterprise that develops, designs, manufactures, and sells electrical components, we promote the Environmental Management System (EMS) in accordance with ISO14001.

Action Guidelines

- We continuously improve our environmental management system to reduce and prevent environmental pollution by keeping the environmental aspects in mind through our activities, products and services.
- We offer products that both help achieve business growth and protect the environment.
- We comply with the various environmental laws as they apply to our activities, products and services.
- We completely ban hazardous substances in our products and do not discharge any hazardous substances into the environment as specified by Fujitsu Components Group.
- Every employee shall strive to improve the environment including use of sustainable sources, climate control, and biodiversity conservation at work and at home and extend those activities to society.

Supplement

1. This policy is documented and made public to our employees, group members and all other parties concerned.
2. Our Environmental Management Division is responsible for the Environmental Policy.

5. The 7th Stage Group Environmental Protection Program (FY2016 to FY2018)

The 7th Stage of the Fujitsu Components Group Environmental Protection Program has been established. Detailed action plans up to FY2018 have been provided and actual activities are on their way.

Item	The 7th Stage Group Environmental Protection Program Goals	FY2018		
		Targets	Results	
Social contribution activities	Improvement of environmental value throughout product lifecycle At least 15 new eco-friendly products ^(*1) have to be developed by FY2018. i. Product to lead in energy-efficiency ^(*2) ii. Product's resource efficiency is increased by 5% or more compared to those of FY2014 ^(*3)	Develop a minimum of 3 new eco-friendly products ^(*1) FY2016-FY2018 total 16 products	Developed 7 new products FY2016-FY2018 total 21 products	Done
	Promotion of social contribution activities Each employee shall contribute to the society to affluent and sustainable society. i. Continuous cooperation with society. ii. Material support and other activities to resolve social/environmental issues such as biodiversity observation.	Implement 36 activities minimum	Implemented 36 activities	Done
Own business activities	Reduction of greenhouse gas (GHG) emissions We will control total emission amount of energy origin CO ₂ less than 115% (22,265t-CO ₂) ^(*4) compared to that of FY2013 (19,360t-CO ₂). (Purchased electricity CO ₂ conversion efficiency : 0.570t-CO ₂ /MWh)	Keep it below 22,265t-CO ₂ , 1.3% ^(*4) reduction against 22,560t-CO ₂ (117% of FY2013)	21,064t-CO ₂ (110% of FY2013)	Done
	Improvement of energy efficiency We will improve specific energy consumption unit ^(*5) in facilities by an average of 1% per year.	Minimum 1% improvement among 3 objective business sites	See table-1	Done
	Promoting to reduce CO ₂ emission in supply chain First-tier suppliers investigate all their second-tier suppliers by FY2018.	Extend it to 100% of suppliers	100%	Done
	Control on waste emission We will reduce waste amount to less than 806t ^(*4) (129% of 626t, average of FY2012 to FY2014) by FY2018.	Reduce it to less than 806t, 129% against FY2012-2014 average	710t, 113% against FY2012-2014 average	Done

*1: Program goal of new products was revised from 5 to 15 since previous goal was accomplished in FY2016.

*2: The products meet the criteria which is ranked in the top 25% in the market including leading products (world-first, industry-first, world-best, industry - best) in energy efficiency.

*3: Improvement of product's resources (smaller, lighter, thinner, reducing number of parts) or resource circulation (reducing waste amount, recycle capability).

*4: Target amount of greenhouse gas emission and waste emission were amended due to estimated production rise.

*5: Specific energy consumption unit means energy consumption amount per unit such as per sales amount, per production quantity, etc.

Table-1 Energy consumption per unit FY2018 results

Site name	Calculation formula	Base figure (Base FY)	FY2018 target	FY2018 results (Improved ratio against Base FY)
FUJITSU COMPONENT Engineering & Development Center	Energy consumption (kl) / sales amount (Million Yen)	0.771 (FY2012)	0.519 ^(*1)	0.506 (-35% against Base FY)
SHINANO FUJITSU	Energy consumption (kl) / sales amount (10 Million Yen)	1.633 (FY2012)	1.417	1.394% (-15% against Base FY)
MIYAZAKI FUJITSU COMPONENTS	Energy consumption (kl) / production quantity (Kpcs)	0.0158 (FY2012)	0.01421 ^(*1)	0.01421 (-10% against Base FY)

*1: FY2018 Targets were amended based on 2018 production plan.

6. The 8th Stage Group Environmental Protection Program (FY2019 to FY2021)

The 8th Stage of the Fujitsu Components Group Environmental Protection Program has been established. Detailed action plans to FY2021 have been provided and actual activities are under way.

Item	The 7th Stage Group Environmental Protection Program Goals	FY2019
		Target
Social contribution activities	Improvement of environmental value throughout product lifecycle At least 10 new eco-friendly products which satisfy (1) or (2) have to be developed by end of FY2021. i. Product to lead in energy-efficiency ^(*1) ii. Product's resource efficiency is increased by 5% or more compared to those of FY2018 ^(*2)	Develop a minimum of 5 new eco-friendly products. FY2019 - FY2021 total 10 products.
	Promotion of social contribution activities Each employee shall contribute to the society to affluent and sustainable society. i. Continuous cooperation with society. ii. Material support and other activities to resolve social/environmental issues such as biodiversity observation.	Implement 36 activities minimum.
Own business activities	Reduction of greenhouse gas (GHG) emissions We will reduce 3,132t-CO ₂ by end of FY2021 by continuous energy saving activities.	Reduce 1,204t-CO ₂ .
	Improvement of energy efficiency We will improve specific energy consumption unit ^(*4) in facilities by an average of 1% per year.	See table-1
	Control on waste emission We will reduce specific waste unit ^(*5) to less than FY2018 results by end of FY2021.	See table-2

*1 :The products meet the criteria which is ranked in the top 25% in the market including leading products (world-first, industry-first, world-best, industry - best) in energy efficiency.

*2: Improvement of product's resources (smaller, lighter, thinner, reducing number of parts) or resource circulation (reducing waste amount, recycle capability).

*3: 5% of FY2018 CO₂ emission (20,870t-CO₂)

*4: Specific energy consumption unit means energy consumption amount per unit such as per sales amount, per production quantity, etc.

*5: Specific waste unit = waste emission amount (t) / production amount (industrial out put amount or quantity)

Table-1 Specific energy consumption unit FY2019 targets

Site name	Calculation formula	Base figure (Base FY)	FY2019 target
FUJITSU COMPONENT Engineering & Development Center	$\frac{\text{Energy consumption (kl)}}{\text{sales amount (Million Yen)}}$	0.771 (FY2012)	Max. 0.519
SHINANO FUJITSU	$\frac{\text{Energy consumption (kl)}}{\text{sales amount (10 Million Yen)}}$	1.633 (FY2012)	Max. 1.41
MIYAZAKI FUJITSU COMPONENTS	$\frac{\text{Energy consumption (kl)}}{\text{production quantity (Kpcs)}}$	0.0158 (FY2012)	Max. 0.0145

Table-2 Specific waste unit FY2019 targets

Site name	Calculation formula	Base figure (Base FY)	FY2019 target
FUJITSU COMPONENT Engineering & Development Center	$\frac{\text{Waste amount (kg)}}{\text{Sales amount (million yen)}}$	66.9 (FY2018)	Max. 66.9
SHINANO FUJITSU	$\frac{\text{Waste amount (kg)}}{\text{Sales amount (million yen)}}$	22.3 (FY2018)	Max. 22.3
MIYAZAKI FUJITSU COMPONENTS	$\frac{\text{Waste amount (kg)}}{\text{Sales amount (million yen)}}$	49 (FY2018)	Max. 49

6. Environmental Activities

■ Development of Eco-friendly Products

We strive to develop and offer eco-friendly products which improve the environment and commercial aspects.

■ Highlights of New Developments

Improvements	Products	Products developed	Improvement ratio (*1)
Energy efficiency	KVM	DVI extender FE-4500CXU	11% reduction in weight
	Thermal printers	Printer for liner-less paper FTP-628MCL103#80-R	30% reduction in weight
	Touch panels	Touch panels without decorative printing sheet (increase series)	4% reduction in weight
Resource efficiency	KVM	AC adaptor for 4 port KVM	80% reduction of power consumption



DVI extender

11% reduction in weight (*1)



Printer for liner-less paper

30% reduction in weight (*1)



Touch panels without decorative printing sheet

4% reduction in weight (*1)

(*1): Compared with our conventional products

■ Global Warming Prevention Activities (Reduction of Energy Origin CO₂, Improvement of Energy Efficiency)

A working group comprised of members from 4 Japanese sites has been keeping activities in order to suppress CO₂ emissions. In FY2018, the touch panel factory introduced energy-saving equipment and added air pressure feeding pipes as well. The pipes are arranged in loops to reduce the electricity that is used by compressors. Conventional pipe arrangement required big pressure (energy) to pressurize by end of pipes from compressors, but loop-arrangement accepts of dispersive placement of compressors and it reduced compressors' energy consumption totally. As the result of this measure, we have achieved reduction of CO₂ emission compared with the last financial year.

Measure	Reduction results (t-CO ₂)
Adoption of loop-arrangement for air pressure pipes	61
Application of anti-heat paint	78

■ Transition of CO₂ Emission

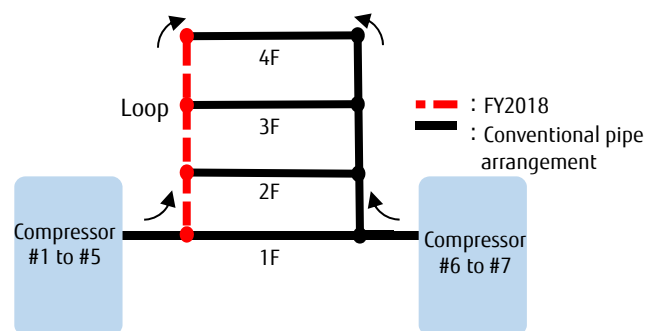
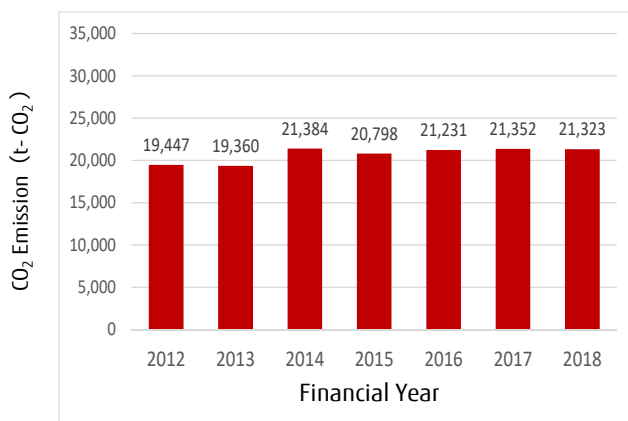


Fig-1: Adoption of loop-arrangement for air pressure pipes realized reduction of pressure supply from compressors and reduced electricity. (Fujitsu Component Limited Engineering & Development Center)

8. Status of Social Contribution Activities

Each site engages in social contributions, not only our employees but also their family members participate, for biodiversity conservation and engaging with local communities. Those activities are expanding year by year and are thoroughly acknowledged as wonderful activities among neighbors.

- Social contribution activities moving on with society
- Biodiversity conservation or activities solving/assisting environmental issues

■ Major Activities



Head office (Shinagawa, Tokyo)
Social contribution activities through collecting used stamps and bottle caps



Shinano Fujitsu (Iiyama, Nagano)
Cleaning up activity through walk rally (right photo), extermination activities for deserted plants (left photo)



Engineering & Development Center (Suzaka, Nagano)
Taking part in Shuzaka-city cleaning up activity



Miyazaki Fujitsu Component (Nichinan, Miyazaki)
Cleaning up of Kazetahama beach

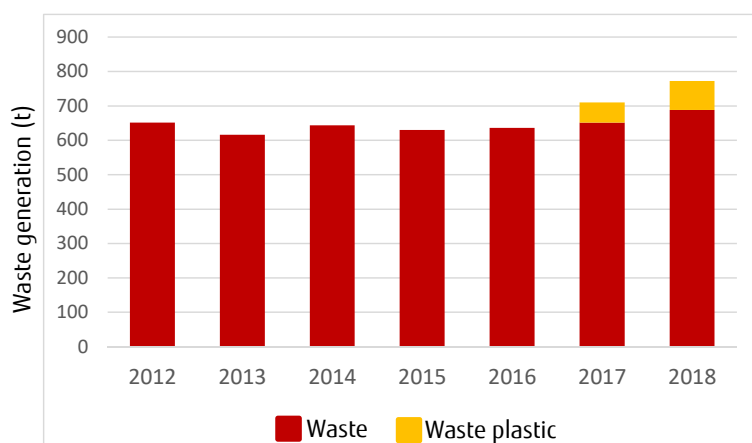


Chikuma Tsushin, Takamisawa (Saku, Nagano)
Cleaning up activity around factory

9. Industrial Waste Reduction Management

Every worker in the group recognizes the importance of the 3Rs (Reuse, Reduce and Recycle) and engages in waste separation. We have been working on the reduction of environmental loads by minimizing the waste and converting them into the valuable resources. From FY2018 onward, the amount of waste increased this year because some plastics used to be recycled in the past had to be scrapped due to China's plastic trash ban. To address this increase, we have continuously studied to segregate PET films and PVCs from other waste plastics to turn them to valuable plastics.

■ Transition of industrial waste reduction



10. Activities to Prevent Environmental Pollution

■ Status of Environmental Laws Compliance

We have complied with all environmental laws or regulations in FY2018.

Status of ground water contamination

Regarding the ground water contamination in which chlorinated organic solvent was found by an independent inspection done by Takamisawa in 1998, we have continuously cleaned up the area by pumping aeration treatment and vacuum suction devices. We confirmed that there was no flow of contaminated water to the outside of facilities and no complaints from neighboring areas or administrative government.

FY2018 Measuring data						
TAKAMISAWA Shinshu plant	Laws	Items	Unit	Legal threshold (Ground water)	Max. value at site	Max. value at observation well (located downstream of ground water)
Measurement based on Soil Contamination Countermeasures Act		Tetrachloroethylene	mg/l	0.01	6.0	less than 0.005
		Trichloroethylene	mg/l	0.03	1.0	less than 0.002
		Cis-1.2-dichloroethylene	mg/l	0.04	1.7	less than 0.02

11. Chemical Substances Contained in Products

■ Management of Chemical Substances Contained in Products

All materials are purchased under the Common Environmental Purchasing Specifications, and Fujitsu Components Group specified banned materials are checked by certification of compliance and chemSHERPA^(*). Phthalic acid ester, which was added under the revised European RoHS directive, is analyzed by Gas Chromatograph Mass Spectrometry and other methods inside our company. In addition, we have established a management system for pollution control in production sites and suppliers and check products' compliance.

*1: A scheme that facilitates sharing information on chemical substances in products conducted by Ministry of Economy, Trade and Industry. (Abbreviation of Chemical Information Sharing and Exchange under Reporting Partnership in supply chain).

■ Green Procurement

We ask all supply partners to build an environmental management system as well as prevention of global warming and biodiversity program to further the reduction of the environmental impact throughout the supply chain.

12. Actions to High Risk Minerals

Fujitsu Components Group promote investigation of the High Risk Minerals in line with OECD Due Diligence Guidance. We use a reporting template of Responsible Materials Initiative (RMI) for conflict minerals and cobalt for these investigation. We will continue the activities to smelting manufacturers and to improve transparency of supply chain to provide reliable information for the customers.

■ Contact

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