

**Fujitsu Frontech Group
Environmental Report
2018**



Photo by Takashi Yoshida

Our Environmental Priority Themes

Based on “Fujitsu Frontech Group Environmental Policy”, we make efforts for the rich, beautiful nature and the sustainable social development, cooperating with society.

We, Fujitsu Frontech Group, decide on “Fujitsu Frontech Group Environmental Policy” based on the trend for global environmental issues around companies such as climate change issue and biodiversity conservation, Fujitsu Group Environmental Policy and Medium- to Long-term Environmental Vision, and establish “Fujitsu Frontech Group Environmental Action Plan” based on the policy, and practice it.

We established “Fujitsu Frontech Group Environmental Action Plan VIII” which is our environmental objectives and targets from FY2016 through FY2018, and we now promote it.

Fujitsu Frontech Group Environmental Policy

Philosophy

We, Fujitsu Frontech Group, follow Fujitsu Group Environmental Policy and define “eco-friendly business activity” as our basic philosophy. We also promote our efforts for the earth environmental protection, recognizing it as one of the most important business issues.

By utilizing our own technology and creativity as an ICT company, we contribute to the sustainable development of society. In addition, we not only comply with the environmental laws, regulations and standards applicable to our business activities, but also make efforts for the earth environmental protection activities by ourselves.

Moreover, we continuously pursue our advanced efforts by all groups and employees, in order to save a rich nature for future generations.

Principles

1. We reduce the environmental burden at every stage through the life-cycle of our products and service.
2. Through our ICT products and solutions, we help our customers and society to reduce their environmental burden and to enhance their environmental efficiency.
3. We create our top-runner products reinforcing the energy efficiency, resource saving and 3Rs (reduce, reuse and recycle).
4. We always recognize the impact on the environment by our activities, products and service, and comply with the applicable environmental laws, regulations, other requirements and our internal guidelines and so on, in order to fulfill our CSR (Corporate Social Responsibility).
5. Based on the results of the environmental impact assessments related to our activities, products and service, we implement pollution prevention and continuous improvement.
6. We set up and review our environmental objectives and targets on “Our Society” and “Our Business”, and each of us make efforts for the earth environmental protection including measures against climate change and protection of biodiversity with participation of all employees.

Contents	Page No.
Our Environmental Priority Themes	I
Top Messages	II
Company Profile / Business Structure / Sales	III
Development of Hardware Products / Green Procurement	IV
Manufacturing	V
Solution Development and Service Solution	VI
Targets and Results	VII
Social Contribution Activities (Inside Japan)	VIII
Social Contribution Activities (Outside Japan) / Business Activities and Environmental Burden	IX
Environmental Performance / Environmental Accounting	X

Upon Editing

In this report, we introduce mainly results and activities of FY2017 while in the Environmental Action Plan VIII (FY2016-FY2018).

And, we took into consideration, the elements of “Sustainable Development Goals (SDGs)” which are now being regarded as very important issues all over the world.

Scope

Environmental performance data in this report includes; Headquarters / Tokyo Plant, Niigata Plant, Kumagaya Service Solution Center, Omiya Solution Center, Fujitsu Frontech Systems Limited, etc. The data on Headquarters / Tokyo Plant includes the data of Life Create Limited.

Period

This report discloses mainly the activities in FY2017, and the indicated data are the final actual values. However, this report also includes some data from the period other than FY2017.

Communication (Editorial Postscript)

In the state that the issues related to the environmental protection such as “The Paris Agreement” entered into force in FY2016 are more and more active in the world, Fujitsu Frontech Group, under its basic philosophy called “eco-friendly business activity”, aggressively promotes environmental activities through countermeasures against climate change and biodiversity protection or the like. We have issued “Environmental Report 2018”, including the introduction about these activities.

We will keep on issuing this annual report continuously, and will make our efforts to reflect the everyone’s opinions and suggestions on creating the more meaningful and more fruitful report.

Issue:

November, 2018

Representative of Issue:

Kazuhiro Igarashi, President and CEO

Representative of Planning & Editing:

Tomoki Ando, Manager of Environmental Management Center

Top Messages

Toward realization of sustainable society, we contribute to global environmental protection with “B to B to Front—Front line to the customer”.



President & CEO
(Environmental Management Controller)
Kazuhiro Igarashi

Toward realization of sustainable society, two common international targets were agreed in international conferences in 2015. The first one is “SDGs (Sustainable Development Goals)” which is to globally achieve targets comprehensively including issues derived from three aspects of economy, society and environment by 2030. The second one is “The Paris Agreement”, which came into force in November, 2016 as a frame for climate change measures after 2020. Now, global climate change measure is about to shift forward to “Carbon-free society” in actual.

Under the circumstance like this, Fujitsu Group established an aggressive goal named “CO₂ Zero-emission” with a vision that it will try to make “zero”, CO₂ emissions derived from its own business by 2050, to contribute to realizing carbon-free society and to adjusting climate change.

Under a concept of “Deliver products and service connecting ICT to human being with front-end technology”, we, Fujitsu Frontech Group, as our mission, deliver customers with total service covering products through solution service in the area of “B to B to Front—Front line to the customer” to support the innovation and expansion of customers business.

It goes without saying that we thoroughly make efforts for energy saving and carbon-free of the whole Group activity and value-chain like this. Moreover, we will also focus on contributing to these of customers and society.

We provide eco-friendly products with top-class energy efficiency, ATMs and bill recycling units, handy-terminals, cash-less system for public racing market and totalizer system and so on, to contribute to energy efficiency of customers.

Furthermore, in fields of ATM solution, outsourcing service, retail solution and help-desk service or the like, we contribute to mitigation of environmental impacts and realization of carbon-free by customers, trying to improve efficiency in a variety of situations with our total solutions to support customers lifecycle.

We have started “Environmental Action Plan VIII” as three-year targets since FY2016. We will make efforts for activity toward a mid-long term vision named “CO₂ Zero-emission” to contribute to solving social and environmental issues from now, while steadily implementing this Action Plan in the 3rd year after achieving all the targets in previous year.

Based on our basic philosophy “eco-friendly business”, we contribute to the global environmental protection by pursuing broad and advanced efforts.

We continuously kept making efforts to our environmental targets in previous fiscal year. They were such as “development of eco-friendly products excellent for energy and resource saving”, “development of environmental solution to reduce greenhouse gas emissions”, “expansion of social activities by employees” and “mitigation of environmental impact by reducing energy use (mainly electricity consumptions)”.

FY2018 is the end of 3 years of Environmental Action Plan VIII. We will make efforts to achieve the targets, so that the results can be essential to next Environmental Action Plan IX.

- Our Society

Eco-friendly products we have developed are top-runner products for energy efficiency, such as “Eco-board®” for a baseball park without electricity construction process due to only use of renewable energy generated by solar panels. We make 50% newly-developed products into top level of energy efficiency, as well as develop products with 15% or more resource efficiency.

And, the more our customers introduce our eco-friendly solutions and services, the more we can contribute to reducing greenhouse gas emissions. We plan to expand more and more contribution.

- Our Business

We are continuously keeping on our energy saving activities to reduce the energy consumption in the business activities of Fujitsu Frontech Group, as well as are replacing facilities with low electricity consumption types, following relevant plan.

In FY2018, we set a target to reduce electricity consumptions by 5% compared to FY2013.

As for environmental legal compliance, we implement the environmental measurement in Tokyo Headquarters and Niigata Plant to monitor the status of our compliance with relevant regulations and to disclose the status in this report.



Corporate Senior Vice President
(Sub Environmental Management Controller)
Kunihiko Matsumori

- Environmental Business

We contribute to the development of the sustainable society with our business activities, products and service throughout their lifecycles according to our basic philosophy “eco-friendly business activity”.

Each group and each employee will fully understand the environmental issues and will positively promote the environmental activities with a higher consciousness of the goals of SDGs.

Furthermore, we, as a member of Fujitsu Group, are contributing to the carbon-free of our customers and society to realize a mid-long term vision “FUJITSU Climate and Energy Vision”.

Company Profile

- Company Name

FUJITSU FRONTECH LIMITED

- Foundation

November 9, 1940

- Capital

JPY 8,457,500,000.-

- Account Closing Date

March 31

- Representative

Kazuhiro Igarashi,
President and CEO

- ISO14001:2015

Certificate No.: EC98J2005-D050

- Environmental Organization



* Under the organization of ISO14001, Omori Office is working as a sub group of Headquarters / Tokyo Plant. However, each sales branch works on the EMS activities independently (not as sub group) because it is located in each Fujitsu Office and they work together in the unit of the location.

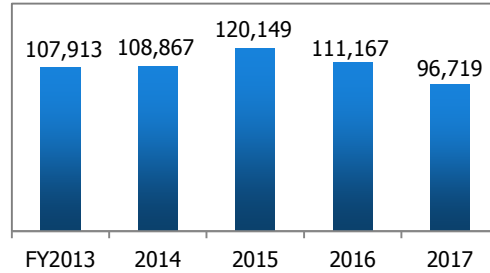
- Fujitsu Frontech Way

All employees of Fujitsu Frontech Group will mitigate a variety of risks caused by our business on the basis of Corporate Vision, Corporate Guidelines as well as Code of Conduct and Principles defined in "Fujitsu Frontech Way" to fulfil social responsibility.



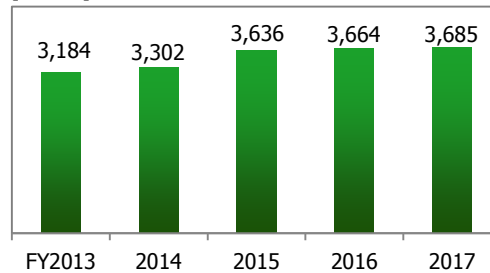
- Transition of Sales (Consolidated)

[Million JPY]



- Transition of Employees (Consolidated)

[Persons]

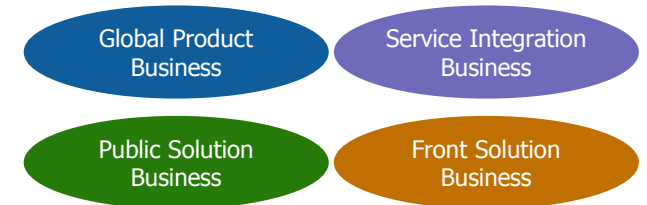


Business Structure

We deliver new value for our customers with ideas from "Things" output in the Trinity consisting of products, solutions and service.

Business Activities in 4 Kinds of Segments

We, Fujitsu Frontech Group, now operate our business in 4 kinds of segments, which are "Global Product Business", "Service Integration Business", "Public Solution Business" and "Front Solution Business".



Regarding as our own strong points, not only both our core technologies such as cash handling, secure & reassuring settlement methods and our unique technologies (leading edge palm vein authentication, RFID and others), but also onsite knowledge and systems engineering skills based on our intimate understanding of business fields and affairs, we deliver new value for our customers with ideas from "Things" which are output in the Trinity consisting of products, solutions and service.

Sales

We help our customer mitigate environmental burden, proposing introduction of eco-friendly products and environmental contribution solutions.

Delivery of Eco-friendly Products and Environmental Contribution Solutions

Fujitsu Frontech Group Sales Division contributes to mitigating environmental burden at customer side by delivering both eco-friendly products and environmental contribution solutions, which are capable of reducing CO2 largely.

And, in environmental contribution solutions, we utilize proposal documents with explanation about such as an effect of reducing CO₂ emissions after the introduction, in time of business talk with our customers.



* This is Fujitsu Group original eco-label. We put this label on our "Green Products", etc.

Development of Hardware Products

We pursue energy and resource saving, and make efforts to develop eco-friendly products.

Efforts toward Environmental Action Plan VIII

Pursing higher energy and resource efficiency

In the field of our hardware product development, we make efforts for two targets.

One is to develop products excellent for energy efficiency. We promote the development of top level products, in comparison with competitive products in markets and our previous products based on the proper standard of each product category.

Another one is to develop products excellent for resource efficiency. Up to now, we have promoted 3Rs design. And, we attempt more resource efficiency (more compact, lighter, smaller etc.) to mitigate the environmental burden now.

Thus, we not only help our customers mitigate their environmental burden, but also make stronger, both advantage and competitiveness of our products in markets.

Introduction of Our Products

FUJITSU Retail Solution "TeamCAT/mini V3"



This multiple and compact terminal for tenants in shopping centers can be placed anywhere without taking much space. It reduces the power consumptions by about 30% compared to previous type by having a high-performance CPUs, while having a variety of external interfaces and a large capacity memory. The weight has been reduced by about 17% compared to previous type, as a result of reviewing the component parts, etc.

Totalizator device "J8"



This totalizator device for public racing track issues the tickets and refunds the winning money to realize flexible operation at a counter. It reduces power consumption in stand-by mode (while customer doesn't use) by about 15% compared to previous type as a result of reviewing the control panels etc., while having many units. In addition, the weight is reduced by about 7% compared to previous type, as a result of reviewing the structure frames etc.

Green Procurement

We promote green procurement in corporation with our suppliers to deliver the products and service with low environmental impact, to our customer.

Procurement Based on Green Procurement Standard

Fujitsu Group has established "Fujitsu Group Green Procurement Standard" which frames the basic concepts of procuring eco-friendly parts, materials and products so that both domestic (Japanese) and overseas suppliers can promote the green procurement.

Establishment of Chemical substances Management System

We are asking our part suppliers to establish the CMS *1 based on "Guidelines for the management of chemical substances in products" which are defined as industrial standard made by JAMP*2, in order to enhance the management of the restricted chemical substances contained in the parts and products in the whole supply chain.

*1: CMS--Chemical substances Management System

*2: JAMP--Joint Article Management Promotion-consortium

Acquisition of the information on chemical substances in products

Fujitsu Group, in cooperation with our suppliers, surveys for the information on chemical substances contained in products, and shares obtained information within internal system, by using such AIS*3 and MSDSplus*4 provided by the JAMP, to comply with relevant regulations, and to prevent regulated chemical substances contained in products from negatively affecting human health and from contaminating the environment.

We have planned to transfer the tool for examining chemical substances contained in products to the successor tool, chemSHERPA*5, in FY2018 and we have successfully applied it.

*3: AIS--Article Information Sheet

*4: MSDSplus--Material Safety Data Sheet plus

*5: chemSHERPA--Chemical information Sharing and Exchange under Reporting Partnership in supply chain

Efforts to "Control and Reduce CO₂"

We are asking our suppliers to promote the programs and activities to reduce the CO₂ emission as a part of the measure against the climate change including global by providing them with necessary information on how a company can deal with the global warming issue and how to promote the CO₂ emission reduction activities.

Manufacturing

22 years have passed since one of our overseas Group companies, FDTP (FUJITSU DIE-TECH CORPORATION OF THE PHILIPPINES), was established in June 1996 and started up in September 1997. They are working on various environmental activities as below.



Establishment of Mass-production Tied up with Niigata Plant

FDTP mass-produces mechatronic units equipped with our major products, ATMs, which are supplied to Niigata Plant as units as well as are directly placed into overseas markets.

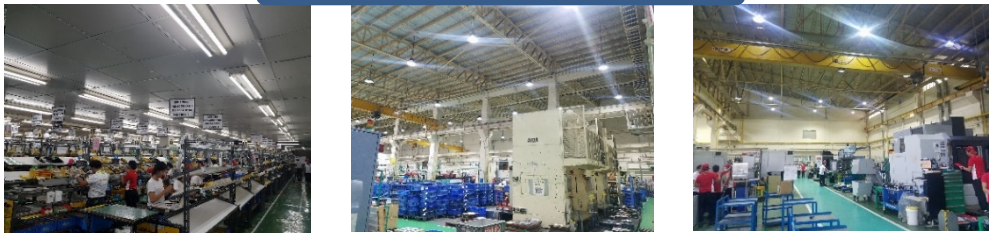
To realize this efficient mass-production, we expanded products and their production system that we had developed in Niigata Plant, a mother plant, to FDTP whose production lines are very advanced.

FDTP also produces various dies and relevant processed parts, and sell them to its local users.

Mitigation of Environmental Burden in FDTP

In second half of FY2017, FDTP introduced totally about 7,200 LED lamps in both PLANT 1 and 2. Upon the introduction, we realized large time and cost saving, with the minimum-cost method that our internal qualified staff had reconnected electrical wiring, and replaced fluorescent lamps to LED lamps by themselves, referring to examples of other companies.

Working areas replaced by LED lamps



And, we fully introduced to FDTP, process management and check sheet management with tablets in manufacturing process, which had been started in Niigata Plant since 2014.

The Tablet System contributes to the mitigation of environmental burden by reducing working time greatly, realizing paper-less and reducing the data analysis man-hours.

Especially, we could get bonus effect that the system established for part processing areas in FDTP had been reimported to Niigata Plant.



Activities of ISO14001

FDTP acquired Certificate of ISO14001 in 2007. And, this was the first acquisition as Fujitsu World-wide Certificate among overseas second-tier subsidiary companies. FDTP takes more positive actions to the environmental protection than FTEC domestic Group companies.

Because of highly environmental contribution in Philippines, FDTP won the "Environmental Awards" from PEZA (Philippine Economic Zone Authority) twice in 2010 and 2016 as well as both "Enterprise Award" and "Exporter Award" at the same time in 2016.



Many employees enjoy participating in a variety of activities as much as they can and such an atmosphere further promotes the participation in many social activities, as a result FDTP greatly contribute to the society.

Clean campaign



Tree planting



Mangrove protection



Community volunteer & School visit



Charity marathon



Development of Solutions and Service Solution

In order to contribute to "Sustainable Development Goals (SDGs)" through our ICT, we promote the reduction of green-house gas (GHG) emissions by developing and delivering Environmental Contribution Solutions.

Actual Results in Fujitsu Frontech Group

Fujitsu Group aims to contribute to the global SDGs with the customers by providing them with the ICT service.

Fujitsu Frontech Group set targets to deliver totally over 14 ICT solutions (Environmental Contribution Solutions) in Environmental Action Plan VIII (FY2016-FY2018). In FY2017, we set the annual target to deliver 5 solutions.

We proposed environmental solutions which quantify the reduction of GHG emissions, and our customers, mainly financial institutions, introduced the 5 solutions below and they could reduce the environmental burdens successfully.

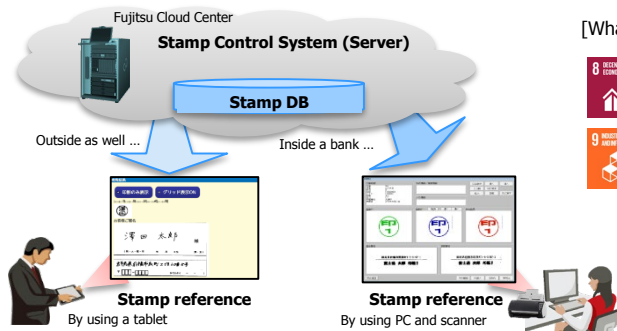
Environmental Solutions in FY2017

- 1) Response to ATM issues accompanied by a stop of core system machines
- 2) Passbook MS (magnetic stripe) repair system
- 3) **Cloud stamp service**
- 4) An option of personal identification for bank branch contact terminal
- 5) Function to repair the MS (magnetic stripe) in the bank ATM with the person in charge operating the ATM front display

* Others are disclosed on our website (<http://www.fujitsu.com/jp/frontech/>).

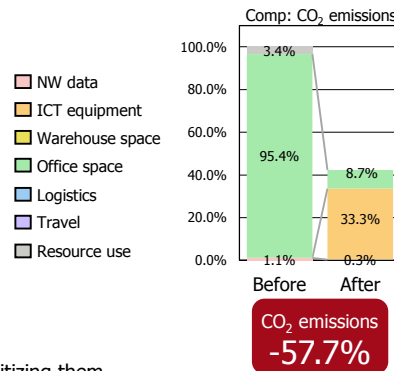
[Example] Cloud stamp service

- > Controlling registered stamps and signatures in the center, by digitizing them.
- > Automatic graphic overlay for stamp data by a system (automatic reference support function) enables to shorten referencing (matching) time and to enhance the accuracy of tasks. As a result, the stamp reference tasks can be much more efficient.



[What SDGs this solution contributes]

- 8 DECENT WORK AND ECONOMIC GROWTH
Goal 8: Decent Work and Economic Growth
- 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
Goal 9: Industry, Innovation and Infrastructure



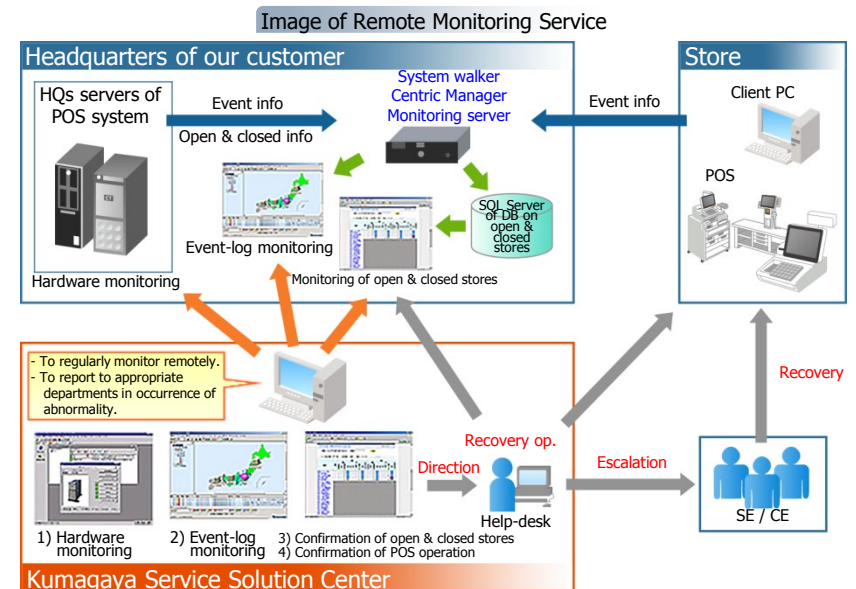
Environmental Efforts in Solution Service Business

We deliver our service solutions to our customers as business partners who share the value standard in order to promote the life cycle management of ICT (Information and Communication Technology) products at the customers. We deliver them with safe, secure and eco-friendly solutions, which contribute to the mitigation of the environmental burden, and with well-prepared support based on our extensive experience and business achievement from the product development until manufacturing.

As a part of retail system introduction and operation service, our experienced expert engineers support the customers with any problem.

In the introduction phase, we can help our customer solve the problem related to installation, setting-up and operation confirmation by confirming and optimizing the wireless LAN environment and by training the POS operators, etc., which are likely to be the customer's initial concerns, at the expense of the customer.

In the operation phase, we help the customers reduce the operating costs by offering the twenty-four seven call care which is one-stop help-desk service, agent service for monitoring / operating the headquarters system and remote monitoring service of the POS system / hardware for retail stores while they are opened or closed, etc. Moreover, we take the environment into consideration upon delivering each service to mitigate the customers' burdens.



Targets and Results

We establish our environmental targets along “Fujitsu Frontech Group Environmental Action Plan VIII”, and promote them. As a result of FY2017, we could achieve all of them, which we had set as “main themes”.

Action Plan VIII (FY2016-FY2018)		Targets and Results (FY2017)		
Themes	Objectives	FY2017 Targets	FY2017 Results	Judge
Our Society	Contribute to sustainable development of society through provision of ICT services. Develop more than 14 environmental contribution solutions from FY2016 to FY2018, to contribute to “Sustainable Development Goals (SDGs)”.	Develop more than 5 environmental contribution solutions by the end of FY2017.	5 certified environment contribution solutions	✓
	Achieve top-level energy efficiency of more than 50% of the newly developed products. Achieve top-level energy efficiency of more than 50% of the products newly developed from FY2016 to FY2018.	Achieve top-level energy efficiency of more than 45% of the products newly developed by FY2017.	57% of the newly developed products achieved the top-level energy efficiency.	✓
	Promote eco design for resource saving and circulation and increase resource efficiency of newly developed products by 15%. Promote eco design for resource saving and circulation and increase resource efficiency of products newly developed from FY2016 to FY2018 by 15%.	Promote eco design for resource saving and circulation and increase resource efficiency of products newly developed by FY2017 by 10%.	The resource efficiency of the newly developed products is improved by 89%.	✓
Our Business	Reduce greenhouse gas emissions in our business facilities. Control greenhouse gas emissions in our business facilities to less than FY2013 by the end of FY2018.	Reduce greenhouse gas emissions in our business facilities over 1.1% compared to FY2013 by the end of FY2017. (Tokyo HQs and Niigata Plant)	The GHG emissions were reduced by 4.5% compared to FY2013.	✓
	Control the amount of waste to less than the average level of FY2012-FY2014. Control the amount of waste to less than the average level of FY2012-FY2014 (under 293 ton).	Control the amount of waste to less than 249 ton in FY2017. (Tokyo HQs and Niigata Plant)	Totally 206.4 ton Tokyo HQs: 41.0 ton (-24%) Niigata Plant: 165.4 ton (-15%)	✓
Our own Theme	Corporate Citizenship Social Activities related to measures against climate change and protection of biodiversity Support our employees to volunteer social activities with society.	Promote worldwide social activities and expand their number of cases. (Equivalent or more than 45 cases of target in FY2016)	77 cases	✓

Explanation of Judge - ✓: Achieved X: Missed

Continuous Promotion to Reduce GHG Emissions

We, with cooperation by all the employees, implement energy saving measures, such as energy saving activity in the whole Group, renewal of energy efficient facilities and so on.

Furthermore, in FY2017, we established our own targets which are in accordance with our business styles in each business location, and made efforts to reduce GHG emissions mainly with energy saving respectively. As a result, we could achieve the target (-4.5%). Target: Reduce no less than 1.1% (-60 ton-CO₂) versus FY2013 Result: Reduced 4.5% (-241 ton-CO₂) versus FY2013

Reinforcement of Environmental Compliance

We annually implement our environmental measurements (for water quality, noise, etc.), setting our own stricter standards than legal ones, to monitor any environmental impact around our business locations.

Regarding waste management, we periodically inspect the internal facilities and contracted waste management companies to confirm that the operations are done properly under the legal requirements.

To meet the requirements of “the Act on Temporary Measures for Promotion of Rational Uses of Energy” and The Japan Electrical Manufacturers' Association “Action Plan for Achieving a Low-carbon Society”, we work on reducing the energy consumption systematically, and report on our activities to government.

Environmental Targets for Business

We, in each division, establish our targets for business following main themes of FTEC Group Environmental Action Plan VIII, which synchronizes Fujitsu Group one, and promote them.

We promote environmental activities related to our business, which are mainly development of environmental contribution solutions, development of new products excellent for energy & resource efficiency, energy saving in each site, reduction of waste generations and so on, based on the meaning and effectiveness recognized by all the employees in the whole Group.

Social Activities (Inside Japan)

We, Fujitsu Frontech Group, expand our activities as “Our Society” in its environmental policy through the clean-up in the community, environmental protection with local government, donation and so on.

Donation

BOOK MAGIC (Collection of used books)

We collect the used books and CDs lying around in the house or office, which will not be read or listened any more and donate the sales to the NPO, JEN (Japan Emergency NGO), who organizes the BOOK MAGIC. The fund earned from the used books is used to build schools in the developing countries.

We've joined this activities since May 2014 collecting the used books and CDs from our employees and send them regularly.



Letter of thanks from the NPO (June 2017)

HQs and Tokyo Plant / LIFE CREATE LIMITED (LC)

Cleaning Campaign

The Headquarters and Tokyo Plant, has implemented this Cleaning Campaign since FY2007. The employees clean the surrounding area once a month for 7 months from March through September.



Environmental Month (June 14, 2017)

Niigata Plant

Flower planting volunteer

Since FY2013, we volunteer planting flowers in the flower beds near Yoshida Kasuga-cho intersection in Tsubame-shi, which had been taken over from local women's association as requested by the city.

Every year, about 10 employees volunteer weeding and picking flowers monthly from April to August while keeping an eye on growth of the flowers.



Flower planting (April 27, 2017)

FUJITSU FRONTECH SYSTEMS LIMITED (FJFS)

Forest conservation

FJFS implements the forest conservation activities twice a year from FY2008, when they concluded the Agreement of Activities for Forest Conservation, etc. with Gunma Prefecture and Maebashi-shi.



Weeding in the forest (July 8, 2017)

Cleaning Campaign

We implement weeding and cleaning in the Minami Shinsui Park near Niigata Plant every June and August from 2009 with cooperation of employees and cooperative companies.

About 200 persons participate in this event every year, which is very much appreciated by the local community.



Scene of weeding (June 7, 2017)

TOTALIZATOR ENGINEERING LIMITED (TEL)

Clean-up with customer

As a social activity, TEL, its customers, concerned parties and employees clean up around the Boat Pier Narashino (the off-site ticket office) hand in hand.



Pick-up of trash (May 12, 2017)

Social Activities (Outside Japan)

The overseas Fujitsu Frontech Group companies implement a variety of social activities mainly for environmental protection.

■ FUJITSU DIE-TECH CORPORATION OF THE PHILIPPINES (FDTP: Philippines)

Volunteer activity in local community

On April 22, 2017, about 50 employees of FDTP have implemented cleaning activity along Laguna Lake for 3 hours.



Scene of activity

■ Fujitsu Frontech North America Inc. (FFNA: U.S.A.)

Donation to local school

From August 8 to September 1, 2017, employees of FFNA donated to neighboring local school, goods to study packed in back-packs which are equivalent to 115 US dollars.

FFNA annually implements this donation, so that children in local community can take sufficient education.



Donated school goods

■ FUJITSU FRONTECH (SHANGHAI) LIMITED (FFTS: China)

Participation in "Health running volunteers"

On June 2, 2018, 12 employees of FFTS participated in "Health running volunteer" at Shanghai-City Century Park.

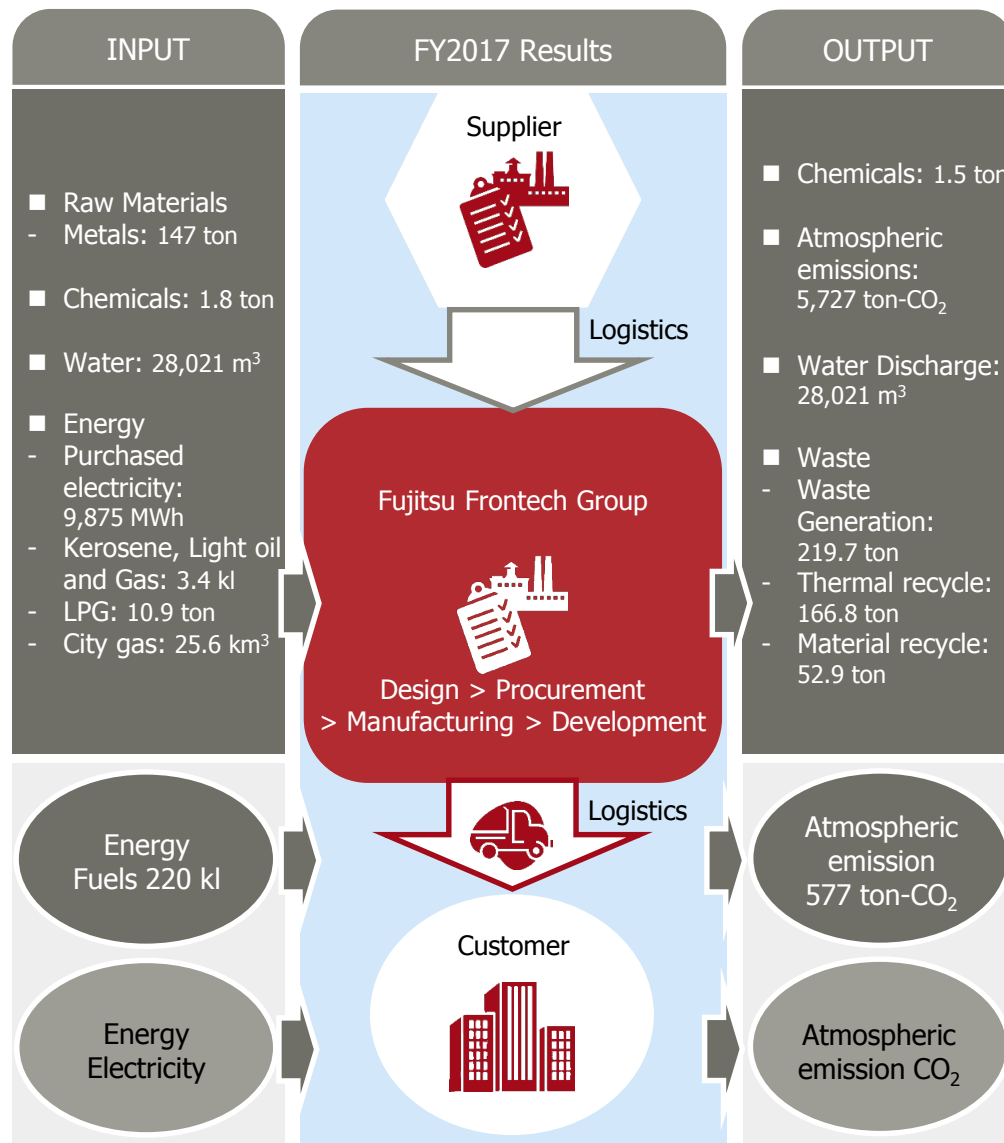
This event is annually held by a sponsor named "Shanghai-City General Union", mainly for delivering daily necessities and educational items to poor children living in Shanghai, and for making up for the lack of exercise with running to promote health of people.



Century Park in Shanghai-City

Business Activities & Environmental Burden -Material Balance-

Based on environmental performance data, we capture the whole image of our environmental activities to promote our eco-friendly business.



Environmental Performance

We measure and monitor the impact on the environment.
We promote our legal compliance based on this information.

FY2017 - Environmental Performance Data (Energy, Water, Chemicals, Waste)

INPUT									
Sites	Energy use						Water [m ³] *1	Chemicals handled [ton] *2	
	Electricity [MWh]	Kerosene [kl]	Light oil [kl]	Gasoline [kl]	LPG [ton]	Town gas [km ³]			
Tokyo HQs	2,751	--	0.06	0.05	1.4	23.0	13,390	--	
Niigata	6,073	2.64	0.06	0.55	9.5	2.6	14,631	1.8	
Omiya SC	108	--	--	--	--	--	--	--	
FJFS (Maebashi)	944	--	--	--	--	--	--	--	
Total	9,875	2.64	0.12	0.6	10.9	25.6	28,021	1.8	

OUTPUT											
Sites	CO ₂ emissions [ton-CO ₂] *3						Water [m ³]	Chemicals output [ton] *2	Waste [ton]		
	Electricity	Kerosene	Light oil	Gasoline	LPG	Town gas			Thermal recycle	Material recycle	To landfill
Tokyo HQs	1,568	--	0.1	0.1	4.3	51.4	13,390	--	20.6	20.4	--
Niigata	3,462	6.6	0.2	1.3	28.4	5.4	14,631	1.5	146.2	17.0	--
Omiya SC	62	--	--	--	--	--	--	--	--	3.5	--
FJFS (Maebashi)	538	--	--	--	--	--	--	--	--	12.0	--
Total	5,630	6.6	0.3	1.4	32.7	56.8	28,021	1.5	166.8	52.9	--

*1: "Grand water" in Tokyo HQs and Niigata Plant has not been counted since FY2015.

*2: Chemicals to be controlled are based on Fujitsu rule. (except chemicals in a little use which is not applicable to law)

*3: Used scale factor of electricity is 0.57 ton-CO₂/MWh from FY2016. (Fixed)

FY2017 - Environmental Performance Data (Legal Compliance)

Niigata Plant -- Drainage Unit: [mg/L] Measuring pts.: 2 - 8 pts. *1			
Main Items	Results *2	Legal Sta.	Original Sta.
Hydrogen ion concentration (pH)	6.2 - 8.2	5.8 - 8.6	5.8 - 8.6
Biochemical oxygen demand (BOD)	1.2 - 3.5	25	25
Suspended Solid (SS)	5 - 41	90	72
Boron and its compounds	<1.0	10	5
Fluorine and its compounds	<0.8	8	4

Niigata Plant -- Groundwater Unit: [mg/L] Measuring pts.: 7 pts.

Main Items	Results *2	Legal Sta.	Original Sta.
Lead and its compounds	<0.001 - 0.003	0.01	0.005
Hexavalent chromium compounds	<0.01	0.05	0.025
Arsenic and its compounds	0.002 - 0.029	0.01	0.01
Fluorine and its compounds	<0.08 - 0.14	0.8	0.4
Cis-1, 2-dichloroethylene	<0.004	0.04	0.02
Chloroethylene *3	<0.0002 - 0.0059	0.002	0.001

Tokyo HQs -- Groundwater Unit: [mg/L] Measuring pts.: 4 pts.

Main Items	Results *2	Legal Sta.	Original Sta.
Lead and its compounds	<0.002	0.01	0.005
Hexavalent chromium compounds	<0.005	0.05	0.025
Arsenic and its compounds	<0.001 - 0.003	0.01	0.005
Fluorine and its compounds	<0.08	0.8	0.4
Cis-1, 2-dichloroethylene	<0.004	0.04	0.02
Chloroethylene	<0.0002	0.002	0.001

*1: Both measuring points and measuring areas are determined each other, depending on the kinds of chemicals.

*2: With respect to each item, we disclose both minimum and maximum value at all the measuring points (a minimum value includes "<") which stands for "less than a detection limit").

*3: Regarding Chloroethene which was detected over the legal standard value in Niigata Plant, we reported the local government immediately. It was found out that this detection had been because of external factors.

Environmental Accounting

The cost was 310 million JPY; the effect was 1,150 million JPY and cost effectiveness was 850 million JPY. As a result, the effective amount decreased by 10.3% (-100 million JPY) compared to FY2016.

FY2017 - Results of Environmental Accounting

Environmental R & D effects decreased, mainly because of transitory saturation of demand for ATMs and bank branch terminals inside Japan.

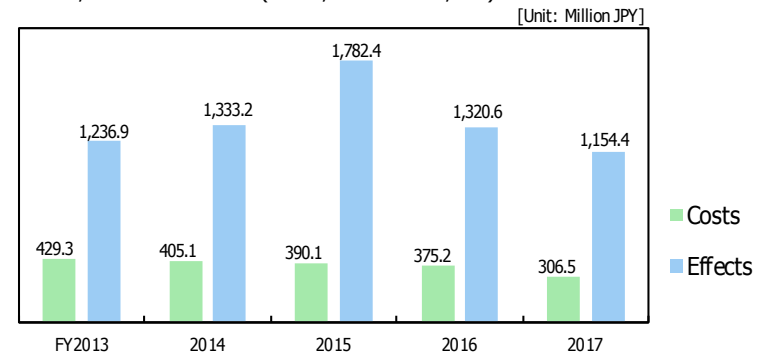
And, total balance decreased compared to last fiscal year as well, because management costs including external audits decreased.

[Results compared to FY2016]

Cost : - 68,658 thousand JPY (375,204 > 306,546)

Effect : - 166,244 thousand JPY (1,320,635 > 1,154,391)

Balance : - 97,586 thousand JPY (945,431 > 847,845)

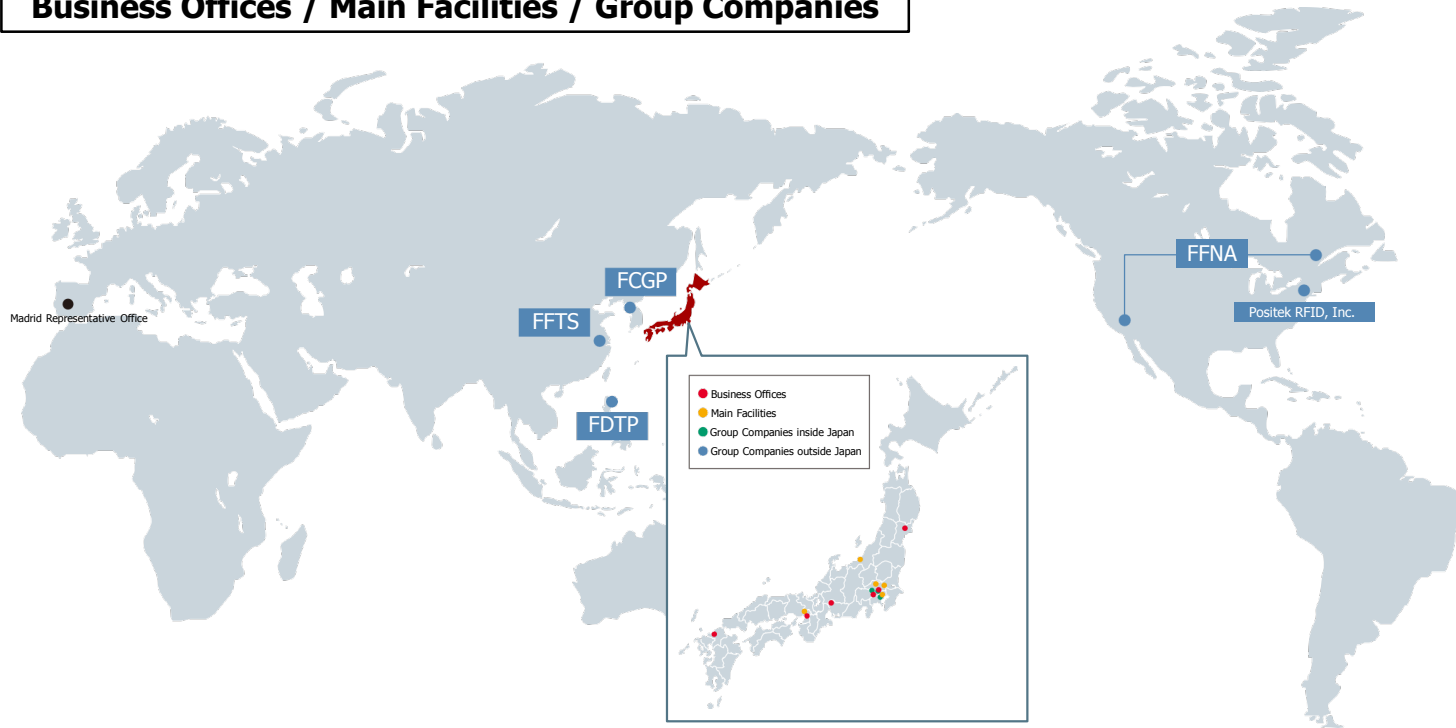


FY2017 - Detail of Environmental Accounting

(): Compared to FY2016 [Unit: Million JPY]

Items	Boundary	Costs	Effects
Within the business area	Pollution prevention	Air pollution prevention, Water quality protection, etc.	18.7 (+0.1) 16.4 (-3.1)
	Eco protection	Energy saving, Prevention of the global warming, etc.	41.9 (-1.4) 24.9 (-3.6)
	Resource circulation	Waste disposal, Effective utilization of resources, etc.	78.3 (-2.8) 68.7 (-8.6)
Sub total		138.9 (-4.2)	110.1 (-15.2)
Up/down stream	Product recycling, Green procurement, etc.	21.6 (-4.8)	8.1 (-1.6)
Management	ISO14001, Eco training, Information systemization, etc.	65.0 (-1.3)	34.9 (+5.6)
R & D	Research for eco-friendly technology of products, etc.	80.9 (-58.4)	1,001.3 (-155.0)
Social activity	Donation and support to eco conservation group, etc.	0.0 (0.0)	0.0 (0.0)
Eco damage	Recovery of land and ground-water pollution, etc.	0.0 (0.0)	0.0 (0.0)
Total		306.5 (-68.7)	1,154.4 (-166.2)

Business Offices / Main Facilities / Group Companies



Business Offices

Sales Group
1776 Yanokuchi, Inagi-shi, Tokyo 206-8555
TEL : +81-42-377-2622

Omori Office
East Square Omori, 6-20-14 Minamioi, Shinagawa-ku, Tokyo 140-0013
TEL : +81-3-5762-5527

Tohoku Branch
Nomura Sendai Aobadori Building, 3-2-23 chuo, Aoba-ku, Sendai-shi, Miyagi Prefecture 980-8441
TEL : +81-22-264-4737

Chubu Branch
JR Gate Tower, 1-1-3 Meleki, Nakamura-ku, Nagoya-shi, Aichi Prefecture 450-6631
TEL : +81-52-756-3685

Nishinohon Branch
Osaka Tokyokaijyonichido Bldg, 2-2-53 Shiromi, Chuo-ku, Osaka-shi, Osaka Prefecture 540-0001
TEL : +81-6-6910-2210

Kyushu Branch
Higashihie Business Center, 3-1-2 Higashihie, Hakata-ku, Fukuoka-shi, Fukuoka Prefecture 812-0007
TEL : +81-92-452-2365

Group Companies inside Japan

LIFE CREATE LIMITED

1776 Yanokuchi, Inagi-shi, Tokyo 206-8555
TEL : +81-42-379-6661

Welfare programs, facilities management and labor dispatch operations

FUJITSU FRONTTECH SYSTEMS LIMITED

EKITA, 2-30-8 Omote-cho, aebashishi, Gunma Prefecture 371-0024
TEL : +81-27-225-6600

TOTALIZATOR ENGINEERING LIMITED

East Square Omori, 6-20-14 Minamioi, Shinagawa-ku, Tokyo 140-0013
TEL : +81-3-5762-5500

Development of software and solutions



Maintenance of totalizator systems, development and sales of operation services and support systems for public race courses



Main Facilities

Headquarters / Tokyo Plant

1776 Yanokuchi, Inagi-shi, Tokyo 206-8555
TEL : +81-42-377-5111



Omiya Solution Center

Omiya JP Building, 1-11-20 Sakuragicho, Omiya-ku, Saitama-shi, Saitama Prefecture 330-0854
TEL : +81-48-788-1280



Niigata Plant

17-8 Yoshidahigashisakae-cho, Tsubame-shi, Niigata Prefecture 959-0294
TEL : +81-256-93-3161



Osaka Solution Center

Osaka Tokyokaijyonichido Bldg, 2-2-53 Shiromi, Chuo-ku, Osaka-shi, Osaka Prefecture 540-0001
TEL : +81-6-6910-2226



Kumagaya Service Solution Center

1224 Nakanara, Kumagaya-shi, Saitama Prefecture 360-0801
TEL : +81-48-526-5333



Group Companies outside Japan

FUJITSU FRONTTECH (SHANGHAI) LIMITED (FFTS)

Building 8, Lujiazui Software Park, No.120, Lane 91, E' Shan Rd, Pudong District, Shanghai, CHINA
TEL : +86-21-6065-1888

Sales and maintenance of mechanical components and display systems



FUJITSU DIE-TECH CORPORATION OF THE PHILIPPINES (FDTP)

113 East Science Avenue, Special Export Processing Zone, Laguna Technopark, Binan, Laguna, Philippines
TEL : +63-49-541-2811

Manufacturing and sales of metal molds and mechanical components



FUJITSU FRONTTECH CHUNGHU GLOBAL PRODUCTS Co. Ltd. (FCGP)

1-185 Yangchon eup, Gimpo, Gyeonggi province, South Korea
TEL : +82-2-3670-7586

Development of finance related equipment, etc.



Fujitsu Fronttech North America, Inc. (FFNA)

27121 Towne Center Drive, Suite 100, Foothill Ranch, California 92610 U.S.A.
TEL : +1-949-855-5500

Sales of mechanical components, RFID, and palm vein authentication systems, and development, manufacturing and sales of self-checkout systems



651 Route 3 Plattsburgh, NY 12901 U.S.A.
TEL : +1-518-562-8495

Manufacturing of Self-checkout system etc. and mechanical components repair service



Positek RFID, Inc.

1210 Stanbridge Street, Suite 710 Norristown, Pennsylvania 19401 U.S.A.

Sales of RFID products and provision of solutions and services related to RFID