

Fujitsu Frontech Group
Environmental Report
2017

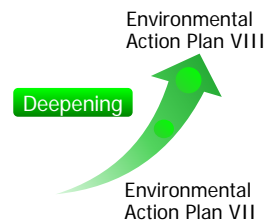


Our Environmental Priority Themes

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 deeper than VII.



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.

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Upon Editing

We, Fujitsu Frontech Group, think that it is our mission to properly, speedily and globally deliver our solution of hardware, software and service to share pleasure with our customer by responding to expectation from customer and society as company group which connects human to ICT with state-of-the-art technology.

In this report, we mainly introduce the results of FY 2016 while in the Environmental Action Plan VIII (FY2016-FY2018).

Scope of This Report

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 FY2016, and the indicated data are the final actual values. However, this report also includes some data from the period other than FY2016.

Communication (Editorial Postscript)

Thanks to all the related parties, we were able to issue 14th Environmental Report in the state that the importance of environmental protection is now expressed in the world.

We will keep on issuing this annual report continuously and will make our efforts to reflect the everyone’s opinions on creating the easy-to-understand report.

Issue:

November, 2017

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

In 2015, toward realization of sustainable society, two common international targets were agreed in international conferences. 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” in actual.

Under the circumstance like this, Fujitsu Group established aggressive goal named “CO₂ Zero-emission” with 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 business innovation and expansion of customers.

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-level energy efficiency, for example, ATMs and bank branch terminals, handy-terminals and totalizer system for public racing market, to contribute to energy efficiency of customers.

Furthermore, in fields of financial ATMs and retail shop related solutions, outsourcing and help-desk service, 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. Though we achieved most of targets in the first fiscal year, further we will make efforts for activity toward long-term vision named “CO₂ Zero-emission” to contribute to solving social and environmental issues from now, while steadily implementing this Action Plan.

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

In FY2016, we established our targets 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”, and promoted them.

FY2017 is a middle of three years of Environmental Action Plan VIII. We will make efforts to achieve the targets, expanding our environmental contribution with awareness of the final achievements.

- Our Society

Eco-friendly products we have developed are top-runner products for energy efficiency. We not only make 50% newly-developed products into top level, but also try to develop products with 15% or more resource efficiency.

We also contribute to the reduction of greenhouse gas emissions by providing our eco-friendly solutions and services to many customers.

- Our Business

We are enhancing our energy saving activities further to reduce the energy consumption in the business activities of Fujitsu Frontech Group.

In FY2017, 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 Headquarter 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)
Kunihiro Matsumori

- Environmental Business

We promote the global environmental protection 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 “Fujitsu Climate and Energy Vision”.

* SDGs:

Acronyms for “Sustainable Development Goals” of United Nations which are the international community goals from 2016 to 2030.

Company Profile

- Company Name

Fujitsu Frontech Limited

- Foundation

November 9, 1940

- Capital

JPY8,457,500,000.-

- Account Closing Date

March 31

- Representative

Kazuhiro Igarashi, President and CEO

- ISO14001

Certificate No.: EC98J2005-D050

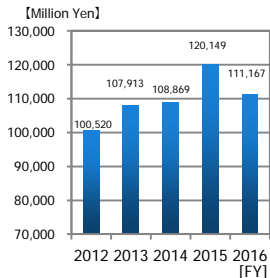
- Address

- Headquarter / Tokyo Plant
1776 Yanokuchi, Inagi-shi, Tokyo, 206-8555 Japan
- Niigata Plant
17-8 Yoshidahigashisakae-cho, Tsubame-shi, Niigata Prefecture, 959-0294 Japan
- Omiya Solution Center
7th Floor, Omiya JP Bldg., 1-11-20 Sakuragi-cho, Omiya-ku, Saitama-shi, Saitama Prefecture, 330-0854 Japan
- Osaka Solution Center
8th Floor, Osaka Tokio Marine & Nichido Bldg., 2-2-53 Shiromi, Chuo-ku, Osaka-shi, Osaka Prefecture, 540-0001 Japan
- Kumagaya Service Solution Center
1224 Nakanara, Kumagaya-shi, Saitama Prefecture, 360-0801 Japan (Inside the Fujitsu Kumagaya Plant)
- Omori Office
2nd Floor, East Square Omori, 6-20-14 Minamioi, Shinagawa-ku, Tokyo, 140-0013 Japan

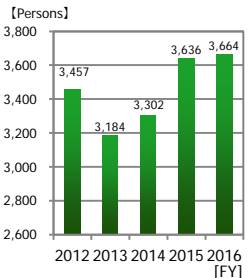
- Group Companies (Japan and Outside Japan)

- Life Create Limited (LC: Japan)
- Fujitsu Frontech Systems Limited (FJFS: Japan)
- Totalizator Engineering Limited (TEL: Japan)
- Fujitsu Die-tech Corporation of The Philippines (FDTP: Philippines)
- Fujitsu Frontech (Shanghai) Limited (FFTS: China)
- Fujitsu Frontech North America Inc. (FFNA: U.S.A.)

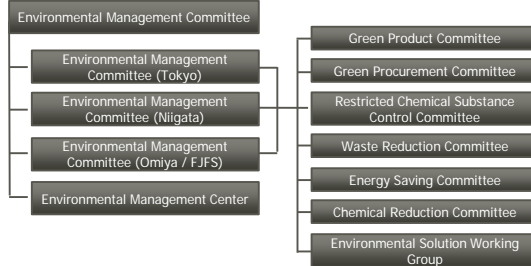
- Transition of Sales (Consolidated)



- Transition of Employees (Consolidated)



- Environmental Committees



* Under the organization of ISO 14001, Omori Office is working as a sub group of Head Quarter / Tokyo Plant. However, Kumagaya Service Solution Center and the other branches work on the EMS activities independently (not as sub group) because each of them is located in each Fujitsu Office.

- Fujitsu Frontech Way

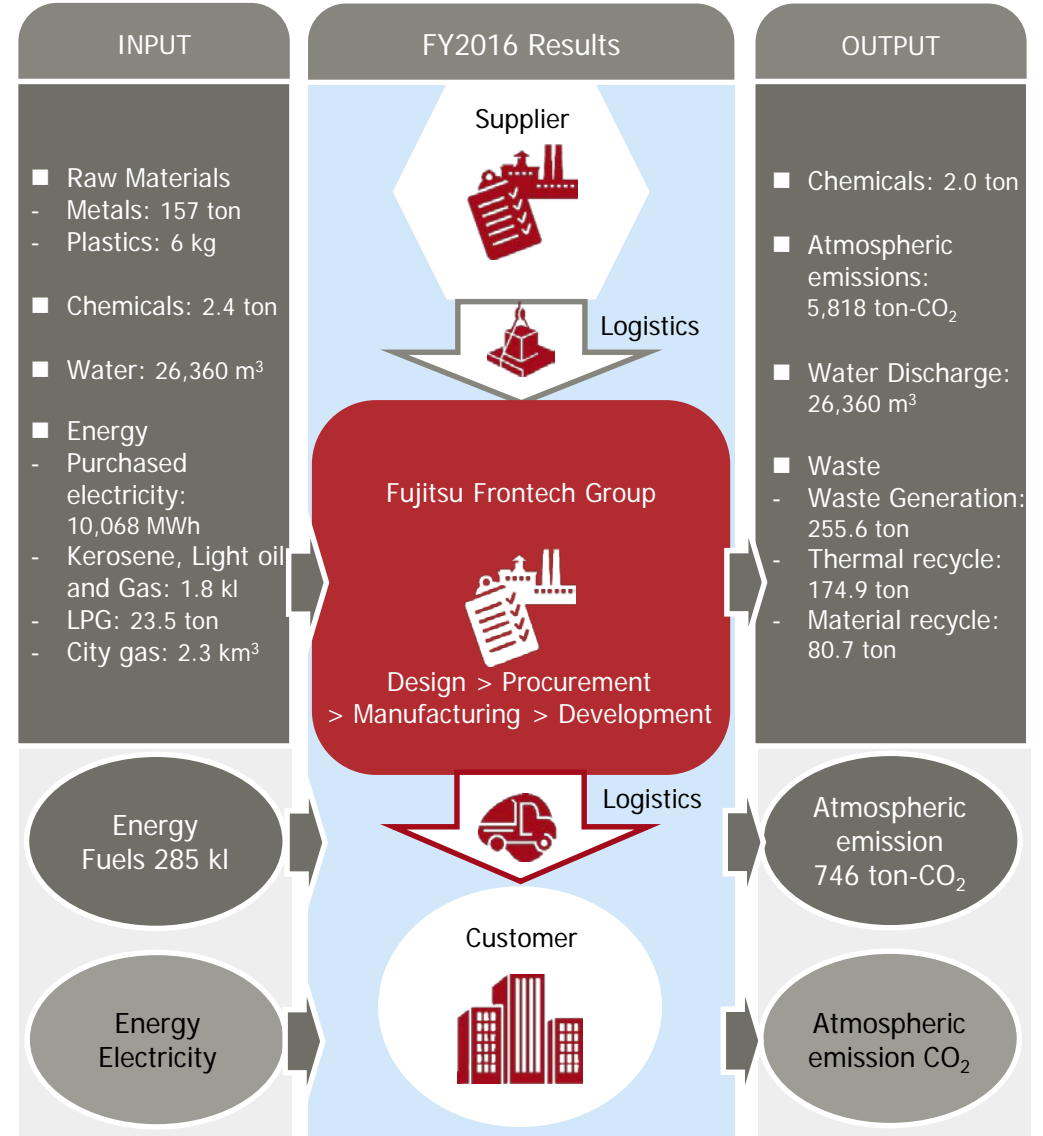
All employees of Fujitsu Frontech Group will mitigate a variety of risks caused by our business on the basis of Corporate Vision, Corporate Values, and Code of Conduct & Principles defined in "Fujitsu Frontech Way" to fulfil social responsibility.

Based on the above policy, we will address continuous enhancement of corporate value by revising "Basic policy related to preparation of internal control" to ensure adjustment of business and by making our work efficient.



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.

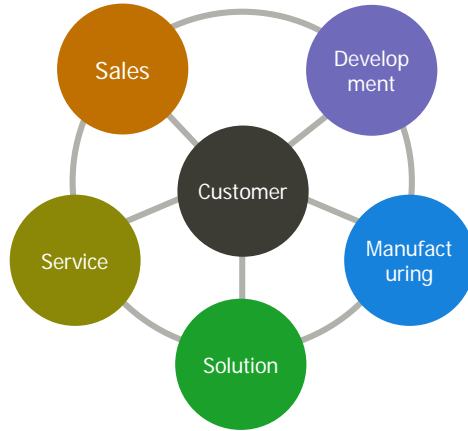


Business Structure

We have business of sales, development, manufacturing, service and solutions, and promote eco-friendly activity in each business cycle.

Consider Environment at Each Business Cycle

Setting “B to B to Front” as a slogan, we establish business structure integrating not only development and manufacturing of hardware and software, but also from sales through delivery of operation, maintenance and service. And, we promote eco-friendly activities in each business cycle.



Sales

We help our customer mitigate environmental burden, proposing introduction of eco-friendly products excellent for energy & resource efficiency and environmental contribution solutions.

Delivery of Eco-friendly Products and Environmental Contribution Solutions

In our sales division, we contribute to mitigating environmental burden at customer side, by providing eco-friendly products such as “palm vein authentication device” pursuing energy and resource efficiency and environmental contribution solutions capable of largely reducing CO₂.



* Green Policy Innovation:

This is Fujitsu Group original eco-label. We put this label on our “Green Products” and “Super Green Products”, etc.

Development of Hardware Products

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

Efforts toward Action Plan VIII

Pursuing 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. Under the circumstances that energy efficiency regulations relevant to ICT products continue to increase, we try to mitigate GHG emissions derived from products.

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

“Air-line Printer” for air ports, realizing miniaturization and weight saving



Based on know-how that we have developed in the field of airport and airways, we adopted thinner plates for conveying structure and structure parts etc. to materially reduce its weight and volume. These realized free layout in airport counters.

Introduction of Our Products

Palm Vein Authentication “PalmSecure-F Pro” realizing less electricity use and miniaturization



This equips with a high-performance CMOS sensor, and can reduce electric consumption per one authentication thanks to improvement of current drive circuits. And, miniaturization of its optical lenses realized its incorporation within products, which had never been done before.

RFID-RW “Counter Sensor Slim” realizing combination with its antenna



No more stress with “Counter Sensor Slim”! which is provided with a much thinner structure by combining the reader-writer and the antenna and adopting the bus power.

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 complies with laws and regulations, and defines regally-banned chemical substances as “do not contain” substances, and prohibits using them in order to prevent the impact on human health and environmental pollution by them preliminarily.

Moreover, Fujitsu Group defines hazardous chemical substances or chemical substances with possibility of hazard. It is required to report and disclose such “containment-control” substances if any of them are contained in products and to promote the survey of chemical substances in product / parts by using AIS*3 and MSDSplus*4 provided by the JAMP in cooperation with suppliers so that the use of hazardous or possibly hazardous substances can be prohibited clearly.

Fujitsu Group has been examining the use of phthalic esters, which are added as prohibited substances in the RoHS*5 Directive.

*3: AIS--Article Information Sheet
 *4: MSDSplus--Material Safety Data Sheet plus
 *5: RoHS--Restriction on Hazardous Substances

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 (Niigata Plant)

We are working on the digital manufacturing with Internet of things (IoT) - Challenge for Smart Factory fusing the virtual and real worlds -

Process Innovation together with Development Divisions

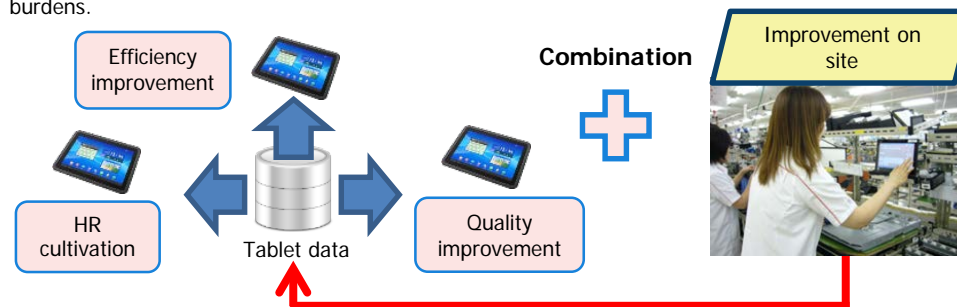
To ensure design quality ahead of schedule (realization of front-loading), we get feedback about the process from trial-production, verification through product design by utilizing 3D printers for plastic and metal materials, and improve the efficiency of developing process. Thus, we have just realized large time-saving from product design to mass production.

Furthermore, we established the virtual verification system using the 3D data with the concept of “Making without actually making” to speedily respond to a variety of requests from our customers and the changes of market. Thanks to this virtual verification technology, we could shorten the time for developing, supply the products steadily and stabilize the product quality while mitigating various environmental impacts (related to electricity, waste, materials, logistics etc.).

Expansion and Level-up of Production Management System with Tablet System

In Niigata Plant, we introduced the tablet system in FY2014, where tablets are used for controlling processes and check sheets. We have been realizing the reduction of the environmental burdens by improving the work efficiency, controlling the real-time data and promoting paperless thanks to this system. We have also provided this system in our main overseas plants and there are 930 tablet devices working in Japan and other countries. In one of our overseas plants (outside Japan), these devices are used not only in the assembly lines but also in the part working processes.

In addition, we developed the analysis tool by ourselves in Niigata Plant to analyze the data acquired through this tablet system so as to utilize the systemized tablet data effectively from the three viewpoints—efficiency improvement, quality enhancement and cultivation of human resources—and we started working on fusing the worksite improvement through the visualization. With this, we are looking forward to more improvements in the plant at a higher level and the reduction of the environmental burdens.



Development of Solutions and Service Solution

In order to contribute to the 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

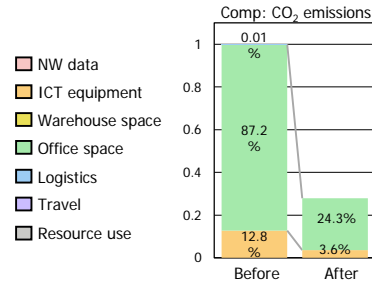
Fujitsu Group aims to contribute to the global SDGs with the customers by providing them with the ICT service.

Fujitsu Frontech Group set targets to deliver totally over 14 ICT solutions (Environmental Contribution Solutions) in Environmental Action Plan VIII (FY2016-FY2018). In FY2016, we set the annual target to deliver 4 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 Solution in FY2016

- 1) Recognition engine package (Automatic recognition of the tax and public fund definitions)
- 2) "Cyclic Electronic Journal" in passbook issuing machines
- 3) Option of EAN bar-code recognition
- 4) iATM system "Response to retrieval"
- 5) System of "Restoration upon having a IC card scanning error"



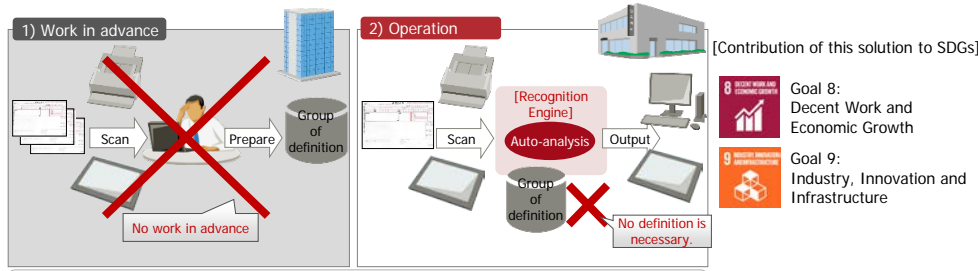
- NW data
- ICT equipment
- Warehouse space
- Office space
- Logistics
- Travel
- Resource use

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

[Example] Recognition engine package (Automatic recognition of the tax and public fund definitions)

- Automatically analyzes each voucher and recognizes relevant data from **keywords** such as name and price, etc.
- **No need** to prepare group of definition in advance.

CO₂ emissions
-72.1%



- [Contribution of this solution to SDGs]
- Goal 8: Decent Work and Economic Growth
 - Goal 9: Industry, Innovation and Infrastructure

[Feature] This solution applies to **various** vouchers because it becomes unnecessary to prepare the group of definition in advance.

This recognizing method is effective for "Delivery notes", etc., which come in many unspecified types.

* This solution is capable of recognizing words very precisely and of accelerating the processing by utilizing AI technology. It is one of the certified Fujitsu-brand AI (Artificial Intelligence) technology solutions, "Zinrai".

Human Centric AI Zinrai

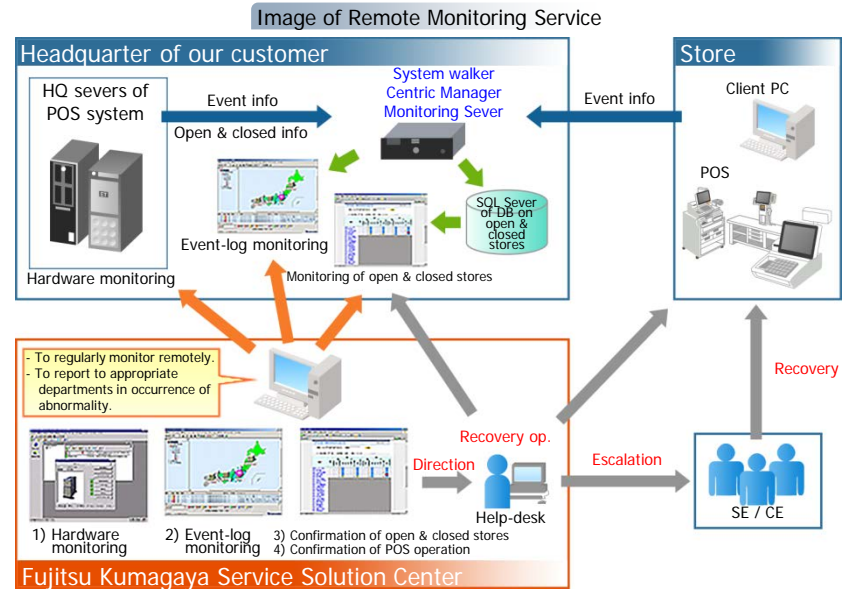
Environmental Efforts in Solution Service Business

We deliver our service solutions to our customers as a business partner who shares the value standard in order to promote the life cycle management of ICT (Information and Communication Technology) products at the customers. We provide our customers 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 preparing the individual operation manual and/or 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 help-desk, agent service for monitoring / operating the headquarter system, remote monitoring service of the POS system / hardware for retail stores while they are opened or closed, field service and OS support, etc. Moreover, we take the environment into consideration upon delivering each service to mitigate the customers' burdens (costs and energy).



Fujitsu Kumagaya Service Solution Center

Targets and Results

In FY2016, the first fiscal year of Environmental Action Plan VIII, we could materially achieve 5 targets while missing “Reduction of greenhouse gas emissions” among our “Main themes”.

Action Plan VIII (FY2016-FY2018)		Targets and Results (FY2016)		
Themes	Objectives	FY2016 Targets	FY2016 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 4 environmental contribution solutions by the end of FY 2016.	5 certified environment contribution solutions	S
	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 40% of the products newly developed by FY2016.	50% of the newly developed products achieved the top-level energy efficiency.	S
	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 FY2016 by 5%.	The resource efficiency of the newly developed products is improved by 140%.	S
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 3% compared to FY2013 by the end of FY2016. (Tokyo HQ and Niigata Plant)	The GHG emission is reduced by 2.54% compared to FY2013.	D
	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.	Control the amount of waste to less than; Tokyo HQ: 83 ton Niigata Plant: 210 ton by the end of FY2016.	Tokyo HQ: 54.1 ton (-35%) Niigata Plant: 172.5 ton (-18%)	S
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 on average)	57 cases	S

Judge legend - S: Sufficiently achieved A: Achieved D: 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.

Further, in FY2016, we established our own target which are in accordance with our business styles, and made efforts to reduce GHG emissions mainly with energy saving. However, we just missed the target by +0.46% at the end of the FY2016.

Target: Reduce no less than 3% (-161 ton-CO₂) versus FY2013
Result: Reduced 2.54% (-137 ton-CO₂) versus FY2013

Reinforcement of Environmental Compliance

We annually implement our environmental measurements (for water & noise), and verify that there is no problem compared to our own stricter standards than legal ones.

Regarding waste management, we periodically inspect the internal facilities and contracted waste management vendors to confirm whether or not the operation is properly done, following 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.

Environmental Performance

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

FY2016 - Environmental Performance Data (Energy, Water, Chemicals, Waste)

INPUT								
Sites	Energy use						Water [m ³]	Chemicals handled *1 [ton]
	Electricity [MWh]	Kerosene [kl]	Light oil [kl]	Gasoline [kl]	LPG[ton]	Town gas [km ³]		
Tokyo HQ	2,680	--	0.11	0.05	14.7	--	11,220	--
Niigata	6,358	0.92	0.03	0.67	8.8	2.3	15,140	2.4
Omiya SC	121	--	--	--	--	--	--	--
FJFS (Maebashi)	909	--	--	--	--	--	--	--
Total	10,068	0.92	0.14	0.72	23.5	2.3	26,360	2.4

OUTPUT											
Sites	CO ₂ emissions [ton-CO ₂] *2						Water [m ³]	Chemicals output *1 [ton]	Waste [ton]		
	Electricity	Kerosene	Light oil	Gasoline	LPG	Town gas			Thermal recycle	Material recycle	To landfill
Tokyo HQ	1,528	0	0.3	0.1	43.2	--	11,220	--	16.1	38.0	--
Niigata	3,624	2.3	0.1	1.6	25.9	5.4	15,140	2.0	151.5	23.7	--
Omiya SC	69	--	--	--	--	--	--	--	--	3.5	--
FJFS (Maebashi)	518	--	--	--	--	--	--	--	7.3	15.5	--
Total	5,739	2.3	0.4	1.7	69.1	5.4	26,360	2.0	174.9	80.7	--

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

*2: Used scale factor of electricity is 0.57 ton-CO₂/MWh from FY2016.

FY2016 - Environmental Performance Data (Legal Compliance)

Niigata Plant - Water Quality Unit: [mg/L]			
Main Items	Results *3	Legal Sta.	Original Sta.
Hydrogen ion concentration (pH)	6.3 - 7.6	5.8 - 8.6	5.8 - 8.6
Biochemical oxygen demand (BOD)	0.5 - 2.5	25	25
Suspended Solid (SS)	3 - 65	90	72
Boron and its compounds	<1.0	10	5
Fluorine and its compounds	<0.8	8	4

Niigata Plant - Grand Water Unit: [mg/L]			
Main Items	Results *3	Legal Sta.	Original Sta.
Lead and its compounds	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
1,1-dichloroethylene	0.08 - 0.15	0.8	0.4
Cis-1, 2-dichloroethylene	<0.004	0.04	0.02
Trichloroethylene	<0.001	0.03	0.015

*3: "<" means "less than".

Tokyo HQ - Grand Water Unit: [mg/L]			
Main Items	Results *3	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	0.003	0.01	0.005
Nitrate nitrogen and nitrite nitrogen	1.4	10	5
Cis-1, 2-dichloroethylene	<0.004	0.04	0.02
Trichloroethylene	<0.002	0.03	0.015

Environmental Accounting

The cost was 380 million yen; the effect was 1,320 million yen and cost effectiveness was 950 million yen. As a result, the effective amount decreased by 32.1% (-450 million yen) compared to FY2015.

FY2016 - Results of Environmental Accounting

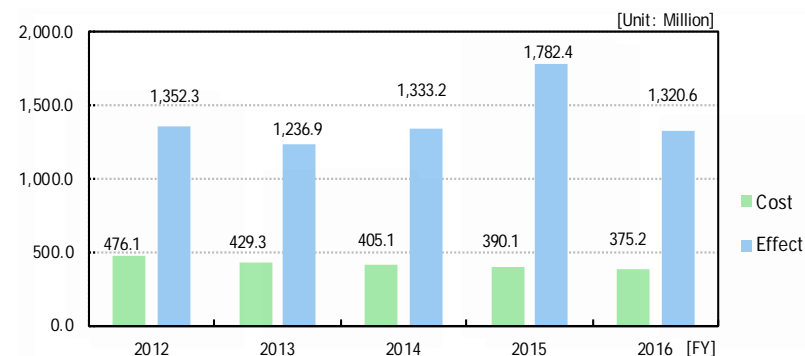
Both environmental R & D cost and effect decreased, mainly because of transfer of POS related business. And, balance decreased as well, though introduction of LED lightings and change of waste to valuable were promoted.

[Results compared to FY2015]

Cost : -14,886 thousand yen (390,090 => 375,204)

Effect : -461,781 thousand yen (1,782,416 => 1,320,635)

Balance: -446,895 thousand yen (1,392,326 => 945,431)



FY2016 - Detail of Environmental Accounting

(): Compared to FY2015 [Unit: Million yen]

Items		Boundary	Cost	Effect
Within the business area	Pollution Prevention	Air pollution prevention, Water quality protection, etc.	18.7 (-1.4)	19.6 (+1.7)
	Eco Protection	Energy saving, Prevention of the global warming, etc.	43.3 (-2.1)	28.5 (+2.1)
	Resource circulation	Waste disposal, Effective utilization of resources, etc.	81.1 (+3.7)	77.3 (+7.0)
	Sub total		143.1 (+0.3)	125.3 (+10.8)
Up/down stream	Product recycling, Green procurement, etc.	26.4 (-2.4)	9.7 (-0.0)	
Management	ISO14001, Eco training, Information systemization, etc.	66.4 (+2.6)	29.3 (-2.1)	
R & D	Research for eco-friendly technology of products, etc.	139.3 (-15.3)	1,156.3 (-470.4)	
Social activity	Donation and support to eco conservation group, etc.	0.0 (-0.0)	0 (0)	
Eco damage	Recovery of land and ground-water pollution, etc.	0 (0)	0 (0)	
Total		375.2 (-14.9)	1,320.6 (-461.8)	

Social Activities (Inside Japan)

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

Donation

Collection of PET bottle caps

We participate in the PET bottle cap collection activity organized by an NPO named “Re Lifestyle” at each site. Many of our employees cooperate with this easy-to-do activity.

The collected caps are sold through the NPO, and the money is used to buy vaccines for children living in struggling countries all over the world.



Letter of thanks from the NPO

Niigata Plant

Cleaning Campaign

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

About 200 persons participate in this event every year. And, we obtain thanks from local community.

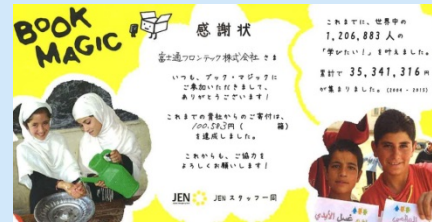


Scene of weeding (June 8, 2016)

BOOK MAGIC (Collection of used books)

BOOK MAGIC is an activity of an NPO called JEN to collect unnecessary books and CDs, etc. from the employees, sell them and donate the fund for school construction, etc. in struggling countries.

We started this from May 2014. We collect the used books, CDs, etc. from the employees in collection boxes, and send them to the NPO periodically.



Letter of thanks from the NPO

TOTALIZATOR ENGINEERING LIMITED (TEL)

Clean-up with customer

As a social activity of TEL, our customer, concerned parties and the employees of TEL implement clean-up around Boat Pier Narashino (the outside ticket counters) hand in hand.



Pick-up of trash (December 10, 2016)

Tokyo HQ / LIFE CREATE LIMITED (LC)

Cleaning Campaign

Tokyo Headquarter and 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, 2016)

FUJITSU FRONTTECH 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 City.



Weeding in the forest (October 22, 2016)

Social Activities (Outside Japan)

The overseas Fujitsu Frontech Group companies, FUJITSU FRONTECH NORTH AMERICA INC. (FFNA), FUJITSU DIE-TECH CORPORATION OF THE PHILIPPINES (FDTP) and FUJITSU FRONTECH (SHANGHAI) LIMITED (FFTS), implement a variety of social activities mainly for environmental protection.

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

PEZA's "Environmental Award"

FDTP won the "Environmental Award" from PEZA (Philippine Economic Zone Authority) because of its contribution mainly of tree planting activity in local community. This has been the second time since FY2010. (It gained "Enterprise Award" and "Exporter Award" too other than this.)

On April 14, 2016, Sekiyama, President of FDTP, was given trophies of each award by Aquino, President of Philippines, at PEZA INVESTORS' AWARDS 2016 which was held at World Trade Center Metro Manila.



Ceremony of "Environmental Award"



Education of trash sorting at a local facility

On June 4, 2016, the employees of FDTP joined the local volunteer activity in Karawang of Laguna State.

Mainly, they repaired facilities, provided gathered children with education of trash sorting, and gave memorial presents, in local community.



Education of trash sorting



FUJITSU FRONTECH NORTH AMERICA INC. (FFNA: U.S.A.)

Participation in charity marathon

On September 25, 2016, the employees of FFNA participated in charity 5km-marathon sponsored by "The Susan G. Komen Breast Cancer Foundation" in California State, sweating a lot under the fine sunshine.

This event is in purposes of promoting health and collecting support fund of breast cancer.



Charity marathon in California State

FUJITSU FRONTECH (SHANGHAI) LIMITED (FFTS: China)

Participation in Health running volunteers

On June 10, 2017, 4 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 making up the lack of exercise with running to promote health of people.



Running around Century Park in Shanghai-City



Introduction: Main Facilities and Group Companies

-- Domestic Sites

Headquarter

Hardware development and design

- Headquarter / Tokyo Plant

(Inagi-shi, Tokyo)

> Design & development, procurement



Mass production factory

- Niigata Plant

(Tsubame-shi, Niigata pref.)

> Manufacturing, logistics



Software development center

- Omiya Solution Center

(Omiya-ku, Saitama-shi, Saitama pref.)

> Planning & Design, Development



- Osaka Solution Center

(Chuo-ku, Osaka-shi, Osaka)

> Development, Sales



System assessment center

- Kumagaya Service Solution Center

(Kumagaya-shi, Saitama pref.)

> Introduction, construction, operation and maintenance



-- Domestic Group Companies

- FUJITSU FRONTTECH SYSTEMS LIMITED (Maebashi-shi, Gunma pref.)

> Development of software and solutions

- TOTALIZATOR ENGINEERING LIMITED (Shinagawa-ku, Tokyo)

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

-- Overseas Group Companies

- FUJITSU DIE-TECH CORPORATION OF THE PHILIPPINES (Philippines)

> Manufacturing and sales of metal molds and mechanical components

- FUJITSU FRONTTECH (SHANGHAI) LIMITED (China)

> Sales and maintenance of mechanical components and display systems

- FUJITSU FRONTTECH NORTH AMERICA INC. (U.S.A.)

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

FUJITSU FRONTTECH (SHANGHAI) LIMITED (FFTS)



FUJITSU FRONTTECH SYSTEMS LIMITED (FJS: Maebashi)



TOTALIZATOR ENGINEERING LIMITED (TEL: Omori)



FUJITSU DIE-TECH CORPORATION OF THE PHILIPPINES (FDTP)



FUJITSU FRONTTECH NORTH AMERICA INC. (FFNA)



Foothill Ranch, California State

Plattsburgh, New York State

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