

Environmental Conservation Activities



Social Requirements

- Reduction of environmental impacts
- Global warming prevention
- Waste reduction

The FDK Approach

- Providing environmentally-friendly products
- Increasing productivity and regularly upgrade facilities
- Reuse of items of value, thorough sorting

Highlights of Environmental Conservation Activities

9th Environmental Action Plan of 6 target items 5 were achieved	Design for environment Target achievement	Reduction of greenhouse gases Target achievement	Improved energy efficiency of 4 sites Target achievement
Reduction of chemical substances of 4 sites, Target achievement	Reduction of waste of 4 sites, Target achievement	Local environment/social contributions Target achievement	

Environmental Conservation Initiatives

Protecting the Global Environment

Basic Concept

As a member of the Fujitsu Group, the FDK Group recognizes the need for action toward the realization of an independently sustainable and recycle-oriented society with initiatives toward environmental conservation that follow the business activities of the company, which include not only legal compliance in each country and region, greenhouse gas reduction, waste reduction, and thorough management of chemical substances but also the reduction of our environmental impact through the products that FDK provides.

FDK established the FDK Group Environmental Policy to promote even more robust Group-wide environmental management.

FDK Group Environmental Policy Action Guidelines

1. Promote and continually enhance environmental management through an environmental management system that complies with the ISO 14001.
2. Promote the sustainable use of natural resources, measures to combat climate change, protection of the ecosystem, and measures to prevent environmental pollution.
3. Comply with all requirements that have been agreed upon from environmental laws and regulations to agreements made with administrative bodies related to FDK business activities.

4. Undertake initiatives through relevant departments using the items below as prioritized themes:
 - (1) Promote eco-conscious product development.
 - (2) Promote energy savings.
 - (3) Properly manage chemical substances.
 - (4) Reduce waste and promote recycling.
 - (5) Promote local environmental efforts and social contribution activities.
 - (6) Advocate initiatives for suppliers and customers to reduce CO₂ emissions.
5. Set environmental goals and targets to achieve in the Environmental Policy and promote environmental management as an effort undertaken by all employees whether FDK Group companies or partners.
6. Raise awareness about the Environmental Policy with all employees whether FDK Group companies or partners working on FDK Group premises and also share it with the general public.

FDK Group Environmental Policy

The FDK Group will promote environmental management under its slogan based on the philosophy below.

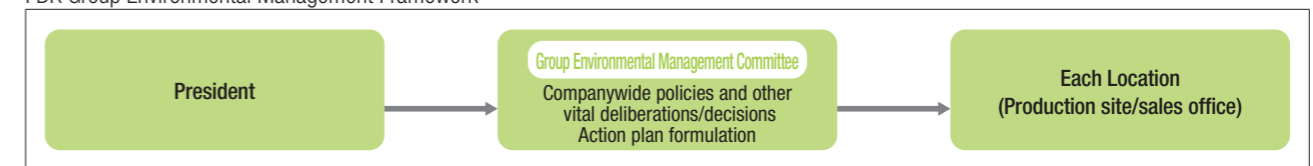
Philosophy

As a Smart Energy Partner that assembles advanced technologies, the FDK group would like our customers to best utilize electric energy in a safe and efficient manner, and it hopes to contribute to the materialization and development of a sustainable society. Moreover, the FDK Group will promote environmental initiatives as efforts undertaken by all employees whether FDK Group companies or partners through fair corporate activities which comply with environmental laws and regulations to pass down a beautiful global environment rich with nature to the next generation.

The FDK Group Slogan

FDK Group Cares about Nature and Safeguards our Planet.

FDK Group Environmental Management Framework



FDK Group 9th Environmental Action Plan

The FDK Group has formulated a plan that conforms to the Fujitsu Group Environmental Action Plan and it has been promoting environmental initiatives.

Through these policies and targets, FDK Group contributes to re-

ducing the environmental impact of customers and society while striving to reduce the environment impact of the FDK Group by strategically and continuously expanding environmental conservation activities to all FDK business regions. Results for FY2019 are shown below.

The FDK Group will continue to further enhance our efforts toward achieving these targets.

FDK Group 9th Environmental Action Plan FY2019 Achievements

Items	Action Plan	Overall (Achievement Rate)
Design for environment	Develop at least six battery products or electronic devices annually that contribute to better energy efficiency (energy savings) throughout the entire Group in Japan.	○
	Develop at least three battery products or electronic devices annually that contribute to better resource efficiency (resource savings) throughout the FDK Group in Japan.	×
Reduction of greenhouse gases	Limit overall CO ₂ emissions from energy consumption at the FDK Group in Japan to 34,568 tons or less by the end of FY2020.	○ (111%)
Energy efficiency	Improve the energy consumption per unit 1% compared to the previous fiscal year at all sites as an indicator of energy use.	○ (100%)
Reduction of chemical substances	Improve PRTR chemical emissions per unit by 5% compared to FY2015 by the end of FY2020 at all sites as an indicator of PRTR chemical substance use.	○
Reduction of waste	Improve the amount of waste generated per unit by 5% compared to FY2015 by the end of FY2020 at all sites as an indicator of waste production.	○ (108%)
Local environment/social contributions	Conduct at least 25 initiatives a year toward local environmental efforts and social contribution activities throughout the FDK Group.	○

“The Sound of Batteries Powered by the Sun Concerts”

As part of its social and environmental contribution activities, FDK supports The Sound of Batteries Powered by the Sun Concerts by Yumiko Orishige, one of the world’s only claviola performers. The performances are powered entirely from Ni-MH batteries charged using sunlight.

FDK will continue to engage in projects that contribute to society and the environment through the activities that utilize the features of FDK businesses.



The Sound of Batteries Powered by the Sun Concert 2



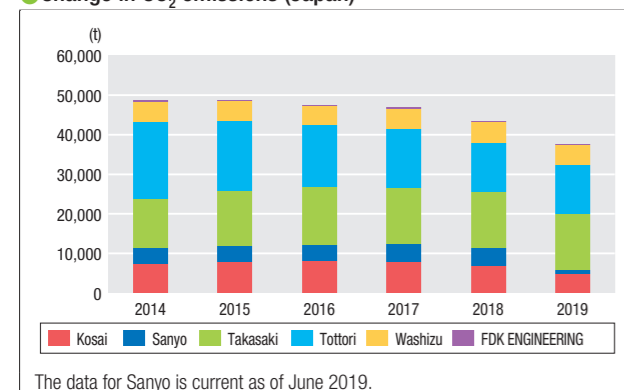
The Sound of Batteries Powered by the Sun Concert 1



The Sound of Batteries Powered by the Sun Concert 3

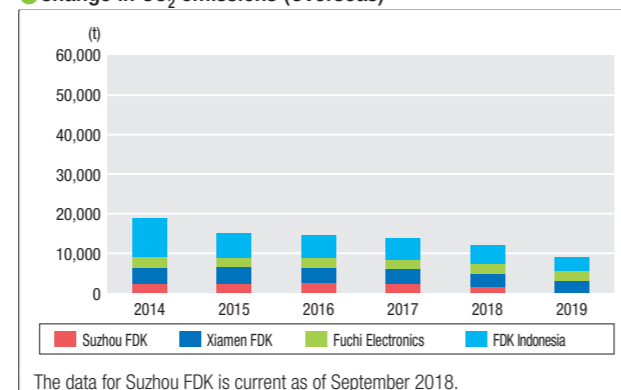
Change in CO₂ emissions (Japan/Overseas) FY2014 to FY2019

Change in CO₂ emissions (Japan)



The data for Sanyo is current as of June 2019.

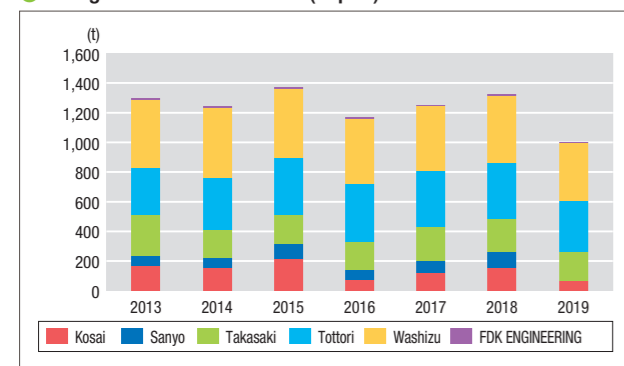
Change in CO₂ emissions (Overseas)



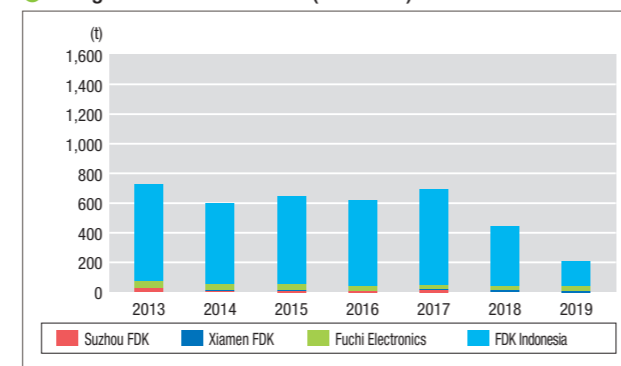
The data for Suzhou FDK is current as of September 2018.

Change in Amount of Waste (Japan/Overseas) FY2014 to FY2019

Change in Amount of Waste (Japan)



Change in Amount of Waste (Overseas)



Environmental performance data by business site

Items	(Unit)		Kosai Plant	Takasaki Plant	Tottori Plant	Washizu Plant	FDK Engineering
CO ₂ emissions	(t-co ₂)	FY2019	4,912	14,017	12,501	4,934	131
		Previous fiscal year	6,830	14,179	12,524	5,142	158
Water usage	(m ³)	FY2019	82,774	22,012	67,145	44,685	480
		Previous fiscal year	94,707	22,699	69,520	44,865	747
PRTR chemical emissions	(kg)	FY2019	0	0	171	0	—
		Previous fiscal year	0	0	139	3	—
SO _x emissions	(kg)	FY2019	—	—	—	—	—
		Previous fiscal year	—	—	—	—	—
NO _x emissions	(kg)	FY2019	344	—	2337	—	—
		Previous fiscal year	375	—	1,728	—	—
Soot (measured density)	(g/Nm ³)	FY2019	—	—	—	—	—
		Previous fiscal year	—	—	Less than 0.001	—	—
Waste water	(m ³)	FY2019	82,774	20,977	35,589	44,802	480
		Previous fiscal year	94,707	21,796	33,889	44,863	538
Waste	(t)	FY2019	67	195	346	388	4
		Previous fiscal year	153	218	380	449	10

Items	(Unit)		FDK ECOTEC	Xiamen FDK	Fuchi Electronics	FDK Indonesia
CO ₂ emissions	(t-co ₂)	FY2019	27	3,016	2,686	3,446
		Previous fiscal year	28	3,517	2,319	4,795
Water usage	(m ³)	FY2019	—	21,150	10,377	12,627
		Previous fiscal year	—	23,608	9,040	10,087
PRTR chemical emissions	(kg)	FY2019	—	—	—	—
		Previous fiscal year	—	—	—	—
SO _x emissions	(kg)	FY2019	—	—	—	—
		Previous fiscal year	—	—	—	—
NO _x emissions	(kg)	FY2019	—	—	—	—
		Previous fiscal year	—	—	—	—
Soot (measured density)	(g/Nm ³)	FY2019	—	—	—	—
		Previous fiscal year	—	—	—	—
Waste water	(m ³)	FY2019	—	16,920	10,377	11,364
		Previous fiscal year	—	18,886	9,040	10,087
Waste	(t)	FY2019	—	10	32	166
		Previous fiscal year	—	12	26	397

*“—” indicates an item not measured in the specified fiscal year because it is outside the scope of statistics collected at a given plant, is not pertinent, or is only subject to obligatory measurement every other year.

*The CO₂ conversion coefficient for purchased electric power is calculated as 0.57t-CO₂ /MWh to calculate CO₂ emissions.

*Suzhou FDK has been excluded from the above due to suspension of operations from January 2019.

*The Sanyo Plant has been excluded from the above due to an April 2019 decision to transfer of manufactured product operations at the plant.