



# Environmental Solution Activity

In order to respond to the increased attention and needs of people toward environmental protection, the FDK Group companies are specialized in environmental businesses.

## Business Activities of Fujidenka Research and Analysis Center Co., Ltd.

Environmental protection is a concern of the people all over the world. This is exemplified by actions against global warming and setting out of various rules such as RoHS, ELV, REACH, POPs, WEEE and Chinese RoHS. Under such circumstances, Fujidenka Research and Analysis Center Co., Ltd. is working for protection of the environment for enterprises and local communities, as a total environmental research and analysis company under the FDK Group. Its main business includes a support to its customers for solving their environment-related problems and extends from consultation on environmental issues to providing a comprehensive service on environmental facilities involving design, construction and maintenance of them.

### Acquisition of the ISO17025 Certification

Fujidenka was successfully certified as ISO17025 compliant by Japan Chemical Laboratory Accreditation(JCLA) in January 2007 for its competency to carry out atmospheric and smoke concentration measurements. ISO17025 is a general requirement as to the competency of research and calibration laboratories. It requires operational and controlling as well as technical competencies on controlling accuracy of tests and calibrations.

The successful acquisition of the certificate means data provided by Fujidenka is now internationally accredited as reliable within the scope of the certification. Fujidenka is determined itself to expand the scope of certification to analysis of hazardous metals contained in products.

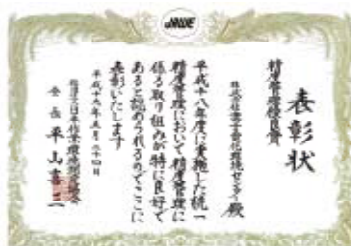


Certificate of JCLA

### Won 'Good Accuracy Control Company' Award

Fujidenka was awarded the 'Good Accuracy Control Company' Award by Japan Association for Working Environment Measurement. This award is given to only a company which won A to all items of accuracy control businesses consigned by the Ministry of Welfare, Labour and Health, as well as A to all items in a crosscheck session by the Association.

In FY2006, 18 companies including Fujidenka won the award in Japan.



Certificate of Good Accuracy Control Company

### Interactions with the Local Community

As a specialist of environmental analysis and measurement, Fujidenka maintains the following supports and actions with the surrounding community.

- ① Sent a staff to the environmental council of Kosai City to provide an administrative operation support from the view point of a specialist.
- ② Invited the employees of the local governments and junior high school students in the local area for a study tour of the analysis room of Fujidenka.
- ③ Sent a staff to a technical division of Shizuoka Metrology Association to contribute to lifting up the competency of the entire industry.
- ④ Sent a staff as a lecturer to an environmental counselors' study meeting of an environmental preservation council whose members consist of local companies. Participated in various study group meetings to raise the awareness on the local environment of the local residents as well as local-based companies.
- ⑤ Participated, as an instructor, in a biological survey of rivers by the local residents



An environmental counselors' study meeting at an environmental preservation council



An instructor sent from Fujidenka working with local people in a biological survey

## Investigation and Test of Hazardous Substances Relating to Green Procurement

Fujidenka is involved in analysis and investigation in compliance to EU's RoHS and ELV as well as REACH, POPs, WEEE, Chinese RoHS and other chemical substance restriction regulations. As for RoHS, measurement results impose a direct influence on customer's production activities. As such, Fujidenka usually provides results of analysis to them as promptly as possible. After a large-scale chamber was introduced in 2005, VOC measurements such as toluene typified by countermeasures for sick building syndrome are provided to broader industries such as electronic parts and interior parts of a vehicle.

More recently, the needs for eco-friendly products has been increasing and the demand for various reliability tests for assessing products incorporating new materials is also on the rise.



Equipment for measuring scattering of VOCs (VOC analysis using a display)



Reliability test equipment (Temperature and humidity acceleration tester for eco-friendly products)

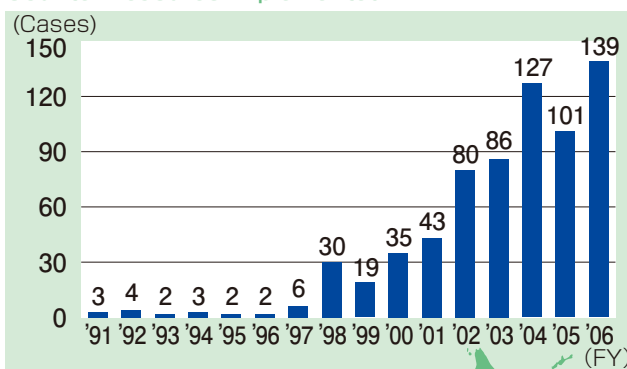
### Business lines

Environmental analysis and measurement, Environmental assessment (Analysis of air, water, noise, vibration, odor and soil contamination level, and measurement of work environment)  
Investigation and removal of soil and underground water contaminants  
Analysis investigation for supporting green procurement  
Material analysis and reliability tests, calibration of measuring devices  
Measurement of substances causing sick building syndrome and VOC emission measurement  
Environmental protection facility design, construction and maintenance

## Anti-Soil Contamination Measures

Even before the enforcement of Soil Contamination Countermeasures Law, Fujidenka has been working for the national level measures against soil contaminations. At the onset, the scope of the investigation was centered on items for acquiring the ISO14001 certification. After the enforcement of Soil Contamination Countermeasures Law in 2003, the number of investigations and implementing countermeasures has been on the rise and currently Fujidenka is capable of processing 100 orders annually. Fujidenka's investigations are in compliance to anti-soil contamination measures set up under the ordinances of each local autonomous body. More recently, the investigation ordered is not limited to that related to compliance with laws, but includes that aiming to alleviate asset risks. Fujidenka is determined itself to provide the highest possible technologies to the customers in order to minimize their risks.

### Major Soil Contamination Investigation and Countermeasures Implemented



Scope of areas expanded to nationwide



## Environmental Investigation

### Expanded from Lake Hamanako Area to More Broad Regions

At the onset of the investigation, water quality, atmospheric and malodor investigations were limited to the areas around Lake Hamanako. In order to respond to the needs for the investigations, the scope has been expanded to neighboring prefectures to include factory, facility and local environmental measurements and investigations. Fujidenka is capable of responding each and every need relating to environment investigations and measurements extending from on-site surveys, analysis to making reports in a consolidated manner, using its unique technologies nourished for a long time.

### Fujidenka Research and Analysis Center Co., Ltd.

Foundation: January 24, 1976  
Capital: 70 million yen (wholly-owned by FDK corporation)  
Employee: 50  
President & CEO: Takeo Maeda  
Head Office: 2281, Washizu, Kosai City, Shizuoka Prefecture  
Tel.053-576-0841 Fax.053-576-5258



# Environmental Solution Activity

## Business Activities of FDK Ecotec Co., Ltd.

Incorporated in 1997, FDK Ecotec Co., Ltd. is committed to the recycling of PCs and other information-related devices to contribute to the realization of a recycle-oriented society. In 2002, the company obtained the certification of ISO14001 ahead of other companies in the industry, and since then, it has been proactively involved in environmental protection and prevention of depleting resources to bring that society to fruition. Since FY2003, FDK Ecotec has been continuing zero emission in handling office automation equipment.

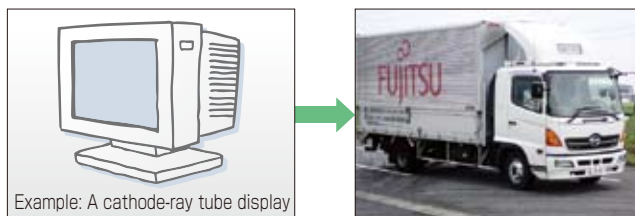
### As a core site of Fujitsu Recycle Center

FDK Ecotec handles used PC and other information-related equipment generated from 13 prefectures in Tokai, Hokuriku and Kinki regions as the Chubu Recycle Center of Fujitsu Recycle Center (FRS). It accepts collection of waste devices through the Ecotec Direct Route, and provides an integrated services to customers from collection to disposal of units.

FDK Ecotec also provides disassembly and transportation of large-sized systems and equipment for its customers.

### Flow of Reuse and Recycle

After collection of used devices, FDK Ecotec manually decomposes and separates materials to a level where they can be recycled and reused.



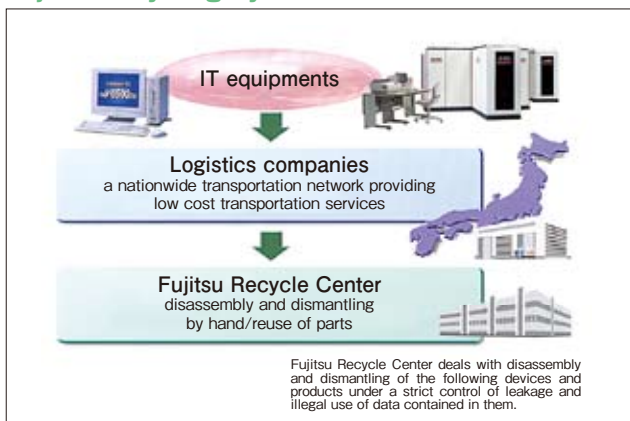
#### Reuse

- Hard disk
- Memory
- Floppy disk drive
- Compact disk drive
- Others

#### Recycle

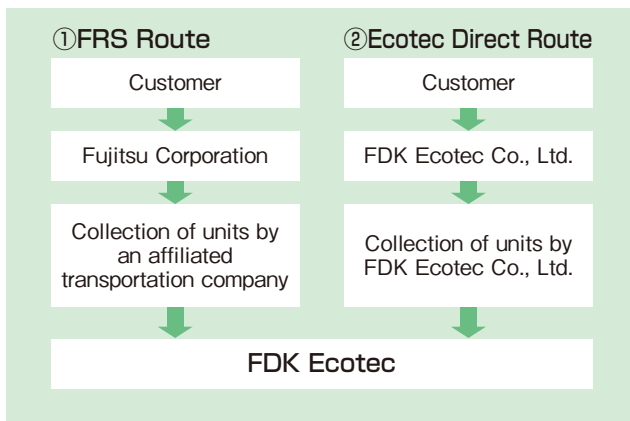
IC for printed circuit board	Waste metals	Waste parts	CRT for displays	Waste plastics	Manuals
Collection of precious metals	Collection of ferrous and non-ferrous metals	Crushing High-temperature melting treatment Metal collection system	CRT recycling system	Recycling system for blast furnace	Paper recycling system
Recycled into precious metals	Recycled into bare metals	Recycled into bare metals	Recycled into CRT	Reused as an alternate fuel for blast furnace	Reused as paper and cardboard sheet

### Fujitsu Recycling System



FRS handles recycling of information communication equipment regardless of manufacturers. Disposal of fixed assets are also handled.

### Flow of Disposal from Acceptance of Request for Collection





## Measures to Prevent Leakage of Information

After collecting PCs and recording media, the data contained in them are all deleted safely according to the guideline on deletion of data on hard disks of personal computers before disposal and transfer by Japan Electronics and Information Technology Industries Association (JEITA) in order to prevent leakage if confidential information of companies and individuals. Special deletion software developed by Fujitsu Corporation is used for deleting data. The software complies with various deletion standards applied by Department of Defense and National Security Agency in the U.S.



HDD data deletion system



HDD destruction system

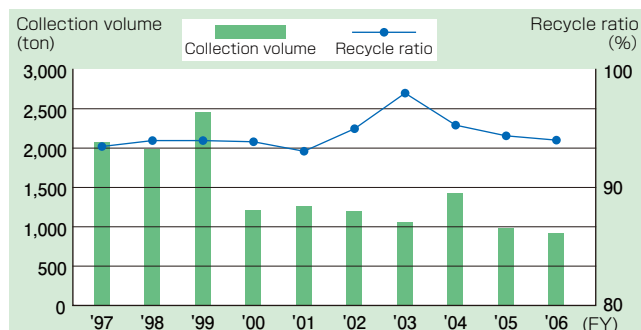
Besides this, data destruction kit for compact disks and physical destruction system for hard disks developed by the company are used as well. The company also provides data destruction services of tapes, IC cards, semiconductor memories and other storage media. A data destruction certificate is issued on demand.



CD destruction system

## Volume of Collection and Recycling Ratio

In FY2006, the volume of wastes collected (accepted) was 919 ton and the recycle ratio was 92%. The volume of collection is decreasing since 2003. This may be largely because the demand for Windows XP-based PCs started to level off and the PC reuse market was generally known to people, as well as light-in-weight and small-in-size PCs started to appear.



\* In this leaflet, method to calculate waste collection volume has been revised.

## New Actions in FY2006

- Preparation for establishing a website by FDK Ecotec Co., Ltd.
- Establishment of a comprehensive recycle control system and its operation tests

## Promotion of Recycling

### Efforts for Increasing Recycling Ratio

Disassembling of used parts to just a level of parts composed of more than one material is not sufficient for recycling of materials. Such parts are separated to a level of plastic, metal and other single materials in the company so that they can be reused for other products. Plastics, in particular, are decomposed to a level of vinyl chloride and polyurethane resin for reuse purposes. Waste plastics are crushed using a crusher.



A plastic crusher

### Expansion of the Scope of Recyclable Products

FDK Ecotec accepts used fluorescent lights which are crushed using a special crusher. A melting machine is used for recycling foam polystyrene. The company plans to introduce a magnet tape destruction machine so that it can accept magnet tapes for recycling.



A fluorescent light crusher

### Licenses

- Collection and transportation of industrial wastes:  
License No. 2100053003 (Gifu Prefecture)
- The range of collection and transportation:  
All areas of the following prefectures: Gifu, Aichi, Mie, Shizuoka and Shiga
- Intermediate treatment of industrial wastes:  
License No. 2120053003 (Gifu Prefecture)
- Types of industrial wastes authorized to treat:  
Waste plastics, metal chips, waste glass and ceramics, concrete chips (excluding those generated by new construction or refurbishment of buildings)

### Lines of Business

#### Recycling of the following equipments

- Computers and their peripheral equipments
- Word processors, fax machines and copying machines
- Telecommunication equipments
- Automated teller machines (ATM)
- Telephone sets, mobile phones, switchboards and POS terminals
- Magnetic tapes, cassette tapes, floppy discs and confidential documents
- OA discs and racks (wooden racks is excluded)

### FDK Ecotec Co., Ltd.

Foundation: March 10, 1997  
 Capital: 30 million yen (wholly-owned by FDK corporation)  
 President & CEO: Masanori Nakazawa  
 Address: Headquarters: 2281, Washizu, Kosai City, Shizuoka Prefecture  
 Gifu Office: 478, Tsuchikura, Hirata-Cho, Kaizu City, Gifu Prefecture  
 Tel.0584-66-4781 Fax.0584-66-4791  
 Employee: 18