

# Fujitsu Group Company Activities (Domestic)

Green Earth

## Applying unique skills in various environmental protection projects

Domestic affiliates are working energetically to reduce the use of harmful chemicals and cut energy consumption, as well as conducting other environmental protection projects drawing on their specialized technology and skills. This section introduces the efforts of two of these companies, FDK and Fujitsu General.

### Fujitsu General's Environmental Protection Activities

Fujitsu General strives to make its operations attractive to all concerned. Placing a priority on environmental protection, it is working in various ways to reduce the environmental burden of its operations and products, from development and design to procurement, production and sales.

#### Development of the Most Energy-efficient Room Air-conditioner

Development of the special "IPAM" air-conditioner technology featuring greater thermal exchange efficiency and an advanced compressor motor has enabled Fujitsu General's air conditioner to surpass stringent energy-saving standards. The air conditioner passes the 2004 standard figure of 4.90 specified in the Energy Saving Law. The 28 model scores 5.51 on this indicator, moreover, and attains a power consumption rating of just 944 KWh, making it the most energy-efficient model in its category. Also 72% recyclable by weight, it employs cardboard for all of its packing materials.

#### Main Features

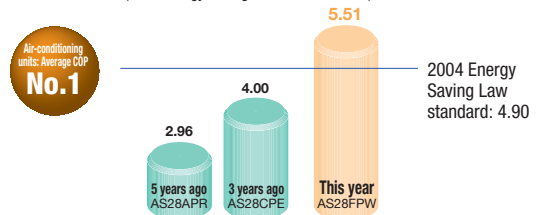
- The 28 model is the most energy-efficient air-conditioning unit in its category.
- Passes new energy-saving standards
- Uses non-ozone-depleting coolant (R410A)
- Zero-power standby switch



URL: <http://www.fujitsugeneral.co.jp/english/>

#### Performance Co-efficiency (COP = ratio of rated capacity to rated power consumption)

IPAM units pass the legal energy conservation standards for 2004 by a substantial margin; on a COP basis, the 28 model is the most efficient air conditioner of its type on the market. The 28 model: 5.51 (2004 Energy Saving Law standard: 4.90)



#### Air Channel Comparison

##### [Conventional type]

Narrow air intake passage/  
high air resistance



##### [Advanced suction/plasma-aero type]

- The use of an advanced suction panel reduces intake air resistance.
- Computer simulations were employed to shape the air channel and position the heat-exchanger, maximizing their effectiveness.



Air flow increased 20%

### FDK's Environmental Activities

Adopting "Everything made from excellent materials" as its guiding slogan, the FDK Group is implementing positive environmental activities. These include the incorporation of eco-friendly materials at the R&D stage, resources and energy saving, and recycling and waste disposal process simplification. The Group works to reduce the environmental burden of its manufacturing operations through proper pollutant management, reduced waste production and development and introduction of energy-efficient processes.

#### Results

FDK discontinued the use of PVC film, a potential source of dioxin formation. Elimination of the label backing paper led to a reduction in paper waste of 49.4 tons in FY2000.



URL: <http://www.fdk.co.jp/index-e.html>

#### Improved Labeling of Alkali Manganese Dry Cell Batteries (A and AA)

In the past, PVC film was the base material used for labels that were peeled from backing paper and applied to the external surface of alkali dry cell batteries. A switch to thermal-application labels has lowered the environmental burden by eliminating both the waste caused by the backing paper and the use of PVC.

