

Environmental Data

Materials Flow

The following tables show the volume of building materials used in fiscal 2008, as well as the generation of CO₂ emissions, waste, and hazardous substances.

The tables also show the extent, in terms of both volume and percentage, to which Kajima's main building materials were supplied through green procurement¹ (i.e. use of recycled materials). Recycled materials accounted for 47%, which demonstrates how aggressively Kajima has advanced on this front.

1. Only the cement portion of ready-mixed concrete was included in calculations of the green procurement rate.

| INPUT | | | | OUTPUT | | | | |
|--------------------------------|------------|-----------------------------------|-----------------------------------|-------------------------------|--|-------------|----------|-------------|
| Principal energy usage volumes | | Construction | Offices | Total | Construction | Offices | Total | |
| Fossil fuels | Diesel oil | 93,615 kl | — | 93,615 kl | CO ₂ | 3,120,000 t | 90,000 t | 3,210,000 t |
| | Kerosene | 1,170 kl | — | 1,170 kl | | | | |
| | Fuel oil | 377 kl | 17 kl | 394 kl | | | | |
| Electricity | | 141.36 MWh | 26.01 MWh | 167.37 MWh | Construction surplus soil (hailed off site) 898,000 m ³ | | | |
| Town gas | | — | 1,560,000 Nm ³ /yr | 1,560,000 Nm ³ /yr | Construction waste | | | |
| | | | | | Volume 2,198,000 t | | | |
| | | | | | Final disposal volume 245,000 t | | | |
| | | | | | Volume of hazardous materials processed | | | |
| | | | | | Material containing asbestos 7,100 t | | | |
| | | | | | CFCs and halon recovered 9 t | | | |
| | | | | | Number of devices containing PCB 368 | | | |
| | | | | | Fluorescent tubes 38.4 t | | | |
| Principal materials | | Total usage | Green procurement volume | Green procurement rate | | | | |
| Steel products | | 4,970,000 t | 3,730,000 t | 75% | | | | |
| Cement | | 2,310,000 t | 950,000 t | 41% | | | | |
| Ready-mixed concrete | | 61,760,000 t (94.0) ² | 7,920,000 t (12.1) ² | 13% | | | | |
| Aggregate | | 10,170,000 t | 6,280,000 t | 62% | | | | |
| Asphalt | | 1,170,000 t | 980,000 t | 84% | | | | |
| Total | | 80,380,000 t (280.2) ² | 19,860,000 t (131.5) ² | 47% ² | | | | |

2. The figures for ready-mixed concrete only include the cement portion.

Environmental Accounting

Environmental conservation costs in fiscal 2008 amounted to ¥22.4 billion, down ¥9.8 billion from the previous fiscal year. The decrease was a result of two factors: a large number of one-off waste handling fees in fiscal 2007, and a sharp drop in waste disposal fees in fiscal 2008 owing to the success of waste reduction efforts.

Assessment indicators

| Indicator | Formula | FY2007 | FY2008 |
|--------------------------------------|--|--------|--------|
| Environmental cost ratio | Environmental conservation costs / Value of construction completed | 2.4% | 1.7% |
| Industrial waste handling cost ratio | Industrial waste treatment costs / Value of construction completed | 1.3% | 0.9% |
| Environmental R&D cost ratio | Environmental R&D costs / Total R&D costs | 22.5% | 25.3% |

FY2008 environmental conservation: costs and benefits

(Millions of yen)

| Environmental conservation costs | Total | Subtotals |
|---|--------|-----------|
| Construction site prevention costs ³ | 166,10 | |
| Global warming prevention costs | | 50 |
| Costs related to resource recycling and effective use | | 11,360 |
| Hazardous materials management costs | | 730 |
| Biodiversity conservation costs | | 40 |
| Pollution prevention costs | | 4,430 |
| Costs of environmentally conscious design | 680 | |
| Costs of R&D ⁴ and environmental operations ⁵ | 3,650 | |
| Costs of environmental damage remedy actions | 30 | |
| Environmental management and education | 640 | |
| Community service and communication | 750 | |
| Beautification, cleaning near construction sites | | 700 |
| Advertising, donations, etc. | | 50 |
| Total | 22,360 | |

3. Figures for construction site prevention costs are based on sampling data from 37 sites representing 13% of the total value of construction completed.

4. R&D costs were ¥2.47 billion.

5. Environmental operations benefited from ¥30.1 billion worth of orders.