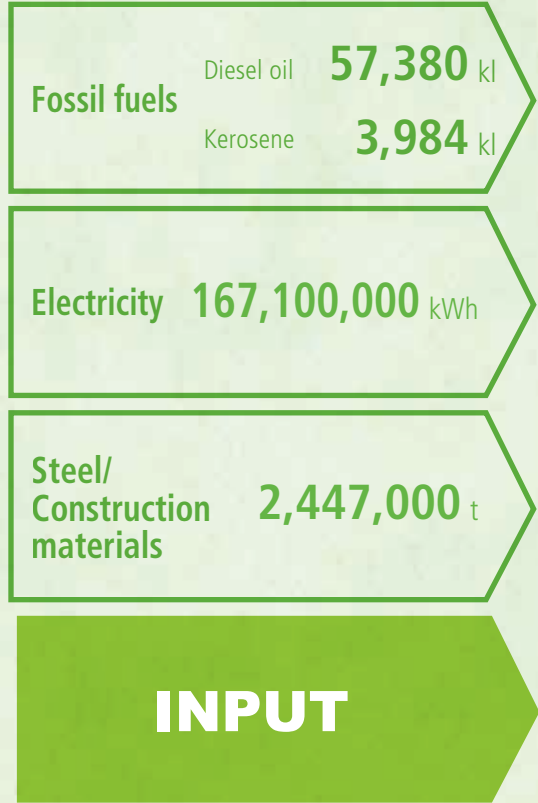




## Material Flow

Material flow in Kajima's construction projects during fiscal 2012 is shown here. This includes energy and material inputs and CO<sub>2</sub> emissions and waste outputs. The change in data over the last few years is also provided. Building operation CO<sub>2</sub> emissions are calculated in terms of their long-term social impact. The emissions reduction results of Kajima's energy-saving designs are announced to the public.



### Green procurement rate

Principal materials	Total usage	Green procurement volume	Green procurement rate
Steel products	400,000 t	304,000 t	76%
Cement	189,000 t	127,000 t	67%
Ready-mixed concrete*	738,000 t (4,850,000 t)	76,000 t (498,000 t)	10%
Aggregate	1,033,000 t	650,000 t	63%
Asphalt	87,000 t	61,000 t	70%
<b>Total</b>	<b>2,447,000 t</b> (6,559,000 t)	<b>1,218,000 t</b> (1,640,000 t)	<b>50%</b>

\* The figures for ready-mixed concrete only include the cement portion. Figures in parentheses represent the total amount of concrete.

### Green procurement items for priority adoption in the design stage

- 1 Blast furnace cement and fly ash cement, as well as concrete containing these cements
- 2 Water retaining pavement
- 3 Steel from electric furnaces
- 4 Timber, plywood, and flooring (use of sustainable wood that is certified or produced in Japan)
- 5 Permeable paving blocks, secondary products made from permeable concrete, and permeable pavement
- 6 CFC-free insulation material
- 7 Recycled tiles, bricks, and paving blocks
- 8 Carpet made from recycled materials
- 9 OA floors made from recycled materials
- 10 High solar reflectance paint and waterproofing
- 11 Materials for green roofs and walls
- 12 LED light fixtures
- 13 Western-style water-saving toilets
- 14 High-efficiency air-conditioning blowers
- 15 High-efficiency air-conditioning pumps
- 16 Renewable energy utilization systems
- 17 Thermal energy and power storage systems



**CO<sub>2</sub> emissions** **223,000 t**

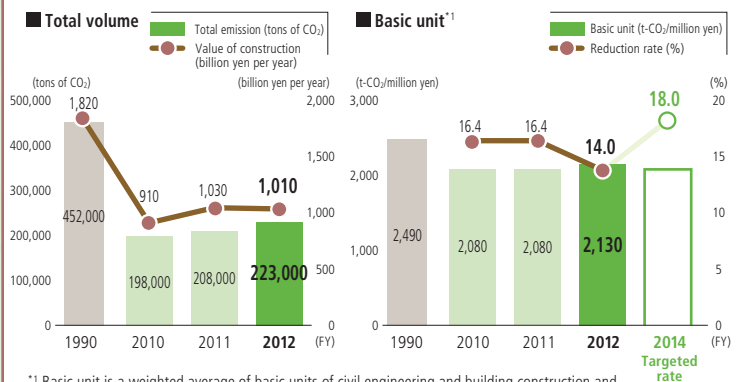
**Construction surplus soil** **1,624,000 m<sup>3</sup>**

**Hazardous materials**  
 Materials containing asbestos **13,103.3 t**  
 CFCs and halon received **3.0 t**  
 Fluorescent tubes **111.2 t**

**Construction waste** **3,249,000 t**  
 Final disposal volume **224,000 t**

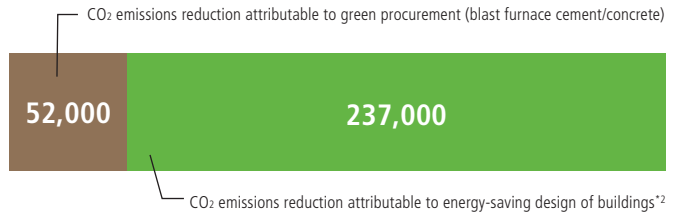
**OUTPUT**

**Changes in CO<sub>2</sub> emissions attributable to construction**



\*1 Basic unit is a weighted average of basic units of civil engineering and building construction and a rate of construction value (a moving average for three years).

**Indirect reduction (tons of CO<sub>2</sub>)**



\*2 It is a cumulative value since fiscal 2003, when Kajima started publicizing this value, as CO<sub>2</sub> emissions attributable to the use of buildings continue to fall every year.

**Volume of construction waste and final disposal volume**

