



Sumitomo Bakelite implements energy conservation activities and strives to reduce CO₂ emissions.

Plant- and Office-Related Energy-Conservation Measures

Global warming resulting from greenhouse gases, such as CO₂, is said to be a cause of climate change exemplified by abnormal weather patterns and rising temperatures and is now seen as the problem that threatens the foundations of human survival. The Sumitomo Bakelite Group has been working to reduce CO₂ emissions through a variety of energy-conservation initiatives.

The commencement of full-fledged operations of a cogeneration system installed at the Shizuoka Plant in August 2004 contributed to Groupwide reductions in energy use and CO₂ emissions.

This cogeneration system can reduce CO₂ emissions by enhancing energy-conversion efficiency by generating electricity via gas turbine power generation using natural gas for combustion while employing the exhaust heat from this process to create steam. In addition, we were able to reduce the amount of electricity used by installing a steam turbine compressor in July 2006 that uses energy released when the high-pressure vapor generated in the cogeneration system is reduced to a normal pressure level and ceasing operation of existing compressors.

As a result of the deterioration in economic conditions in 2008, the volume of production declined, thus bringing decreases in the use of energy and emissions of CO₂.

Since 2007, the Amagasaki, Shizuoka, and Utsunomiya plants have been able to reduce emissions of CO₂, and control emissions of SO_x and soot and dust, by switching from heavy oil to utility gas for boiler fuel. The building in which Sumitomo Bakelite's Head Office is located was in fiscal 2006 selected by Japan's Ministry of the Environment to receive subsidies under a program wherein grants are provided to facilities establishing voluntary greenhouse gas reduction targets. The implementation of variable flow control in accordance with air-conditioning load and other efforts at the building has reduced its CO₂ emissions.

Further, to facilitate continuous energy-saving measures from a different point of view, some facilities are undergoing energy diagnostics studies by an external company.

In addition to measures noted above, we are proceeding with various sorts of energy-conservation initiatives at each of our business sites. These initiatives include the following:



Cogeneration system (Shizuoka Plant)



Boiler converted to utility gas (Amagasaki Plant)



Light shield installation (Tsu Plant)



Steam turbine compressor (Shizuoka Plant)



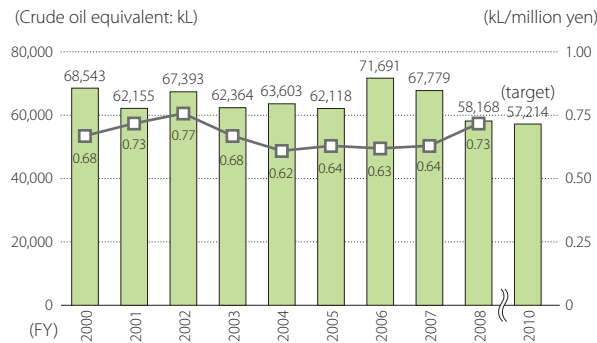
Energy conservation via greenification (Amagasaki Plant)



1. Installation of inverter controllers for pumps, fans, compressors, and others
2. Water cooling of outdoor air-conditioning units
3. Installation of an energy-saving static capacitor
4. Installation of energy-saving water-cooling chillers
5. Installation of energy-saving lighting fixtures
6. Installation of energy-saving controllers
7. Maintenance of air-conditioning equipment

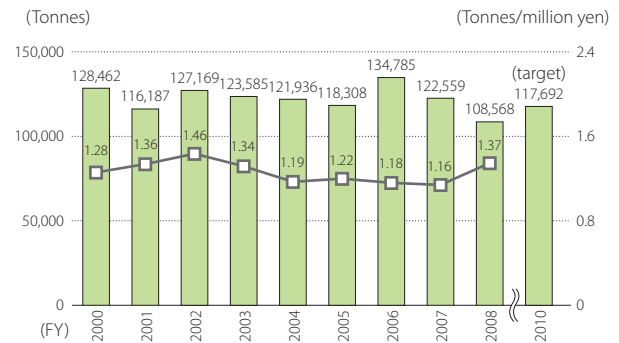
8. Refurbishment and maintenance of cooling towers
9. Recovery of steam from steam drains
10. Spot repairs of steam and air leaks
11. Removal of unnecessary pipes
12. Installation of energy-saving molding machines
13. Application of insulation coating to roofs and tanks
14. Reduction of air-conditioned space through rearrangement and cleaning up the workplace

Energy Usage and Energy Usage per Production Amount Value*



* Energy usage per production amount value is determined using the following equation: Energy usage per production amount value = energy usage / (production amount x unit price)
 Note: Data are compiled from all domestic business sites listed on page 11.

CO₂ Emissions and CO₂ Emissions per Production Amount Value*



* CO₂ emissions per production amount value are determined using the following equation: CO₂ emissions per production amount value = CO₂ emissions / (production amount x unit price)
 Note: Data are compiled from all domestic business sites listed on page 11.

Distribution-Related Energy-Conservation Measures

Based on the revision of the Act on the Rational Use of Energy, Sumitomo Bakelite has begun working as a "specified load owner" to calculate shipping-related energy usage since fiscal 2006.

In fiscal 2008, sales volume decreased 7.62 million tonne-kilometers to 33.65 million tonne-kilometers. In addition, as a result of the decline in the average size of shipments, the ratio of small transport vehicles has increased, and the amount of fuel used per volume of cargo transported has increased. As a result, in fiscal 2008, the energy use per production value unit rose.

Annual Energy Use Report Figures

		Units	FY2006	FY2007	FY2008
Shipping tonne-kilometers		Thousands of tonne-kilometers	30,297	41,265	33,647
CO ₂ emissions associated with energy use		t-CO ₂	5,090	6,730	5,580
Energy consumption per shipping unit	Energy consumption (crude oil conversion basis; kL)/shipping thousands of tonne-kilometers	kL/thousands of tonne-kilometers	0.0632	0.0613	0.0624
	Rate of change (FY2006=100%)	%	100	97	99

Note: The following are included in the compilation of the data above: Sumitomo Bakelite Co., Ltd., Amagasaki Plant, Kanuma Plant*, Nara Plant*, Shizuoka Plant, Industrial Laminates Plant, High Performance Plastic Products Plant, Utsunomiya Plant, and Tsu Plant (Plants marked with an asterisk (*) were included in the computation beginning in fiscal 2007).