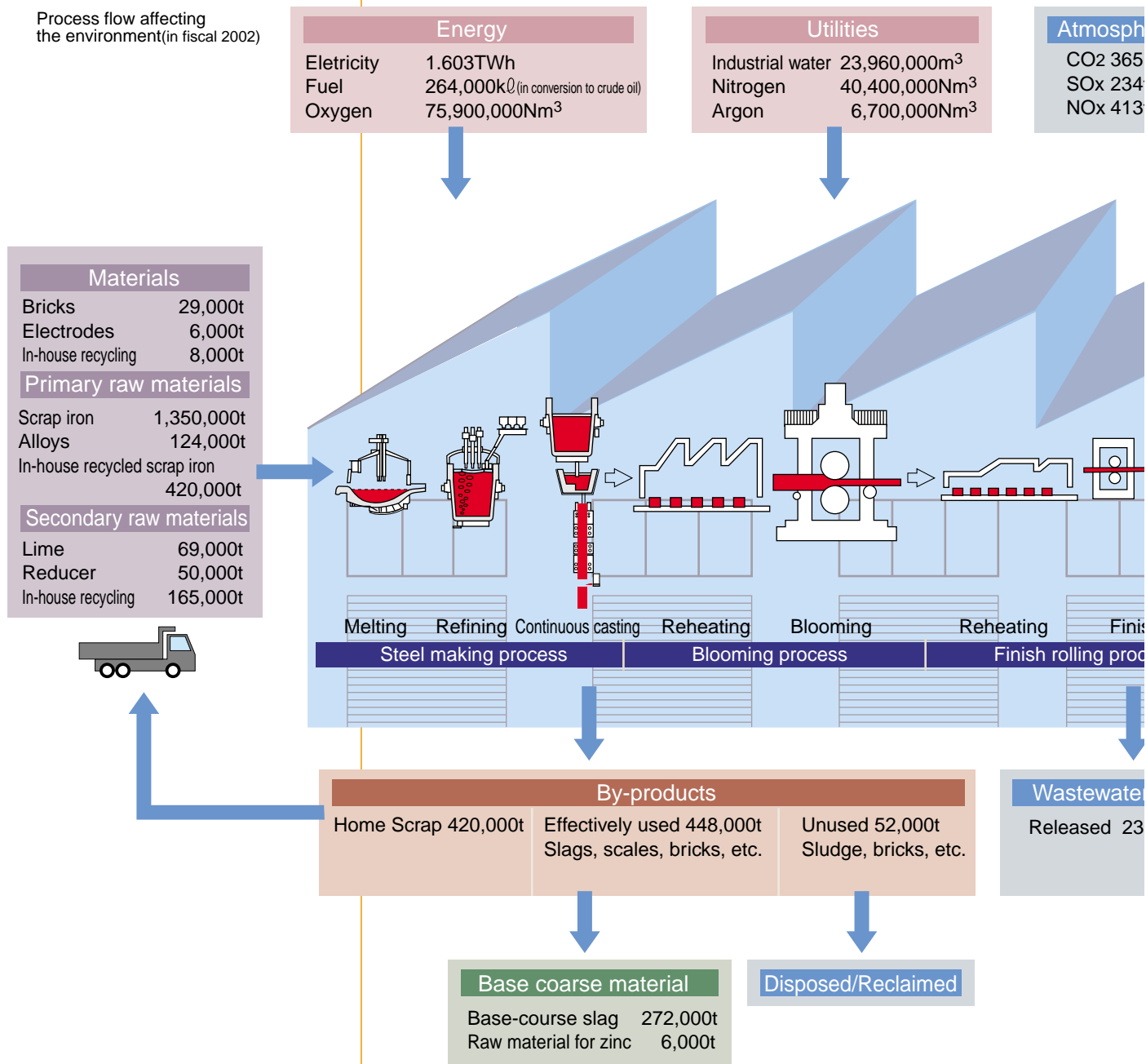


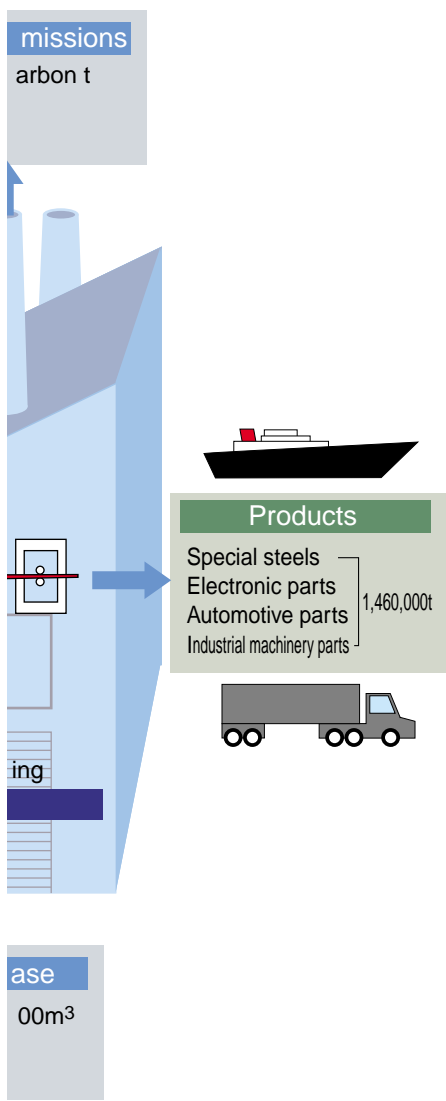
Activities to Protect the Global Environment

Process Flow Affecting the Environment

The production process flow and the material flow in the plant are shown in the sketch. Almost 90% of materials for steel-making is recycled materials, mainly steel scrap. Most of energy consumed is electricity for electric arc furnace and reheating furnace. The 94% of by-products are utilized effectively in the company as recycled materials and also utilized as the base coarse material in the society.

Process flow affecting the environment (in fiscal 2002)

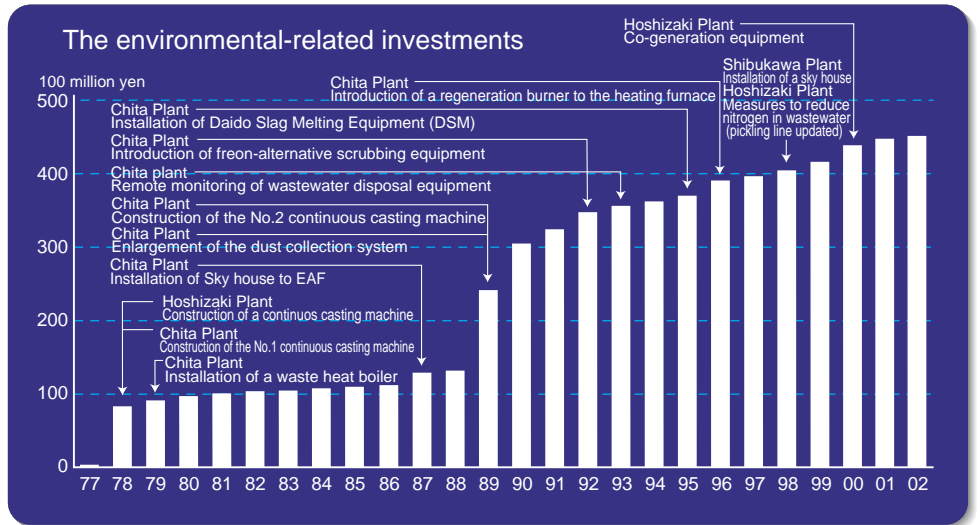




Major Activities for Environmental Preservation

1. Main investments in environmental preservation

Daido Steel has invested mainly in environmental equipment. Ex.) Dust collection system, changing fuel for reducing SOx, NOx, and installing continuous casting machine, waste water treatment system to reduce nitrogen in wastewater, introducing re-generative burner and co-generation system. Daido Steel will continue to promote these activities for global environmental preservation.



2. Cost for environmental preservation

In accordance with the Environmental Agency's Guidelines, total cost and the economical effect associated with environmental investments in FY 2002 were indicated.

Cost for environmental preservation

(Unit: one million yen)

Classification	Activities	Amount
		2002
1. Business area costs	Expenses related to reduction of environmental impact	3,911
2. Cost at upstream and downstream	Cost increase due to fuel conversion	422
3. Management costs	Environmental Management activities	259
4. Research & development	Research & development	1,209
5. Social activities	Voluntary actions such as afforestation and beautification campaign	37
6. Environmental damage	Expense on levy for SOx emissions	181
Total		6,019

Economical effect (Unit: one million yen)

Effect	Amount
	2002
By-products recycling	770
Reduction of landfill waste	695
Total	1,465

CO₂ : Conversion of energy used in the plant into carbon tons.
 SO_x : Conversion of S content in fuel used in the plant into SO₂
 NO_x : Conversion of sampled waste gas into NO_x

Countermeasures against Global Warming

Japanese steel industry has been endeavoring to save energy since the "Oil crisis" in 1973. We established high standard of energy efficiency and production system by reducing the consumption of petroleum fuel and introducing regenerative system for instance. Pursuant to autonomous activity plan on energy saving presented by the Japanese Iron and Steel Federation, we promote many environmental activities to achieve our goals.

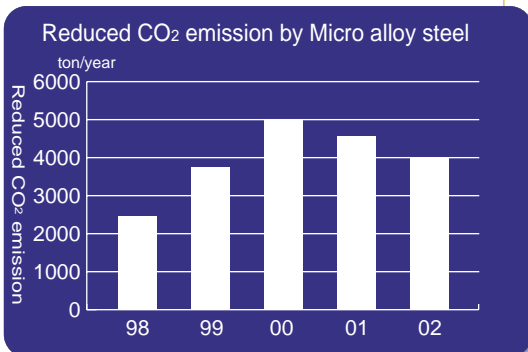
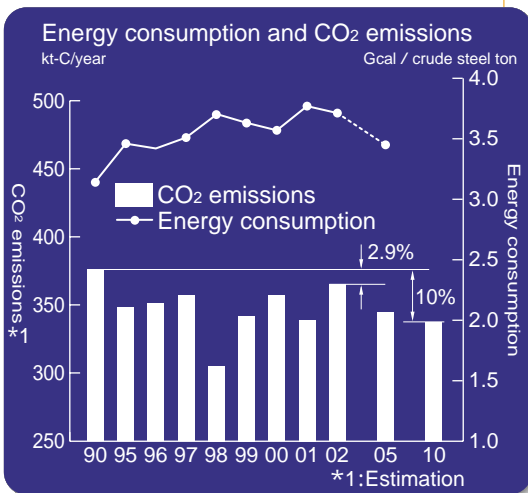
1. Energy consumption and CO₂ emissions

We set our goal as follows; Reduction of CO₂ emission by 10% in 2010 compared from the figure of 1990. (converted in carbon ton)

Energy consumption reduced comparing to last year's.

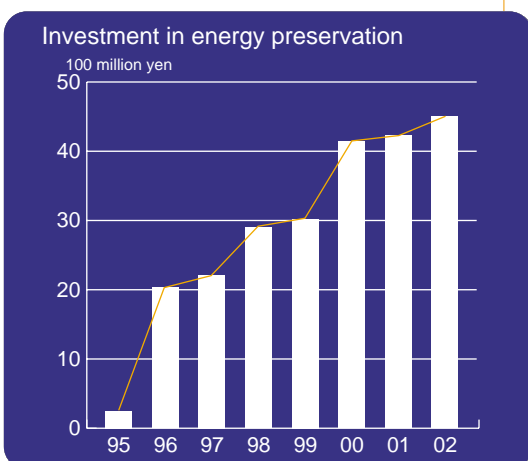
CO₂ emission has been also reduced by 2.9% in 2002, thanks to fuel change from heavy oil to cleaner energy such as Liquefied Natural Gas (LNG).

Daido Steel will continuously endeavor to reduce energy consumption rate and CO₂ emissions by active promotion of environmental investment and manufacturing process improvement.



2. Advantage of micro alloy steel (Contribution to society)

Micro alloy steel is one of our products that can be omitted heat treatment process. That greatly saves processing of customer and energy. Daido Steel contributes reducing CO₂ emission through our products.



3. Investment in energy preservation

The investment in energy preservation has been accumulated ¥4.5 billion since 1995.

4. Cases of energy saving improvement

Minimizing the expensive daytime electricity consumption (AN process) Daido Steel has developed new melting process which has two 700t molten steel storage vessels.

This process enables us to cut the melting cost and increase the use of low grade steel scrap by following ways;

- steel scrap is melted by utilizing cheaper electricity in the night time and molten steel is stored in the vessel.
- one heat can be produced from the stored molten steel (30-60%) and steel scraps (40-70%) by minimizing the consumption of expensive electricity in the daytime.
- even though the level of certain tramp elements of melt are high, they can be diluted in the vessel by stored molten steel.

We call it "AN process." "AN" is abbreviation of "Anticipating the Next/Future."

Introduction of compressed natural gas vehicle

We began to utilize ecological cars such as the compressed natural gas vehicle and the hybrid vehicle to reduce the impact on environment.

Change of logistics

At Maruta Transport Co., a transportation company and one of our affiliates, many activities and efforts have been made to change their main logistics from trucks to ships. 33% of total cargo have been transported by ship.

It is not appropriate to load the steel products on the ship when it rains. Therefore, an all-weather shipyard has been built at Chita Plant. It protects the products from rain. We are trying to shift transportation by truck to effective ship as well as railway.

<Example>

Transportation from Nagoya to Niigata

(Products: 36,000 tons)

CO2 emission

By truck 5,800 tons

By railways 1,160 tons (80% reduction)

They also try not to idle the engine of trucks to reduce the emissions.

Storage vessels (Chita Plant)



Natural gas vehicle (Chita Plant)



All-weather shipyard (Chita Plant)

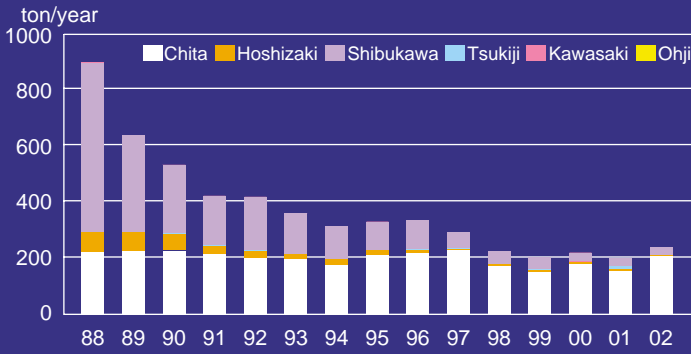


Special containers which can be used by truck and rail



Environmental Preservation of Air

Sulfur oxide emissions



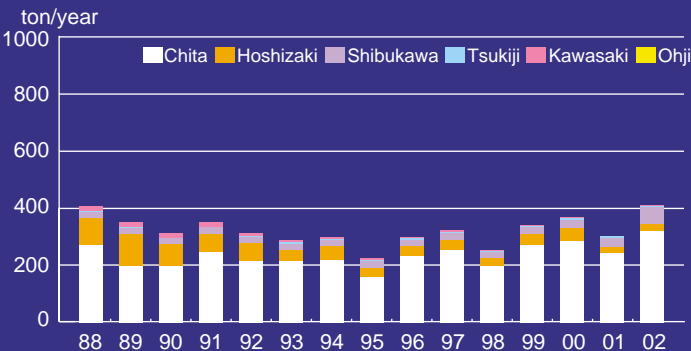
At Daido Steel, efforts have been made to reduce SOx, NOx and dust.

1. Sulfur oxides (SOx), Nitrogen oxides (NOx)

Daido Steel has actively promoted the use of low sulfur fuel oil, conversion of fuel oil to natural gas and energy saving measures. As a result, SOx emissions have been remarkably reduced to 25 % of 1980's level.

In order to reduce NOx emissions, Daido Steel has been taking countermeasures such as introduction of NOx burners developed by ourselves, improvement of combustion efficiency, introduction of denitration equipment and steam atomizing for efficient combustion of heavy oil.

Nitrogen oxide emissions



Fence around slag dumping/recycling treatment yard



2. Dust

Major countermeasures against dust;

- Installation of multi-line bag filter dust collector* to dust emitting equipment such as electric arc furnaces. (* Building evacuation, Sky house evacuation and direct evacuation)
- Installation of fence around slag dumping/recycling treatment yard to reduce scattering of dust
- Frequent water sprinkling over roads inside plants/works and introduction of truck wheel cleaner
- Periodical measurement of dust in the air inside / outside the plant

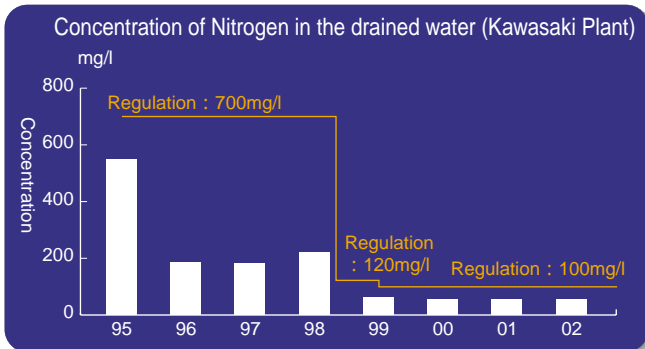
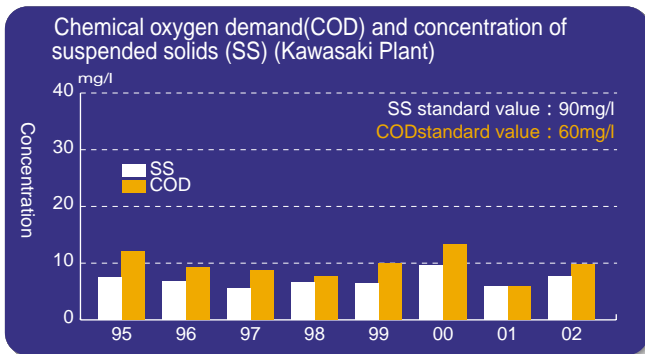
Environmental Preservation of Water

At Kawasaki plant, cooling water used in every process is purified by a coagulator and a sand filter before being released to Tokyo Bay. The water quality is constantly monitored to maintain the level of water cleanliness.

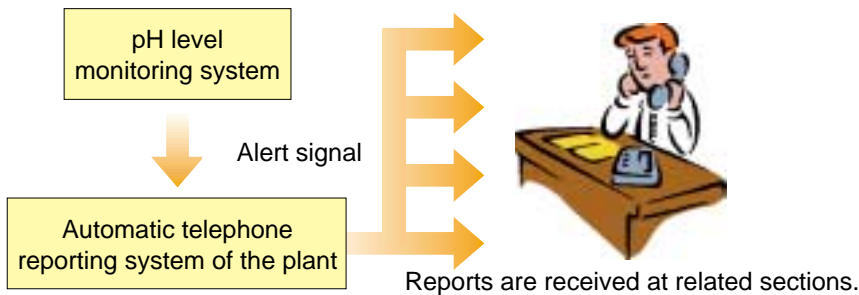
This data is reported to the local government office on a timely basis.

As a countermeasure to prevent the eutrophication of Tokyo Bay which is closed sea area, the concentration of Nitrogen in the drained water is dramatically reduced through improvement of equipment and operation.

Drainage processing equipment
(Kawasaki Plant)



Automatic telephone reporting system at inappropriate level of pH in drained water



This system enables 24 hours observation of pH level by reporting all related sections, including a guardroom. Formerly, only equipment pulpit could observe the pH level.