Section 2
Production and Purchasing

Honda ECOLOGY 2

Reduction of Environmental Impacts to Zero to Achieve Environment—Friendly Factories That Local People Can Be Proud of

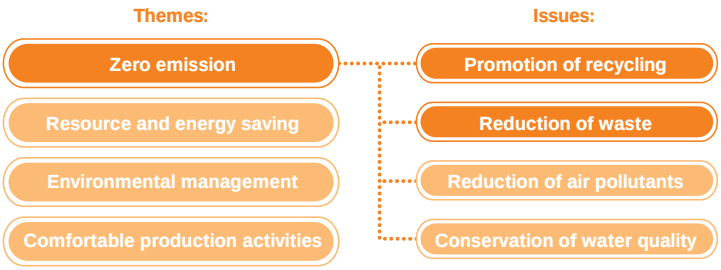
We input a variety of resources and energy into our production processes to manufacture products.
Honda is implementing measures to minimize the impact that its production activities have on the global environment, improving the working environment, and promoting symbiosis with local communities around its factories in order to develop them into "Green Factories" that local people can be proud of.
Also, we are conducting various environmental conservation activities in cooperation with our suppliers of materials and parts, encouraging them to obtain ISO 14001 certification.

Zero Emission for the Effective Use of Resources

Honda has been promoting “zero emission” to reduce waste generated from and environmental impacts caused by its factories to the minimum under its green factory project. In July 2000, by reducing the generation of waste and promoting recycling, we achieved “zero landfill disposal” at all of our plants in Japan. Also, we are aggressively implementing countermeasures against waste sources to reduce the total amount of waste generated.

Target for waste reduction
◎Achievement of zero landfill disposal by 2001

●Green factory measures



Efforts for zero landfill disposal

1995 — Reduction of waste by 50% (compared with 1991 levels) at all factories

1997 — Launch of the green factory project

1999 — Achievement of zero landfill disposal by the Suzuka Factory

2000 — Achievement of zero waste at all factories

2002 — Reduction of waste to be incinerated

Sludge
Waste tires
General waste

Casting sand
Iron, aluminum, Glass
Fluorescent tubes
Dry batteries

Waste wood

Composite resin
Remnants

Waste oil
Cutting fluid

1 “Zero landfill disposal”

“After materials are carried into a factory, nothing but products should be carried out from it.” This is the words of Honda’s founder. In the production process, a significant amount of resources and energy are used, and not only products but also waste products, wastewater, air pollutants, and CO_2 are generated. Honda, aiming to reduce the environmental impacts caused by these by-products to zero, has long been implementing the measures for zero emissions. As part of such measures, we started to implement “zero landfill disposal” measures in 1996 and achieved the objective at all of our factories in July 2000. “Zero landfill disposal” represents Honda’s fundamental idea about the environment, which has been promoted within the company since its foundation.

2 Onsite examination of actual situations

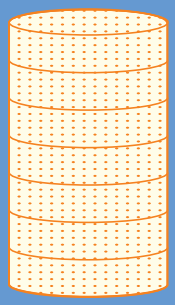
As of 1996, Honda disposed of approximately 7,000 tons of waste as landfill. To reduce such waste to zero, we first examined and analyzed the actual situation: what kinds of waste were generated, and in what ways, and why were they disposed of as landfill. We analyzed these waste problems in relation to our activities, materials, technologies, and costs, and planned practical measures to reduce all waste. Our staff made many proposals for waste reduction, including a method to recycle even the labels attached to parts.

At most of our factories, pocket-sized brochures detailing the waste items to be sorted were prepared and everyone carries these brochures with them to help with the careful sorting of waste. It has been proved that the careful sorting of waste leads to a reduction of the loads imposed on waste incinerators and to the reduction of dioxins generated by incineration.

3 Efforts for recycling and zero landfill disposal

If we depended entirely upon external recycling companies, it would not be possible to achieve 100% recycling. We have therefore been examining methods to recycle materials that are said to be unsuitable for recycling in cooperation with our suppliers as well as with external

Achievement of "zero landfill disposal"



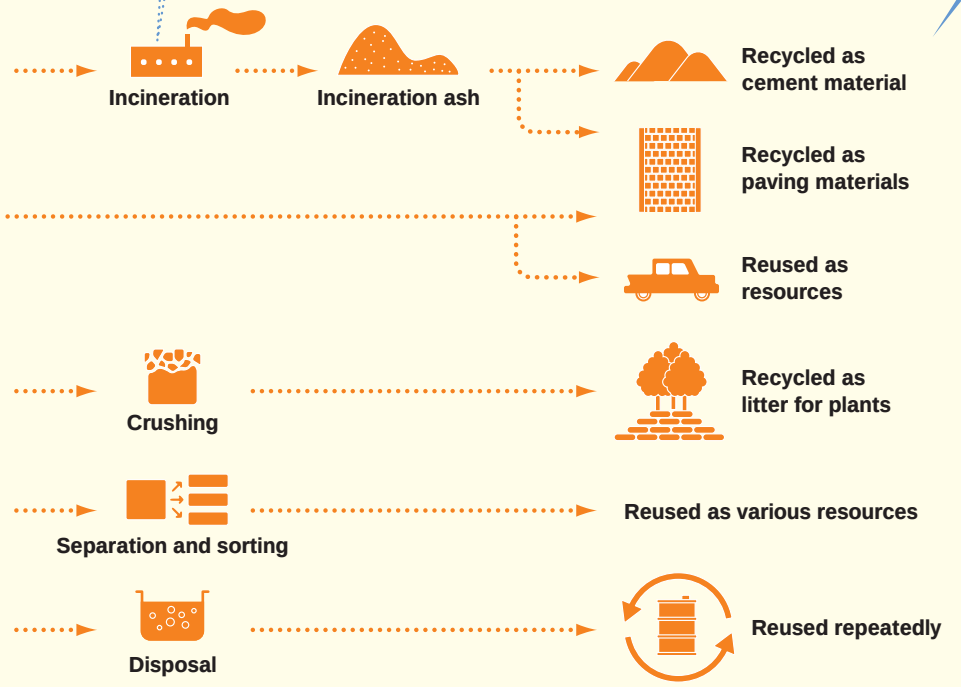
In September 1999, the Suzuka Factory achieved "zero landfill waste" for the first time in the automobile industry. This was followed by the Saitama and Hamamatsu Factories in March 2000, and by the Tochigi and Kumamoto Factories in July 2000, and "zero landfill disposal" was achieved at all of Honda's factories in Japan one and a half years earlier than planned.

Introduction of a new incinerator

New incinerator installed at the Suzuka Factory

This incinerator has greatly reduced the emission of dioxins to the level that meets the world's strictest dioxins emissions standards, as enforced in Europe.

Efforts for zero landfill disposal at factories



Incineration ash from an incinerator is sieved to remove foreign matter.

Waste casting sand is sorted to be reused as sand or for paving stones and blocks.

Crushed waste wood is used as litter to protect plants within the premises.

Cutting fluid dispersed in the form of mist in the cutting process is collected. Also, cutting fluid attached to chips generated in the cutting process is collected and reused after removing oil from it.

recycling companies. For example, we developed a device to remove foreign matter from incineration ash and improved this again and again. As a result, approximately 2,100 tons of incineration ash, which had previously been sent to landfills, were recycled as a material for cement or as paving materials (recycled as paving materials after being fused and solidified). Also, we have significantly increased the recycling of waste oil, cutting fluid, and composite resin remnants. Thus a large amount of waste that was previously destined for landfills, is now recycled.

4 Implementation of localized measures both within and outside Japan

For the achievement of "zero landfill disposal," each of Honda's factories simultaneously implemented their own measures and any measures that proved to be effective at one factory was aggressively introduced to other factories to accelerate achievement of our goals. As a result, approximately one year earlier than planned (in July 2000), "zero landfill disposal" was achieved at all our factories in Japan. The diagram shown above outlines our efforts to attain this goal. Such efforts have also been made at our factories overseas. For example, at Honda of the U.K. Manufacturing Ltd. (HUM) in the United Kingdom, the amount of waste for landfills was reduced to less than one-third compared with the level of 1995 (60 kg/vehicle). Thus Honda is promoting localized waste reduction activities all over the world.

Canada

Waste reduction in the coating process

Measures and New Technologies to Prevent Air and Water Pollution

Honda has long been taking measures to prevent air and water pollution based on the principle of "preventing the generation of pollutants at the source." We are preventing air pollution by introducing pollutant removing devices and pollutant emission reducing devices and by switching to cleaner fuels.

At the Hosoe Plant of the Hamamatsu Factory, unique measures are implemented for the conservation of water resources and water quality, including the adoption of a closed system for wastewater.

Measures to prevent air pollution

1972

Independent development of Japan's first electric dust collector
(to remove dust emitted from casting incinerators)
(at the Sayama Plant of the Saitama Factory)

Switching to alternative fuels as anti-NO*x* and SO*x* measures

1970
Establishment of a pollution measures headquarters
(developed into an environment promotion committee in 1979)

Measures to purify wastewater

1964

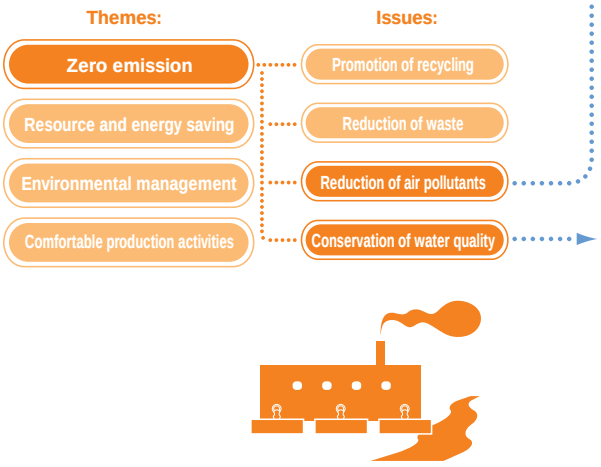
Circulative use of industrial water

1971

Japan's first general wastewater treatment plant that adopts the activated sludge method
(at the Hamamatsu Factory)

The plant started its operations in 1971 and was improved in 2000 to reduce the disposed sludge to zero.

● Green factory measures



1 Prevention of air pollution at the source

In the 1970s, it was regarded as one of the important objectives for companies to prevent pollution. Accordingly, at Honda's plants, measures were promoted to prevent air pollutants such as SO*x* (sulfur oxides), HC (hydrocarbons), and NO*x* (nitrogen oxides) from being generated in the combustion of fuels as a heat source in the parts manufacturing and heat treatment processes, including the casting process. Subsequently, measures to reduce dioxins generated at the incineration of wastes were also implemented. Presently, all plants are making further efforts to reduce the generation of pollutants and to deal with volatile organic compounds (VOCs) generated in the painting process. Over many years, the plants have been consistently taking anti-pollution measures based on the principle of "preventing the generation of pollutants at the source." Specifically, they are trying not to generate pollutants but if this is unavoidable, they introduce devices to control the generation at places near to the polluting sources.

For example, to reduce SO*x* and NO*x* emissions, they have switched from heavy oil to kerosene and to natural gas as fuels for boilers. Further, they have dramatically reduced pollutants through the use of catalyzers and of more environment-friendly incinerators. For anti-VOC measures, they have introduced water-based paints as well as highly efficient painting machines, thereby reducing the amount of paints used and VOC emissions.

2 Implementation of drastic anti-dioxin measures

Honda has introduced incinerators that remarkably reduce dioxins contained in exhaust emissions to some of its factories, including the Suzuka Factory. The factories, however, do not solely depend on these incinerators: they also sort waste that contain chlorine, which can cause the generation of dioxins, before incinerating them. Further, the factories are reducing the use of materials that contain chlorine. For example, in 1998, the Suzuka Factory started to use chlorine-free cutting fluid, instead of that containing chlorine, as a lubricant in the parts cutting process. Because the newly adopted cutting fluid does not disperse in the form of mist compared with the traditional cutting fluid, the environment within the factory was improved, in addition to making recycling easier.

3 Conservation of water quality according to Honda's voluntary standards

Honda has been taking water pollution prevention measures also based on the principle of "prevention at the source."

Since 1970, we have been introducing general wastewater treatment plants to each of our factories and have been treating and managing wastewater in a sophisticated manner according to our voluntary standards, which are actually stricter than those set by laws and government ordinances. Over this period, we have consistently been trying to reduce the consumption and waste of water at the source by the circulative use of water.

For example, the Kumamoto Factory,

1998

Operating new-type incinerators to prevent dioxin emissions
(at the Suzuka Factory)

Enabling remarkable reduction of dioxins in exhaust gases

Drastic sorting of wastes to be incinerated

Sorting wastes containing chlorine by the use of test paper to prevent the generation of dioxins

2000

Introducing new-type painting machines to reduce VOC emissions

The highly efficient bell painting machine for metallic coating has reduced VOC emissions by 50%.

2001

Switching from kerosene to natural gas as higher quality fuels
(at the Kumamoto Factory)

Launch of the Green Factory Project in 1997

1998

Introducing devices to remove phosphorous in order to reduce the phosphorous content in wastewater
(at the Suzuka Factory)

1999

Introducing a system to monitor wastewater on a 24-hour basis
(at all Honda factories)

Introducing facilities to treat wastewater that contains oil
(at the Hamamatsu and Kumamoto Factories)

2000

Introducing the facilities to treat concentrated wastewater
(at the Hamamatsu Factory)

Introducing the contact oxidation system[1] to the general wastewater treatment plant
(at the Hamamatsu Factory)

2001

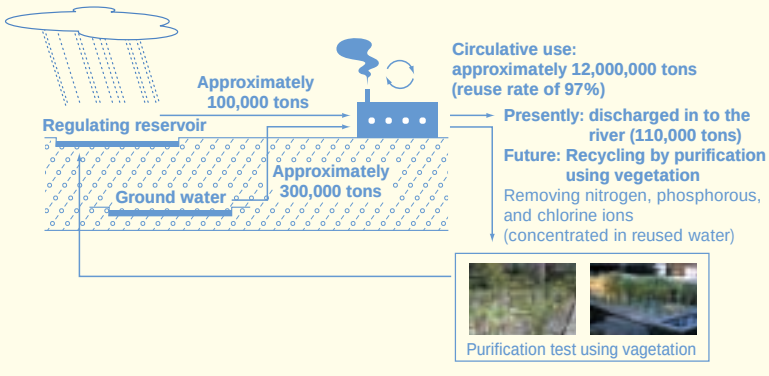
"Closed system"[2] for wastewater from the outboard engine assembling process
(at the Hosoe Plant of the Hamamatsu Factory)

Discontinuing the coated surface pre-treatment using hexavalent chromium and adopting a harmless treatment method using zinc phosphate
(improvement of the pure water cleaning tank) (at the Takanezawa Plant of the Tochigi Factory)

1) Contact oxidation (highly activated sludge method): System to improve treatment efficiency by attaching microorganisms to shells and plastics
2) Closed system: system to conserve water resources and water quality by the circulative use of water, which reduces wastewater to zero

which started operations in 1976, is reusing 97% of industrial water supplied to the factory. It is making efforts to further increase the reuse rate and is reducing the amount of ground water pumped by switching to the use of rainwater. Rainwater contains a smaller amount of minerals than the ground water that has been traditionally used as industrial water and the minerals contained in rainwater will not easily concentrate, even after repeated use. Rainwater can therefore be used longer than ground water, thus reducing the amount of water that is finally wasted. Towards the goal of "zero wastewater," we are putting into practical use the technology to remove nitrogen and phosphorous concentrated in reused water through the power of vegetation.

Test plant (at the Kumamoto Factory) for "zero wastewater"



Steps towards "zero wastewater"

Water saving through the use of rainwater → Expanded use of rainwater in the supplementary supply of water to production processes → Full recycling of wastewater by ecological treatment

The figures represent those for a period of a year.

4 Conservation of soil and ground water quality

Honda factories, attributing importance to "symbiosis with local communities" in their green factory activities, conduct research and monitoring of soil and underground water at the observation wells bored within their premises. The results show that no harmful substances used at the factories have flowed out of the premises. Also, we are increasing the number of survey points and promoting the monitoring and research of soil and underground water even at the places where no harmful substances are used.

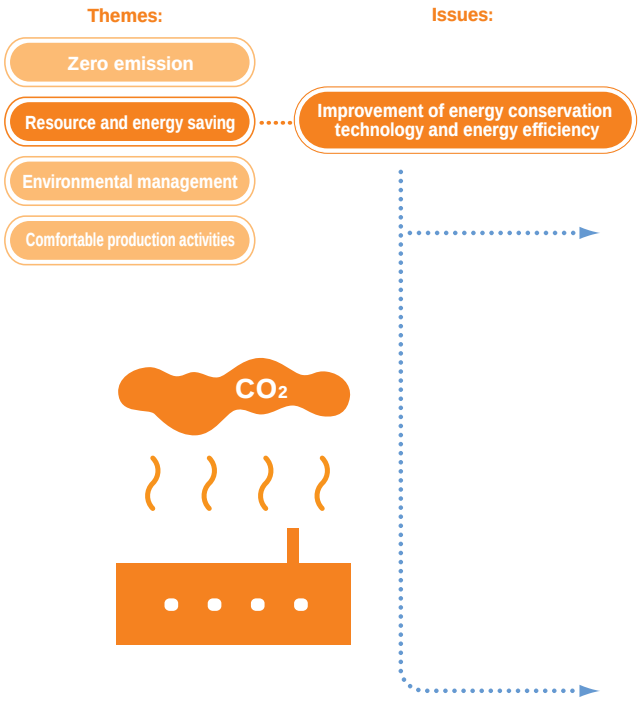
Pursuit of Energy Efficiency for the Reduction of CO_2 Emissions

Honda is committed to the efficient use of resources, materials, and energy for production without waste, thereby reducing the CO_2 emissions that cause global warming.

We are improving our factilities and production methods by introducing natural gas cogeneration systems and by improving our production lines to reduce the environmental impacts caused by our factories and to make them the most energy efficient in the world.

Honda's energy saving target in the production domain:
◎To reduce energy intensity by 15% by 2001 (compared with 1990 levels) [already achieved]
◎To reduce energy intensity by 30% by 2010 (compared with 1990 levels)

●Green factory measures



Efforts made targeting power sources

1976 | 1995

Introduction of a water thermal storage system ···► Introduction of an ice thermal storage system ····►

Efforts made targeting production processes

1976

Holding meetings to present examples of the effective use of resources and energies

1 Expanded use of energy-saving equipment

To reduce the emission of air pollutants such as CO_2, NO*x*, and SO*x* from our factories, Honda has been switching its fuel source to natural gas, which represents one of the clean energies. Further, we generate energy to supplement the electricity purchased from power plants, while carefully controlling CO_2 emissions.

In a cogeneration system, an engine, such as a gas turbine, runs a generator to generate electricity and the gas exhausted from the engine is also used as a source of energy. The heat from the exhaust gas is used to generate steam, which is in turn used for multiple purposes, including use in air conditioners. In the case of electricity purchased from power plants, approximately 60% of the electricity is lost in the generation or transmission process. In a cogeneration system, however, such loss is minimized and higher energy efficiency can be achieved.

In 1998, we introduced a cogeneration system powered by natural gas to the Suzuka Factory. The unit achieved a total energy efficiency of 70%, reducing the CO_2 emissions from the factory by 2,500 CO_2-tons on an annual basis. By further improving the waste heat recovery efficiency and the power generation efficiency, we expect to achieve energy efficiency as high as 86% for the cogeneration unit installed at the Saitama Factory and for the third and fourth systems to be installed at the Suzuka Factory in September.

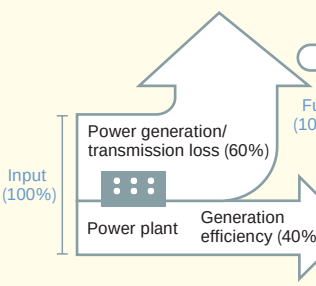
2 Production line innovations

In addition to reducing the environmental impact caused by the generation of energy, it is also necessary to use generated energies in the production processes efficiently and without waste. Honda started to improve its production lines in 1999, including increasing the number of models that could be produced by a single production line. We are now improving the production lines at our factories all over the world in order to reduce the environmental impact caused by our production activities.

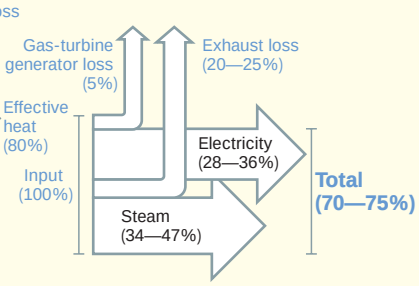
Specifically, for welding, coating, and assembling, we have introduced new technologies and reviewed the processes for the promotion of energy saving. For example, in the welding process, we replaced hydraulic robots, which had been operated constantly, with electric servo robots, which can be operated only as required. We thereby reduced the energy consumed by the welding robots to less than half, and,

Cogeneration system

●Energy efficiency of the purchased electricity



●Energy settings for a cogeneration system



Energy saving measures implemented at the Hosoe Plant

Highly efficient production system
Manufacturing a variety of outboard engines from two horsepower engines to 225 horsepower ones by one production line

Next-generation thin film solar cells
Aiming at power generation of 100,000 kWh a year, taking advantage of the abundant sunshine amount in Hamamatsu

1998

Introduction of a cogeneration system

2001

Starting the operation of the Hosoe Plant with greatly improved energy efficiency
(at the Hamamatsu Factory)

2002

Reducing the unit energy consumption by 15% compared with 1990 levels

2010

Aiming at reducing the unit energy consumption by 30% compared with 1990 levels

1998

Reducing the parts to which the MIG welding method that uses CO_2 gas is applied, thereby reducing CO_2 emissions by 20%
(Compared with 1993 levels)

1999

Production line innovations ····► **Expansion throughout the world**

Examples of improvements made in production processes

Welding process

In the past, it was necessary to use different welding devices for each model, but now a device that can be used for a variety of models has been developed. Also, the introduction of electric servo robots has sped up the welding process.

Coating process

The coating line has been shortened by streamlining the pretreatment process. Water-based paints are now used for intermediate and finish coatings and coating efficiency has been improved to reduce the emissions of volatile organic compounds (VOCs).

Body assembling process

In the past, the time required for assembling varied by model, but by the use of subassembly lines, the differences have been reduced. Presently, using a more compact assembly line, a variety of models are assembled.

furthermore, shortened the time required for welding. As a result, the total CO_2 emissions from the entire welding process have been reduced by 20% compared with the level before the aforementioned improvements were made. Regarding the coating process, we simplified the layout of the lines and aggressively introduced advanced technologies to improve coating s efficiency and total energy efficiency. Also, we started to use water-based paints for intermediate and finish coatings to improve coating efficiency and reduce emissions of VOCs. As a result of these efforts, the CO_2 emissions from the coating process have been reduced by 20% compared with previous levels.

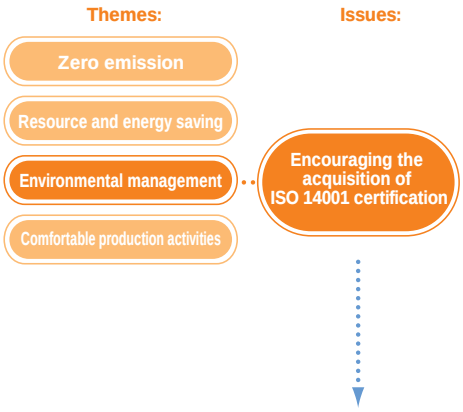
3 State-of-the-art factory with higher energy efficiency

At the Hosoe Plant of the Hamamatsu Factory constructed in September 2001 for producing outboard engines, a variety of devices and technologies are introduced to improve energy efficiency. For example, multiple models can be now manufactured by a single production line more speedily and easily. By advanced management of the production system and space, both efficient production and comfortable environment for workers are achieved at the plant. Also, the next-generation thin film solar cells that Honda has independently developed are attached to the plant's roof for solar power generation (see page 27). By the improvement of efficiency and introduction of advanced technologies, the plant has reduced its consumption of electricity to almost a half of that of traditional plants.

Aggressive Introduction of ISO 14001-Certified Environmental Management Systems

Honda has been promoting the introduction of environmental management systems to manage and reduce the environmental impacts caused at each stage of its production activities. By 1998, all Honda domestic factories acquired ISO 14001 certification. We are also encouraging our suppliers to acquire the certification. In foreign countries, 31 Honda factories have acquired ISO 14001 or EMAS certification.

● Green factory measures



Honda, to continuously reduce and manage the environmental impact caused by its production facilities and processes, has been aggressively introducing ISO 14001-certified environmental management systems. In Japan, the power products manufacturing plant in the Hamamatsu Factory was the first among Honda's factories to acquire ISO 14001 certification (in 1997), and by the end of fiscal 1998, all the other factories had acquired this certification. Also, at overseas factories, we have promoted the acquisition of certification, and as of the end of fiscal 2001, a total of 32 Honda factories in North America, South America, Europe, Asia, and Oceania are ISO-14001 certified. Furthermore, in Europe, we are also promoting the acquisition of EMAS.*

* EMAS: Eco Management and Audit Scheme

ISO 14001/EMAS-certified Honda business sites as of the end of fiscal 2002

Expansion of environmental management

1997

Acquisition of ISO 14001 certification by Honda Belgium N.V. and subsequent acquisition of this certification by other Honda group companies in different countries

Acquisition of ISO 14001 certification by the Hamamatsu Factory

1998

Acquisition of ISO 14001 certification by all Honda factories in Japan

2002

Encouraging the acquisition of certification by major suppliers

Encouraging the acquisition of certification by Honda's overseas factories

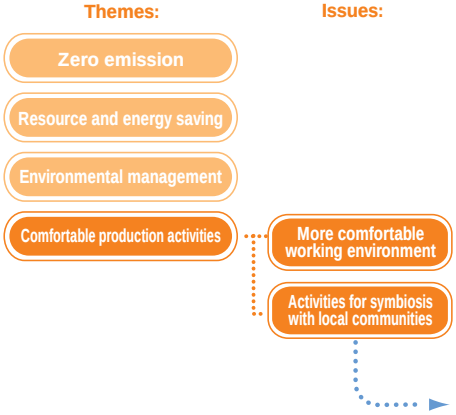
Making Our Factories in Harmony with Local People and Employees

Since its foundation, Honda has been attributing importance to the philosophy of "Respect for the Individual." Based on this, Honda factories are conducting symbiosis activities with local communities and improving the working environment, in order to become factories that are appreciated by local people as well as by those working in them.

Furusato Afforestation
On this land of approximately 346,000 square meters, as many as 550,000 trees were planted.

Tools to reduce work loads
A variety of tools have been developed to reduce the loads imposed on staff in moving heavy objects, etc.

● Green factory measures



1 Prevention of sensory pollution and greening activities for symbiosis with local communities

At Honda's factories, efforts have been made to prevent sensory pollution such as noise, vibration, and bad odors by introducing soundproof walls and deodorizers. Also, greening activities named "Furusato (native place) Afforestation" have been continuously conducted since 1976 to plant broadleaf trees that are suitable for the local ecosystem in and around the factories to help improve the local environment and reduce CO_2. And at Honda's overseas factories, we are implementing various measures for symbiosis with local communities and the natural environment (see page 58).

2 Provision of a comfortable working environment

At Honda's factories, automation has been promoted and the devices that ensure workers' health and safety have been aggressively introduced to improve the working environment. For example, at the Hosoe Plant of the Hamamatsu Factory, which started operations as the newest production base in Japan in 2001 to manufacture outboard engines, new engine assembling tools have been introduced. The tools decrease the load placed on employees by enabling them to assemble engines from all the directions. Furthermore, the plant has introduced conveyors to move the outboard engines to the water testing tanks and thereby freed workers from heavy lifting.

column

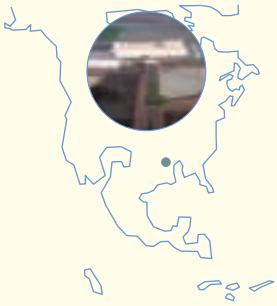
Measures Taken at Honda's Overseas Factories

To provide worldwide customers with the products that satisfy them, Honda has established a system for local Honda staff to develop, manufacture, and sell products that meet the needs of local communities throughout the Americas, Europe, Asia, and Oceania. For environmental conservation, which is now a common theme for people all over the world, we make it a rule for our local staff to take environmental measures that are optimal for local communities. Some of these measures are introduced below.

Honda Manufacturing of Alabama (in Alabama, U.S.)

To become a global standard for environment-friendly factories

In establishing Honda Manufacturing of Alabama (HMA) as Honda's newest factory in North America in November 2001, Honda set itself the goal of integrating the factory into the local community as a factory that people can look up to and introduced various advanced environmental conservation measures. For example, as measures to prevent soil pollution, the factory minimizes the risk of oil spills at the time of delivery by concentrating all oil supply facilities into one location. Also, all the supply pipes are installed overhead and are equipped with drip pans to enable easy visual inspections and to prevent oil from soaking into the soil in the event of pipe leaks. Furthermore, treated wastewater is discharged through a double-walled effluent line and monitored by sensors to give special protection against leakage. To prevent air pollution, water-based paints are used for coatings, and state-of-the-art facilities to make volatile organic compounds harmless were introduced to ensure double and triple measures for environmental



Preventing oil leakages
Overhead supply pipes enable problems to be detected quickly, and oil drip pans are installed in the bottom sections of the pipe in case of leakage.

●U.S.

Energy saving measures

Honda of America Mfg., Inc. (HAM), which is Honda's production base in North America, is reducing the environmental impact caused by its production activities based on it own policies concerning environmental activities. The East Liberty Auto Plant (ELP) centrally manages the use of energy and water by each of its production processes, and fully examines the improvement possibilities of the processes. The remarkable results of effective measures taken at the plant include the improvement of energy efficiency on holidays and 53% energy saving by replacing hydraulic motors with electric motors for transporting paints to the coating process.

Electric motors used for transporting paints (small cylinder-shaped objects in the center of the photo)

Central monitor to check the amount of remaining paints and to control the motor operation

●Belgium

Installation of new water purifying equipment to improve the quality of treated wastewater

Honda Europe N.V. (HE) installed bio-rotors to improve the quality of treated wastewater. The rotors stir the wastewater, introducing fresh air to activate the bacteria in the water, and thereby purifying it. HE regards the treatment and further purification of wastewater as one of its most important tasks.

Bio-rotor (water purifying equipment)

●Thailand

Reduction of electricity consumption by the use of natural light

Thai Honda Mfg. Co., Ltd. (THM) replaced mercury vapor lamps with fluorescent lighting fixtures (each with two tubes) and thereby reduced the consumption of electricity for lighting equipment. To further save energy, THM has installed skylights in the roof of its factory. Because natural light streams in through them, there is no need to turn on the lights during the eight hours of daylight, which is half the time that the factory is in operation. The company has greatly reduced its electricity consumption.

Before the installation of skylights

After the installation of skylights

For the Procurement of Environment-Friendly Materials and Parts

To reduce the environmental impact caused by our products throughout their life cycles, it is necessary to cooperate with suppliers. Honda, in order to procure environment-friendly materials and products, established the *Honda Green Purchasing Guidelines* and held a number of meetings to explain the guidelines to suppliers. We are thus implementing effective measures to promote green purchasing, which means to choose environment-friendly products and services.

Office supplies targeted for green purchasing

Honda Green Purchasing Guidelines

Promotion of green purchasing

2001	2002	2005	2007	2008	2010
Promoting the acquisition of ISO 14001 certification by suppliers	Establishment of the *Green Purchasing Guidelines* Explanatory meetings for suppliers	Honda's guidelines on chemical substances	Target: Acquisition of ISO 14001 certification by all Honda suppliers (in Japan)	Target: Zero landfill disposal at suppliers	Target: Acquisition of ISO 14001 certification by all Honda suppliers (overseas)	Target: Reduction of CO_2 emissions by 6% over 2000 at suppliers

Outline of *Honda Green Purchasing Guidelines*

	Classification	Management item	Target
Products[1]	Management of chemical substances contained in products (purchased parts)	Content of chemical substances in products (parts and materials)	Compliance with the schedule set forth in Honda's guidelines on chemical substances[4]
Manufacturing[2]	Management of environmental impacts by suppliers	CO_2 emission volume Waste amount (reduction of landfill)	2010: 6% reduction over 2000 2007: Zero landfill
Corporate system[3]	Promoting environmental management systems at suppliers	Further acquisition of ISO 14001 certification	2005: Completion in Japan 2008: Completion in other countries

1) Products purchased by Honda
2) Manufacturing process of products
3) Environmental management system to manage the manufacturing process
4) The guidelines show the schedule for reducing, discontinuing the use of, or replacing with alternatives for chemical substances with environmental impacts, including those regulated in Europe (lead, mercury, cadmium, and hexavalent chromium) and those voluntarily regulated by Honda.

1 Reduction of environmental impacts in cooperation with suppliers

One single automobile is composed of 20,000 to 30,000 parts, most of which are purchased from suppliers. To reduce the environmental impact caused by the manufacturing of automobiles, it is therefore necessary for automobile makers and their suppliers to cooperate with each other. Honda asks its suppliers to introduce ISO 14001-certified environmental management systems. So far, 55 major suppliers have already acquired this certification. In 2002, all factories (or plants) of suppliers, providing materials to, or manufacturing products for, Honda, started to promote the acquisition of ISO 14001.

2 Establishment of *Honda Green Purchasing Guidelines*

Honda set its green purchasing guidelines to aggressively promote the green procurement of materials and parts in December 2001. The guidelines provide details of the specific management items and targets to be dealt with by Honda and its suppliers toward 2010, for the three fields as shown in the table above. We will continue to ask our suppliers to manage and disclose data on environmental impacts and will continue to purchase environment-friendly materials and parts.

3 Green purchasing of office supplies

Based on the principle of green purchasing to promote the preferable purchasing and popularization of environment-friendly products and services, we are also purchasing environment-friendly products and services for our offices. The following shows Honda's basic ideas for green purchasing:

1. Purchase products and services by taking into account the various types of environmental impacts on each stage of the products' life cycle.
2. Purchase products and services that are produced and sold by businesses that have management policies concerning the environment and that are actively engaged in environmental conservation.
3. Actively obtain environmental information concerning products, manufacturers, and distributors, and use the information for making purchasing decisions.

At Honda, general office supplies have been replaced with environment-friendly ones and as of 2002, 353 items used in the offices are environment-friendly products.