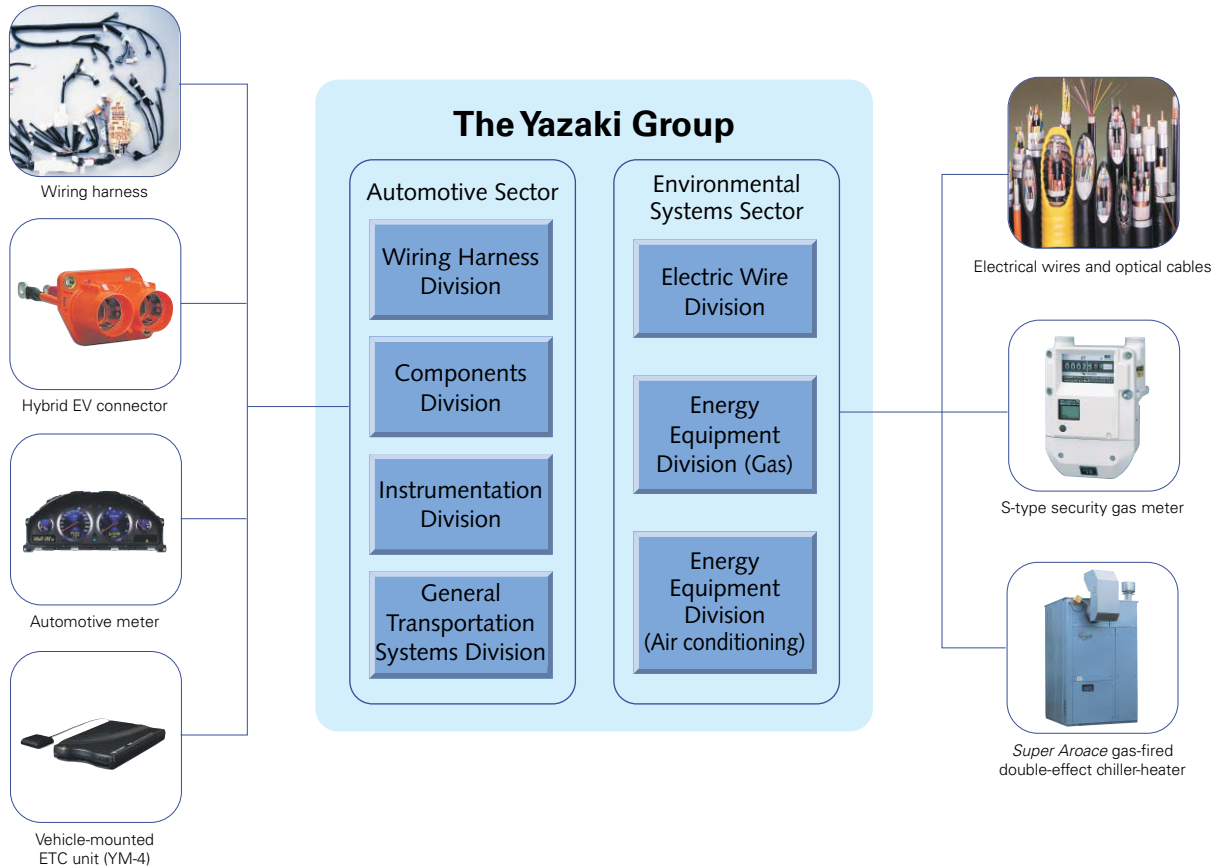
A large, stylized letter 'Y' that serves as a background for the report. The top two arms of the 'Y' are filled with horizontal blue and white stripes. The central stem of the 'Y' is a vertical rectangle containing a photograph of a tropical beach with clear turquoise water and a blue sky with white clouds. The bottom arm of the 'Y' is also filled with horizontal blue and white stripes.

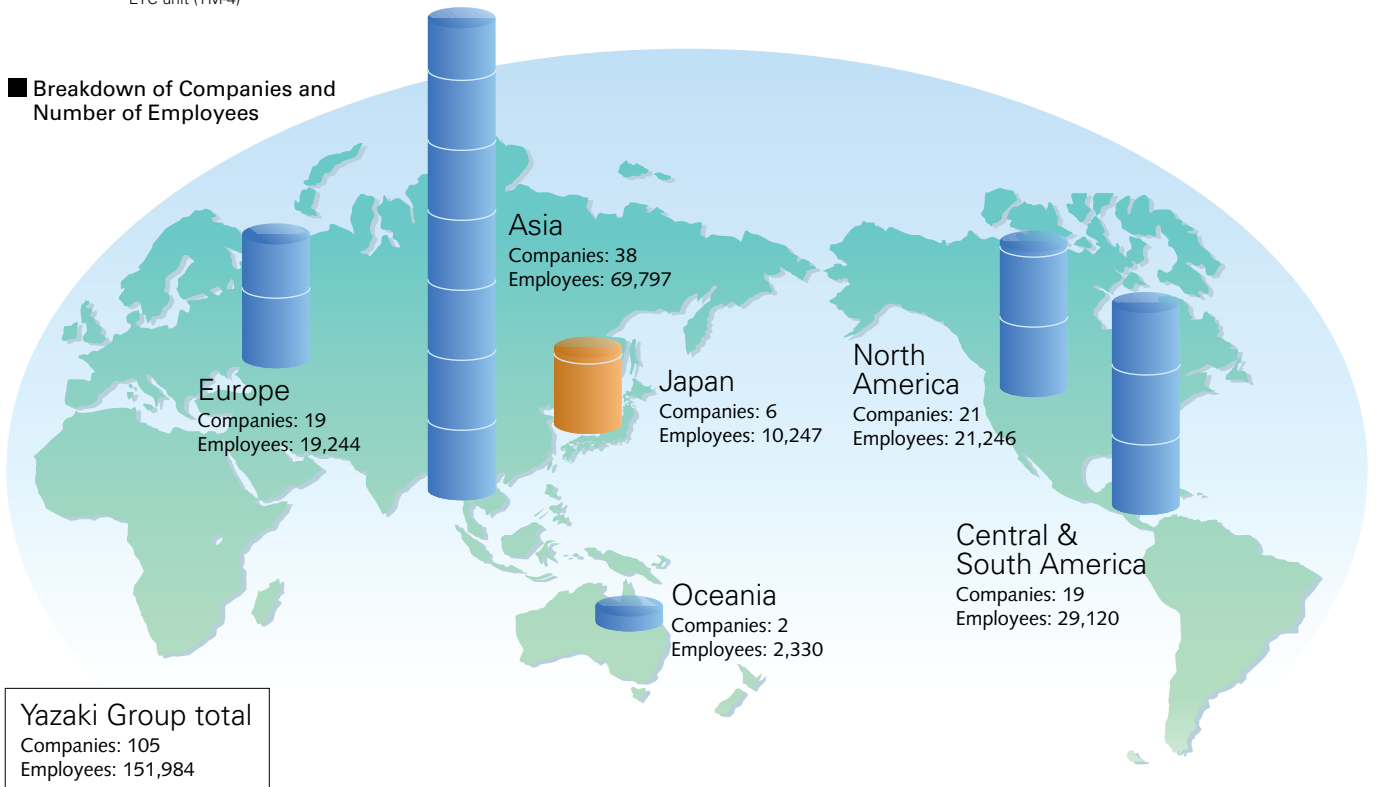
**Social & Environmental Report**  
**2004**

# Overview of Business Activities

The Yazaki Group boasts a diverse range of products in the Automotive and Environmental Systems sectors such as wiring harnesses, automotive components and parts, electrical wire, and gas and air-conditioning equipment that are distributed worldwide through numerous bases in Japan and overseas. Supporting the Yazaki brand is a corporate group comprising six companies in Japan and ninety-nine overseas affiliates with Yazaki Corporation at their center. The Group's integrated business management covers development, production, and sales of a wide array of products, and includes seventy domestic affiliated companies that manufacture products in the Automotive and Environmental Systems Sectors, and operate nursing, service, and recycling businesses.



## Breakdown of Companies and Number of Employees



**Company Outline**

Name: Yazaki Corporation  
 Date of establishment: October 8, 1941  
 Representative: Chairman Yasuhiko Yazaki  
 President Shinji Yazaki  
 Location: 17th Floor Mita Kokusai Building 4-28,  
 Mita, 1-chome, Minato-ku Tokyo,  
 108-8333, Japan  
 Capital: 3.1915 billion yen

**Yazaki Domestic Group Companies**

- Yazaki Electric Wire Co., Ltd.  
Numazu Factory, Fuji Factory, Hodosawa Factory
- Yazaki Parts Co., Ltd.  
Washizu Factory, Susono Factory, Ohama Factory,  
 Haibara Factory, Tochigi Factory, Niimi Factory,  
 Daitou Factory
- Yazaki Meter Co., Ltd.  
Shimada Factory, Rokugo Factory, Tenryu Factory
- Yazaki Resources Co., Ltd.  
Hamamatsu Factory
- Yazaki Corporation Hokkaido Sales Co., Ltd.

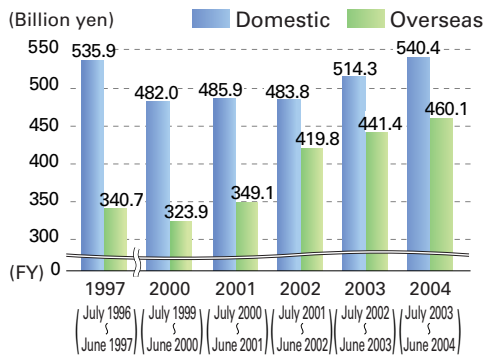
**Overseas Group Companies: 99**

**Yazaki Group total number of employees:**  
 151,984  
 (Domestic: 10,247, Overseas: 141,737)

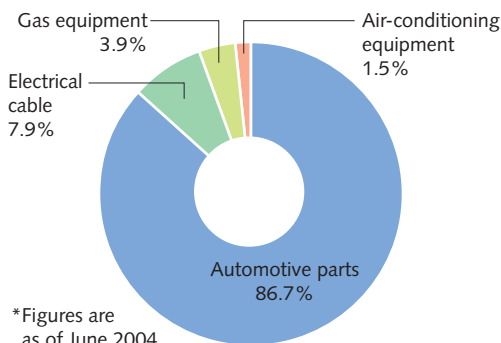
**Domestic Affiliated Companies: 70**

\*As of April 2004

**Net Sales**



**Yazaki Corporation's Sales Breakdown by Sector (Domestic)**



\*Figures are as of June 2004

- **Period covered**  
 FY2004 (June 21, 2003 to June 20, 2004)  
 Most recent data and information used when possible.
- **Scope of data**  
 The information presented in this report covers all six domestic group companies as well as selected overseas group companies and domestic affiliated companies.
- **Listing of Names**  
 - As this is a report of the Yazaki Group as a whole, the factories of each group company are referred to using production site names. Company names are not listed.  
 - This mark indicates that more information can be found in the glossary on page 50.

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## Executive Message

Our actions are geared towards helping create a society capable of sustainable development.



Yasuhiko Yazaki  
Chairman  
Yazaki Corporation

A stylized, cursive signature in black ink, corresponding to the name Yasuhiko Yazaki.

Shinji Yazaki  
President  
Yazaki Corporation

A stylized, cursive signature in black ink, corresponding to the name Shinji Yazaki.

## Corporate Response in an Era of Rising Expectations of Society

Yazaki has sought to fulfill its social responsibilities as a corporation needed by society based on principles that remain unchanged since its establishment sixty years ago. Today, it is time to once again reflect on the meaning of those principles. Social aspects of corporations' activities as reflected in corporate compliance and accountability, as well as the concept of corporate social responsibility (CSR) as developed in America and Europe, are being debated and reevaluated. The primary objective of any corporation is earning profit; failure to do so could even be described as breaching shareholder trust. At the same time however, a corporation cannot fulfill its roles solely through the pursuit of profit. Yazaki believes that only when a corporation can generate profit and adhere to social ethics at the same time can it become needed by society. Our past conduct and performance based on our principles have created the Yazaki corporate character and support the Yazaki brand. We believe that our mission in the future will be to pursue both profit and social ethics — two essential elements of our management based on deeply rooted principles.

## Global Expansion for the Benefit of the Environment

We inherited the earth from our parents, and it will soon be time for us to pass it on to our children. We cannot, however, spoil the earth for our own convenience and benefit before we hand it over to the next generation. Environmental issues affect all humankind. Confronting environment-related issues requires us to also address the causes of poverty. Yazaki believes that conducting business and creating jobs overseas helps reduce or eliminate poverty and improve education, in turn, leading to fundamental solutions to environmental issues. The core meaning of one of Yazaki's founding policies—a corporation in step with the world—serves as our guide. Human life and the environment will forever be tied together; environmental issues cannot simply be avoided. We want all of our business activities throughout the world to be grounded in the premise that each individual's actions affect the environment and each of us can contribute to the resolution of environmental issues.

## Timely Responses to Heightened Environmental Awareness

One recent development concerning the environment was the enactment of the EU ELV (End-of-Life Vehicle) Directive in July 2003, which requires the phasing out of lead, mercury, cadmium, and hexavalent chromium. The RoHS Directive (EU directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment) and the EcoLeaf Program in Japan are indicators of the rapidly increasing awareness of environmental issues around the world. As Yazaki deals primarily in the automotive and environmental systems sectors, we must make particularly rapid responses. Consequently, we have adopted a stance of emphasizing the manufacture of appropriate products over cost. We are also promoting the development of group-wide environmental management systems that include review and enhancement of educational programs and will use global structures to address environmental issues in collaboration with overseas production sites. We will continue our efforts to be a company trusted by customers and local communities, to develop environmentally friendly products, and to achieve zero-emissions factories as we help create a society capable of sustainable development.

## Looking Back on Environmental Activities in the Past Year

During the past fiscal year, we reorganized the Yazaki Environmental Committee structure to undertake more company-wide environmental activities and established new sales and management environment committees. In addition, the chairpersons of each of these committees participate in a new Environmental Information Liaison Committee that meets every month. We enhanced our environmental management system to include further development of environmental educational programs and created a basic training program for all ranks of employees. With respect to product development, we organized a company-wide ELV Project in response to the EU ELV Directive. We are eliminating use of the four banned substances and are establishing a system of environmental guarantees for all Yazaki products. Yazaki is also promoting reduction in the use of substances of concern in non-automotive parts including the creation of lead-free products. Overseas, Yazaki is promoting trilateral cooperation between three corporate regions through the Yazaki Group International Automotive Conference, and local Environment Committees have been established in the Americas and Europe. Yazaki will continue to undertake a wide range of social initiatives to further prosperous coexistence with local communities.

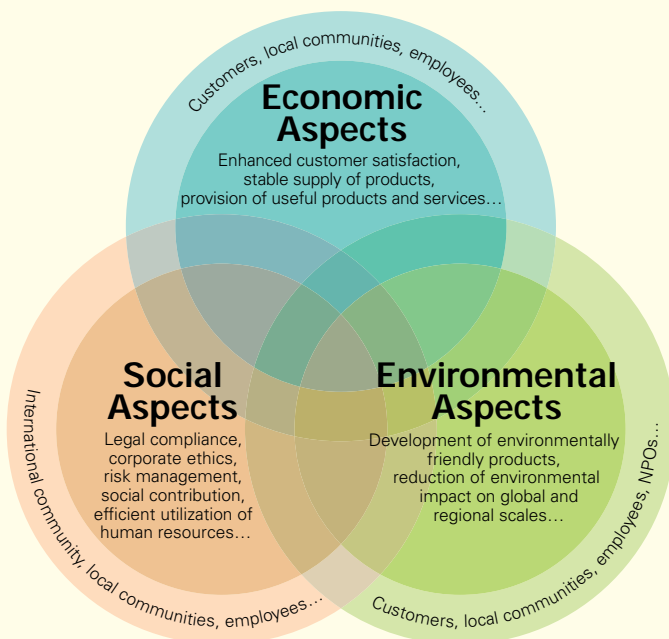
## Putting the Corporate Policy into Practice

# Yazaki's Corporate Philosophy

In order to promote sound management and make a greater contribution to society, Yazaki emphasizes corporate responsibility and pursues its corporate mission according to its steadfast corporate policy.

## The Yazaki Group Vision

The Yazaki Group aims to be recognized and trusted as a “welcome presence in the eyes of society,” and continues to evolve into a company capable of sustainable development.



## The Yazaki Corporate Culture

Since its establishment, Yazaki's management and employees have developed a unique corporate culture that emphasizes compliance with the law, being a company that cares about people, and business activities that contribute to society. One aspect of this unique corporate culture is an emphasis on understanding actual conditions at work locations. Managers visit work sites, talk with employees, and listen to their opinions to enhance mutual understanding. The “What a waste!” mentality promoted by founding president Sadami Yazaki led to the creation of Yazaki's environmental genes. The idea that waste generated is not waste at all but instead a valuable resource, and that with a little innovation, just about anything can be effectively put to use is alive in Yazaki's 5R activities. New Yazaki System (NYS) activities are representative of our spirit of taking up the challenge of continual improvement. These initiatives are not limited to manufacturing but are adopted company-wide in development, marketing, and management, and all employees are working to improve their skills in response to changing social needs.

When entering a new business area, even before studying profit feasibility, Yazaki starts by asking how that business can contribute to society. This corporate culture developed over many years is an invaluable asset. In the future, we will continue to conduct business activities in accordance with the spirit of our corporate policy.

## Yazaki Corporate Policy Shared Worldwide

Yazaki's corporate policy —a corporation in step with the world and a corporation needed by society— are unchanging guides that cover all corporate activities including the determination of business goals, management policies, and the company's *raison d'être*. Yazaki operates in accordance with a uniform stance and code of conduct, based on its corporate policy, to fulfill its responsibilities and mission as a manufacturer of high-quality products that can be supplied when needed anywhere in the world via the optimal route and at an appropriate cost. At the same time, as a global corporation, Yazaki has created a unique form of business management and corporate culture based on self-initiative, equality, and harmony, seeking to be a multicultural company that develops in conjunction with diverse communities around the world.

In conducting business, the corporate policy functions as a shared philosophy that combines the significance of existence and the values of the Global Yazaki Group.

## Issues for the Future

In conjunction with the globalization and expansion of markets, comprehensive corporate evaluation that takes into account contributions to society and humanity are emphasized more than economic aspects. Yazaki is confident that in the past it has adequately met its social responsibilities and fulfilled its roles in its relationships with society and employees. Today however, corporate social responsibility is being reevaluated as new economic and social systems are developed. As a result, activities intended to ensure legal compliance, contribution to society, and environmental preservation are more important than ever. In addition, we believe that these types of corporate activities generate synergistic effects with societal development and one day can lead to a society capable of sustainable development.

To carry out such activities, the management and all employees must have greater awareness and initiative, must view changing needs from broader economic, environmental, and social perspectives and must take quick, effective action. Yazaki will continue to reevaluate and take appropriate action on the various issues it is facing — management systems, employee education, and regional activities.

## Main Social Activities


### Eradication of Poverty

Based on the idea that poverty is a major factor behind environmental destruction and conflict, Yazaki selectively chooses locations for establishing, developing, and expanding overseas bases with the intention of helping eliminate poverty.

 Executive Message: p. 4

### Promoting Multiculturalism

Yazaki seeks to be a multicultural corporation rather than a multinational corporation. To Yazaki, internationalization means achieving harmony based on respect for the cultures and customs of each country and region. From this perspective, Yazaki holds summer camps for the children of employees from Japan and other countries, conducts the Global Training System to develop broad international perspectives in employees, and offers the Adventure School, a training program for new recruits in which participants develop their own personal development programs abroad — these are just a few of Yazaki's unique personnel training programs.

 People: p. 40


### Creating Jobs

Safeguarding employment is an important mission of management. As many manufacturing companies continue adding to the hollowing out of the domestic industry by shifting production overseas, Yazaki is working to create new businesses at home that have minimal impact on the environment but contribute significantly to society.

 People: p. 42


### Ties with Local Communities

To become a corporation that contributes to the development of the region, Yazaki makes particular efforts to communicate and work together with local residents, promote volunteerism, conduct educational activities in cooperation with local governments, and support educational programs for local elementary and middle school students.

 Society: pp. 43-45

### Promoting Local Development

Yazaki places particular importance on activities that contribute to society both in Japan and overseas. By giving priority to impoverished countries and regions when selecting new sites for business activities, Yazaki engages in activities tailored to the specific conditions in each region such as creating educational opportunities for local youth, and support of and charitable donations to local communities.

 Society: pp. 43-44




The Thomas furnace (rotary smelter) with greater productivity than the air furnace was first introduced to Japan in 1957

## Main Environmental Activities


### ISO 14001 Certification

The Tenryu Factory acquired ISO 14001 certification in 1996 and was attempting to build an environmental management system even before the certification organization was officially established in Japan. A total of thirteen group production sites have acquired certification and an additional thirty-six companies affiliated with the production divisions are currently working towards acquiring certification by March 2005.

 Environmental Management: p. 15


### Environmentally Considerate Products

In 1974, Yazaki completed the world's first solar-powered heating, air-conditioning, and hot-water supply system and in 1976, developed and marketed a solar-powered water heating system and other products powered by clean, renewable energy sources. The Yazaki Automotive Sector is actively implementing EU ELV Directive compliance measures and developing products that comply with Environmental Labeling Type III standards.

 The Environment: pp. 21-24


### Creating Green Factories

Yazaki is steadily implementing measures to make green factories a reality, such as steps to promote proactive prevention and *mieruka* (visualization) in 1971, and replacing VTA organic solvents with water-based emulsions in 1985. In particular, Yazaki is working towards achieving zero emissions based on 5R activities in an effort to further contribute to a recycling oriented society.

 The Environment: pp. 25-32


### Global Environmental Management

As part of environmental responses on a global scale, Yazaki is promoting the creation of an environmental management system for the entire Yazaki Group, including overseas business sites. Overseas locations are also working to acquire ISO 14001 certification and implementing other environmental measures specifically suited to the region.

 The Globe: pp. 35-38

### Environmentally Friendly Businesses

Recycling of cardboard boxes and paper began in 1964 in the spirit of preventing waste. Iwao Industries Co., Ltd. was established in 1971 to recycle used electrical wire and Yawara Industries Co., Ltd. was established in 1981 to recycle used wooden electrical wire spools. Yazaki is currently working to enter other environmentally friendly businesses such as recycling of paper, glass, and food waste.

 People: p. 42

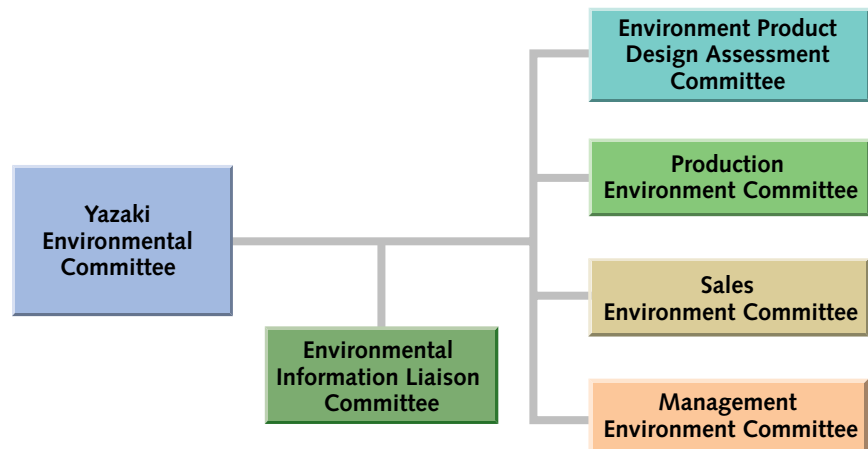
### Environmental Genes

Upon seeing the casual disposal of materials and defective goods, founder Sadami Yazaki declared that there "are no waste baskets, just recycling bins." In the first attempt of its kind in Japan, Yazaki imported a Thomas furnace from Germany in 1957 to recycle used copper. From this early awareness of recycling, Yazaki's unique environmental genes continue to mature.

 Environmental Chronology, p. 49

# Highlights of FY2004 (1) (June 21, 2003 - June 20, 2004)

## Environmental Management



### To Encourage Full Employee Participation

## Sales Environment Committee, Management Environment Committee and Environmental Information Liaison Committee Established

### Creating a System that Adapts Quickly to Changes in Environmental Responses

As we entered FY2004, President Shinji Yazaki announced the importance of enhancing and strengthening our environmental response system, quoting as key points that “every individual staff member should be equipped with the basic ability to adapt to changes in the environment and technology” and that “Yazaki too needs to rapidly adapt to the worldwide heightened awareness of environmental issues.” In line with this policy, existing environmental strategies and plans were reviewed, and, to realize better overall performance, a reorganization of the environmental management implementation system was begun. At the Yazaki Environmental Committee meeting of October 2003 and on the basis of proposals from the Environmental Affairs Division, it was decided that a new Sales Environment Committee and a new Management Environment Committee would be established to join the existing Environment Product Design Assessment Committee and Production Environment Committee. At the same time, the Environmental Information Liaison Committee was established to coordinate information flow amongst the Product Design Assessment, Production, Sales, and Management Environment Committees. Similarly, in preparation for major changes in the automotive industry as a result of heightened awareness of environmental issues such as the EU ELV Directive, organizational changes were made to the Environment Product Design Assessment Committee, including the setting-up of an Automotive Sector Subcommittee to coordinate Automotive Sector response.



The Environmental Information Liaison Committee meets once a month

### The Mission of Environmental Management — Raising Individual Awareness of Environmental Issues

What are the environmental technologies and functions required by the market, now and in the near future, and how should this information be gathered and fed back into product development? These questions can be most rapidly answered by the people whose work brings them into close contact with the customer — our sales staff. Meanwhile, in today’s world where compliance and corporate responsibility are subject to strict scrutiny, management staff are tasked with gathering information on new environmental legislation and legislative amendments and making it available across the company. Sales Environment Committee and Management Environment Committee actions arise from these basic roles.

The Environmental Information Liaison Committee, led by Senior Managing Director Yasumitsu Muramatsu, also vice-chairman of the Yazaki Environmental Committee, is made up of the chairpersons of the Product Design Assessment, Production, Sales, and Management Environment Committees and meets once a month. Targeting a more vigorous environmental response, Chairman Muramatsu made clear his own responsibility and determination by declaring that “providing thorough environmental education for all employees so as to create a climate in which employees take independent and voluntary environmental action will assist in reinforcing the brand strength of Yazaki.” By implementing environmental management at all levels of the company, we aim for a high environmental awareness among all employees and a corporate ethos in which rank and file employees will take the lead in initiating action.





ISO 14001 certification audit at Yawara Industries Co., Ltd.

## Environmental Management

### For a More Wide-ranging and Powerful Environmental Response System Support for ISO 14001 Certification by Affiliated Companies

“What does EMS mean?” This was a question asked at the first information meeting held by the Fuji Factory to support the acquisition of ISO 14001 certification by Yawara Industries Co., Ltd. In order to provide more wide-ranging cooperation in its environmental action plans, Yazaki has set a target date of March 2005 for ISO 14001 certification of all thirty-six domestic companies affiliated with its production divisions and is engaged in a program of support. With all-round support from the Fuji Factory including education for all employees, risk assessment, rollout of programs, enhancement of rules and regulations, and documentation of environmental information, Yawara Industries Co., Ltd. began preparatory activities in July 2003 and acquired certification in March 2004 under the multi-site method. As of the end of FY2004, sixteen affiliated companies had obtained certification, and a further twenty were in preparation for certification by FY2005. By encouraging more operational bases to make improvements through an environmental management system, we aim to further reduce environmental impact.



Director environmental training

## Environmental Management

### Fostering Initiatives through Improved Environmental Awareness Further Enhancement of Rank-specific Environmental Education

In FY2004, Yazaki implemented rank-differentiated environmental education for all group employees, including newly recruited employees, general grades, management grades and executive grades. This year a program of basic education was offered, but in the future we will work to also develop specialized programs to build Yazaki's own environmental education system. Staying in touch with the frontline has been a key approach of Yazaki senior management since the company's founding. In the rollout of environmental education, likewise, we believe it is important for senior management to take the lead in gathering knowledge of the environment and applying it. Our company chairman put his own name forward for participation in an environmental education program for board members and listened enthusiastically to a lecture given by a speaker from a company with an advanced environmental action program. Company President Shinji Yazaki said he had “no admiration for directors whose uniforms never get dirty — proof that they do not keep an eye on the frontline.” With an emphasis on the frontline of operations, we are committed to continuing environmental education as a way of raising environmental knowledge and awareness and encouraging improvement in all frontline operations.

## Highlights of FY2004 (2)

### The Environment



Measurement of lead and cadmium in electrical insulation materials using fluorescent X-ray analysis

### Company-wide Response to E + QCD Manufacturing Eliminating Designated Harmful Substances from Products through the ELV Project

#### A Project Working to Counter Pollutants from Unexpected Sources

With a view to eliminating the four substances banned by the EU ELV Directive, the internal ELV Project was launched in April 2003. As the goal for the first phase, we set about collecting non-use certificates from all suppliers and by July, when the directive came into force, we had met the challenge successfully. However, the project leader, Mitsugu Watanabe, did not stop there. The project was under the direction of a team made up of employees from product and purchasing divisions. The banned substances however are not only limited to product materials and secondary materials, but may even be contained in items such as the marker pens used when inspecting products, which means that they can find their way into the production process from unexpected sources. Among the issues faced were a general lack of knowledge, challenges in putting in place a system for prompt collection and checking of non-use certificates, and the consistent application of rules including how to deal with suppliers. Mr. Watanabe, who believed that the project should not just involve product divisions and that a company-wide response was necessary, conferred with his superiors and restructured the team to include staff from all divisions. The second phase of the project began with the goal of creating a system to rigorously eliminate the banned substances from the workplace. The project moved into a third phase and reached the point where the monitoring system for each of the planning, development, purchase, and production stages was becoming well-integrated, and the term of office of the first project leader was due to end. Then, Watanabe, who was pleased with the progress of the project, heard a comment from a certain vehicle manufacturer. "What Yazaki should be asking for from its suppliers is not non-use certificates but inspection certificates."

#### Towards an Environmental Quality Assurance System for All Yazaki Products

Watanabe saw that this was actually a very valuable comment. He immediately reorganized the structure to center the project around the Quality Management Division. In consideration of the ELV Project, he decided to make it his goal to put in place a system based not on a non-use certificate from the supplier but on either the supplier presenting relevant data or on Yazaki carrying out its own measurements and analyses in-house and verifying non-use using these data. At present, the ELV Project is progressing steadily with a data presentation system under creation. At the same time, working through all of the issues involved in adapting to the ELV Directive has been a great learning process for Yazaki. The elimination of harmful substances is not limited to automobiles; there is also the RoHS directive on household electrical appliances, and very few assumptions can be made as to what chemical substances in what sectors may be regulated in the future. Not just automotive component parts but all Yazaki products need to be covered by an assurance system which guarantees non-use by certification of inspection. The ELV Project is now evolving into an environmental quality assurance system for all products. Watanabe comments: "The first clause of the Yazaki Global Environment Charter commits us to strict observance of environmental laws and regulations. In the future, Yazaki will continue to devote all available energies to the creation of a system for environmental quality assurance."



The First YEL European Environment Health and Safety Conference

The Globe

Environmental Initiatives on a Global Scale  
Environment Health and Safety  
Conference Organized by Yazaki  
Europe (YEL)

Leon Dautzenberg, a manager at Yazaki Europe who had participated in the Yazaki Group International Automotive Conference in October 2003, made a suggestion upon his return home to Vice-president Mike Boston. "The Yazaki head office is doing great work. Global environmental issues concern the whole world. Shouldn't YEL be creating a cooperative system with other European group companies to take action?" YEL immediately started to explore the issue and decided to appoint environmental officers at the twelve production sites in the European region. To enable concerted environmental action, the First YEL European Environment Health and Safety Conference was held over two days in January 2004 at Yazaki Saltano de Portugal Componentes Electricos Automoveis, Lda. (YSP). Nineteen staff from twelve production sites in eleven European countries participated. Also in attendance was Tomohiko Nishiwaki, General Manager of the Environmental Affairs Division in Japan, who commented: "It is very significant that an environmental conference has been instituted where the European environmental officers can all meet in one place. It represents a firm step toward environmental action by Global Yazaki."



AAPL employees with the "Waste Wise Business Award"

Society

Creating Factories with Recognized  
Contributions to Society  
Overseas Affiliates Receive  
Prestigious Awards in Environment,  
Health and Safety, and other Areas

Australian Arrow Pty. Ltd. (AAPL / Australia) received the Waste Wise Business Award, presented by the state government to enterprises that achieve notable results in reducing waste. It also received the Sustainable Business Award, which was instituted to mark the designation by UNESCO of the nearby Mornington Peninsula as a biosphere reserve.

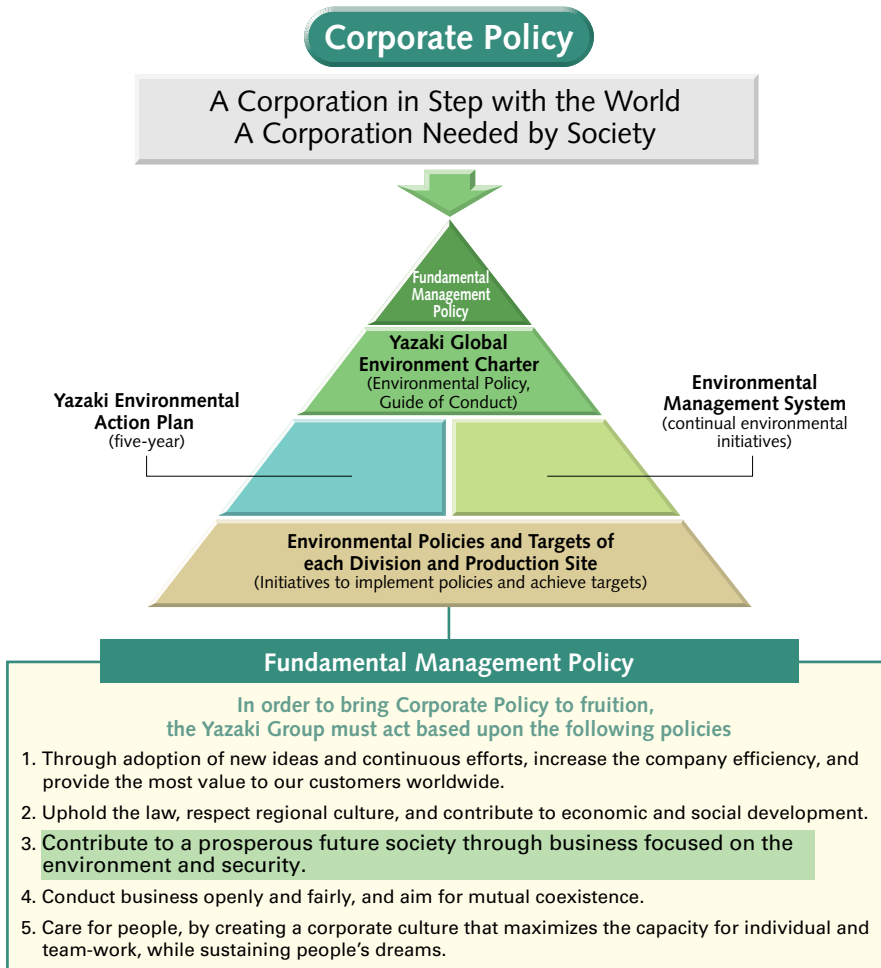
In March 2004, EDS Manufacturing, Inc. (EMI) (Philippines) received the Outstanding Environmental Performer Award from the Philippine government. The prize is awarded to overseas-based enterprises which make the greatest contribution to the Philippines.

Elsewhere, in February 2004, Circuit Controls Corporation (USA) won the Gerald "Smitty" Smith First Place Safety Award presented by the Northwest Michigan Industrial Association, which promotes labor health and safety. This prize is awarded to enterprises that make major efforts to create a safe working environment, and was awarded in recognition of the Safety Committee's work over the last three years.

# Environmental Management

## Corporate Principles and Structure

Yazaki has further strengthened its environmental management system, revised and significantly reorganized the environmental committees structure, and steadily constructed an environmental quality assurance system.



### Corporate Policy, Environmental Policy and Guide of Conduct

Since the company's establishment, Yazaki's business policies have always been based on the Corporate Policy — a corporation in step with the world and a corporation needed by society. This policy serves as the starting point for the corporate activities, including those related to the environment, of all Group companies. Yazaki has been fulfilling its corporate social responsibilities in response to ever-changing social conditions since the Environmental Affairs Division was created in 1971 — back when environmental pollution began to emerge as a serious social problem. Yazaki has made environmental response an important management issue, and in 2002 began construction of an environmental management system to cover the entire Group. The Yazaki Global Environment Charter was revised and the Environmental Policy and the Guide of Conduct were adopted for the entire Yazaki Group to comprehensively address environmental issues. In addition, new measures were incorporated into the five-year Environmental Action Plan, which sets goals for 2007. Yazaki is now working to further develop and improve its environmental system from a global perspective with an eye toward expanding the system to include overseas affiliates.

## Yazaki Global Environment Charter

### Environmental Policy

The Yazaki Corporation Group recognizes that preservation of the global environment and its resources is a serious concern common to all mankind. We will strive to make the world a better place and work to enrich our societies through environmentally-sound business activities, environmental awareness and individual contributions which are in line with our fundamental business policy.

### Guide of Conduct

1. **Observance of environmental laws and regulations**  
To proactively establish independent goals to reduce the burden placed on the environment through strict observance of domestic and international laws and regulations, and to promote activities to achieve these goals.
2. **Establishment of the environmental management system**  
To maintain and enhance the environmental management system for all areas of our business activities in accordance with ISO 14001 guidelines.
3. **Development of environmentally friendly products**  
To design and develop environmentally friendly products by keeping in mind the lifecycle of our products during stages of product planning.
4. **Reducing the burden placed on the environment**  
To promote activities which reduce the burden placed on the environment, reduce waste and conserve energy and resources for all stages of development, production, sales, logistics and service.
5. **Promotion of "green" purchasing**  
To promote "green" activities for purchasing / procurement of resources, materials, machinery, equipment and supplies.
6. **Raising of environmental awareness**  
To raise the environmental awareness of our employees and to foster proactive participation in activities which preserve the environment through training and instruction.
7. **Contributions to society**  
To establish ties and actively promote the exchange and disclosure of information related to environmental preservation with governmental and municipal organizations.
8. **Transferring environmental technologies overseas**  
To make global contributions to environmental preservation by transferring environmental technologies developed in Japan to overseas expansions and operations.

(Adopted June 1997; Revised May 2002)

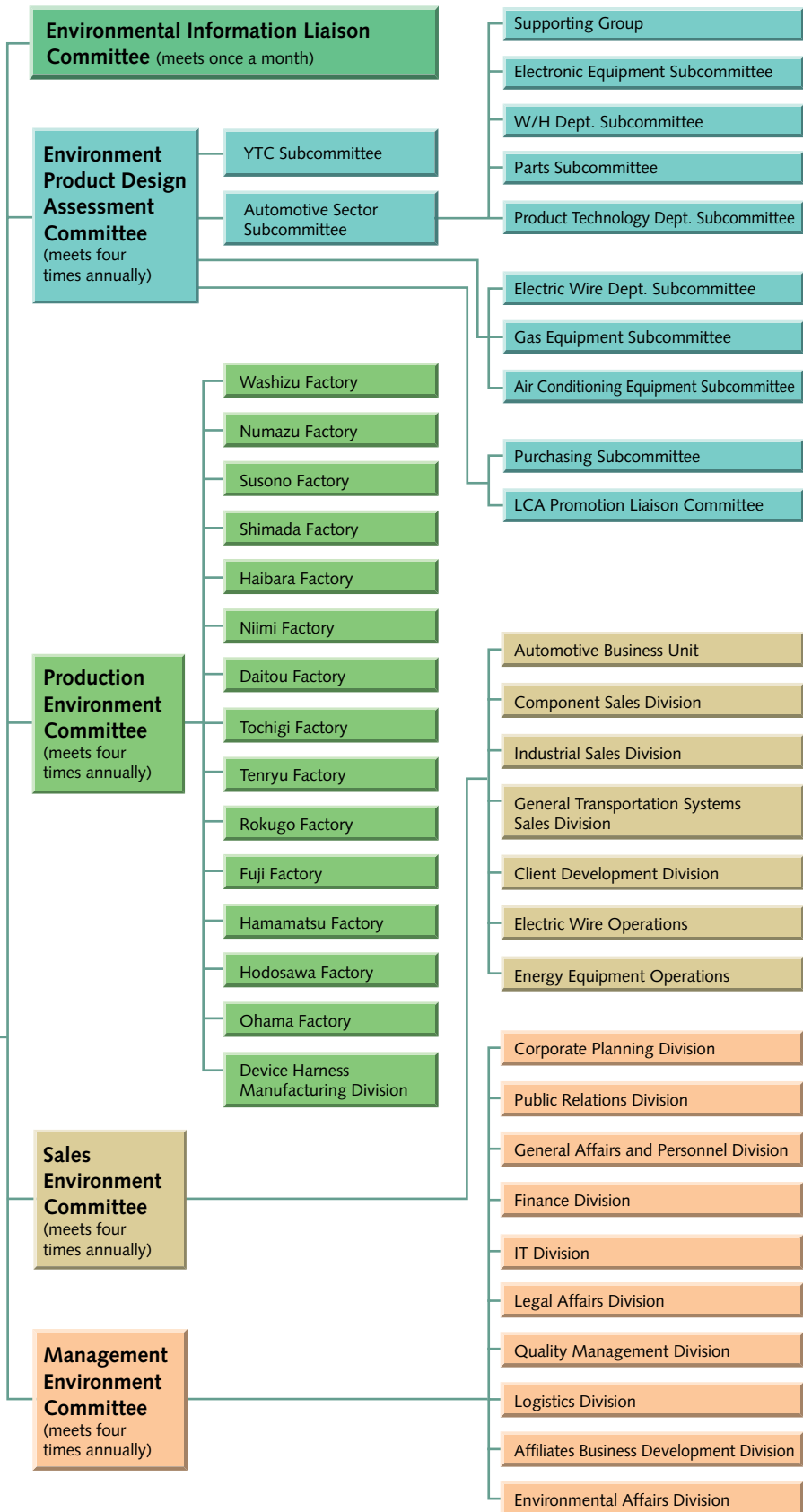
### Reinforcing Promotion Structures

During FY2004, three new organizations were created to reinforce the environmental management promotion structure: the Environmental Information Liaison Committee, the Sales Environment Committee, and the Management Environment Committee. In addition, the Environment Product Design Assessment Committee was restructured. The Environmental Information Liaison Committee, whose members are the vice-chair of the Yazaki Environmental Committee and the chairpersons of the other four environmental committees, meets once a month to report on the activities of each committee, investigates collected data and provides it to the other committees, deliberates and reaches decisions on pending issues, and reports the results to the Yazaki Environmental Committee. The Sales Environment Committee gathers data on environment-related developments concerning manufacturers and markets and makes that information available to product development divisions as quickly as possible. The Management Environment Committee collects data on government and regulatory trends and promotes proper environmental responses within the Administrative Division.

### Organization and Structure

**Yazaki Environmental Committee**  
(meets twice annually)  
**Chairman: President Shinji Yazaki**  
**Vice-Chairman: SMD Yasumitsu Muramatsu**  
 Established: October 2001  
 Determines the direction of Yazaki's responses to major environmental issues and promotes environmental preservation activities of the entire Yazaki Group

**Environmental Affairs Division**  
(Secretariat for three Environmental Committees)  
 Established: October 2001  
 Coordinates environmental initiatives across various divisions and determines company-wide positions



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# Environmental Management

## The Yazaki Environmental Action Plan

With the establishment of Sales and Management Environmental Committees, Yazaki reassessed its Five-Year Environmental Action Plan and established new plans and goals. In FY2004, Business Units, Operations, and Management Divisions developed their own environmental plans and put them into action.

### ■ Yazaki Five-Year Environmental Action Plan (July 2003 - June 2008)

Action Items		Five-Year Plan (2008 Goals)	FY2004 Goals		
1	Adherence to laws and regulations	Complete elimination of banned substances from Yazaki products as outlined in EU ELV Directive	- Complete elimination of substances outlined in EU Directive from automotive products  - Promotion of lead elimination		
2	Establishment of the Environmental Management System (EMS)	Full-scale implementation of EMS	- Establishment of environmental action plan implementation structure in the Operations and Management Divisions	- Development, implementation, and promotion of environmental action plans by Business Units, Operations, and Management Divisions	
			- Acquisition of ISO 14001 certification  throughout the entire Yazaki Group, including thirty-six affiliated companies	- Acquisition of ISO 14001 certification by nine out of the twenty-nine affiliated companies that had not yet acquired certification	
			- Establishment of system to study environmental accounting	- Establishment of a system that enables development divisions to assess their environmental costs	
			- Introduction of a material flow cost accounting system for all products	- Evaluation of introduction methods at all fourteen production sites	
			- Establishment of internal and external audit systems	- Establishment of an audit system	
3	Development of environmentally friendly products	Implementation of an environmental assessment system starting at the development and design stages	- Enhancements to Social and Environmental Report	- Enhancement of contents	
			- Completion of soil contamination tests at all production sites	- Soil contamination tests at all fourteen production sites	
			- Establishment of an environmental quality assurance system	- Establishment of an Environmental Quality Assurance Project Group and an inspection organization	
4	Reduction of environmentally hazardous substances	Reduction of harmful chemical substances	- Establishment of system to acquire Environmental Labeling Type III 	- Mastering of LCA  methodology by development divisions	
			Reduction of environmental impact from logistics operations (shipping and distribution)	- Development of environmentally considerate products 	- Development of products based on the concepts of 3R design, energy-conserving design, and lighter weight (five factors)
				Reduction of landfill waste	- Reduction by 22.2% from the 1990 level to 27,642 tons
			- Emissions per unit of production: Reduction by at least 5% from the 2001 level		- Per unit of production: Reduction by 2% from the 2001 level
5	Promotion of green purchasing	Environmental response by suppliers and the entire supply chain	- Achieve zero landfill waste at all production sites (Promotion of 5Rs  : 3Rs + Refuse and Repair)	- Volume disposed of in landfill: Reduction by 95% from the 1999 level (goal: 195 tons)	
			- Establishment of a system to control and reduce the use of chemical substances	- Assessment of the volume of chemical substances used	
			- Reduction in CO <sub>2</sub> emissions and promotion of resource conservation by increasing transportation efficiency and improving packaging materials	- Organochloric atmospheric pollutants: Complete elimination at all fourteen production sites	
6	Raising environmental awareness	Enhanced employee environmental education	- Organochloric atmospheric pollutants: Development of complete elimination plans at all thirty-six affiliated companies	- Reuse rate of 37% for pallets and parts boxes (by converting to plastic) FY2003 results: 53%	
			- Reduction in transportation distance and number of delivery runs: Transportation fuel efficiency improvement 3.96km per liter (FY2003 results: 4.04km per liter)	- Reduction in transportation distance and number of delivery runs: Transportation fuel efficiency improvement 3.96km per liter (FY2003 results: 4.04km per liter)	
7	Social contribution	Information disclosure to / communication with local communities	- Establishment of a green procurement system  for materials (secondary materials)	- Development and implementation of green procurement guidelines for materials, parts, etc.	
			- Introduction of EMS at suppliers and providing guidance	- Holding of seminars to explain green procurement guidelines (516 companies)	
8	Overseas transfer of environmental technologies	Promotion of environmental policy / strategy in line with the needs of overseas affiliates	- Establishment of a green purchasing system  for office supplies	- ISO 14001 certification acquisition request to suppliers	
			- Establishment of a company-wide environmental education system	- Creation of guidelines and expansion to production sites	
9	Social contribution	Information disclosure to / communication with local communities	- Introduction of employee incentives	- Creation of an environmental textbook and begin environmental education for managers	
			- Introduction of performance review for managers	- Consideration of introducing a system to enhance employee environmental awareness by benchmarking other companies	
			- Establishment of a system to enhance discussion of environmental issues with the surrounding communities	- Closer communication with the local communities surrounding the fourteen production sites	
10	Overseas transfer of environmental technologies	Promotion of environmental policy / strategy in line with the needs of overseas affiliates	- Establishment of a Global Yazaki environmental action system	- Start of environmental action in Europe	

 This mark indicates that more information can be found in the glossary on page 50

FY2004 (July 2003 - June 2004)

FY2005 (July 2004 - June 2005)

Status of achievement: ☆☆☆100% or more; ☆☆80% or more; ☆ less than 80%

FY2004 Performance	Evaluation	Related Pages	FY2005 Goals
- Eliminated lead from automatic transmission gear-position sensors	☆☆☆	22	- 70% elimination of lead from wiring harness terminals
- Developed and expanded environmental action plans at Business Units, Operations, and Management Divisions	☆☆☆	11 - 12	- Promotion of environmental action and assessment of progress - Establishment of a consolidated environmental management system and start of organizational evaluation (overseas affiliates and domestic affiliated companies)
- All nine companies acquired certification	☆☆☆	15	- Certification acquisition at the twenty companies that have not yet acquired certification. (Complete ISO 14001 acquisition throughout the entire Yazaki Group)
- Established an environmental cost assessment system in development divisions	☆☆☆	19	- Consolidated environmental accounting at sales divisions
- Implemented on a model product at each production facility	☆☆☆	20	- Introduction of material flow cost accounting system at all production sites
- Environmental and social initiatives were evaluated by an accounting / auditing subsidiary	☆☆☆	55	- Consideration of introduction of internal audit system at production sites - Enhancements to external audits
- Switched from Environmental Report to Social and Environmental Report - Reports issued by individual production sites	☆☆☆	18	- Enhance corporate social responsibility initiatives
- Conducted soil contamination testing at all fourteen production sites	☆☆☆	16	- Continued implementation of soil contamination tests at affiliated companies
- Established organization - Began standard checking procedures	☆☆☆	21	- Compliance with regulations related to environmentally hazardous substances by the Environmental Quality Assurance Project Group
- Implemented LCA	☆☆☆	24	- Establishment of system to enable development divisions to carry out LCA analyses
- Easy-to-dismantle and lightweight designs for junction blocks Halogen-free electric wire, lead eliminated from printed circuit boards (total of six models)	☆☆☆	21 - 24	- Establishment of standards to ensure development of environmentally considerate products - Promotion of research and certification committee for environmentally considerate products
- Reduced by 9.8% from the 1990 level to 31,660 tons	☆☆	25 - 26	- Reduction by 14.7% from the 1990 level to 29,935 tons
- Reduced by 8.6% from the 2001 level	☆☆☆		- Emissions per unit of production: Reduction by at least 3% from the 2001 level
- Reduced by 97.7% from the 1999 level (results: 98 tons)	☆☆☆	26 - 27	- Promotion of 5Rs - Implementation of 5Rs at affiliated companies
- Substances subject to PRTR 4,954 tons/year	☆☆☆	28	- Establishment of system to control usage and operation - Establishment of goals for reduction of substances subject to PRTR and promotion of goal achievement
- Completely eliminated	☆☆☆		_____
- Completely eliminated ahead of schedule at thirty-five out of thirty-six affiliates	☆☆☆		- One remaining company is scheduled to achieve complete elimination by December 2004
- Implementation rate: 47%	☆☆	33	- CO <sub>2</sub> emissions reduction - Modal shift promotion
- Fuel efficiency improvement: Goal achieved	☆☆☆		- Reuse of packing materials - Waste reduction
- Held seminars to explain the requirements for renewing the Basic Business Agreement - Held seminars to explain the green procurement guidelines (registering all 516 companies)	☆☆☆	18	- Green procurement goal setting and progress monitoring
- Certification acquired by 391 out of 516 companies (acquisition rate of 75.8%)	☆☆☆		- Quantitative evaluation of guidance to suppliers - Implementation of green purchasing throughout the entire company - Purchasing of fifty low-pollution vehicles for company use
- Expanded to production sites	☆☆☆		
- 2,200 people in managerial positions completed training sessions	☆☆☆	17	- Establishment of an environmental education system - Expansion to general employees
- Investigated other companies' best practices and studied implementation possibilities	☆☆☆		- Introduction of a system to increase environmental awareness - Creation of model systems based on benchmarking of other "environmentally advanced" companies
- Twelve production sites participated in local self-governing councils' and community clean-up activities	☆☆☆	43 - 48	- Promotion of environmental preservation activities in each community (site) - Assessment of information disclosure against benchmarking of other environmentally advanced companies
- Environmental action began in Europe (twelve sites) and Americas (eleven sites)	☆☆☆	35 - 38	- Begin environmental initiatives in ASEAN (twelve sites) and China (ten sites) regions

# Environmental Management

## Environmental Management System and Environmental Risk Management

In FY2004, Yazaki ensured proper operation of the environmental management system and encouraged affiliated companies to acquire ISO 14001 certification. Risk management activities include continued soil contamination testing and earthquake-proofing measures in the Tokai region of central Japan.

### ISO 14001 Certification and Environmental Audits

Yazaki Group production sites that had already acquired ISO 14001 certification continued to enhance environmental performance in FY2004 using PDCA (plan, do, check, act) cycles, outlined in the environmental management system. Internal and external audits confirmed that the system is operating properly. Yazaki is also supporting the efforts of thirty-six domestic companies affiliated with its production divisions to obtain ISO 14001 certification. As of June 2004, nine more had acquired certification bringing the total to sixteen. All thirty-six affiliated companies are scheduled to be ISO 14001 certified by FY2005, and to help them obtain certification, Yazaki mainly uses a multi-site method in which the parent company builds the system and its Environmental Affairs Division provides training and other support and promotes environmental action.



ISO 14001 certification audit (Yawara Industries Co., Ltd.)

### ISO 14001 Certification Acquisition Status at Japanese Production Sites and Affiliated Companies

Production site	Year	Affiliated companies
Tenryu Factory	1996	
Numazu Factory	1997	Numazu Physical Distribution Co., Ltd. <sup>1</sup>
Susono Factory		
Fuji Factory	1998	Gifu Industrial Equipment Co., Ltd.
Ohama Factory		
Haibara Factory		
Daitou Factory		
Shimada Factory	1999	Kumamoto Industrial Equipment Co., Ltd.
Rokugo Factory <sup>2</sup>		
Niimi Factory	2000	Oita Parts Co., Ltd.
Tochigi Factory	2001	Kawane Parts Co., Ltd.
Y-CITY		
Washizu Factory		
Hamamatsu Factory		
—	2002	Japan Chain Terminal Co., Ltd. <sup>3</sup>
—	2003	Anan Parts Co., Ltd.
	2004	Fujinomiya Parts Co., Ltd. <sup>4</sup>
		Aomori Parts Co., Ltd.
		Fukushima Parts Co., Ltd.
		Niigata Parts Co., Ltd.
		Kagoshima Parts Co., Ltd.
		Yamaguchi Parts Co., Ltd.
		Okayama Parts Co., Ltd.
	Yawara Industries Co., Ltd.	
	Tottori Parts Co., Ltd.	

1: Numazu Physical Distribution Co., Ltd. acquired certification as one of the sites of the Numazu Factory.

2: Rokugo Factory acquired certification as part of the Shimada Factory.

3: Japan Chain Terminal Co., Ltd. changed the certification and registration organization in 2002.

4: Fujinomiya Parts Co., Ltd.'s Koizumi Factory acquired certification in 2003, ahead of the rest of the company.

### Compliance

Again in FY2004, Yazaki did not violate any environment-related laws and there were no environment-related accidents. Yazaki has made "observance of environmental laws and regulations" the first item of the Yazaki Global Environmental Charter, and complies with all types of environment-related laws and regulations such as national laws, municipal ordinances, and unique regional environmental agreements concluded by production sites. Yazaki has set voluntary standards that are stricter than regulatory standards and takes measures beyond what is required. In addition, a new Management Environment Committee was established within the existing environmental management promotion system to ensure rapid responses to new and revised laws and regulations. This committee provides information on laws and regulations to the entire company and will work to ensure compliance with environment-related laws well into the future.

### Affiliated Companies that will acquire ISO 14001 Certification by March 2005

Shimizu Parts Co., Ltd.  
 Fuji Parts Co., Ltd.  
 Kosai Parts Co., Ltd.  
 Akita Parts Co., Ltd.  
 Yamagata Parts Co., Ltd.  
 Miyagi Parts Co., Ltd.  
 Higashi Shikoku Parts Co., Ltd.  
 Minami Shikoku Parts Co., Ltd.  
 Fukui Parts Co., Ltd.  
 Hokuetsu Parts Co., Ltd.  
 Hokuriku Parts Co., Ltd.  
 Gifu Parts Co., Ltd.  
 Sol Technica Co., Ltd.  
 Tanshin Industrial Co., Ltd.  
 Nagasaki Parts Co., Ltd.  
 Miyazaki Parts Co., Ltd.  
 Kumamoto Parts Co., Ltd.  
 Cable Technica Co., Ltd.  
 Kan Industries Co., Ltd.  
 Iwao Industries Co., Ltd.



## Environmental Risk Management

Yazaki's environmental risk management seeks to avoid environmental accidents closer to the source by implementing proactive preventive measures rather than responsive measures. Activities include daily qualitative and quantitative monitoring and inspection, as well as installation and improvement of equipment / facilities needed in the event of an accident or disaster and emergency drills to contain possible environmental pollution on company premises should an accident occur. Each production site also discloses relevant information to residents in the surrounding neighborhoods and works to strengthen ties by holding regular plant tours and community meetings.

## Soil Contamination Tests

Beginning in April of 2003, Yazaki reviewed documents and conducted interviews concerning soil contamination at all affiliated companies. Based on the results, soil contamination tests are being carried out at all fourteen domestic production sites. FY2004 tests confirmed that six of the production sites were safe. Dioxin concentrations <sup>■</sup> of 2200pg-TEQ/g, 2.2 times the regulatory standard (1000pg-TEQ/g), were detected in the vicinity of the remains of an incinerator at the Shimada Factory. Analysis of soil in the area and at a depth of 15 centimeters revealed dioxin concentrations of 7200pg-TEQ/g. In response, the Shimada Factory immediately

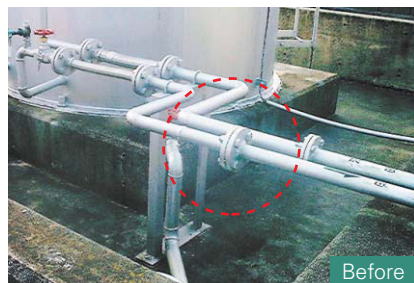


Soil boring to check for dioxins

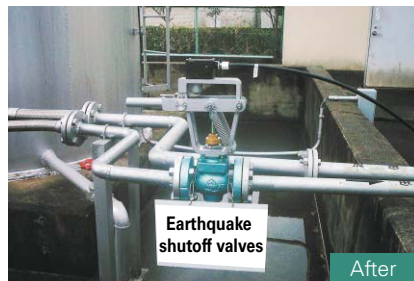
decided to excavate and replace the contaminated soil. Detailed surveys and corrective measures are to be completed by the end of 2004. In line with Yazaki's policy of disclosing even negative information, the factory will report the survey results as well as the measures it will take to administrative agencies.

## Preparing for Earthquakes in the Tokai Region

In preparation for a major earthquake in the Tokai region forecast to occur in the near future, all company buildings and facilities were surveyed for earthquake resistance and preventive measures taken in FY2004, including measures to prevent pollution in the event a structure is destroyed. Earthquake shutoff valves were installed on kerosene and fresh water tanks at the Daitou Factory. The valves automatically shut to prevent leaks in the event of an earthquake of magnitude five or greater (on the Japanese scale).



Before



After

Earthquake shutoff valves installed on kerosene tanks

At the Ohama Factory, aging plating treatment wastewater storage tanks were refurbished to prevent leakage of waste plating fluids and possible consequent soil contamination outside the premises.

At the Haibara Factory, an incinerator taken out of operation in 2002 was disassembled to prevent the spread of dioxin in the event of collapse during an earthquake. Soil contamination tests were also conducted to confirm that the soil is safe. The area is now used for a 3R center.



Incinerator removal in progress at the Haibara Factory

In April 2003, Yazaki began assessing the earthquake resistance of its offices, factories, and other buildings, and reinforcement construction where necessary was completed in January of 2004. A total of 222 structures were surveyed at twenty-eight office and factory locations constructed prior to the new seismic design methods developed in 1981. Based on the results of the assessment, reinforcement construction was performed on 113 structures at twenty-three offices and factories.



Reinforcement construction at offices and factories

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## Raising Environmental Awareness and Promoting Full Employee Participation

The Yazaki Group is working to raise employee awareness of environmental issues and develop full-scale employee participation through rank-specific environmental education, production of environmental leaflets, environmental month activities, and green purchasing.

### Environmental Education

The Yazaki Group as a whole has been working to strengthen its environmental education system. During FY2004 rank-specific environmental education was conducted for all employees from managers to entry-level employees.

For director-level environmental training (including the chairman), an instructor was invited to discuss the activities of “environmentally advanced” companies.

700 Yazaki Group managers, higher executives, and presidents, factory managers, and administrative managers of affiliated companies completed one of the twelve basic environmental training courses for executive-level personnel held during the year. Environmental training was also conducted for 1,500 mid-level employees including those of affiliated companies using textbooks and videos.

For other employees, including those of



Environmental training for managers

affiliated companies, 23,000 copies of an environmental educational leaflet were printed and distributed, and managers conducted environmental education for each team at individual production sites. In addition, in cooperation with personnel development staff, environmental education was incorporated into new manager and new employee training programs to motivate employees and raise environmental awareness and response.

587 persons participated in one of thirty-six manager training, standards training, and internal auditor training programs held to promote environmental education at affiliated companies seeking to acquire ISO 14001 certification.

In addition, working groups were established to create an employee incentive program, and to support a system of performance evaluations as a means of continually raising the environmental awareness of all employees.



Environmental educational leaflet — Ecology Text

### Details of Rank-specific Environmental Education

Rank	Item	Basic Training	Specialized Training	Professional Skills Training
Executives	Courses	<b>Basic environmental training courses for executives</b> - The importance of environmental strategies and responses - Understanding the environmental management system	<b>Director Training</b> (conducted by the Environmental Affairs Division) - Case studies of other companies' best practices - Management of departmental environmental policies	<div style="border: 1px solid green; padding: 10px; text-align: center;"> <p>There are a few individuals at each production site with professional environment-related skills and knowledge</p> </div>
	Objectives	Raise awareness of and implement environmental strategies	Reinforce awareness of environmental tasks	
	Methods	Large-group courses	Seminars and lectures	
	Evaluation	Performance towards goal achievement evaluated by each Business Unit, Operations and Management Division		
Management	Courses	<b>Basic Environmental Training for Executives</b> - The importance of environmental strategies and responses - Incorporating environmental issues into policies	<b>Specialized Environmental Training</b> - Specialist training on environmental topics - Implementation and management of environmental policies	<b>Professional Training</b> - Supporting implementation of environmental strategies and annual plans - Following-up on environmental activities within production sites
	Objectives	Incorporate environmental issues into policies and develop leadership	Provide knowledge and skills necessary for implementing environmental policies	Provide skills needed to act as a work site environmental manager
	Methods	Large-group courses and video training	External and internal courses	External and internal courses
	Evaluation	Operation of the environmental management system, implementation of environmental policies, energy conservation and waste reduction activities, etc.		National qualifications and approved qualifications received
General employees	Courses	<b>Basic Environmental Training</b> - Motivate employees / discussion of environmental principles - Provide basic environmental knowledge	<b>Environmental Specialist Training</b> - Specialized training on environmental topics	<b>Environmental Professional Training</b> - Manufacturing and organizational support - Promotion of environmental action within production sites
	Objectives	5Rs, proper sorting of waste, employee motivation	Provide knowledge and skills necessary to implement environmental policies	Provide skills needed to act as a work site environmental manager
	Methods	Leaflets and in-company training	External and internal courses	External and internal courses
	Evaluation	Through questionnaires distributed and operation of the environmental management system		National qualifications and approved qualifications received
Organization responsible		Environmental Affairs Division	Individual divisions	Environmental Affairs and individual divisions

### Training and Awareness

Each production site conducted emergency drills based on ISO 14001 standards. Because many of Yazaki's production sites are located in Shizuoka Prefecture, particular emphasis was placed on training in anticipation of a major earthquake in the Tokai region. In preparation for leaks or discharges of plasticizers (oils), the Fuji Factory conducted emergency response training on identifying the site of a leak or discharge and response measures to prevent the downstream spread of substances, and cleanup procedures.

In addition to all fourteen production sites, sales offices and affiliated companies as well selected one of the following themes and held educational activities designed to raise awareness during Environment Month based on their own action plans: (1) promoting better communication with local communities through plant tours and introducing environmental activities; (2) contributing to local communities through beautification activities; and (3) raising employee awareness through lectures and exhibits. Y-CITY, the Yazaki Group's global headquarters, promoted reductions in paper use and thorough sorting of waste paper volumes as keys to reaching its goal of reducing copy paper consumption by 30%.

### Green Procurement and Purchasing

The Yazaki Green Purchasing Guidelines were adopted to promote joint cooperation on environmental measures in conjunction with suppliers. The guidelines were distributed to 516 companies that do business with Yazaki's Automotive Sector, and an explanatory meeting was held in February 2004. Suppliers were requested to cooperate in five areas: (1) creation of an environmental management system; (2) reduction of substances of concern subject to the EU ELV (End-of-Life Vehicle) Directive; (3) reduction of other chemical substances; (4) provision of chemical substance data; and (5) registration of the name of the environmental manager. As of the end of June 2004, 391 companies have acquired ISO 14001 certification and all companies have registered the name of an environmental manager.

As a part of its efforts toward green purchasing, Yazaki is reviewing the number and replacement timing of company vehicles it owns as it considers a shift to low-emission vehicles. About fifty vehicles are replaced each year. In addition, reuse of PCs within the company was begun with 39 used PCs being serviced and put back into use. Each production site is implementing its own green purchasing activities, with the NYS Promotion Office at the Haibara Factory having achieved 100% green purchasing for four major items: paper, office supplies, office equipment, and lighting equipment.



Explanatory meeting for the Yazaki Green Purchasing Guidelines

### Publication of Social and Environmental Report

In 2002, Yazaki published its first Environmental Report, summarizing group-wide environmental activities. Last year's report, the Social & Environmental Report 2003, also included the social aspects of Yazaki's activities in 2003. The 2003 Report, which comprised 44 pages, also included an independent review. 7,000 of the Japanese-language version were printed, and 2,000 copies of an English translation were also printed.

In addition, to promote environmental education and better communication with local communities, all production sites produced individual environmental reports in FY2004 (the Shimada and Rokugo factories produced a joint report).



Environmental Report 2002  
Social & Environmental Report 2003



Training in preparation for an oil spill at the Fuji Factory

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## Environmental and Cost Management

Yazaki uses group-wide environmental accounting as one management tool to achieve compatibility between environmental and economic performance. We have also created a model production line to investigate material flow cost accounting.

### Environmental Accounting

Environmental accounting is a management tool used to quantitatively assess and analyze investment and expenditures related to environmental preservation (environmental preservation costs) and their effects (environmental benefits) with the objective of reducing substances of concern. The Yazaki Group discloses environmental accounting information for its fourteen production sites and the Administration Division in Japan, and is promoting the establishment of group-wide environmental accounting to determine and analyze investment and

expenditures related to environmental preservation, and their benefits based on the Environmental Accounting Guidelines (2002 edition) issued by the Ministry of Environment.

In FY2004, investment in environmental preservation at the fourteen production sites of 55.61 million yen plus expenditures of 1.82 billion yen resulted in total environmental costs of 1.88 billion yen. Investment was primarily made in higher-efficiency absorption chiller-heaters intended to reduce global warming, introduction of heating and air conditioning control systems, and installation of copper smelting furnace emission processing equipment. Environmental costs include

48.6 million yen for soil contamination testing as a pollution prevention measure at production sites. As a result, environmental costs within business areas increased by at least 25% over FY2003. Upstream and downstream costs arising from eliminating lead from electrical wires and introducing green procurement for fixtures and equipment was 28.94 million yen, four times higher than the previous year. In addition, management activity costs were included in environmental activity expenditures by the Administration Division, and as a result, costs more than doubled to 414.94 million yen.

### Environmental Accounting in FY2004

(Thousand yen)

Environmental Preservation Cost	Investment	Expenditures	Total	Details
Business area costs	44,496	449,411	543,907	
Pollution prevention	6,774	234,245	241,019	Emissions processing equipment, purification tank maintenance and management, soil analysis, wastewater analysis at wastewater treatment facilities
Global environmental preservation	36,952	38,711	75,663	Lighting energy conservation, inverter control
Resource circulation	770	226,455	227,225	Industrial waste processing and recycling (waste oils, plastics, etc.)
Upstream / downstream costs	0	28,944	28,944	Elimination of lead, procurement of environmentally friendly office supplies
Management activity costs	799	414,136	414,935	Costs for EMS development and operation (ISO 14001 seminars, etc.), personnel expenses for environmental managers
Research & development costs	10,310	867,480	877,790	Costs for developing new products (research and testing, outsourcing, labor)
Social contribution costs	0	982	982	Beautification activities, environmental improvements
Environmental damage remediation costs	0	49	49	Rainwater drain pipe maintenance
Other costs	0	10,837	10,837	Purchase of environment-related publications, membership fees for various organizations, emergency fixtures (oil fence, etc.)
<b>Total</b>	<b>55,605</b>	<b>1,821,839</b>	<b>1,877,444</b>	

\*All R&D costs are recorded as expenditures

### Economic Effects (Benefits) Resulting from Environmental Preservation Initiatives

(Thousand yen)

Environmental Preservation Effects	Actual Effects	Deemed Effects	Total	Details
Business area	100,090	321,839	421,929	
Pollution prevention	29,246	154,922	184,168	Contribution from wastewater and waste gas processing facilities
Global environmental preservation	55,165	133,754	188,919	Reduction in contracted electric expenses by controlling demand
Resource circulation	15,679	33,163	48,842	Recycling of waste, switch to a different contractor
Upstream / downstream	0	0	0	
Management activity	4,701	8,183	12,884	In-house water quality analysis, wastewater monitoring, other
Research & development	0	0	0	
Social contribution	1,884	0	1,884	Collection of aluminum cans, other
Environmental damage remediation	0	0	0	
Other	0	0	0	
<b>Total</b>	<b>106,675</b>	<b>330,222</b>	<b>436,897</b>	

In an effort to improve the disclosure of economic effects (benefits) resulting from environmental preservation measures, this year, both actual effects and deemed effects have been calculated. Also, the economic effects categories now correspond to environmental preservation cost categories.

Actual effects (benefits) were 166.80 million yen and deemed effects (benefits)

were 330.22 million yen for a total of 436.90 million yen. The actual effects consist of 15.68 million yen from the recycling of waste generated at production sites and from switching waste processing companies. A 55.17 million yen reduction in energy consumption (electricity, gas, and oil) resulting from energy conservation activities and a review of electricity supplied under contract was seen. Deemed

effects in the business area include energy conservation from supply / demand control devices and the contribution to deemed effects calculated on the basis of depreciation of environmental facilities. Management activity effects include water quality analysis and wastewater monitoring.

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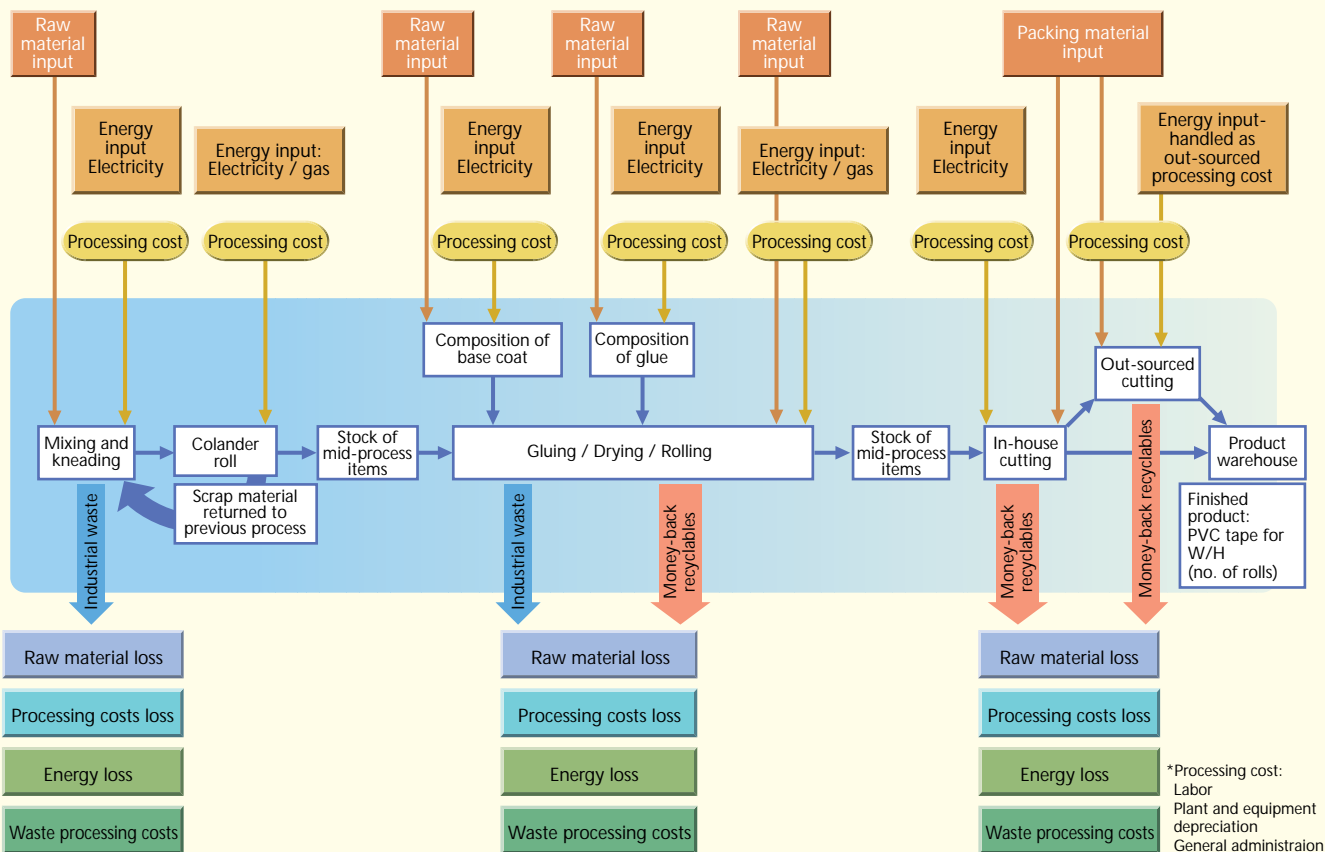
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## Introduction of Material Flow Cost Accounting

Material flow cost accounting tabulates the types and volumes of resources introduced into and waste generated from each manufacturing process into a flow chart, and clarifies the associated costs. This facilitates calculation of loss rates of

raw materials, energy, etc. at each process and effectively improves environmental aspects from a cost perspective. Yazaki is promoting the introduction of material flow cost accounting by first implementing it on a model production line.

Material Flow Cost Accounting Model Production Line (Production line at the Fuji Factory for PVC tape for wiring harnesses)



# The Environment

## Development & Design

In order to reduce environmental impact throughout the entire lifecycle of every Yazaki product, we are developing environmentally considerate products by incorporating the concept of design for recycling, energy-conserving designs, and resource conservation measures in development and design.



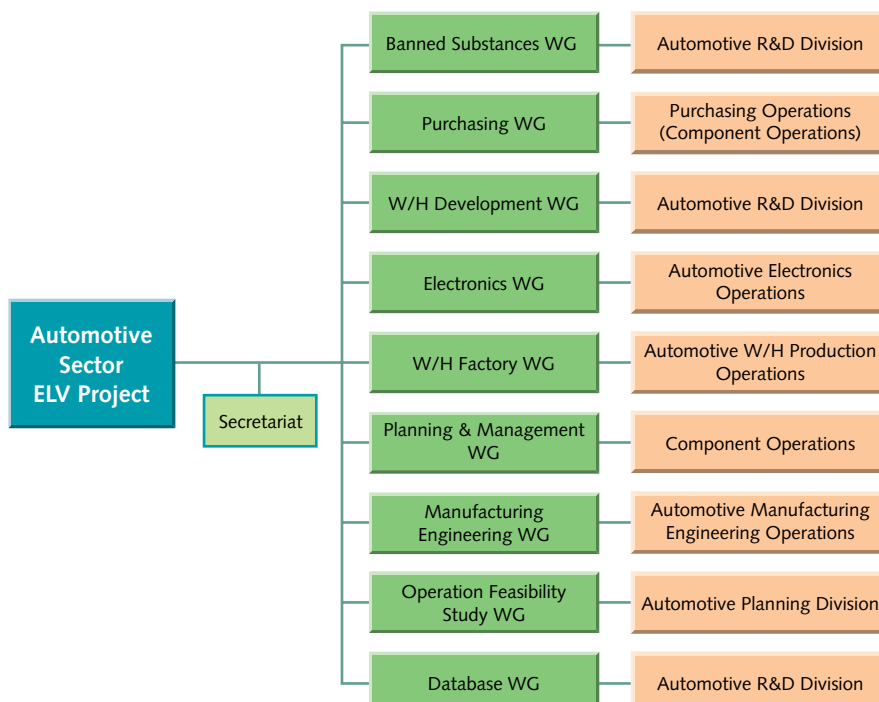
Inspecting the printed circuit board modifications that have been made for a new flat tachograph

Yazaki's Automotive and Environmental Systems Sectors supply society with a tremendous range of parts and products. In FY2004, Yazaki focused on developing parts that comply with the EU ELV Directive and strengthening the control system to better respond to regulations on substances of concern in the Automotive Sector. In the Environmental Systems Sector, Yazaki is focusing on further conserving energy and resources by developing more compact, more functional, lighter-weight products with longer useful lives. Yazaki is also working towards developing new environmental technologies that can be used in a wide range of applications.

### Establishment of an Environmental Quality Assurance System

In July 2003, the EU ELV Directive to phase out the use of four banned chemical substances went into effect. Yazaki organized a company-wide project to establish a system to ensure that the parts used in the wiring harnesses and meters to be delivered to automobile manufacturers do not contain the banned substances. In Phase I (which lasted till August 2003), Yazaki worked on obtaining certificates from suppliers verifying that their parts do not contain any of the four banned substances. In Phase II (which lasted until January 2004), Yazaki established a control system based on non-use certificates in all stages including planning, development, procurement, and production. In Phase III, which began in February 2004, Yazaki incorporated the results into rules, standards, and procedures, and ensured compliance by individual departments. Furthermore, Yazaki is systematically improving its quality assurance by moving from control based on non-use certificates to the establishment of an environmental quality assurance system that is based on actual inspection data and monitoring.

#### ELV Project Promotion Structure

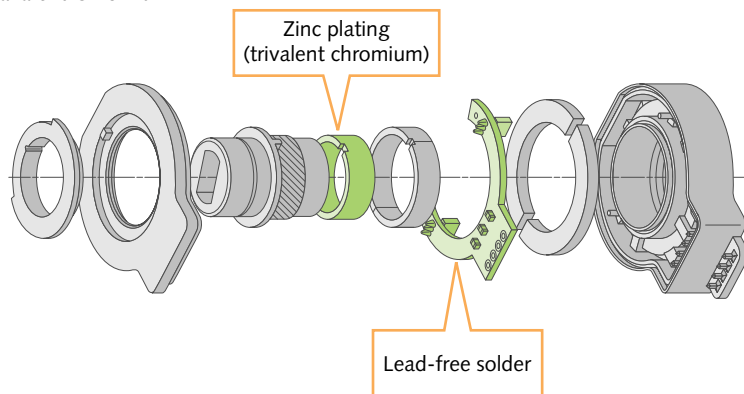


**Reduction of Substances of Concern**

**Automatic Transmission Gear-position Sensor Free of Lead and Hexavalent Chromium**

The automatic transmission gear-position sensor is an automotive component

**Structure of the Automatic Transmission Gear-position Sensor Free of Lead and Hexavalent Chromium**



housed inside the transmission ECU (electronic control unit) case, and senses the gear position, outputting the result to the ECU. Yazaki eliminated lead from the solder used for this component, and also eliminated hexavalent chromium by switching the zinc plating to trivalent chromium. At the same time, Yazaki reduced the size, and weight of the gear-position sensor by 80% from 200g to 40g to conserve resources.

**New, Flat Tachograph with Reduced Lead and Hexavalent Chromium**

Yazaki used to use hexavalent chromium in the surface-treated steel plates of its tachographs. However, by switching to new materials, the use of hexavalent chromium was eliminated. The hexavalent chromium content of the entire product was reduced from 2.4mg to 1.5mg (approximately 37% reduction). Also, whereas older tachographs used two printed circuit boards positioned on the top and the rear, Yazaki integrated these into a single printed circuit board in the new model, thus reducing the overall lead content from 3.6g to 2.8g (approximately a 23% reduction). Yazaki is currently working toward the complete elimination of lead and hexavalent chromium.



New, flat tachograph with reduced lead and hexavalent chromium

**Development of New Environmental Technologies Useful to Society**

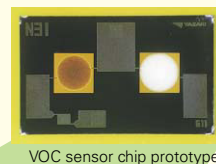
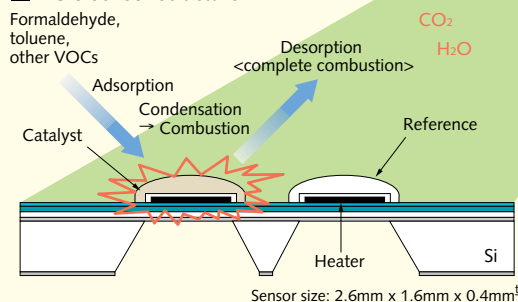
**VOC Sensor for Detecting Substances that Cause Sick House Syndrome**

Out of the five areas included in the Open Competition for the Development of Innovative Technology sponsored by the Ministry of Education, Culture, Sports, Science and Technology, Yazaki's Technology Center applied for a grant in the category "response to environmental issues," under the theme of "Development of a highly sensitive sensor that utilizes adsorption combustion." The Center was awarded a grant and is proceeding with the commercialization of a high-precision VOC (volatile organic compound such as formaldehyde, toluene, xylene, etc.) sensor that adsorbs VOC onto a catalyst and completely burns the VOC instantaneously. The VOC sensor detects VOC in the air at high precision and informs the user of its presence. The only countermeasure that can

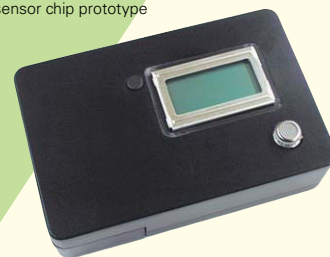
be taken against chemical hypersensitivity, including sick house syndrome, is identifying the cause. The new VOC sensor not only detects VOC inside a building, but as a portable unit it has a wide range of applications and can be used inside

vehicles and elsewhere. Yazaki considers this new technology to be a promising preventive measure useful in a broad range of fields.

**VOC Sensor Structure**



VOC sensor chip prototype



VOC sensor prototype (portable type)

Sensor size: 2.6mm x 1.6mm x 0.4mm<sup>3</sup>

Environmental Management

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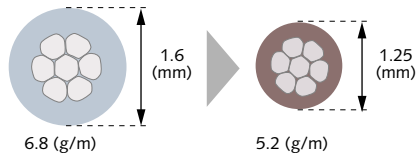
# The Environment

## Halogen-free ISO-certified Wire (electric wire for automobiles)

PVC was previously used in the insulation of electrical wire. Because PVC may produce dioxins when incinerated, Yazaki has switched to a completely new, halogen-free insulating material that can be thermally recycled. At the same time, by switching the applicable conductor resistance standard from JASO to ISO, electric wire weight has been reduced even further. Halogen-free ISO-certified electric wire was adopted for use in the new Prius, which Toyota Motor Corporation introduced to the market in 2003, reducing the total weight of wires per vehicle from 32.1kg in the older model to 25.4kg. This weight reduction of approximately 21% contributes to improved fuel efficiency.

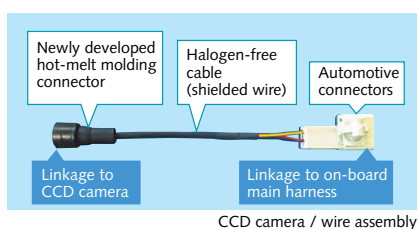
### Comparison between Conventional Electric Wire and Halogen-free ISO-certified Electric Wire

(Example: Electric wire with 0.5mm<sup>2</sup> cross section)



## Elimination of Halogen from Wire Used for On-board CCD Cameras

Yazaki expanded its efforts to eliminate halogen from wiring harnesses for cars to wiring harnesses in electrical components as well. In FY2003, Yazaki eliminated halogen from the wiring harnesses used for CCD cameras, which would otherwise have resulted in increasing environmental impact as the use of in-vehicle ITS (Intelligent Transport Systems) continues to expand. By also making all other parts halogen-free, Yazaki succeeded in making the entire camera recyclable.



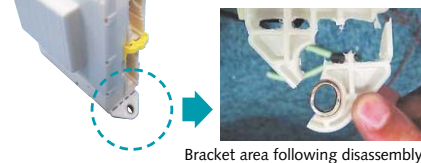
## Development of Environmentally Considerate Products

### Wiring Harness Initiatives

With the goals of improving ease of dismantling to enhance the recyclability of cars and achieving resource conservation, Yazaki set out to develop wiring harnesses that would be much more environmentally considerate than conventional products.

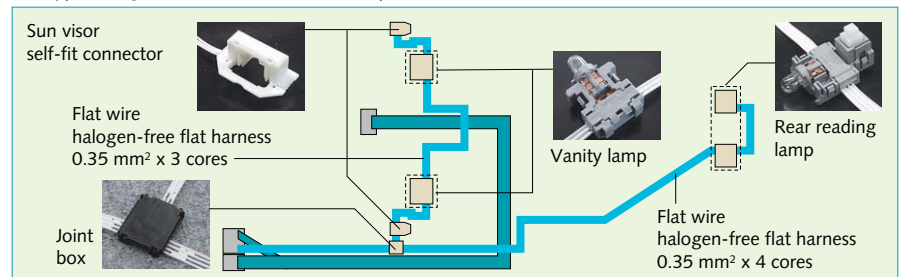
#### New Easy-to-Dismantle Junction Block (with improved recyclability)

Yazaki developed a new type of highly recyclable junction block that can be easily removed from end-of-life vehicles.



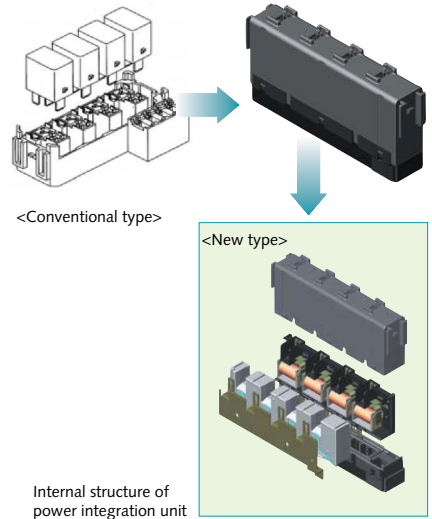
#### Flat-type Wiring Harness (lighter weight)

Flat-type wiring harness that increases cabin space



#### New, Compact, Lightweight Relay & Fuse Unit (size reduction)

Compact size achieved by reducing weight by 16% and volume by 24%.



## YAZAKI Environmental Genes

From the trenches **First Research Team, Electric Wire Development Division**

### Development of Halogen-free ISO-certified Electric Wire

Because PVC is extremely reliable, it has been in use for almost half a century and is used in almost all electric wire today. Given that there was no halogen-free wire available on the market, we faced one difficulty after another in terms of short-term development. In the initial stage of development for example, when we tried to obtain the same level of flexibility as PVC, we ended up lowering friction resistance. When we tried to balance flexibility with friction resistance, wires behaved wildly during shearing tests and peeling

residue remained on the wire. Our development effort involved continuous material modifications and improvements, and it was quite a challenge to learn about the material characteristics and identify the optimal conditions.



Staff member measuring elongation of an insulator



### Development of a Diagnostic System for Extending the Life of 6.6kV XLPE Cables

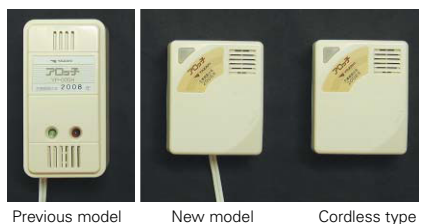
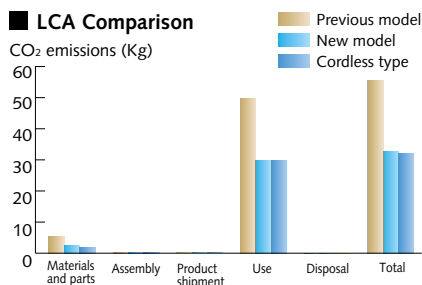
6.6kV XLPE cables (cross linked polyethylene power cables), which are used to distribute power to homes, buildings, and factories, are deteriorated by moisture (water treeing phenomenon) over time, eventually leading to dielectric breakdown. Therefore, these cables must be periodically replaced. However, because it is difficult to distinguish deteriorated cables from those that are still usable, all cables, even still usable ones, have traditionally been replaced. In a joint research project, the Cable Technology R&D Center together with an electric power company successfully developed a new live wire diagnostic system, Hot Line Diagnostic Apparatus for XLPE Cables, that can accurately determine the insulation performance of a 6kV XLPE cable even when electricity is running through it. This system is now in use by electric power companies and commercial-scale utility customers to help extend the useful life of 6.6kV XLPE cables.



Live wire diagnostic system for 6.6kV XLPE power cables

### Development of a New Liquefied Petroleum Gas (LPG or Propane) Alarm and Implementation of LCA

Yazaki developed a new, smaller, lighter-weight, low power-consumption LPG alarm. It does not require any installation fixtures, thus helping reduce waste during installation or replacement. Additionally, to make the alarm more visible (such as for the elderly), we combined a lens with the warning light and added a function that keeps the light off under normal conditions but causes it to flash brightly when the alarm is activated. During development of this new alarm, Yazaki carried out LCA (Life Cycle Assessment) in order to compare its CO<sub>2</sub> emissions with those of the previous model. It was verified that the new model results in a CO<sub>2</sub> emission reduction of approximately 42% (23kg) compared to the previous model.



Previous model      New model      Cordless type

### Development of Aroace Remote Control Unit with Function to Use Waste Heat First

Yazaki added a prioritized energy-conserving operation function to the Aroace air-conditioning system's remote control unit. The Aroace uses energy from cogeneration or waste heat from a factory; when an Aroace (uses waste heat) and a Super Aroace (uses a burner) are used in conjunction, the control unit always gives higher priority to waste-heat utilization. Only when the amount of waste heat is insufficient is the burner fired up to make up for the shortfall in heat, thus saving energy. The control unit also automatically selects the optimum number of Aroace units needed to be in operation according to the air-conditioning load.



Remote control unit that gives priority to using waste heat

## YAZAKI Environmental Genes

From the trenches **Research Planning Department, Cable Technology R&D Center**

### Development of Hot Line Diagnostic Apparatus for XLPE Cables

Because we were searching for a diagnostic principle that had never been described in any literature, we repeatedly ran numerous tests on mud-covered cables recovered from work sites. Although we faced the risk of failure many times, it was teamwork that helped us through these difficulties. We were

given many opportunities to present our results, including at a conference of the Institute of Electrical Engineers of Japan, and the joy we feel about the fact that the completed system is being widely utilized in the market more than makes up for the tough times we experienced during product development.



Hot Line Diagnostic Apparatus for XLPE Cables and its development team members

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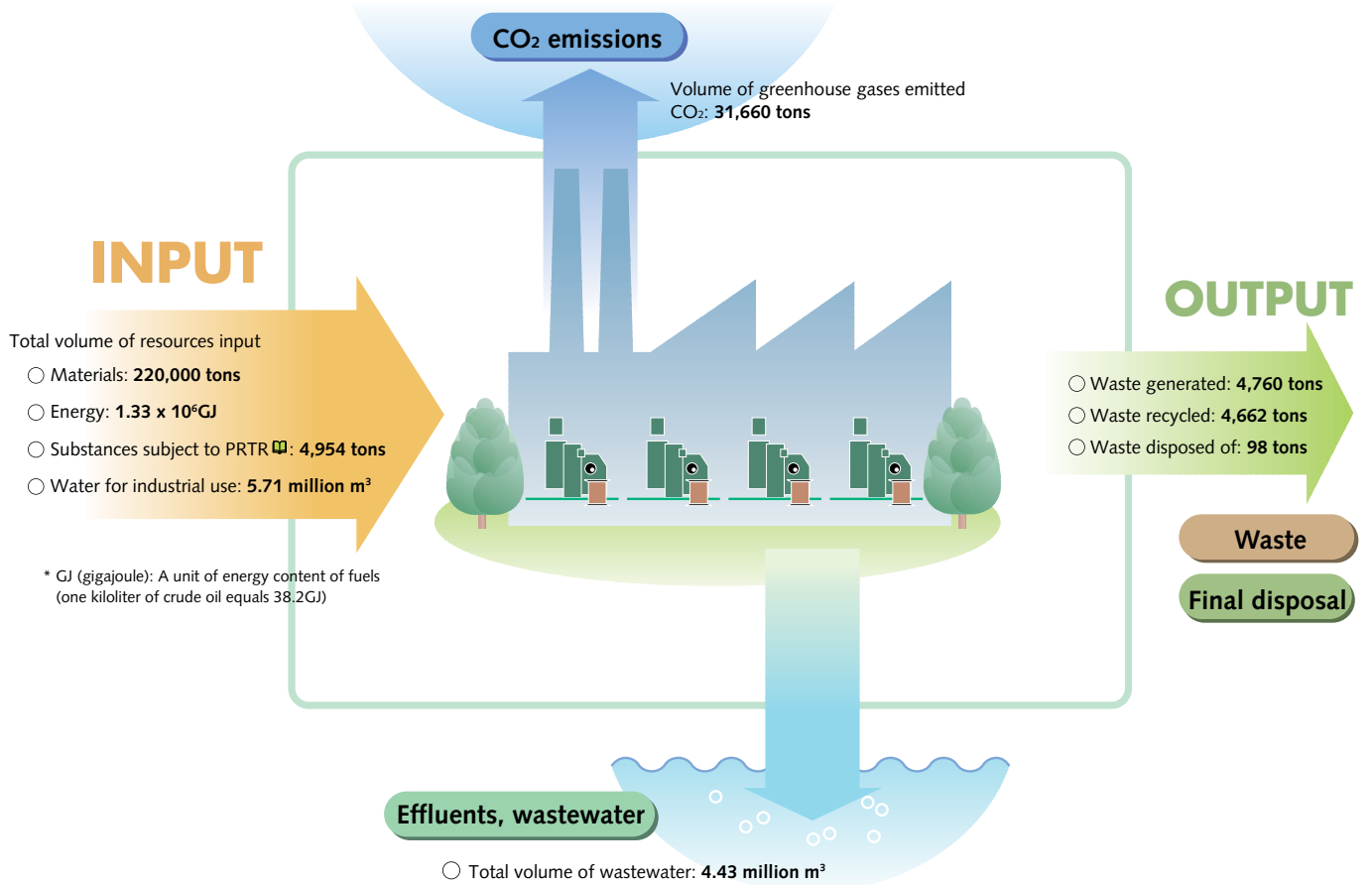
Appendices

# The Environment

## Production

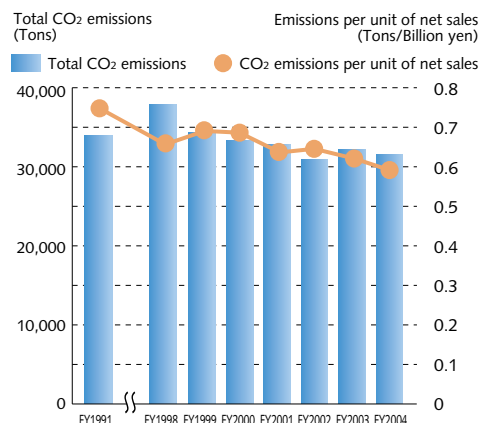
Yazaki's fourteen domestic production sites promote production that brings with it as little environmental impact as possible, and are working toward creating clean factories with the goal of coexisting with surrounding communities and making a contribution to society.

### Volume of Resources Input and Volume of Substances Released into the Environment at Fourteen Production Sites in FY2004

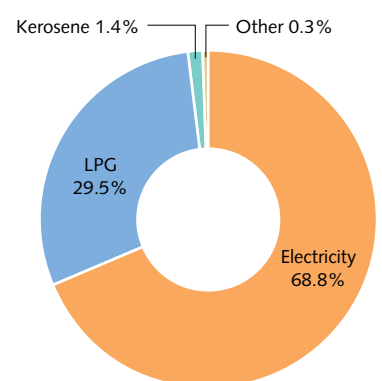


Yazaki's production site initiatives focus on three areas: prevention of global warming (reduction of CO<sub>2</sub> emissions), reduction of waste (zero-emission factories), and reduction of substances of concern (chemical substance management). In FY2004, Yazaki worked on further reducing waste toward the goal of achieving zero landfill waste at all of its production sites. Yazaki also implemented detailed building- and facility-related energy conservation measures.

### Total CO<sub>2</sub> Emissions and CO<sub>2</sub> Emissions per Unit of Net Sales at All Fourteen Production Sites



### Breakdown of Energy Consumption in FY2004



### Prevention of Global Warming

In FY2004, total CO<sub>2</sub> emissions from Yazaki's fourteen production sites amounted to 31,660 tons, and CO<sub>2</sub> emissions per unit of net sales were 0.59 tons per billion yen. Although Yazaki worked hard to reduce total CO<sub>2</sub> emissions by 15% from the 1990 level (35,085 tons), the actual reduction achieved was 9.8%, falling short of the goal. As for CO<sub>2</sub>

emissions per unit of net sales, Yazaki achieved an 8.6% reduction against the goal of 2% from the FY2002 level (0.64 tons per billion yen).

In FY2004, Yazaki's key energy conservation measures included the installation of inverters in its facilities, improvement in the efficiency of air supply systems, and optimization of facility operation timings (e.g., turning the power off during non-operation hours).

### Waste Reduction

As a result of efforts made by all production sites to completely eliminate landfill waste, the total volume of waste generated by Yazaki in FY2004 was reduced by 13.6% from the FY2003 level (5,510 tons) to 4,760 tons. The volume of materials that had to be disposed of as final waste was reduced by 97.7% from the 1999 level to 98 tons, and the recycling rate reached 97.9%. In FY2004, five production sites (Niimi Factory, Tochigi Factory, Hodosawa Factory, Tenryu Factory, and Hamamatsu Factory) achieved the goal of zero landfill waste (reducing the volume of waste requiring final disposal to 5% or less of the 1999 level) / zero-emissions, bringing the total to eleven factories. The factories that have achieved zero emissions have begun renewed efforts to achieve complete elimination (zero waste requiring final disposal). The Numazu Factory achieved this goal in FY2004 and continues to maintain this status.

#### Major Energy Conservation Activities at Production Sites

Factory	Major energy conservation measures	Reduction in total CO <sub>2</sub> emissions (tons)
Numazu Factory	Improved efficiency by optimizing the operation periods of compressors, hopper dryers, boilers, etc. and by changing the air pressure at the source	188
Susono Factory	Improved efficiency by promoting the installation of inverters in copper filtration pumps, air-venting fans, and lighting fixtures, and by consolidating branch factories	178
Haibara Factory	Improved efficiency by removing moisture from molding raw materials in advance and by installing a compressor control and automatic shut down system	201
Niimi Factory	Improved efficiency by upgrading air conditioners to energy-saving types, looping air pipes, modifying operation periods, and fixing air leaks	75
Tenryu Factory	Shortened periods in which power is on by using alarm-based switching, and reduced power usage by modifying process designs and making other efficiency improvements	46
Fuji Factory	Repaired steam pipe leaks, installed inverters in lighting fixtures, and shortened the compressor unload time	332

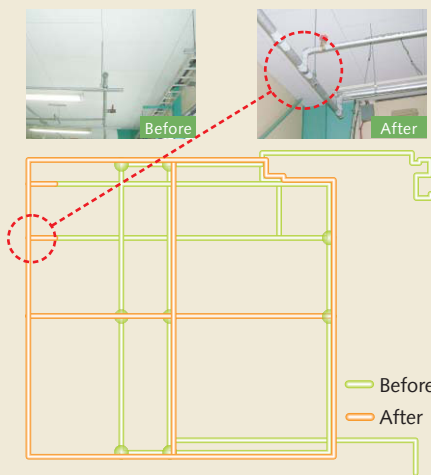
### YAZAKI Environmental Genes

From the trenches

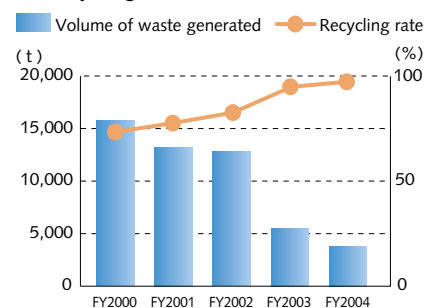
#### Looped Configuration for Air Pipes

Washizu Factory Administrative Department

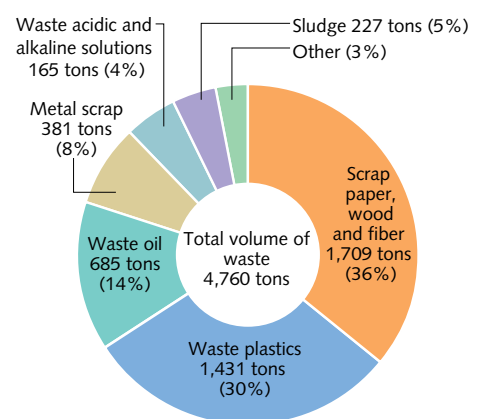
Since the compressor facility accounts for 10% of total electricity consumption, we set out to reduce air loss in air pipes. Initially, creating a diagram describing the existing air pipe routing and trying to modify it to an ideal routing, and then creating a diagram of the ideal air pipe routing presented a tough challenge. However, the energy-conserving effect of the improved routing is significant, and we are planning to implement this new routing scheme at nine affiliates next year.



#### Total Volume of Waste Generated and Recycling Rate



#### Breakdown of Waste (FY2004)



# The Environment

## Major Steps Taken to Reduce Waste Reuse

At the Tochigi Factory, cardboard boxes and wooden pallets used for imported products were switched to returnable and reusable plastic containers. As a result, the volume of waste cardboard boxes and discarded pallets was reduced from 31.6 tons to 2.3 tons. The Fuji Factory stopped accepting deliveries of reclaimed copper in pallets and switched to returnable metal collection boxes that can be reused.



Returnable and reusable plastic boxes and pallets at the Tochigi Factory



Returnable and reusable metal collection boxes at the Fuji Factory

## Recycle

The Numazu Factory, which completely eliminated landfill waste, is now recycling stretch film and plastic bags (300 kg/month), which used to be thermally recycled, into pellets. Additionally, the factory is also recycling waste plastics (approximately five tons/month), which was used as solid fuel in the past, into plastic boards for use as building materials.



Waste plastics at the Numazu Factory and recycled boards

The Hodosawa Factory is now recycling difficult-to-incinerate aluminum-clad cables and PE+PVC composite overflow, which used to require disposal in landfills, reducing their volumes by 0.25 tons/year and 0.40 tons/year, respectively. The Tenryu Factory is now recycling sludge generated during the process of neutralizing and dehydrating waste acidic

and alkaline solutions into a raw material used in paving baked roadbeds at the rate of approximately 85 tons/year.



Difficult-to-incinerate aluminum-clad cables at the Hodosawa Factory

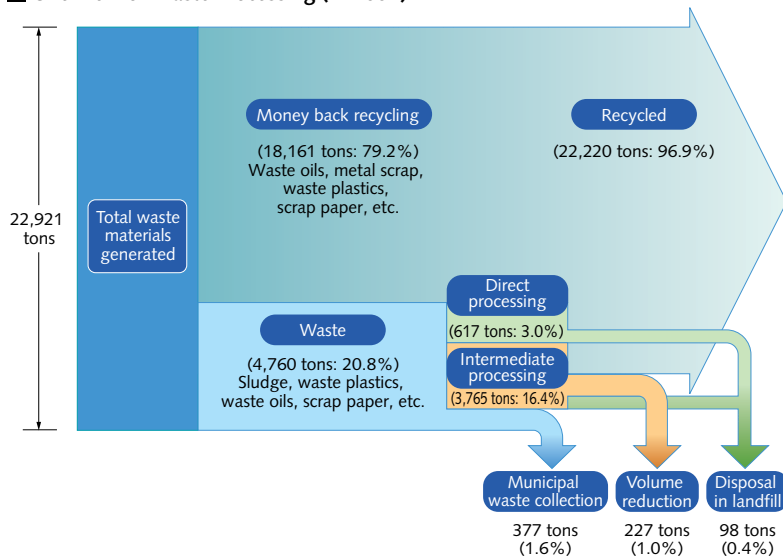
## Reduce (Resource Conservation)

In order to conserve resources by extending the useful lifespan of the alkaline cleaning solution (sodium hydroxide) used for cleaning die parts, the Haibara Factory installed a purification device equipped with a cartridge filter in the solution tank. By purifying the cleaning solution through filtration and recirculation, the volume of waste alkaline solution was reduced to one third of that previously generated, from 170 liters per month down to 60 liters per month.



Alkaline cleaning solution filtration device at the Haibara Factory

## Overview of Waste Processing (FY2004)



## Reduction of Substances of Concern

In terms of managing chemical substances, Yazaki strengthened its control even further from the viewpoints of banning usage, reducing usage, and instituting tighter control of substances that might become subject to government regulations in the future, and also made efforts to assess the chemical substance control status (types and volumes) at affiliated companies. In FY2004, Yazaki completely eliminated the use of dichloromethane at the six production sites that were using it. A total of approximately 4,954 tons of 15 types of chemical substances, whose use must be reported to the government in accordance with the PRTR law, were used at Yazaki's production sites.

### Major Efforts to Reduce Substances of Concern

#### Complete Elimination of Dichloromethane

The Shimada Factory had already switched the dichloromethane used for cleaning machined parts to a hydrocarbon-based cleaning solution. However, because this new cleaning solution was not effective in cleaning parts with cavities, a small volume of dichloromethane was still being used. In order to solve this problem and completely eliminate the use of dichloromethane, the Shimada Factory began looking for a new processing method in cooperation with the Manufacturing Engineering Division and Manufacturing Division, among others. Through the introduction of a vibration cleaning system and a vacuum dryer, the factory was able to completely eliminate all use of dichloromethane in January 2004.



Vibration cleaning system and vacuum dryer

#### Expansion to Affiliated Companies

As the Yazaki Group companies successfully eliminated the use of dichloromethane, Yazaki began providing technical guidance and transferring technologies for eliminating dichloromethane to affiliated companies. As a result, two companies —Japan Chain Terminal Co., Ltd. and Kan Industries Co., Ltd.— have completely eliminated its use, and one remaining affiliated company is scheduled to completely eliminate it by December 2004.

### Volume of Substances Subject to PRTR Released and Transferred at All Production Sites (FY2004)

(Unit: kg)

	Substance name	Volume handled	Volume released into the atmosphere	Volume transferred	Volume recycled	Volume used
1	Bis(2-ethylhexyl) adipate	6,500	0	0	0	6,500
2	Antimony and its compounds	89,253	0	0	3,643	85,610
3	Ethylbenzene	1,890	1,700	190	0	0
4	Xylene	24,122	22,226	1,048	164	684
5	Dichloromethane	9,990	9,000	990	0	0
6	Decabromodiphenyl ether	12,280	0	0	914	11,366
7	Copper salts (water-soluble)	30,000	0	0	30,000	0
8	Toluene	87,670	77,494	1,214	7,941	1,021
9	Lead and its compounds	118,608	2	0	10,631	107,975
10	Nickel	4,002	0	35	0	3,967
11	Bisphenol A type epoxy resin	45,730	0	641	0	45,089
12	Phthalic acid	4,511,900	0	0	67,100	4,444,800
13	Di (2-ethylhexyl) phthalate	6,411	0	0	8	6,403
14	Poly(oxyethylene) octylphenyl ether	1,400	0	0	0	1,400
15	n-alkylbenzenesulfonic acid	4,100	0	0	0	4,100
Total		4,953,856	110,422	4,118	120,401	4,718,915

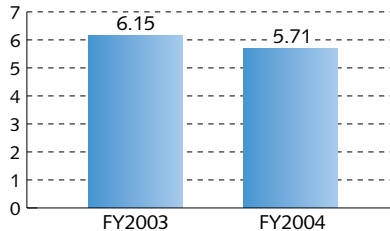
\*Since last year, companies are required to report to the government on the usage of substances that are handled in amounts of one ton or more (previously five tons or more). This has resulted in an increase in the number of substances that must be reported.

## Water Conservation

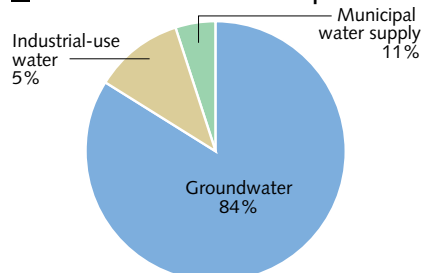
All of Yazaki's fourteen production sites monitor their water consumption. In FY2004, total water consumption was down by 440,000 cubic meters from FY2003 to 5.71 million cubic meters. Two measures that contributed to this reduction were the complete stoppage of pumping when no water is needed and reuse of cooling water.

### Trends in Water Consumption

(Million m<sup>3</sup>)



### Breakdown of Water Consumption



## On-site Verification of Waste Processing Companies

The Numazu Factory has been conducting on-site verification of waste processing companies and has confirmed that almost all waste generated at production sites is being reused by intermediate processing companies, with attention being paid to local environments. At industrial waste processing companies, Yazaki checked ISO 9002 certification acquisition, waste plastic recycling status, and other key areas of concern. At final disposal sites, verification focused on the status of material recycling and thermal recycling, and even dioxin concentrations during incineration and the recycling status of post-incineration ash. Other production sites are also conducting on-site verification on a regular basis to ensure that waste is being properly recycled and processed.



On-site verification of waste processing companies conducted by the Numazu Factory

# The Environment

## Factory Initiatives (1): Haibara Factory

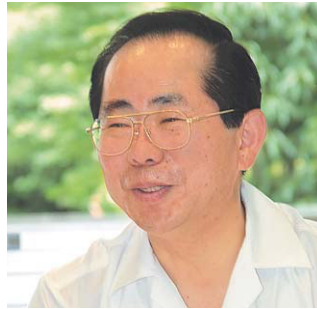
### Advanced Environmental Initiatives to Realize a Society Capable of Sustainable Development



#### ■ Factory Outline

Name: Yazaki Parts Co., Ltd., Haibara Factory
Location: Nunokihara 206-1, Haibara-cho, Haibara-gun, Shizuoka-ken
Factory Manager: Toshimasa Suzuki
Established: 1967
Site area: 121,000 m <sup>2</sup>
Building area: 60,680 m <sup>2</sup>
Employees: 446

*Toshimasa Suzuki*  
Toshimasa Suzuki  
Factory Manager  
Haibara Factory



My motto is “Spend as much time as possible on the shop floor.” Environmental response is a major corporate responsibility and must be perpetually improved. In order to ensure participation by all employees, management must set the example with an uncompromising attitude. Therefore, I try to enhance communication with employees by spending as much time as possible going around the shop floor, and trying to come up with ideas for improvements together with them. I believe it is important to communicate to all our employees our commitment to taking environmental action superior to that of other companies.

#### Haibara Factory Environmental Policy and Guide of Conduct (Acquired ISO 14001 certification in 1998)

**The Haibara Factory is committed to helping realize a human society that can coexist with the Earth, not only by complying with laws and regulations but also by instituting and promoting appropriate environmental preservation policies and action toward the resolution of global environmental issues.**

Based on the basic environmental policy, the Haibara Factory has made the promotion of environmental management a priority issue and considers it important to conduct its operations in harmony with the natural environment and to coexist with local communities. Therefore, we have specified the following:

- We shall abide by the environmental laws and regulations related to the Haibara Factory's activities, products, and services, as well as other requirements to which the corporate organization agrees
- Of the environmental issues related to the Haibara Factory's activities, products, and services, we shall focus on the following items as priority environmental management issues:
  - Prevention of pollution through enhanced environmental preservation activities
  - Reduction of waste generated by the factory
  - More efficient usage of energy
  - Development and design of environmentally considerate products and equipment
- We shall establish environmental objectives and goals, promote specific action to achieve them, and review and improve them periodically
- We shall continually improve our environmental management system in order to improve our environmental performance in keeping with changes in the factory's activities and products as well as in environmental laws and regulations
- As a good corporate citizen, we shall actively participate in environmental preservation activities in local communities and society at large

#### Trying to Remain on the Cutting Edge in Environmental Fields as well

The Haibara Factory is the development and manufacturing base for automotive electronic equipment parts, connectors, and automated wire harness production machinery. Under the slogan “aiming to be a cutting edge factory,” the Haibara Factory continues to play a leading role in Yazaki Group initiatives in terms of technology, quality and environmental issues. In the area of labor safety and health, in 2001 we became one of the first sites in the Yazaki Group to obtain OHSAS 18001 certification. Factory Manager Suzuki believes that aligning everyone's views is key to encouraging participation by all employees. When not in his office, he can be found on the shop floor working to ensure employee awareness of environmental issues by talking to employees face-to-face as often as possible.

#### Promotion of *Mieruka* (visual representation) to Improve Understanding and Awareness

At the Haibara Factory, the “Go, See, and Explain” attitude is well established. Because it is difficult to sufficiently communicate one's meaning with words alone, a culture of providing visual explanation has been nurtured and is being utilized in expanding environmental activities in the form of *mieruka* (visual representation) of environmental issues. The Haibara Factory achieved zero emissions last fiscal year and, as part of further waste reduction activities based on the 5R thinking, the colors, shapes, and labels of containers used for collecting waste were standardized among all departments, and the containers were also labeled in four languages to facilitate



Containers placed in the cafeteria to sort waste

efficient use by the factory's many foreign employees in an effort to promote *mieruka* of waste management activities.

As a close-to-home example of resource recovery from waste, the Haibara Factory began converting the sludge generated from treating factory wastewater and household sewage from the dormitories inside the factory into a fertilizer. This sludge-based fertilizer is used for keeping the factory grounds green, and is also provided to employees and people in the local communities free of charge.



"HAI Clean" sludge-based fertilizer



Sludge to fertilizer conversion plant built inside the factory

### First Yazaki Group Factory to Introduce Material Flow Cost Accounting

In the Electronics Assembly Department, process flow charts were created to identify the kinds of resources being input into individual processes, the kinds of waste being generated from these processes, and how waste was being processed from an environmental perspective. The motivating and educational



Environmental process flow charts and recycling examples in the Electronics Assembly Department

effects of these flow charts on employees were significant. For example, in the zero defective products initiative, the defective product-scraping rate was reduced to 1/6 of the January 2002 rate.

The First Molding Team of the First Component Production Department also completed a material flow cost accounting system. Measuring and quantifying the volume of resources input into each process, the volume of waste generated, and the total equipment operation time has made it possible to more realistically manage environmental issues, costs, and quality, and to move from mere recycling to promoting significant reductions in the volume of waste generated, and also working to improve those products with low energy efficiency levels or poor yields.



Model production line on which material flow cost accounting is being implemented

### If We Work Hard at it Ourselves, Others Involved Will Eventually Join in Our Efforts

In April 2004, the Haibara Factory disassembled an incinerator whose operation had been stopped in April 2002, and in its place installed the 3R Center

for collecting resources from within the factory. Under Factory Manager Suzuki's edict of "Keep places with an unclean image as clean as possible," a colorful cement surface was used for the floor of the Center and colorful containers for sorting waste were arranged in an orderly manner. The collection company then began to feel that it could not send dirty trucks to the Center, voluntarily modified their trucks, and now sends special trucks with tulips painted on a white background. This turned out to be a good example that substantiates Mr. Suzuki's belief, "If we work hard at it ourselves, others involved will eventually join in our efforts."

In terms of greenery and landscaping, plants on the entire factory premises were surveyed and systematically replanted. These efforts improved the appearance of the actual factory and grounds. Additionally, opening up areas that were shielded from the outside by trees has made the entire factory more visible and has given the people in the surrounding communities a greater feeling of trust. As a company that seeks to coexist with the surrounding communities, the Haibara Factory is committed to doing its best to fulfill its corporate responsibility in terms of information disclosure as well.



The collection truck servicing the 3R Center

### Achieving Leading Levels of Green Purchasing Among Yazaki Group Production Sites

Last year, I attended a study meeting held to promote green purchasing at all departments. Subsequently, we held several internal study meetings and took action that resulted in our achieving leading levels of green purchasing among Yazaki Group production sites and 100% green purchasing in the four items specified in the Law on Promoting Green Purchasing. One of the most challenging

issues was determining whether or not an item was really "green." However, I am very happy to report that, with cooperation from our coworkers, supervisors, and suppliers, we were able to achieve our goal.



Naoko Oishi  
NYS Promotion Office

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## Factory Initiatives (2): Tenryu Factory

Carrying on the Tradition Set by the Company's Founder:  
"No Waste Baskets, Just Recycling Bins"



### ■ Factory Outline

Name: Yazaki Meter Co., Ltd., Tenryu Factory
Location: Minamikashiwa 23, Futamata-cho, Tenryu-shi, Shizuoka-ken
Factory Manager: Kiyoji Nagai
Established: 1959
Site area: 64,447 m <sup>2</sup>
Building area: 32,856 m <sup>2</sup>
Employees: 321



*Kiyoji Nagai*

Kyoji Nagai  
Factory Manager  
Tenryu Factory

To take environmental action, I think the most important thing is to be aware of the issue. Production processes inevitably have some kind of impact on the global environment. Finding out how to continuously reduce that impact to a minimum is the greatest mission expected of us. Tenryu Factory is engaged in environmental action based on a system of manufacture from which waste of resources and energy has been rigorously eliminated, and the development of environmentally friendly products that have little impact on the environment at the utilization and disposal stages.

### Tenryu Factory Environmental Policy and Guide of Conduct (Acquired ISO 14001 certification in 1996)

**We will contribute to the protection of the global environment and the creation of a prosperous society while seeking coexistence between manufacturing and the environment through continual environmental improvement based on the Yazaki Global Environment Charter, and with an awareness of the importance of environmental preservation in the manufacturing of gas equipment. In order to put our environmental philosophy into practice, all employees will strive to achieve the following:**

1. Compliance with laws and regulations: we will strictly observe environment-related laws and regulations and take appropriate action in accordance with other requirements
2. Prevention of pollution: we will put in place optimal provisions and measures to prevent pollution
3. Development of environmentally friendly products: we will undertake development and design of environmentally friendly products based on an assessment of environmental impact during the product life-cycle from the product planning stage
4. Reduction of environmental impact: we will promote energy- and resource-conservation in all business activities from production and development to sales, distribution and after sales service to reduce waste and environmental impact
5. Implementation of green purchasing: we will implement green purchasing and procurement of materials, secondary materials, machines, equipment and supplies
6. Raising of environmental awareness: we will conduct environmental education to raise the environmental awareness of every individual employee to a level where they take independent action to preserve the environment
7. Social contribution: we will collaborate with government and the local community, and undertake active exchange and disclosure of information on environmental preservation, and work to contribute to society

### Multi-skilled Operator System: Eliminating Waste and Improving Efficiency

The Tenryu Factory develops and produces gas meters and other gas-related equipment, and security systems. All its products are subject to inspection by public authorities and have a designated validity period; like fresh foods, they cannot be stockpiled. Says Factory Manager Nagai: "Both stockpiling and surplus production impact the environment. Leveled-out production and measures to meet day-to-day fluctuations are major tools in our efforts to rigorously eliminate waste, conserve energy and save space." The driving force behind these efforts is the multi-skilled operator system. When orders exceed the leveled-out production volume, these multi-skilled operators "change hats" and join the production line. At the Tenryu Factory, nearly all employees combine a number of skills as multi-skilled operators.



Sign indicating that a multi-skilled operator is at work

### Introduction of a Licensing System to Test Quality, Environmental Awareness, and Safety Skills

The line operator licensing system was introduced to ensure quality, environmental awareness, and safety skills among production line operators. After receiving the education and training required for each operational task (technical skills, environmental response, safety, etc.), operators are posted provisionally on the production line and their performance assessed according to a check sheet. When they pass the test they are issued an operating license indicating their various skills. Each operator evaluates his or her daily performance on "operation monitoring



sheets." Operators who display excellent performance can advance, while those who do not perform adequately may have their licenses suspended or withdrawn and undergo re-education and re-training.



Operating license

One of the more conspicuous aspects of environmental activities at the Tenryu Factory is the initiative and creativity displayed by employees in recycling remnant or redundant materials, equipment and parts. This carries on the tradition set by the company's founder Sadami Yazaki in his phrase "no waste baskets, just recycling bins" and is an expression of "our environmental genes."

### Numerous In-house Devices Reflecting the Yazaki Environmental Genes

At the Tenryu Factory, devices created in-house are in use in all workplaces. For instance on the gas meter assembly line, there is a device inspired by watching a puppet. *Dai-hachi Hajime-kun*, as it is known, is a non-powered transport / delivery system based on the movement of weights and principles of gravity. On the large gas meter mixed production line where multi-item small-lot production is done, a multi-axial screwdriver machine can switch to tightening the screws on a product with a different screw pitch at the touch of a single button. In the electronic equipment assembly line, the *Machigaematen* automatically opens, closes, and removes parts to prevent the mounting or assembly of the wrong parts on a multi-tasked production line. In the aluminum die-casting process, we have introduced a device to control the number of operating air compressors as a way of conserving energy. A control panel that normally costs around 2.5 million yen to purchase has been built by our staff after consulting a specialist company to acquire the relevant manufacturing technology for a material cost of around 30,000 yen. Component parts taken from idle

equipment, unused machine tools, and other items are collected at the "replaceable parts room" and advertised on the factory website to promote re-use at other factories and Yazaki Group companies.



Non-powered transporter *Dai-hachi Hajime-kun*



Device to control the number of air compressors

### Product Development that Aims to Enhance Environmental Awareness in the Gas Equipment Industry

In the area of product development too, the Tenryu Factory is devoting energy to creating environmentally friendly products from a user's viewpoint. Efforts are made to reduce environmental impact from the design stage, and promotion of lightweight and compact size specifications are emphasized. Life-cycle assessment (LCA) of the product's environmental impact is also carried out. In autumn 2004, we plan to launch an automatic metering unit equipped with a simple display function that can display gas consumption and charges, carbon dioxide emission volume, and other operational data. Factory

Manager Nagai says enthusiastically: "We are working to enhance environmental awareness of the industry itself."



Automatic metering unit with easy to read display

### Supporting Tenryu Welfare Workshop for Over Thirty Years

To promote harmonious relations with the local community, the Tenryu Factory organizes a factory tour every year. The throwing open of the whole factory to local people is a great opportunity to improve communication with the local community through information sessions and exchanges of opinion. In addition, the Tenryu Factory has been supporting the Tenryu-Kohseikai, a local social welfare organization facility for physically disabled persons, in a variety of ways including commissioned work and provision of technical training since its establishment in 1972.



Social welfare organization Tenryu-Kohseikai

### Consistent Leadership to Promote New Ventures

The introduction of the multi-skilled operator system for employees met with some opposition at first, especially from people who were attached to having their own workplace. However, from the perspective of improving efficiency in human resource deployment, enhancing employee skills, conserving energy, and other advantages resulting from the more compact production line and facilities, it was a measure that was absolutely necessary. That is why I, for instance, took the lead by working until five o'clock

in the General Affairs Department and from five o'clock onwards as a multi-skilled operator to promote acceptance of the system. At present, we draw up a monthly plan to effect smooth deployment of human resources.



Toyohisa Shimizu  
Manager, General Affairs Department,  
Tenryu Factory  
Manager, Production Control Department (concurrently)

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## Logistics

Syo Transportation Co., Ltd., which handles all logistics for Yazaki, is striving to achieve ecologically sound transportation, with the environment and safety being its highest-priority issues. The company's goal is to build a high-quality transport system that minimizes environmental impact.

### Overview of Syo Transportation (FY2004)

Number of trucks owned	137 vehicles owned, 800 vehicles at subcontractors
Operating distance traveled	900,000 km/month
Number of sales offices	Key shipping hubs: 5 Key delivery hubs: 10
Volume of cargo handled	240,000 tons/month
Number of employees	385 employees



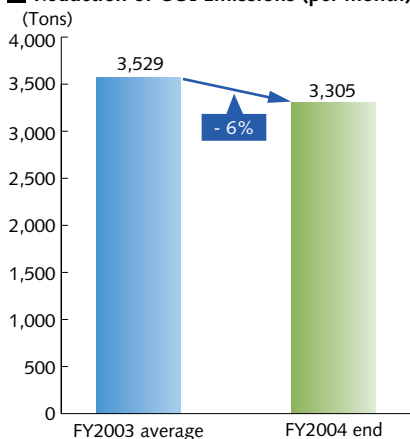
"Eco-drive" Syo Transportation delivery truck having had environmentally sound driving measures implemented

Syo Transportation Co., Ltd. is an affiliate specializing in transport and delivery by truck of finished and semi-finished products and parts. The company acquired ISO 14001 certification in 2002 and is engaged in reducing both CO<sub>2</sub> emissions and usage of packaging materials. In 2003, Syo Transportation acquired OHSAS 18001 certification, integrated with ISO 9001 and 14001 certification.

### Reduction of CO<sub>2</sub> Emissions

As of the end of FY2004, average monthly CO<sub>2</sub> emissions at Syo Transportation were 3,305 tons — down 224 tons (6%) per month over the same period in FY2003. With the goal of effectively managing fuel consumption during transport, Syo Transportation in FY2004 worked on improving the efficiency of its dispatching schedule and transportation routes based on improvement suggestions obtained from drivers and other personnel responsible for transport.

### Reduction of CO<sub>2</sub> Emissions (per month)



### Promotion of Modal Shift

As a measure to reduce CO<sub>2</sub> emissions, Syo Transportation has been working on switching the transport mode from long-distance truck transport to sea and rail transport. In FY2004, Syo Transportation made further progress in implementing modal shifts, and began investigating and analyzing the remaining long-distance truck routes that had not yet been switched to sea or rail transport.

### IT-Based Load Assessment System

In order to shift from a fixed dispatching system, which tends to cause waste during service runs, to a flexible optimized dispatching system, Syo Transportation worked on installing an IT-based system for determining loads in advance. Kakegawa Logistics Center began experimental operation of a system that loads data into a computer and determines the optimum dispatching schedule two days in advance. This new system was able to significantly improve loading rates. While continuing to carefully monitor the effectiveness of this system, Syo Transportation plans to expand its use to other centers of logistical operations.

### Use of Digital Tachographs to Promote Environmentally Sound Driving Practices

Digital tachographs have been installed in every truck to encourage and assist in environmentally sound driving practices. Drivers are evaluated based on the analyzed data, and formal recognition is given to excellent drivers and excellent workplaces twice a year. Additionally, the truck seatbelts are printed with a special slogan to raise drivers' safety and environmental awareness.



Syo Transportation's original seatbelt

### Reduced Use of Packaging Materials

#### Reusable Shipment Boxes

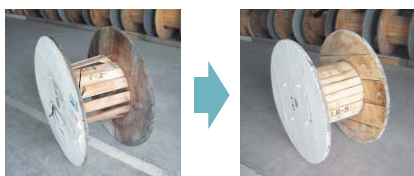
Most of the automobile wiring harnesses shipped from overseas production sites were previously packed in corrugated cardboard. In order to conserve resources, Yazaki gradually began converting the shipment boxes to returnable and reusable plastic containers. As of June 2004, shipment boxes for 47% of the total import volume had been converted to the new plastic containers, with the goal of achieving 100% conversion by June 2008.

# Recycling

In addition to applying the concept of design for recycling during product development and 3R (Reduce, Reuse, Recycle) thinking in production, Yazaki has also been promoting collection and recycling at the product disposal stage.

## Collection and Recycling of Products at the Disposal Stage

Yazaki's Sales Division acts as the collection site for products such as discarded wire, used wooden spools, end-of-life gas meters, and absorption solution from absorption chiller-heaters that can be recycled and reused. In FY2004, the recycling rate was approximately 90% for both discarded wire and used wooden spools.



Wooden spool collected for recycling

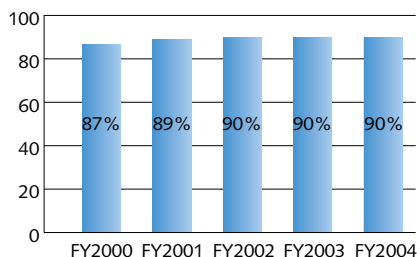
After recycling

Approximately 45,355 end-of-life gas meters were collected with 13% of their aluminum content being recycled. 71.8 tons of absorption solution was also collected, cleaned of impurities, and reused in products.

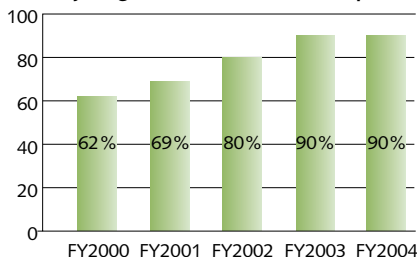


Extracting the absorption solution

### Recycling Rate of Discarded Wire



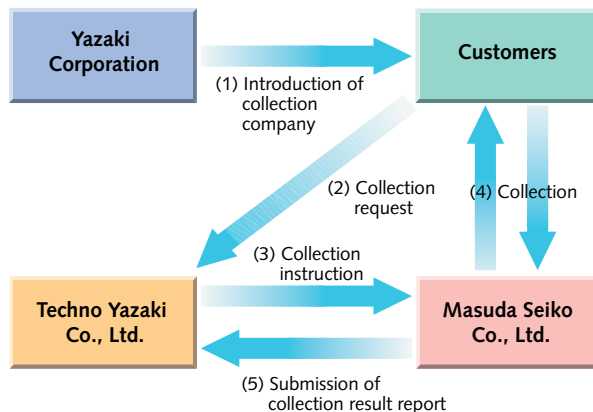
### Recycling Rate of Used Wooden Spools



## Improvements in the Gas Meter Collection System

In order to improve the recycling rate of end-of-life gas meters, Yazaki reviewed and improved the existing collection / recycling system. In the old system, individual branch offices of Yazaki Corporation collected end-of-life gas meters, which were then dismantled and sorted at the Tenryu Factory. In the new system however, a specialized subcontracted company centrally manages the collection / recycling process. Additionally, discarded alarms and regulators are also collected during collection of end-of-life gas meters to help reduce customers' disposal costs.

### New End-of-Life Gas Meter Collection / Recycling System



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# Promoting Global Environmental Management

Yazaki has ninety-nine overseas affiliates in thirty-seven countries around the world where approximately 140,000 persons are employed. We are promoting the creation of a Global Yazaki Environmental Management System based in and operating on four fronts – Japan, the Americas, Europe and Asia and Oceania.



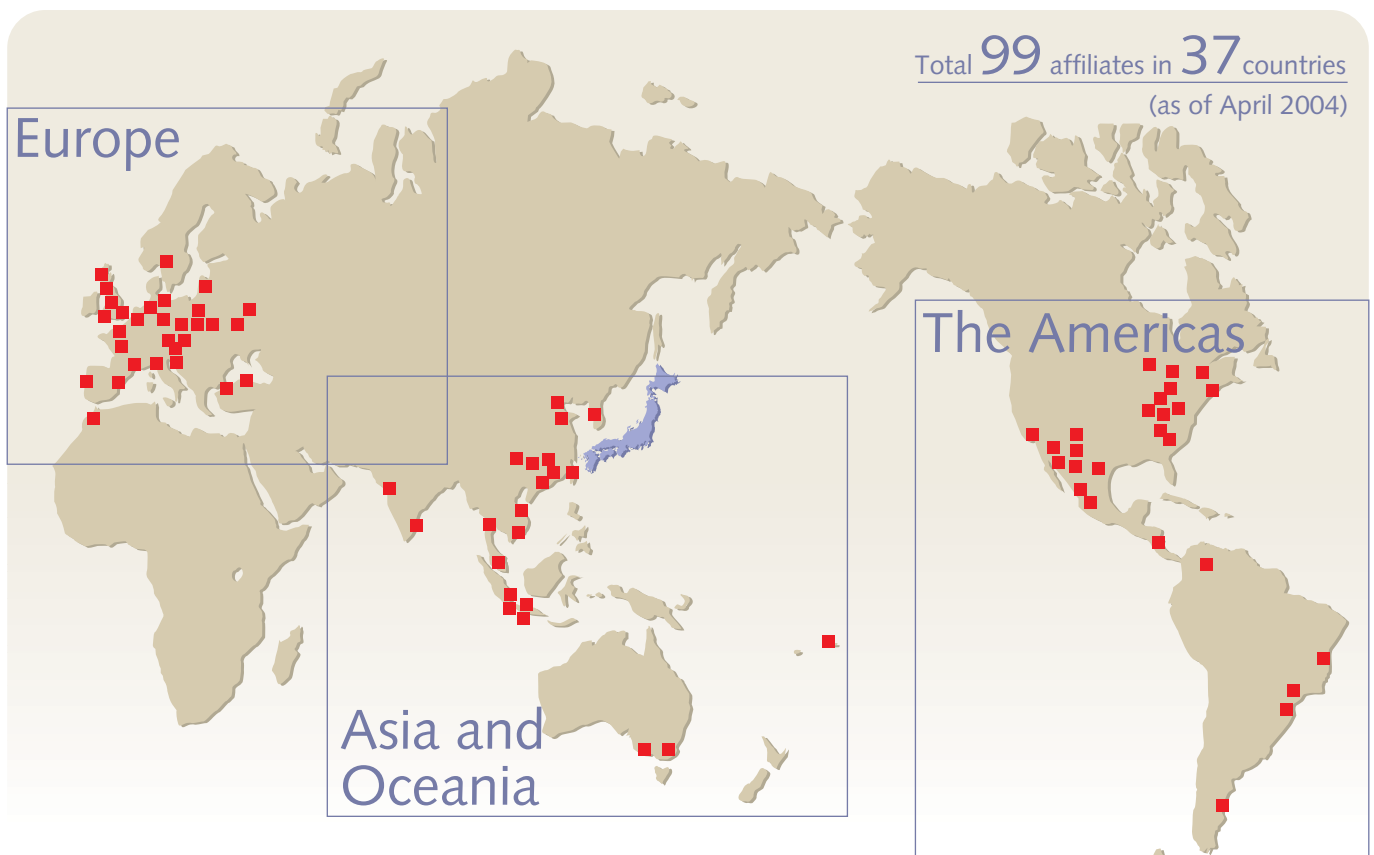
Wiring harness production at Yazaki Saltano de Portugal (YSP)

### Basic Approach to the Global Yazaki Environmental Management System

In the five-year long-term plan for the period to 2007, Yazaki is promoting domestic Group company initiatives while drafting and strengthening specific environmental responses suited to each overseas affiliate. As social and cultural conditions vary at each of our overseas affiliates depending on the country and region where they are located, management is under local direction. Necessary technology transfer, guidance, and other forms of support are provided from Japan. Meanwhile, by actively disseminating

information on domestic Group activities to overseas affiliates, Yazaki aims to create a global environmental management system built and based on understanding and cooperation. All overseas affiliates will share a common commitment to the Yazaki Global Environment Charter and formulate individual environmental action plans. Expansion of the environmental management system and other global environmental responses will proceed with the construction of an information management network on four fronts: Japan, the Americas, Europe, and Asia and Oceania.

### ■ Yazaki's Overseas Affiliates



### Yazaki Group International Automotive Conference

In October 2003, eighty-two delegates from thirty-seven factories and offices around the world gathered at the Y-CITY World Headquarters (Yazaki's Headquarters in Shizuoka, Japan) for the Yazaki Group International Automotive Conference. In response to the goal of having all participating factories and offices acquire ISO 14001 certification by the end of 2003, a total of twenty-six factories and offices had completed certification by the target date, including the twenty-four production divisions. Meanwhile, with the sudden increase in issues that require concerted worldwide response, such as implementation of the EU ELV directive, it was confirmed that the Environment Product Design Assessment Committee would use a global system to monitor trends and developments in environmentally friendly products. Among other issues discussed were what kind of coordinating system should be put in place as overseas environmental activities progress favorably and coordination with Japan becomes necessary. Regarding the three specific requests that were made toward Yazaki's environmental initiatives on a global scale —the prevention of global warming, reduction of waste, and control and reduction of chemical substances used— each overseas affiliate set its own targets and went to work.



2003 Yazaki Group International Automotive Conference



First YEL European Environmental, Health & Safety Conference

### Regional Environmental Conferences in Europe and the Americas

As a step towards establishing the Global Yazaki Environmental Management System, the first Regional Environmental Conference was held under the organizational lead of Yazaki Europe (YEL), Germany. In order to move forward in a concerted fashion in Europe, YEL has appointed an environmental manager and posted environmental officers at each of its twelve European affiliates. In January 2004 nineteen environmental officers from all its affiliates gathered to hold the First YEL European Environmental, Health & Safety Conference. Discussions were held on current issues and on future systems for action. In the Americas, Yazaki North America Inc. (YNA) appointed a director to oversee environmental issues and an environmental manager in March 2004, and drew up its environmental action plan. The YNA Environmental Committee, composed of representatives from YNA's eleven factories and offices in the Americas was also set up. Yazaki is also promoting similar action in Australia and Asia.

#### Overseas Business Sites that Acquired ISO 14001 Certification

FY	Overseas Corporation, Factory or Office	Country
1998	EDS Manufacturing, Inc. Headquarters / Imus Factory (EMIF)	The Philippines
	Yazaki Saltano de Portugal Componentes Electricos Automoveis, Lda. (YSP), Gaia Factory (YSPG)	Portugal
	Ovar Factory (YSPO)	
	Yazaki Saltano de Ovar-Productos Electricos, Lda. (YSE)	
1999	Taiwan Yazaki Corporation (TYC), Headquarters/Pingtung Factory	Taiwan
	Taipei Office (TYCT)	
	Tungkang Sub-Factory	
2000	Yazaki North America, Inc. (YNA)	U.S.
	Yazaki do Brasil Ltda. (YBL), Headquarters / Factory	Brazil
	Australian Arrow Pty. Ltd. (AAPL)	Australia
	EWV Limited Liability Company (EWD)	Mexico
	Auto Circuitos de Obregon, S.A. de C.V. (ACOSA)	
	AUTO Electronica de Juarez S.A. de C.V. (AEJ)	
	Productos Electricos Diversificacoos S.A. de C.V. (PEDSA)	
Sistemas Electricos Y Conductores S.A. de C.V. (SECOSA)		
2001	Thai Arrow Products Co., Ltd. (TAPO), Head office	Thailand
	Tata Yazaki Autocomp Limited (TYA)	India
	Tianjin Yazaki Automotive Parts Co., Ltd. (TJY)	China
	Thai Arrow Products Co., Ltd., Bang Phli factory (TAPB)	Thailand
	Circuit Controls Corporation (CCC)	U.S.
	NACOM Corporation (NACOM)	U.S.
	Thai Arrow Products Co., Ltd., Phitsanulok factory (TAPP)	Thailand
	Yazaki-Torres Manufacturing, Inc. (YTMI)	The Philippines
	YTM Components Inc. (YTMCI)	

FY	Overseas Corporation, Factory or Office	Country
2001	P.T. Autocomp System Indonesia (PASI)	Indonesia
	Thai Arrow Products Co., Ltd., Chachoengsao Factory (TAPC)	Thailand
	Shantou Special Economic Zone Yazaki Auto Parts Co., Ltd. (SYA)	China
2002	Elcom, Inc. (ELCOM)	U.S.
	Thai Yazaki Electric Wire Co., Ltd., Phra Pradaeng Factory (TYEP)	Thailand
	Wat Khae Factory (TYEW)	Indonesia
	P.T. EDS Manufacturing Indonesia (PEMI)	
	Yazaki Slovakia a, spol. sr. o (YSK)	
	Yazaki EDS Samoa Ltd. (YES)	Samoa
SY WIRING TECHNOLOGIES, India Pvt Ltd.	India	
2003	Huanan Yazaki (Shantou) Auto Parts Co., Ltd. (HNY)	China
	Arnecom, S.A. de C.V., Nicaragua (ARCLE)	Nicaragua
	Arnecom, S.A. de C.V., Monterrey Factory (Wire) (ARCCB)	Mexico
	Yazaki EDS Vietnam, Ltd. (YEV)	Vietnam
	Arnecom, S.A. de C.V., Monterrey Factory (Meters) (ARCIN)	Mexico
	Shantou Special Economic Zone Yazaki Auto Parts Co., Ltd., Chenghai Factory (SYACH)	China
	Arnecom, S.A. de C.V., Monterrey Factory (W/H) (ARCN)	Mexico
	Autopartes Y Arneses de Mexico, S.A. de C.V., Ciudad Juarez Factory Group (AMSI)	Mexico
	Shantou Special Economic Zone Yazaki Auto Parts Co., Ltd., Wanji Factory (SYAWJ)	China
	Yazaki-Ciernel S.A. (YCSA)	Colombia
	Yazaki Argentina S.R.L (YAS)	Argentina
	Yazaki Wiring Technologies Slovakia S.R.O (YWTS)	Slovakia
2004	Yazaki Otomotive Yan Sanayi ve Ticaret A.S. (YOT)	Turkey
	Buenaventura Autopartes S.A. de C.V (BAPSA)	Mexico

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## Action on Three Fronts

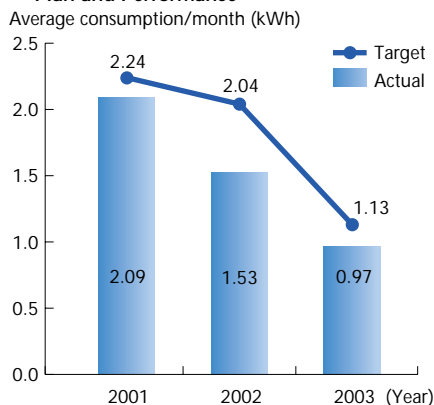
### The Americas

#### PEDSA (Mexico)

In 2004, in addition to the annual theme of reduced electricity consumption, Product Electricos Diversificacoos S.A. (PEDSA) implemented a nine-point plan that included monitoring and charting electrical energy consumption, increasing efficiency through pressure adjustment of compressors, and optimizing lighting.

Reduced electricity consumption through sustained energy-saving activities contributes to preventing global warming. An awareness and understanding of this relationship has begun to spread among PEDSA employees.

#### Reduced Electricity Consumption at PEDSA Per Unit of Production: Plan and Performance\*



#### ARCIN (Mexico)

To coincide with the start up drive for ISO 14001 certification in November 2003, Arnecom (ARCIN) held an Environment Week to teach employees the importance of environmental protection and promote an environmentally friendly corporate culture. At the same time suggestions for environmental improvements were solicited. An accompanying poster stated the aims of ISO 14001 certification and attempted to enhance environmental awareness by asking employees to think about (1) management of environmental impact (2) prevention of pollution (3) compliance with environmental laws and regulations, and (4) continual improvement. Of twenty-four suggestions received, four were awarded prizes; a suggestion on how to save printing ink took first prize.

### Europe

#### YSP (Portugal)

Yazaki Saltano de Portugal (YSP) worked to reduce waste of organic solvents and explored various courses of action after gathering the latest information on the purchase and disposal of solvents. It was found that a recycling device for solvents used at the Gaia Factory was the most effective method, and recovery and recycling of organic solvents was begun. As well as contributing greatly to the attainment of waste reduction targets, it has reduced purchasing and waste disposal costs to almost zero. YSP is currently considering supplying the recovered solvents to other factories.



Organic solvent recycling device

#### YWTS (Slovakia)

Yazaki Wiring Technologies Slovakia (YWTS) used a model machine to clarify problem areas in the pressure-welding process and worked to reduce the large amount of waste normally generated. It was found that there were major problems with the control setting value for detecting contact status. After ensuring that quality conditions were maintained, YWTS started improvement activities with the target of a 50% reduction in waste. A change in the setting value has produced a decrease in waste volumes, but issues such as adaptation to varying product types still remain. After repeated assessment and examination of results, YWTS will expand improvement implementation to other machines.



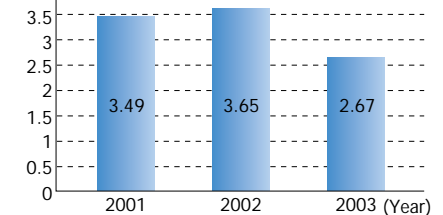
Members of the YWTS environmental promotion team

### Asia and Oceania

#### AAPL (Australia)

In 2004, Australian Arrow Pty. Ltd. (AAPL) launched its environmental plan looking to reduce waste by a further 40% from the levels achieved in 2003. By June, landfill waste had been reduced by 50%. This success was achieved mainly through a comprehensive waste-recycling project led by the Electronic Component Manufacturing Division. Under the project, manufacturing waste was analyzed using an independently devised method to identify recyclable items. A waste-sorting system was then set up and rigorous checks carried out to ensure proper sorting. In this way, reuse and recycling rates have been greatly increased.

#### Volume of Landfill Waste Per Employee\* (m<sup>3</sup>)



#### TJY (China)

In a country like China, which is experiencing a dramatic pace of industrialization, making continual environmental improvements requires a sufficient awareness of current environmental issues. Accordingly, Tianjin Yazaki Automotive Parts (TJY) appointed environmental promotion officers and implemented training programs to communicate the importance of environmental improvement and action at TJY and other areas. Environmental promotion officers who have been through the training program hold environmental lessons at the morning staff assembly everyday for different sections and production lines as a means of enhancing awareness of environmental improvement.



Environmental lesson at morning staff assembly for each assembly line

\*Figures indicate total for the period between January and December

# Overseas Initiatives : EMI (Philippines)

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## EMI Receives the Outstanding Environmental Performer Award from the Philippine Government in Recognition of its Environmental Conservation Efforts

EDS Manufacturing Inc., (EMI), founded in the Philippines following the establishment there of Yazaki-Torres Manufacturing Inc. (YTMI), is an important production base exporting wiring harnesses to Japanese and North American automobile manufacturers. Since acquiring ISO 14001 certification, compliance with local laws and regulations has been at the forefront of environmental activities at EMI.

### Outstanding Recognition for Action Based on ISO 14001 Standards

As a result of the February 2004 government audit of EMI's environmental protection activity, EMI was named the most outstanding of all overseas-owned enterprises and was awarded the Outstanding Environmental Performer Award by the Republic of the Philippines Department of Trade and Industry in March. Environmental responses and achievements based on ISO 14001 requirements and strict observance of laws, regulations, and standards set by the Philippine government were cited as the main reasons for the award.



EDS Manufacturing, Inc. (EMI) receives the Outstanding Environmental Performer Award from the Republic of the Philippines Department of Trade and Industry Secretary Cesar V. Purisima

### Nearly 98% of Waste Recycled through Promotion of 5Rs

EMI has been working hard to reduce waste based on the concept of 5Rs (Reduce, Reuse, Recycle, Repair and Refuse) and now recycles 97.6% of all waste generated. A program to ensure thorough sorting of waste, recycling, and disposal, was formulated and implemented. Waste is now sorted into color-coded recycling bins and

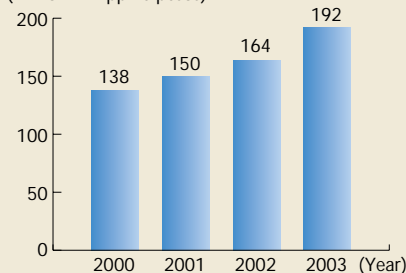


Color-coded recycling bins to indicate type of waste

recycled through an outside operator.

EMI is also working on projects to gather fallen leaves and grass from within the factory premises for composting, to reduce water consumption and wastewater discharge, and to use treated wastewater as water for plants and greenery onsite.

### Profit from Sale of Recycled Materials (Million Philippine pesos)



### Environmental Education to Encourage Active Participation by All Employees

In order to spread an understanding of the environmental management system throughout the company and to promote awareness of environment-related programs and action, EMI provides environmental education to newly recruited employees. A bulletin called the EMS News is published once a year to present information and provide a status report on environmental activities and programs at EMI. The bulletin is distributed not just to all employees but also to people in the local communities and serves a useful role in promoting awareness among staff and understanding from the community.



Environmental education for new recruits



EMS News presenting environmental activities at EMI

### Coexistence with the Local Community

EMI distributes surplus materials from the factory and used pallets to Imus and other cities to be used for urban development and beautification, and also regularly distributes them to employees by lottery.



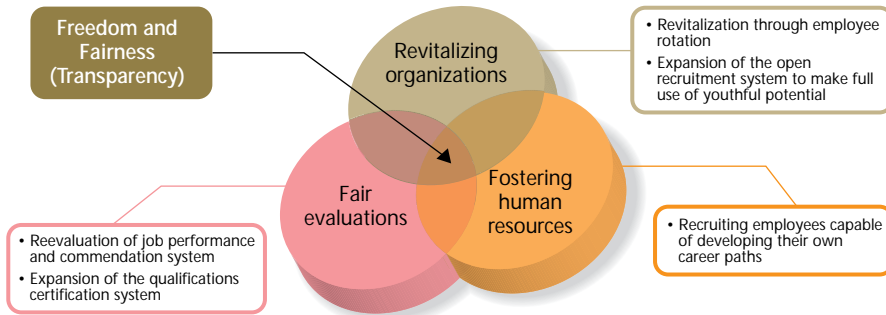
Used pallets for distribution to local authorities and employees

EMI has built a sidewalk for both employees and local residents along both sides of the road to promote safety and help prevent accidents. As a shortage of clean water in the Philippines has resulted in high water utility charges, EMI distributes water regularly to local residents. When fire breaks out in the vicinity, assistance is also given to replenish fire engine water tanks.

# People

## Caring About People

Yazaki states in its Fundamental Management Policy that it will “care for people, by creating a corporate culture that maximizes the capacity for individual and team-work, while sustaining people’s dreams.” We are working to create enthusiastic staff and an active company.



### Fostering of Human Resource Development

In order to create the foundation necessary for development of professional human resources in all job types and divisions, Yazaki has continued to foster employee growth and development through training programs focused on continuity of corporate principles, basic human skills, and globalization. In response to recent societal changes, collaborative work with specialist divisions has enhanced employee training programs and company-wide New Yazaki System (NYS) activities, and allowed Yazaki to incorporate environmental responses in a timely manner.

### Anchor System

Yazaki has been operating the Anchor (meaning the last runner in a relay) System since 1990 to promote reemployment of personnel who have reached retirement age. In 2001 and 2002, approximately 16% of employees who reached retirement age (60 years old) were rehired. The number of employees who seek reemployment is increasing yearly, with up to 80% of employees who reach retirement age interested in reemployment in recent years. Yazaki reviewed and expanded the system to provide reemployed personnel work not only at the previous workplace, but at any Group company. Under the new system, job position information is collected Group wide, and employees seeking reemployment are registered and reemployed when suitable positions meeting the needs of both employee and employer are found.

### Human Resources and Labor Affairs

#### Basic Principles

Guided by the basic principles of Freedom and Fairness, Yazaki’s human resource operations rely on three pillars to put these principles into practice: (1) revitalizing organizations; (2) fair evaluations; and (3) fostering human resources. In this way, the Human Resources Division is working to cultivate the corporate ethos and human resources necessary to proactively adapt and change in the 21st century.

Based on the idea of being a company that “cares about people,” Yazaki is reforming and improving operations and focusing on new, highly efficient businesses while creating environments for yet new businesses, thus fulfilling our management responsibility to protect employment. We are building strong relationships of trust and enhancing understanding between

labor and management by working together to create pleasant workplace environments.

### Evaluation and Commendation Systems

In the pursuit of fair and impartial evaluations, we have introduced an evaluation system based on responsibilities and performance. Goal management previously applicable only to managers is now applied to all employees to raise motivation. Role behavior evaluation allows frank and open evaluation of employee performance through both self-evaluation and evaluation by supervisors based on the degree of achievement of goal management and role behavior. Together with the highly transparent, checked and balanced evaluation system, a commendation system to recognize individuals who have made particularly strong efforts or achieved noteworthy results further motivates employees, encourages personal effort, and leads to higher employee satisfaction.

### ■ FY2004 Educational Training System and Target Participants

		General Education (General Affairs and Personnel Division)						
Section	Target	Basic skills/Role recognition/Expanding horizons			Language ability / Global skills			Other (Courses for specific positions)
		Role recognition / Expanding horizons	Management skills	Corporate policy / Values	Continued higher education within Japan	Language ability / Global skills	Continued higher education overseas	
Skill Application Stage	Associate Director	Associate director training (33 people)						
	Grade 12			Discussion with President				
	Grade 11	Training by grade						
Skill Enhancement Stage	Grade 10		Management training (Dept. / Section Managers)					
	Grade 9	Training of Managerial Assistants (230 people)						
	Grade 8							
	Grade 7	Training of Section Chiefs (300 people)						
Skill Development Stage	Grade 6	Training of Senior Staff Members (347 people)						
	Grade 5			Discussion with Chairman				
	Grade 4				Toyota Technological Institute (advanced degree)			
	Grade 3				Toyota Technological Institute (undergraduate degree)			
	Grade 2							
Grade 1								



## Labor Relations

Based on the principles of dialogue and autonomy, the Yazaki Employee Labor Union is active in three core areas: improving management and working conditions, raising social benefits, and enriching the Yazaki organization. The Union and management work in close cooperation as the two sets of wheels of a single vehicle to achieve their goals. The Union consists of a head office and twelve regional offices and operates a Culture Center, which is in charge of employee education and public relations, a Life Center, which provides a wide range of support for volunteer and other activities both at and outside of work, and a Recreation Center, which works to enhance employee leisure enjoyment. The union also has three specialist committees—the Wage Labor Committee, the Overseas Professional Committee, and the Political Policy Committee—and the Revolution of Youth (ROY) organization, made up of members 30 years of age and younger.



A newsletter published last year to mark the 40th anniversary of the Yazaki Employee Labor Union

## Employment Without Regard to Nationality

Development of a global personnel policy is an urgent prerequisite to being able to share human resources and promote active employee rotation internationally. Yazaki began recruiting personnel without regard to nationality in FY2003. By FY2004, Yazaki had hired twelve foreign nationals from seven different countries. Most of them have completed a four-year degree at a Japanese university.

### ■ Hiring by Nationality (FY2004)

Country of Origin	Number of Persons Hired
China	4
Malaysia	2
Bangladesh	1
South Korea	2
India	1
Mexico	1
United States	1
<b>Total</b>	<b>12</b>

## Global Response

### Worldwide Human Resources (WWHR) Integration Committee Meeting

In 2004, Yazaki gathered the leading personnel representatives from six regions around the world (Europe, the United States, Central and South America, ASEAN, China, and Japan) and held the first annual WWHR Integration Committee Meeting in Japan. The conference, which adopted as its theme "Creating a Global Feeling of Unity and Effectively Using Human Resources," addressed five major issues: (1) promoting a shared Yazaki Way; (2) personnel mobility; (3) developing personnel skills; (4) enhancing communications skills; and (5) global personnel structures. Other issues such as compliance, environmental strategies, new businesses, and personnel strategies were discussed in expert sessions, laying the foundation for future global personnel strategies.



The first annual WWHR Integration Committee Meeting

### Adventure School

In 2001, Yazaki began providing employees with scholarships to research, plan and implement a six-month overseas training program themselves called the Adventure School. Objectives of the program are to develop a wider awareness and appreciation of other cultures, language proficiency, creativity, and emotional and mental strength. The programs take place around the world. As of FY2003, a total of 713 employees had completed the program, which is open to all new recruits who began working for Yazaki upon graduation from college, high school, or an occupational school.

### ■ Number of Adventure School Participants

FY	Number of employees (participation rate)	FY	Number of employees (participation rate)
1996	101 (100%)	2000	94 (87%)
1997	115 (100%)	2001	65 (86%)
1998	112 (100%)	2002	82 (85%)
1999	106 (79%)	2003	38 (70%)
<b>Cumulative total</b>		<b>713</b>	

## Global Training Program

In 1996, Yazaki introduced the Global Training Program with the aim of enabling potential candidates for management positions at overseas affiliates to acquire skills in the Japanese language, corporate culture, and business practices, and also learn about Japanese life, language, customs and culture during a one-year program in Japan. In FY2004, eighteen participants from fifteen factories and offices in ten countries participated in the program.

### ■ Cumulative Number of Global Trainees by Country

Country	No. of participants	Country	No. of participants
United States	13	Vietnam	1
Mexico	24	Singapore	1
Brazil	2	Australia	6
Colombia	3	Samoa	11
China	10	Slovakia	13
The Philippines	28	Portugal	1
Thailand	22	Turkey	2
Indonesia	7	Belgium	1
<b>Total</b>		<b>145</b>	



Global Trainees tour the Numazu Factory

### Summer Camp

In 2003, Yazaki once again held a Japan-based summer camp for domestic employees' children in their fifth and sixth years of elementary school, an overseas summer camp for employees' children in their second year of junior high school, and the Summer Camp in Japan for the children of local staff of overseas affiliates. The overseas summer camp was held in Australia for the first time. Participants enjoyed a seven-day overseas experience during their summer vacations.

### ■ Number of Summer Camp Participants

Type of camp	Japan-based summer camp	Overseas summer camp	summer camp in Japan
Participants	Children of Japan-based employees	Children of Japan-based employees	Children of overseas employees
First year (no. of participants)	1977 (27)	1985 (18)	1998 (16)
2003	168	139	126
<b>Cumulative total no. of participants</b>	<b>4,562</b>	<b>3,084</b>	<b>1,063</b>

# People

## Employee Health and Safety

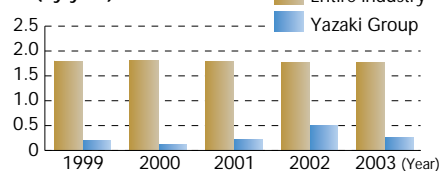
### Employee Health and Safety Policies

Yazaki emphasizes health and safety of its own accord based on the awareness that employee health and safety is a critical management issue. Today, diversification of work formats and employment mobility are increasing dramatically, making employee health, safety and other social concerns a top priority. With respect to safety, Yazaki continuously strives to identify and reduce workplace risks to even further reduce and hopefully eliminate work-related accidents. To promote employee health, Yazaki is working to support good mental health and eliminate excessive work. All production sites have taken voluntary action to comply with the OHSAS 18001 international standards on employee health and safety and as of FY2004, two production sites had acquired certification.

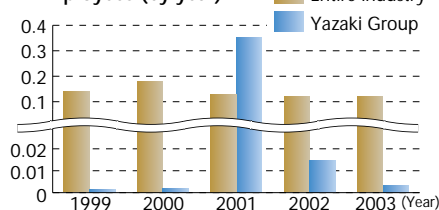
#### Work-related Accidents

The graphs below show the frequency and severity of work-related accidents compared to national statistics. All fourteen production sites are competing against each other for safety awards based on standards created by the Plant Health and Safety Committee. The monthly rankings serve to further promote efforts to completely eliminate work-related accidents.

#### Work-related Accidents per 100 Employees (by year)



#### Severe Work-related Accidents per 100 Employees (by year)



\*Comparison with nation-wide figures disclosed by the Ministry of Health, Labour and Welfare in the "Survey on Industrial Accidents"

#### Yazaki Group Health and Safety Goals

Category	Goal	Details
Work-related accidents	Reduce accidents that result in absence from work	Implement health and safety management methods that reduce risks. Reduce existing risks by promoting "safety observation" and take thorough measures to ensure that employees who handle machinery are fully trained and able to operate it safely.
Health management	Enhance mental health management	Actively promote mental health through self-care and support from the workplace.
	Prevent health issues resulting from excessive work	Eliminate extended periods of continuous work. Implement improvements as suggested by industrial physicians and conduct thorough health management based on health recommendations derived from employee interviews.
Traffic accidents	Eliminate work-related traffic accidents	Take measures to eliminate work-related traffic accidents, which have increased dramatically.

#### Mental Health

The Yazaki Group conducted a mental health survey to determine the status of persons with mental health issues in preparation for the introduction of a group-wide mental health support system. The survey covered employees in production, technology, development, and management divisions, and the results were organized by occupation, age, rank, and qualifications. The results of the survey and data from systems already in operation at some sites will be used in expansion of support systems to the entire Yazaki Group.

#### Crisis Management for Overseas Travelers

To ensure the safety of employees who are sent overseas on assignment or traveling for business, Yazaki conducts thorough crisis management tailored to the conditions of each overseas location. Yazaki created an information network with the cooperation of overseas affiliates, and public safety and terrorism information is posted on the company intranet. A range of information concerning overseas life and conduct (and advisories / warnings when necessary) is provided to employees before leaving. In addition, a Crisis Management Committee was established under the direct authority of the President and structures put in place to respond immediately in the event of any accident or incident.

#### Preparations for an Earthquake in the Tokai Region

In preparation for a major earthquake in the Tokai region Yazaki has reinforced buildings, taken measures to secure production equipment and fixtures to prevent them from toppling, improved disaster response manuals, and conducted thorough disaster response training. In November, we distributed a document entitled "Preparing for the Tokai Earthquake" and took other measures based on the pamphlet "Passport to Life" published by the Yazaki Disaster Response Headquarters to raise employee awareness of household earthquake response measures and the need to always be prepared.



#### Skills Olympics for Disabled Employees

Yazaki is committed to employing and raising the skills of disabled persons. At the 2003 Abilympics (an occupational skill competition for persons with disabilities), Takashi Katsuzawa of the Y-CITY System Center won the gold medal in the database category.



Takashi Katsuzawa, winner at the Abilympics

# New Business Development to Protect Employment

Yazaki is putting its efforts into developing new businesses, including environment-related businesses, in an effort to protect employment at affiliated companies in Japan due to the shift of production overseas, and to create a low anxiety work environment where employees can thrive.

## Creating Employment

Yazaki sees the protection of employment as a major management issue and to safeguard employment at affiliated companies in response to the erosion or hollowing out of the domestic manufacturing industry, Yazaki is working to develop new business opportunities. In the process of new business development, Yazaki seeks to create meaningful and stable work that reduces environmental impact while at the same time benefits the local community. In addition to the Corporate Planning Division and the Finance Division, which are under the direct authority of the president, Yazaki has also established an Affiliate Business Development Division, which provides comprehensive support to affiliated companies to develop businesses in the nursing care, recycling, and service sectors.

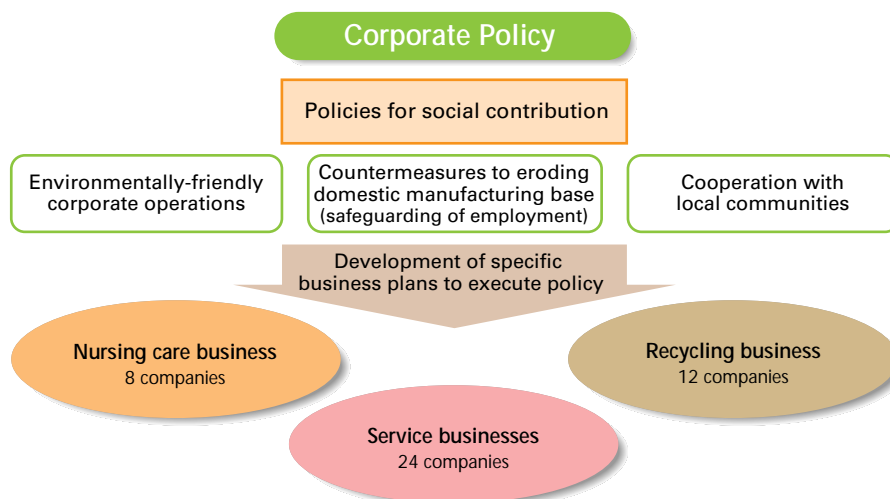
### Content of New Businesses

Type of business	Description	No. of bases (Jul. 2004)
Nursing care business	Home-visit nursing, day-care center nursing, live-in nursing care, sale of nursing care appliances, other	8
	Re-use of toner cartridges	1
Recycling business	Recycling of gas meter materials	8
	Recycling of food waste as fertilizer	1
	Recycling of used paper	1
	Recycling of glass bottles	1
Service business	Gas heater safety inspection and maintenance	1
	Insurance agency	23

### Nursing Care

In addition to day-care center, home-visit, and live-in nursing care services and support for disabled persons, Yazaki expanded business activities and began sales of nursing care equipment in FY2004.

In FY2004, Yazaki Corporation also entered the nursing care business with the launch of nursing care preparatory facilities at Y-CITY under the name *Kami Fusen Yazaki Care Center*. The center will initially engage specifically in home-visit nursing, live-in nursing care support and sale of nursing care appliances and equipment, but it will later expand to include value-added services such as rental and sale of nursing care equipment and home renovations. In April of 2004, Yazaki Corporation and eight affiliates held a conference to exchange information on the nursing care business. Each company reported on the current status of business as well as future issues and prospects and responded to questions, contributing to the promotion of the nursing care business by affiliates.



### Recycling

Existing environment-related businesses include gas meter recycling and re-use of toner cartridges for laser printers. In FY2004, Yazaki launched a paper recycling business, and is preparing to launch glass recycling and food waste recycling businesses in FY2005.

#### ■ Paper Recycling

Paper is converted into a powder, then molded and reused in foamed paper products that do not contain any hazardous substances such as chlorine, can be discarded with ordinary waste and have been designated in compliance with the Law on Promoting Green Purchasing. Foamed paper has excellent heat insulating and cushioning properties and can be used to manufacture a wide range of value-added products such as buffering materials, sheets, boards, and coolers. Gifu Parts Co., Ltd. began production of foamed paper products in January of 2004.



Example of foamed paper product YuuPack

#### ■ Glass Recycling

Manufacture of Super Sol, a lightweight construction material made from waste glass began in July 2004. Super Sol has a wide range of construction applications including in lightweight concrete frames, foundations, base materials for rooftop gardens, and as an absorption material to contain and clean up spills to prevent pollution.



Super Sol

#### ■ Food Waste Recycling

Approximately nineteen million tons of food waste is generated in Japan each year, but only about 9% of it is reused. Niigata Parts Co., Ltd. plans to launch a new business in the spring of 2005 to sort food waste from other raw waste to be incinerated for use in fertilizer and livestock feed, and to generate energy from biomass.

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## Society

# Contributions to Society

Based on Yazaki's policy of being "a corporation needed by society," we are involved in a wide range of initiatives to help create better societies in Japan and abroad.



Opening ceremony of part-time schooling system programs offered by YEV Vietnam to the local community



### The Yazaki Memorial Foundation for Science and Technology

In FY2004, the Yazaki Memorial Foundation for Science and Technology received 153 applications for grants. The Foundation awarded Grants for General Research to five people (three years each), Grants for Specific Research to one person and ten one year Grants for Research Encouragement, principally awarded to young researchers up to thirty-five years of age. Additionally, travel grants were made to thirteen young researchers in the framework of international cooperation, helping them make international presentations of their research.



2004 grants presentation ceremony

### Support for NGOs and Other Organizations

Yazaki provided funds to assist the NGO Save the Africa, which is engaged in providing assistance to villagers in obtaining daily necessities and medical treatment mainly in African villages; and to Wildlife, a magazine published by the NPO Nature Film Network with the aim of saving flora and fauna threatened with extinction.



Wildlife Magazine, published by the NPO Nature Film Network

#### Research Topics Supported by Grants in FY2004

##### Grants for General Research

- Development of a novel solid electrolyte material to conduct trivalent aluminum ions for practical application
- Development of microlithium recyclable battery with embedded silicon chip
- Creation of ultra-lightweight high-efficiency thermoelectric conversion element through control of nano-structures for high-level energy recovery
- Creation of polyrotaxane gel for recycling of cross-linked polymers
- Modeling of biological warning and defense systems and application to autonomous robots

##### Grants for Specific Research

- Development of environmentally adapted high-performance lead-free piezo-electric material through nano-domain engineering

##### Grants for Research Encouragement

- Research into analog AF circuit technology capable of dynamic restructuring
- Research into synthesis of phosphorescent material with carrier recognition site
- Research and development into energy-saving adaptation of nanoscale mold manufacturing technology based on new surface improvement process
- Investigation of stimulus-response mechanism of acrylamide polymer aimed at development of novel intelligent material
- Actual spatial measurement by carrier transport parameters in semiconductor nanostructures and application to nano-device simulation
- Magnetocaloric effect in rare-earth nitrates — development of magnetic refrigerant coolant operating in the range from liquid nitrogen temperature to liquid hydrogen temperature
- Development of energy-storing photoinduction capacitor
- Basic research into soil water content estimation by microwave active sensing
- Development of high-function heat-sink material based on fiber-particle hybrid-reinforced Cu substrate composite material
- Development of novel recycling technology for waste generated in aluminum recycling process

## Activities of Individual Divisions, Offices, and Factories

### Factory Initiatives to Enhance Communication with Local Communities

Yazaki's production sites work to establish good communication links and close relationships with the surrounding local communities in an effort to contribute to a better society. In FY2004, twelve production sites conducted factory tours and carried out beautification activities in the surrounding areas.

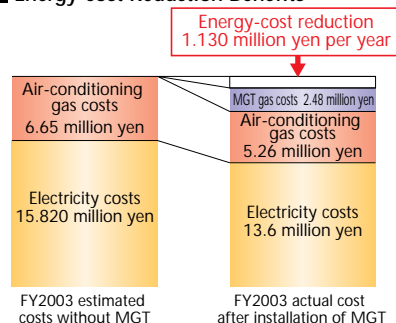
### Opening of Cogeneration System Facility to the Public (Energy Equipment Operations)

An electric power monitoring system was installed at the Chubu Customer Center at the same time a micro gas turbine cogeneration system (MGT) was introduced. To demonstrate the energy-saving performance of the cogeneration system that supplies electricity and heat simultaneously and to promote an awareness of energy resources, the facility was opened to the general public. Cogeneration systems are generally very efficient and represent a vital new system for countries like Japan that are poor in energy resources. The opening up of the facility was meant to encourage more widespread use.



Cogeneration system at Chubu Customer Center

#### Energy-cost Reduction Benefits



### Participation in International Exchange Exhibition of Children's Art (International Human Resources Department)

Yazaki exhibited paintings by the children of overseas employees at the International Exchange Exhibition of Children's Art held every year in October by the city of Narita, Japan. This exhibition is aimed at fostering the dreams and creativity of children, the driving force of the 21st century, and deepening their understanding of different cultures and the lives of people in other countries through the medium of art. Some 80 works from Portugal, Indonesia, Samoa, and Slovakia were exhibited through Yazaki.

### Cooperative Involvement in Youth Health Education Campaign (General Affairs Department)

Yazaki cooperated in the Youth Health Education Campaign organized by Sankei Photographic Service Inc. with the assistance of the National Youth Education Council. The Sankei Color Encyclopedia, published as part of the campaign to encourage intellectual and emotional development (issued four times a week or 204 times a year), and information panels were presented to the local First Toyooka Elementary School and Toyooka Junior High School.



Sankei Color Encyclopedia

### Support of Reforestation Activities in China through Collection of Aluminum Cans (Y-CITY)

Y-CITY continues to use money raised by selling aluminum cans collected by employees to benefit welfare and charity organizations. In FY2004, Yazaki contributed one million yen to a project organized by

Greening the Deserts to plant trees on 625 square kilometers of the Inner Mongolia Autonomous Region of China. Yazaki plans to reforest an area of one square kilometer of desert land, to be known as the Yazaki Y-CITY Forest, and cultivate it over a ten-year period into a forest of 12,000 trees. This area was chosen as the site for the reforestation project to attract agriculture and other sustainable industries to the area, and also to protect the world heritage site of Karahot.



Reforestation in progress in China's Inner Mongolia Autonomous Region

### Charity Concert held to Support Medical Aid (Y-CITY)

The city of Susono, where Y-CITY is located, is preparing to enter into a sister-city arrangement with a Romanian city. With the aim of providing medical aid to Romanian children in the framework of this relationship, a charity concert featuring the Transylvania Ensemble was organized by the Susono-Romania Friendship Association and held at Y-CITY in November 2003. The Romanian ambassador, the mayor of Susono, and the director of the Susono-Romania Friendship Association were among the distinguished guests who joined an audience of over 300 for the lively event. Yazaki presented the 50,000 yen that was collected at the concert to the Romanian embassy.



Charity concert to provide medical aid to Romanian children

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### Cooperation in Study Visits for Junior High School Students (Y-CITY)

Third grade students of the local Tomioka Junior High School, having chosen "Studying the Susono City of the Future" as a general study theme, were invited for an enterprise study visit by Y-CITY. In November 2003, six pupils were given a tour of the biotope, recycling center, and other facilities as a way of supporting their schoolwork. The pupils took notes eagerly and came out with a host of questions.



Junior high school students listen to an explanation in the product display room

### Exchange with the Local Community and Environmental Education (Numazu Factory)

In an effort to enhance communication with residents of the surrounding Ooka district, an "open house" for the local community was hosted in the parking lot of the Numazu Factory in March 2004. On the day, blessed with fine weather, factory staff and local people met to chat and enjoy the attractions provided in what turned out to be an enjoyable event.



Open house for local residents organized by the Numazu Factory

The factory also participates each year in an Environmental Fair organized to raise the environmental awareness of city residents. At the Environmental Fair held in February 2004, information panels on resource recycling and environmentally considerate products were displayed as an example of initiatives taken under the environmental management system.

### Active Participation in the Creation of a Better Hometown (Niimi Factory)

The city of Niimi in Okayama Prefecture has declared as its basic policy "Reorienting our hometown to work for global environmental preservation and the use of sustainable energy." As it rolls out the Niimi City New Energy Vision, the city is working hard to introduce new energy forms and enhance environmental education. The Niimi Factory is representing local business establishments as one of the eighteen participating members comprising the Vision Formulation Committee. In this way, the Niimi Factory is taking an active part in urban development based on clean energy sources, for instance by presenting to the city authorities proposals on clean energy use in seven potential projects drafted with reference to the particular features of Niimi City.

The factory also loans its premises to elementary schools, senior citizens' clubs, and other sections of the public, organizes visits to retirement or nursing homes, and takes part in a very wide range of activities tailored to the needs of the local community.



Volunteers visit a retirement home

### Support of High School Students' Environmental Protection Study (Hamamatsu Factory)

In response to a request from first-grade students of the nearby Hamamatsu-Nishi High School, which has chosen "Environmental Protection" as a general study theme, the factory organized an enterprise study visit in July 2003. As the event took place during the summer holiday, participation was on a voluntary basis, but all twenty-one boys and girls nominated for the visit took part. Pupils took serious advantage of the opportunity to learn, eagerly taking notes.



High school pupils listening to a talk on environmentally considerate products

### Annual Spring Clean-up Campaign (Shimada Factory, Rokugo Factory)

The Shimada and Rokugo factories, both situated in the city of Shimada, organize a joint Clean-up Campaign every spring. As part of the campaign, litter was collected in the factory vicinity. At the Shimada Factory, thirty five volunteers cleared trash from the area outside the perimeter fence, while at the Rokugo Factory, all eighty staff participated in a clean-up of the cherry tree-lined banks of the Tochiyama River in preparation for the approaching cherry-blossom viewing season.



Volunteers from the Shimada Factory



Rokugo Factory staff clean along the banks of the Tochiyama River

### Active Participation in Various Community Activities (Hiroshima Office)

Since relocation of the office, staff housing, and staff dormitory to the present site in 1973, all residents living in company housing have taken an active part in community events. This includes not only local trash-clearing activities held twice yearly but also participation every year in the local sports day and other notable local events, and acting as officers of the local residents' association.



Hiroshima Office staff clear trash from the area around staff housing and the dormitory

# Creating Better Societies Overseas

Yazaki's policy — "a corporation in step with the world" and "a corporation needed by society" applies equally to our operations around the world.

All overseas affiliates are engaged in activities and initiatives to improve local social conditions according to the needs and particular features of their region.

## Activities at Overseas Affiliates

### Serving the Community with Clean-ups at Three Bases SYA / HNY (China)

Under the slogan "clearing trash from our towns to create an attractive and hygienic environment," all Yazaki affiliates in China aim to make community clean-ups a regular feature. In December 2003, around 2,070 employees of Shantou Special Economic Zone Yazaki Auto Parts Co., Ltd. (SYA) took part in a clean up of "Time Square" in Shantou City. Six truckloads of garbage were removed from the 60,000 square-meter area. In March 2004, 1,356 employees of the Chenghai Factory of Shantou Special Economic Zone Yazaki Auto Parts Co., Ltd. (SYA-CH) took part in a clean up in the vicinity of the factory, collecting sixteen truckloads of trash in two hours. Around the same time, around 1,500 employees of Huanan Yazaki (Shantou) Auto Parts Co., Ltd. (HNY) participated in clean ups of the area around the factory and the administrative district of the city.



SYA-CH employees clean-up the vicinity of the factory



SYA-CH employees gather to begin clean-up operations

### Installing Artificial Bat Roosts to Protect the Microbat AAPL (Australia)

The microbat is a protected species in the area where Australian Arrow Pty. Ltd. (AAPL) is located. By consuming large numbers of mosquitoes and other insects every night, microbats play an important role in maintaining the environmental balance within the local ecological community. To meet their daytime roosting requirements, microbats require older trees with exfoliating bark or naturally occurring tree hollows, but the loss of the area's forests resulted in a loss of habitat and the ecological balance was beginning to break down. Tree-planting activities are now in progress, but it will be many years before newly planted trees will be old enough to provide the tree-hollows required by bats. In an ongoing process of research, the experience gained through trial and error has led to a much greater understanding of the roosting requirements of microbat species. AAPL has succeeded in designing artificial trees to provide a suitable roosting environment for the microbat. As it can take weeks, months and sometimes years for local bat populations to find, inspect and finally occupy artificial bat roosts, the new bat-roosts are being monitored for signs of bat occupation using various techniques. The cooperation of all employees by not interfering with the bat-roost poles in any way is helping AAPL protect the microbat.



Artificial bat roosts set up at AAPL



The microbat, a protected species in Australia

### Energetic Social Action for Local Development (Brazil)

The Yazaki Irati Plant (YAB) is located in the Parana State in the South of Brazil — an area with essentially an agricultural economy. Irati is a small, lovely town with only three manufacturing facilities. Implementation of charitable initiatives to benefit employees and the city of Irati are part of YAB company policy. These activities have included the opening of a creche so that employees can come to work without worrying about their children, support for the building of an extension to the local elementary school, and the building of homes for poor families in the city.



Employees' children at the creche

YAB's participation in special events, traditions and observances such as Greenery Day (dedicated to tree-planting), cultural competitions and environmental protection activities on Children's Day, and the Irati Peach Fair promotes exchange and friendly contact with the local community. Additionally, the company has worked to stimulate local development, for instance by presenting rescue equipment to the Irati Fire Brigade, providing assistance for fire engine repair, or by presenting company uniforms to public sanitation workers.



Tree-planting on Greenery Day

### Receives Top Business Award in Recognition of Outstanding Contribution to Society YEV (Vietnam)

Every year since its establishment in 1995, Yazaki EDS Vietnam, Ltd. (YEV) has presented books to thirty-five elementary, junior high, and senior high schools in the Ben Cat district where it is located.



Ceremony to present books to local schools

As the company employs many people from poorer households who have had to take up jobs to help make ends meet and therefore could not attend school, after repeated discussions with the Ben Cat People's Committee and local school board, and with the cooperation of these bodies, YEV established a school offering a part-time schooling system in August 2003. The school began with 150 junior high school pupils, but enrollment has now swelled to over 400, including senior high students. The school has of course run out of classrooms, but with the full support of the Provincial Labour Office and the Labour Union, it has been able to borrow rooms to use from the local elementary school.



Opening ceremony of part-time schooling system

As this is an area with many households afflicted by poverty, YEV has helped build houses, distributed New Year decorations free of charge, and expanded employment by building a second factory in an effort to boost local prosperity. For these and other activities, in FY2004, YEV was presented the Top Business Award by labor unions from among the 3,000 enterprises in Binh Duong Province.

### Environmental Improvement of Surrounding Canals TAPC (Thailand)

During the hot season (March to May), the canal which runs past the front of Thai Arrow Products Co., Ltd. (TAPC) used to become clogged with weeds which slowed the water flow and resulted in an unpleasant smell. Many of the employees of TAPC voiced their opinions that environmental improvement was needed. An independent survey was carried out and, as the land was publicly owned, the cooperation of the provincial authorities was requested in order to begin making improvements. It was agreed that the province would lend a power shovel, and TAPC, as a means of contributing to the community, set about formulating an improvement plan. Not only was the canal basin cleared of weeds and mud, but trees were also planted to improve the scenery. Local people have expressed their delight that the water flow has improved, the unpleasant smell has vanished, and the canal has taken on a more attractive appearance. In order to maintain the improved environment, TAPC conducts regular inspections and continues to remove weeds and take other action whenever necessary.



Before



After

Canal basin before and after improvement



**Major Awards Received in FY2004**

**Japan**

In recognition of new technological developments relating to the paper "Detection of Volatile Organic Compounds by a Catalytic Combustion Sensor under Pulse Heating Operation" published in the Electrochemical Society of Japan's journal Electrochemistry in 2004, Yazaki was awarded the 2004 Scientific Paper Prize. The Yazaki paper was one of only four of the 100-plus scientific papers published in 2004 to receive the award.

Meanwhile, Toru Fukuda of Shimada Factory received the 2004 Education, Culture, Sports, Science and Technology Minister's Award for Invention and Service in Occupational Duties.



Presentation ceremony of the Electrochemical Society of Japan 2004 Scientific Paper Prize

**Overseas**

In recognition of its success in reducing waste, AAPL (Australia) received the Waste Wise Business award from the state government. It also received the Sustainable Business Award in acknowledgement of its environmental preservation action in nearby Mornington Peninsula, which has been designated a biosphere reserve by UNESCO.

EMI (Philippines) received the Outstanding Environmental Performer Award, awarded by the Philippine government to overseas-owned enterprises.

Circuit Control Corporation (CCC), USA won the Gerald "Smitty" Smith First Place Safety Award presented by the Northwest Michigan Industrial Association in recognition of its efforts to promote labor health and safety.



Members of the CCC Safety Committee after receiving the Gerald "Smitty" Smith First Place Safety Award

**Our Latest Bullet Train "Mottainai!" Ad**

Our Shinkansen (Japanese bullet train) advertising campaign was revamped on March 1, 2004, with "Mottainai!" as the new theme.

According to the Japanese dictionary, "Mottainai!" is defined as "A sense of regret over something being wasted due to undervaluing its worth;" in other words it means to appreciate the value of a "thing."

During the Edo Period (1603 - 1867) the Japanese people took recycling very seriously. The Japanese at that time were not as wealthy as they are now, and so understood without having to be told the true worth of things to their lives, and took care not to waste anything. However, as our material riches increased, our native predilection for prudence rapidly diminished, and we began to hear the word

"Mottainai!" less and less; ultimately becoming a society that gives little heed to the worth of not only the tangible, but life's intangibles as well.

"Mottainai!" is not a word that merely applies to the material world, but to time and opportunities, potential and wisdom; indeed to every aspect of our lives and endeavors. In the 21st century, along with the pressing need to abandon our "use it once, and throw it away" approach to the economy and consumption in favor of safeguarding the environment and reducing hazardous materials we have begun to see "Mottainai!" in a whole new light.

Our new "Mottainai!" advertising campaign

seeks to embody the above concepts.

Founder and President Sadami Yazaki embodied the notion of "Mottainai!" when he claimed that he wanted to be "Japan's No. 1 waste collector." The founder's sense of values led to implementing strict corporate recycling and reuse policies when Iwao Industries was founded thirty-three years ago, the present Chairman's strong emphasis on the development of solar energy, and eventually the present day co-generation type solar energy use water-fired absorption chiller heater equipment.

It is our responsibility to preserve a healthy environment for the next generation on life's splendid stage, our Earth. Starting with corporate-wide activities thirty-three years ago and continuing to this day, the notion of "Mottainai!" has at all times informed our practices.



Yazaki's bullet train ads March 2004



May 2004



July 2004

Environmental Management

The Environment

The Globe

People

Society

Appendices

# Environmental Chronology

Yazaki Events		National & World Events
● Recycling of copper materials begun with introduction of Thomas furnace in manufacture of electric wires	1957	
● Collection begun of used copper, aluminum, and paper for use as raw materials for Yazaki products	1964	1961 ● Foundation of World Wildlife Fund 1962 ● Publication of Silent Spring by Rachel Carson
● Introduction of non-polluting DFP Dip Forming Process (continuous casting) at Yazaki Electric Wire Co., Ltd. ● Sales release of "Dondo" waste incineration furnace featuring reduced smoke pollution	1969	1964 ● The oil tanker Torrey Canyon runs aground 1967 ● Enactment of Basic Law for Environmental Pollution Control 1968 ● Dr. Svante Oden, a Swedish scientist, announces that atmospheric pollution in Europe is the cause of acid rain in Scandinavia ● Enactment of Air Pollution Control Law ● Enactment of Noise Regulation Law
● Establishment of used electric wire recycling company Iwao Industries Co., Ltd. ● Launch of CFC-free modular type absorption chiller-heater <i>Aroace</i> ● Establishment of Environmental Affairs Department and formation of company-wide Environmental Affairs Committee (Production Division)	1970	1970 ● Enactment of Law Relating to the Prevention of Marine Pollution and Maritime Disasters (repeal of Law for Prevention of Oil Spills at Sea) ● Enactment of Water Pollution Control Law and Waste Management and Public Cleansing Law ● Establishment of the Environment Agency
● Completion of <i>Solar House</i> , containing world's first solar-powered heating, air-conditioning, and hot-water supply system	1971	1971 ● Limits to Growth published by the Club of Rome ● United Nations Conference on the Human Environment held in Stockholm ● Announcement of Law on the Preservation of the Natural Environment ● Japanese government publishes first White Paper on environment
● Launch of solar-powered water heating system <i>Yuwaita</i>	1972	1972 ● MARPOL treaty ● Amendment of Air Pollution Control Law
● Launch of solar <i>Blue Panel</i> , heat insulation panels for heating, air-conditioning and hot-water supply systems; sales of hot-water powered chiller-heater <i>Aroace</i> ● Resource- and energy-saving office established (Sendai Branch Office) ● Launch of <i>Aroace</i> gas fired double-effect chiller-heaters ● Launch of <i>Solar House</i> solar-heat powered heating, air-conditioning, and hot-water supply system for use in snowbound areas	1973	1973 ● Washington agreement (CITES : the Convention on International Trade in Endangered Species of Wild Fauna and Flora) ● London Dumping Convention: Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter ● Ramsar Convention on Wetlands: protection of migratory birds ● Enactment of Vibration Regulation Law ● United Nations Conference on Desertification (UNCOD) held
● Launch of solar <i>Blue Panel</i> , heat insulation panels for heating, air-conditioning and hot-water supply systems; sales of hot-water powered chiller-heater <i>Aroace</i> ● Resource- and energy-saving office established (Sendai Branch Office) ● Launch of <i>Aroace</i> gas fired double-effect chiller-heaters ● Launch of <i>Solar House</i> solar-heat powered heating, air-conditioning, and hot-water supply system for use in snowbound areas	1974	1974 ● Nuclear power electricity generator accident at Three Mile Island
● Establishment of Yawara Industries Co., Ltd. for recycling of end-of-life wooden electric wire spools ● Launch of <i>Aroace</i> water heater featuring recovery systems for used steam and waste heat ● Foundation of Yazaki Memorial Foundation for Science and Technology ● <i>Aroace</i> modular controller awarded Outstanding Energy-saving Product Prize for its prize as a product with outstanding energy-saving characteristics ● Sales release of <i>Achichi</i> solar-powered hot-water supply system for domestic use ● Formulation of pollution control measures completed; dissolution of Yazaki Group Environment Committee and Environment Department to accompany transfer to system of response based on individual factories and offices	1975	1975 ● Introduction of regulation on total NOx volume
● Sales release of <i>Acemic</i> , which protects against damage by static electricity and electromagnetic waves ● Development of electric wire using non-halogen fire-retardant insulation	1976	1976 ● Helsinki Protocol: reduction of SOx emissions
● Sales release of <i>EE-Solar</i> and <i>Advance Solar</i> slim-line solar-powered domestic hot-water supply systems ● LPG cogeneration facility installed at Yazaki guesthouse(s) ● Establishment of Yazaki Scholarship Foundation in Manila to mark opening of EMI in the Philippines ● <i>EE-Solar</i> receives Top Technology Award for outstanding technology from Japan Solar Energy Society ● <i>Aroace</i> becomes the first device in the industry to be approved by Tokyo Metropolitan Government Bureau of the Environment as a Tokyo Metropolitan Commercial Small Boiler or Other Combustion Device with Low NOx Emissions ● Establishment of Environment and Safety Department	1977	1977 ● Montreal Protocol on Substances that Deplete the Ozone Layer ● Enactment of Law Concerning the Protection of the Ozone Layer ● Establishment of Intergovernmental Panel on Climate Change (IPCC) ● Basel Convention on the Control of Transboundary Movements of Hazardous Wastes ● Exxon Valdez runs aground
● Establishment of Environmental Safety Committee	1979	1979 ● Formulation of Guidelines for Measures to Prevent Global Warming ● Enactment of the Law for the Promotion of Utilization of Recycled Resources
● Launch of lead-free battery cables ● Launch of an improved and lightweight solar-powered water heater model ● Acquisition of ISO/DIS 14001 certification by Tenryu Factory ● Formulation of Yazaki Global Environment Charter ● Acquisition of ISO 14001 certification at Numazu and Susono Factory ● Introduction of LCA in electric wire divisions ● Launch of <i>Aroace</i> air conditioning systems ● Creation of biotope to mark establishment of Y-CITY ● Launch of <i>Ecology Cables</i> using polyethylene-based material ● Acquisition of ISO 14001 certification by Fuji Factory, Ohama Factory, Haibara Factory, Daitou Factory and four overseas bases ● Introduction of LCA in automotive wiring harnesses divisions ● Launch of environmentally friendly driving control system digital tachographs ● Launch of lead-free automotive electric wire and automotive vinyl tape ● Sales release of environmentally friendly adhesive tape made with polyethylene-based fire-retardant material ● Acquisition of ISO 14001 certification by Shimada Factory and three overseas bases ● Acquisition of ISO 14001 certification by Niimi Factory and eight overseas bases	1980	1980 ● Rio Earth Summit (Framework Convention on Climate Change, Forest Principles, Convention on Biodiversity, Agenda 21)
● Launch of high-efficiency <i>Aroace</i> (energy-saving model) ● Reorganization of Environment and Safety Department as the Environmental Affairs Division ● Establishment of Yazaki Environmental Committee, Environment Product Design Assessment Committee and Production Environment Committee ● Acquisition of ISO 14001 certification by Tochigi Factory, Y-CITY, Washizu Factory, Ohama Factory and twelve overseas bases ● Review of Yazaki Global Environment Charter, formulation of five-year Yazaki Environmental Action Plan and start of implementation ● Acquisition of ISO 14001 certification by seven overseas bases ● Installation of halogen free components in vehicles ● Survey to check for soil pollution at all manufacturing establishments ● Conversion to lead-free electric wires and cables ● Installation of easy-to-dismantle wiring harnesses in automobiles ● Acquisition of ISO 14001 certification by thirteen overseas bases ● Established the Sales Environment Committee, the Management Environment Committee and the Environmental Information Liaison Committee ● Environmental Committee Meetings held in Europe and North America ● Acquisition of ISO 14001 certification by one overseas base	1981	1981 ● Enactment of the Basic Environment Law 1993 ● Formulation of Basic Environment Plan 1994 ● Framework Convention on Climate Change, first Conference of the Parties (COP1) 1995 ● Elimination of designated CFCs 1996 ● Amendment of Air Pollution Control Law and of Water Pollution Control Law ● International standardization of ISO 14001 regulations
	1982	1982 ● Amendment of Waste Management and Public Cleansing Law ● Meeting of parties to the Framework Convention on Climate Change in Kyoto (COP3) ● Enactment of Law for Recycling of Specified Kinds of Home Appliances
	1983	1983 ● Enactment of Law Concerning Special Measures against Dioxins ● Enactment of Pollutant Release and Transfer Register (PRTR) Law
	1985	1985 ● Enactment of Basic Law for Establishing the Recycling-Oriented Society ● Enactment of Containers and Packaging Recycling Law ● Meeting of parties to the Framework Convention on Climate Change in The Hague (COP6) ● Meeting in Bonn of parties to the Framework Convention on Climate Change (continuation of COP6)
	1986	1986 ● Introduction of the Automobile Recycling Law ● Meeting of World Business Council for Sustainable Development (Johannesburg Summit)
	1987	1987 ● Enactment of Soil Pollution Law ● Enactment of end-of-life (ELV) directive ● Enactment of WEEE (EU Directive on Waste Electrical and Electronic Equipment) ● Enactment of RoHS (EU Directive on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment)
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## Glossary / Terms

		Page No.
<b>ISO 14001 (International Standards Organization)</b>	ISO 14001 is the cornerstone standard of the ISO 14000 series. It specifies a control framework / organization for an Environmental Management System which can be certified by a third party. Following certification, annual maintenance and renewal audits are required once every three years.	13
<b>Environmentally considerate product</b>	A product into which measures to reduce environmental impact such as energy conservation, enhanced recyclability, and reduced use of chemical substances have been incorporated starting at the product design and development stages in order to reduce environmental impact throughout the entire lifecycle of the product, i.e., production, usage, and disposal stages.	13
<b>Environmental label</b>	Label identifying environmentally considerate products, and classified into Environmental Labeling Type I, II and III under ISO standards. Environmental Labeling Type III, which presents comprehensive information in quantitative form about the product's lifetime environmental impact has been used by the Japan Environmental Management Association for Industry in its "EcoLeaf Type III environmental labeling program" since 2002.	13
<b>LCA (Life Cycle Assessment)</b>	Evaluation of a product's environmental impact throughout the entire product lifecycle — from the mining of raw materials through the manufacturing, use, recycling and disposal stages.	13
<b>Green procurement / Green purchasing</b>	Green procurement is the purchase of principal and secondary production materials that bring or result in as little environmental impact as possible. Green purchasing is based on the same principal but applies to office supplies and office equipment.	13
<b>Halogen-free</b>	Halogen is a generic term for five elements: fluorine, chlorine, bromine, iodine, and astatine. Halogen compounds contain environmentally toxic substances such as dioxin. Substances that do not contain chlorine or bromine or any other halogen compounds are described as halogen-free.	14
<b>5Rs</b>	Yazaki's approach to waste reduction. The concepts of Refuse (do not buy things that become trash) and Repair have been added to the conventional 3Rs (Reduce, Reuse, Recycle) to expand efforts to achieve zero emission of waste.	14
<b>Modal shift</b>	Reduction in the number of runs and total distances traveled by delivery trucks, accompanied by combination and / or replacement with large-capacity transport modalities, such as railways and ships. Modal shift is implemented to reduce CO <sub>2</sub> emissions and other exhaust gases, and to ease traffic congestion.	14
<b>Dioxins</b>	Generic term for polychlorinated dibenzo para dioxin (PCDD) and polychlorinated dibenzo furan (PCDF). Highly toxic substances that are generated during incineration processes, chemical manufacturing processes, etc.	16
<b>EU ELV Directive</b>	The European Union's end-of-life vehicle recycling law. This waste reduction law is designed to ensure reduction and proper processing of waste generated from end-of-life vehicles. This law also specifies the elimination (in phases) of lead, mercury, cadmium, and hexavalent chromium.	21
<b>VOC (Volatile Organic Compounds)</b>	Generic term for volatile organic compounds, such as toluene, xylene, and formaldehyde. In addition to causing headaches or dizziness when inhaled, VOCs have been implicated in causing cancer and more recently have been identified as causes of the so-called sick house syndrome.	22
<b>PVC (Polyvinylchloride)</b>	A widely used highly versatile plastic. Because substances suspected of being carcinogenic are used during its manufacture and because dioxins may be generated during its incineration, some makers are beginning to voluntarily reduce the use of PVC.	23
<b>6.6kV XLPE cables</b>	Vinyl-clad cable made by covering electrical wire with cross-linked polyethylene for insulation and reinforcement. CV means vinyl is used as the sheath (the outermost covering of cable offering protection and waterproofing) material.	24
<b>Cogeneration system</b>	Highly energy-efficient system that supplies both electrical power and heat. Heat generated during electrical power generation is extracted and used for heating buildings or water.	24
<b>Zero emission</b>	Concept proposed under the leadership of Mr. Gunter Pauli, an advisor to the United Nations University, in 1994. At Yazaki, zero emission refers to the goal of helping build a recycling-oriented society by reducing the waste (emissions) generated at all stages, i.e., production, logistics, use, and disposal, to an amount as close to zero as possible.	25
<b>PRTR (Pollutant Release and Transfer Register)</b>	Register used for tracking release and transfer of environment-polluting substances. The PRTR law is designed to systematize the reporting and information disclosure requirements related to chemical substances, and also to indirectly encourage corporations to implement voluntary initiatives to regulate and reduce the volume of chemical substances used. Any business entity that uses any designated substance in an amount exceeding the specified volume must submit a PRTR report to the government.	25
<b>Dichloromethane</b>	A type of organochloric solvent. It is used in degreasers / cleaners for metals and machines, and also in paint removers. Environmental standards have been established for dichloromethane levels. At high concentrations, it can affect the central nervous system, causing nausea, dizziness, and other health problems.	28

## Numazu Factory

● Location: Ooka 2771, Numazu-shi, Shizuoka-ken

● Main products: Power cable, communication cables, pre-fabricated cables

## ▶ Air Pollution Data (Conforming to the Air Pollution Control Law and Prefectural Ordinances)

Substance	Equipment	Control value			Actual measurement
		Conforming to the Air Pollution Control Law	Prefectural Ordinances	Voluntary Regulation	
NOx	Aluminum melting furnace	200	200	111.6	70
PM	Aluminum melting furnace	0.2	0.2	0.07	0.01
SOx	Aluminum melting furnace	0.325	0.325	Less than 0.01	Less than 0.01

1. Control values are shown in ppm for NOx, g/Nm<sup>3</sup> for PM, and Nm<sup>3</sup>/h for SOx  
 2. Actual measurements of NOx and PM refer to maximum values with respect to the control values for each particular piece of targeted equipment

## ▶ Water Pollution Data (Conforming to the Water Pollution Prevention Law and Prefectural Ordinances)

Substance	Enactment of Water Pollution Control Law	Control value		Actual measurement		
		Prefectural Ordinances	Voluntary Regulation	Maximum	Minimum	Average
pH	5.8 - 8.6	5.8 - 8.6	6.0 - 8.5	8.4	6.8	7.82
BOD	160 (120)	25 (20)	10 (3)	7.7	0.5	1.59
SS	200 (150)	70 (50)	10 (3)	6	1	1.45
Inorganic oil	5	5	3	0.8	Less than 0.5	0.5
Copper	3	1	0.3	0.097	0.004	0.03

\*Note 1. Control values show the highest value (daily average)

\*Note 2. All figures are shown in mg/l, except for pH

Abbreviations

\*pH: Hydrogen ion concentration

\*BOD: Biochemical oxygen demand

\*SS: Concentration of suspended solids in water

## ▶ PRTR-Target Substances

Substance	Volume handled	Volume released				Volume recycled	Volume removed	Volume consumed
		Air	Water	Interred on site	Waste			
Xylene	940	840	—	—	100	—	—	—
Toluene	2,030	1,810	—	—	220	—	—	—
Bisphenol A type epoxy resin	42,230	—	—	—	590	—	—	41,640
Lead and its compounds	29,970	—	—	—	—	2,470	—	27,500
Bis phthalate	711,900	—	—	—	—	58,700	—	653,200
Antimony and its compounds	12,800	—	—	—	—	1,060	—	11,740

Data disclosed in notification to local authorities

Units: Class 1 designated chemical substances other than dioxin, kg; Dioxins, mg-TEQ

Note: Control values indicate the values stipulated by law, prefectural ordinances or regional agreements  
— indicates not stipulated by law or not measured

## Shimada Factory

● Location: Yokoi 1-7-1, Shimada-shi, Shizuoka-ken

● Main Products: Automotive instruments

## ▶ Water Pollution Data (Conforming to the Water Pollution Prevention Law and Prefectural Ordinances)

Substance	Enactment of Water Pollution Control Law	Control value		Actual measurement		
		Prefectural Ordinances	Voluntary Regulation	Maximum	Minimum	Average
pH	—	5.8 - 8.6	6.5 - 8.0	7.7	7.0	7.29
BOD	—	25 (20)	15 (10)	5.8	0.9	3.31
SS	—	60 (40)	30 (20)	10.0	1.0	3.94
Inorganic oil	—	5	1.5	Less than 0.50	Less than 0.50	Less than 0.50
Copper	—	1	0.2	Less than 0.10	Less than 0.10	Less than 0.10
Zinc	—	3	0.2	0.15	Less than 0.05	0.07
Soluble iron	—	10	0.5	Less than 0.10	Less than 0.10	Less than 0.10
Total chromium	—	2	0.2	Less than 0.05	Less than 0.05	Less than 0.05
Chromium (VI) compound	—	0.5	0.05	Less than 0.05	Less than 0.05	Less than 0.05
Dichloromethane	—	0.2	0.1	Less than 0.002	Less than 0.002	Less than 0.002

\*Note 1. Control values show the highest value (daily average)

\*Note 2. All figures are shown in mg/l, except for pH

Abbreviations

\*pH: Hydrogen ion concentration

\*BOD: Biochemical oxygen demand

\*SS: Concentration of suspended solids in water

## ▶ PRTR-Target Substances

Substance	Volume handled	Volume released			Volume transferred	Volume recycled	Volume removed	Volume consumed
		Air	Water	Interred on site				
Dichloromethane	9,990	9,000	—	—	990	—	—	—
Toluene	7,770	7,000	—	—	770	—	—	—
Xylene	4,450	4,000	—	—	450	—	—	—
Ethylbenzene	1,890	1,700	—	—	190	—	—	—
Lead	1,800	—	—	—	—	1,800	—	—
Water-soluble copper salts	30,000	—	—	—	—	30,000	—	—

Data disclosed in notification to local authorities

Units: Class 1 designated chemical substances other than dioxin, kg; Dioxins, mg-TEQ

There are no designated facilities subject to the Air Pollution Control Law

Note: Control values indicate the values stipulated by law, prefectural ordinances or regional agreements  
— indicates not stipulated by law or not measured

## Ohama Factory

● Location: Kunikane 1360, Daitou-cho, Ogasa-gun, Shizuoka-ken

● Main Products: Terminals and junction blocks

### Water Pollution Data (Conforming to the Water Pollution Prevention Law and Prefectural Ordinances)

Substance	Control value			Actual measurement		
	Enactment of Water Pollution Control Law	Prefectural Ordinances	Yazaki wastewater standard (ISO 14001)	Maximum	Minimum	Average
pH	—	5.8 - 8.6	6.0 - 8.4	7.83	6.84	7.48
BOD	—	20	15	9.1	1.1	2.38
COD	—	(20)	(15)	12	1.2	4.41
SS	—	30	25	3.8	0.4	1.78
Inorganic oil	—	3	—	Less than 1.0	Less than 1.0	Less than 1.0
Organic oil	—	30	—	Less than 1.0	Less than 1.0	Less than 1.0
Copper	—	1	0.8	Less than 0.2	Less than 0.2	Less than 0.2
Fluorine	—	15	0.6	Less than 0.2	Less than 0.2	Less than 0.2
Zinc	—	1	0.8	0.21	Less than 0.05	Less than 0.05
Soluble iron	—	10	8	Less than 0.3	Less than 0.3	Less than 0.3
Soluble manganese	—	10	—	Less than 0.10	Less than 0.10	Less than 0.10
Lead	—	0.01	0.01	Less than 0.01	Less than 0.01	Less than 0.01

\*Note 1. Control values show the highest value (daily average)  
 \*Note 2. All figures are shown in mg/l, except for pH  
 Abbreviations  
 \*pH: Hydrogen ion concentration  
 \*BOD: Biochemical oxygen demand  
 \*COD: Chemical oxygen demand  
 \*SS: Concentration of suspended solids in water

### PRTR-Target Substances

Substance	Volume handled	Volume released				Volume recycled	Volume removed	Volume consumed
		Air	Water	Interred on site	Waste			
Nickel	4,002	0	0	0	35	0	—	3,967
Toluene	2,734	2,700	0	0	0	34	—	0
Lead	3,174	2	0	0	0	800	—	2,372

Data disclosed in notification to local authorities  
 Units: Class 1 designated chemical substances other than dioxin, kg; Dioxins, mg-TEQ

There are no designated facilities subject to the Air Pollution Control Law

Note: Control values indicate the values stipulated by law, prefectural ordinances or regional agreements  
 — indicates not stipulated by law or not measured

## Susono Factory

● Location: 1500 Mishuku, Susono-shi, Shizuoka-ken

● Main Products: Low-tension automotive wires

### PRTR-Target Substances

Substance	Volume handled	Volume released				Volume recycled	Volume removed	Volume consumed
		Air	Water	Interred on site	Waste			
Toluene	4,931	3,703	—	—	—	207	—	1,021
Xylene	2,593	1,745	—	—	—	164	—	684
Antimony and its compounds	15,453	—	—	—	—	1,283	—	14,170
Bis (2-ethylhexyl) phthalate	6,411	—	—	—	—	8	—	6,403
Decabromodiphenyl ether	3,780	—	—	—	—	314	—	3,466
Lead compounds	7,064	—	—	—	—	3,521	—	3,543

Data disclosed in notification to local authorities  
 Units: Class 1 designated chemical substances other than dioxin, kg; Dioxins, mg-TEQ

There are no designated facilities subject to the Air Pollution Control Law and Water Pollution Prevention Law

## Hodosawa Factory

● Location: Hodosawa 1157-106, Gotemba-shi, Shizuoka-ken

● Main Products: Fiber optic cables, optical connectors, device harnesses, wiring harnesses for houses

### PRTR-Target Substances

Substance	Volume handled	Volume released			Volume transferred	Volume recycled	Volume removed	Volume consumed
		Air	Water	Interred on site				
Bisphenol A Epoxy Resin	3,500	0	0	0	51	0	0	3,449

Data disclosed in notification to local authorities  
 Units: Class 1 designated chemical substances other than dioxin, kg; Dioxins, mg-TEQ

There are no designated facilities subject to the Air Pollution Control Law and Water Pollution Prevention Law

## Hamamatsu Factory

● Location: Higashi-machi 740 Hamamatsu-shi, Shizuoka-ken

● Main Products: Aroace, Yuwaita, etc.

### Air Pollution Data (Conforming to the Air Pollution Control Law and Prefectural Ordinances)

Substance	Equipment	Control value			Actual measurement
		Conforming to the Air Pollution Control Law	Prefectural Ordinances	Voluntary Regulation	
NOx	3t Boiler	150	—	—	123
	4t Boiler	150	—	—	83
PM	3t Boiler	0.10	—	—	Less than 0.01
	4t Boiler	0.10	—	—	Less than 0.01

1. Control values are shown in ppm for NOx, g/Nm<sup>3</sup> for PM  
 2. Actual measurements of NOx and PM refer to maximum values with respect to the control values for each particular piece of targeted equipment

### Water Pollution Data (Conforming to the Water Pollution Prevention Law and Prefectural Ordinances)

Substance	Control value			Actual measurement		
	Enactment of Water Pollution Control Law	Prefectural Ordinances	Voluntary Regulation	Maximum	Minimum	Average
pH	5.8 - 8.6	5.8 - 8.6	5.8 - 8.6	8.2	7.6	7.9
BOD	25 (20)	25 (20)	20	22.0	Less than 0.5	Less than 3.7
COD	160 (120)	25 (20)	20	15.6	7.6	11.1
SS	200 (150)	50 (40)	35	16.0	1.0	5.3
Inorganic oil	5	5	3	Less than 1.0	Less than 1.0	Less than 1.0
Organic oil	30	30	30	Less than 1.0	Less than 1.0	Less than 1.0
Copper	3	1	1	0.07	Less than 0.05	Less than 0.01
Fluorine	8	8	8	2.3	0.7	1.5
Zinc	5	3	1	0.09	Less than 0.05	Less than 0.06
Soluble iron	10	10	1	0.2	Less than 0.1	Less than 0.12
Soluble manganese	10	10	8	Less than 0.1	—	—
Total nitrogen	120 (60)	120 (60)	120 (60)	29.9	8.0	19.0
Total phosphorus	16 (8)	16 (8)	16(8)	2.97	—	—
Lead	0.1	0.1	0.1	0.01	Less than 0.01	Less than 0.01

\*Note 1. Control values show the highest value (daily average)  
 \*Note 2. All figures are shown in mg/l, except for pH  
 Abbreviations  
 \*pH: Hydrogen ion concentration  
 \*BOD: Biochemical oxygen demand  
 \*COD: Chemical oxygen demand  
 \*SS: Concentration of suspended solids in water

No substances subject to the PRTR Law are handled, or volumes handled are less than those that require reporting

Note: Control values indicate the values stipulated by law, prefectural ordinances or regional agreements  
 — indicates not stipulated by law or not measured

## Haibara Factory

● Location: Nunokihara 206-1, Haibara-cho, Haibara-gun, Shizuoka-ken

● Main Products: Connectors, dies, W/H machine manufacturing equipment, electrical equipment

### Air Pollution Data (Conforming to the Air Pollution Control Law and Prefectural Ordinances)

Substance	Equipment	Control value			Actual measurement
		Conforming to the Air Pollution Control Law	Prefectural Ordinances	Voluntary Regulation	
NOx	Boiler (CH-1-1)	150	150	100	77
	Boiler (CH-1-2)	150	150	100	64
PM	Boiler (CH-1-1)	0.1	0.1	0.05	0
	Boiler (CH-1-2)	0.1	0.1	0.05	0

1. Control values are shown in ppm for NOx, g/Nm<sup>3</sup> for PM  
 2. Actual measurements of NOx and PM refer to maximum values with respect to the control values for each particular piece of targeted equipment

### Water Pollution Data (Conforming to the Water Pollution Prevention Law and Prefectural Ordinances)

Substance	Control value			Actual measurement		
	Enactment of Water Pollution Control Law	Prefectural Ordinances	Voluntary Regulation	Maximum	Minimum	Average
pH	5.8 - 8.6	5.8 - 8.6	6.2 - 8.2	7.7	6.3	7.2
BOD	120	30	15	3.1	0	1.6
COD	120	30	20	11	6.1	8.3
SS	150	7	35	6	2	1.5
Inorganic oil	5	—	2.5	0	0	0
Organic oil	30	—	15	0	0	0
Copper	3	—	1.5	0	0	0
Fluorine	8	—	4	0	0	0
Zinc	5	—	2.5	0	0	0
Soluble iron	10	—	5	0	0	0
Soluble manganese	10	—	5	0	0	0
Total nitrogen	60	—	30	29.5	29.5	29.5
Total phosphorus	8	—	4	3.45	3.45	3.45
Lead	0.1	—	0.05	0	0	0

\*Note 1. Control values show the highest value (daily average)  
 \*Note 2. All figures are shown in mg/l, except for pH  
 Abbreviations  
 \*pH: Hydrogen ion concentration      \*BOD: Biochemical oxygen demand  
 \*COD: Chemical oxygen demand      \*SS: Concentration of suspended solids in water

### PRTR-Target Substances

Substance	Volume handled	Volume released				Volume recycled	Volume removed	Volume consumed
		Air	Water	Interred on site	Waste			
Toluene	21,000	19,600	—	—	1,400	—	—	—
Lead	3,600	—	—	—	940	—	—	—

Data disclosed in notification to local authorities  
 Units: Class 1 designated chemical substances other than dioxin, kg; Dioxins, mg-TEQ

Note: Control values indicate the values stipulated by law, prefectural ordinances or regional agreements  
 — indicates not stipulated by law or not measured

## Fuji Factory

● Location: Hodosawa 652, Gotemba-shi, Shizuoka-ken

● Main Products: Copper rods, cables for indoor use, automotive cable, rubber parts, PVC compounds, vinyl tape

### Air Pollution Data (Conforming to the Air Pollution Control Law and Prefectural Ordinances)

Substance	Equipment	Control value			Actual measurement
		Conforming to the Air Pollution Control Law	Prefectural Ordinances	Voluntary Regulation	
NOx	Melting furnace	180	—	—	34
	Boiler	150	—	—	63
PM	Melting furnace	0.2	—	—	0.04
	Boiler	0.1	—	—	Less than 0.01
SOx	Melting furnace	16	—	—	Less than 1
	Boiler	2	—	—	Less than 0.02

1. Control values are shown in ppm for NOx, g/Nm<sup>3</sup> for PM, and Nm<sup>3</sup>/h for SOx  
 2. Actual measurements of NOx and PM refer to maximum values with respect to the control values for each particular piece of targeted equipment

### Water Pollution Data (Conforming to the Water Pollution Prevention Law and Prefectural Ordinances)

Substance	Control value			Actual measurement		
	Enactment of Water Pollution Control Law	Prefectural Ordinances	Voluntary Regulation	Maximum	Minimum	Average
pH	5.8 - 8.6	—	6.0 - 8.4	8.4	7.7	8.1
BOD	160 (120)	25 (20)	15	5	0.6	2.0
Lead	0.1	—	0.08	0.034	0.001	0.010
Thiram	0.06	—	0.03	Less than 0.0006	Less than 0.0006	Less than 0.0006

\*Note 1. Control values show the highest value (daily average)  
 \*Note 2. All figures are shown in mg/l, except for pH  
 Abbreviations  
 \*pH: Hydrogen ion concentration  
 \*BOD: Biochemical oxygen demand  
 \*COD: Chemical oxygen demand  
 \*SS: Concentration of suspended solids in water

### PRTR-Target Substances

Substance	Volume handled	Volume released			Volume transferred	Volume recycled	Volume removed	Volume consumed
		Air	Water	Interred on site				
Bis (2-ethylhexyl) adipate	6,500	0	0	0	0	0	0	6,500
n-alkylbenzenesulfonic acid	4,100	0	0	0	0	0	0	4,100
Antimony and its compounds	61,000	0	0	0	1,300	1,300	0	59,700
Xylene	7,300	7,300	0	0	0	0	0	0
Decabromodiphenyl ether	8,500	0	0	0	600	600	0	7,900
Toluene	42,000	35,700	0	0	6,300	6,300	0	0
Lead and its compounds	73,000	0	0	0	1,100	1,100	0	71,900
Bis phthalate	3,800,000	0	0	0	8,400	8,400	0	3,791,600
Polyoxyethylene octylphenyl ether	1,400	0	0	0	0	0	0	1,400

Data disclosed in notification to local authorities  
 Units: Class 1 designated chemical substances other than dioxin, kg; Dioxins, mg-TEQ

Note: Control values indicate the values stipulated by law, prefectural ordinances or regional agreements  
 — indicates not stipulated by law or not measured

## Tenryu Factory

● Location: Minamikashiwa 23, Futamata-cho, Tenryu-shi, Shizuoka-ken

● Main Products: Gas meters, gas security systems

### Air Pollution Data (Conforming to the Air Pollution Control Law and Prefectural Ordinances)

Substance	Equipment	Control value			Actual measurement
		Conforming to the Air Pollution Control Law	Prefectural Ordinances	Voluntary Regulation	
NOx	Aluminum melting furnace	—	180	—	18
PM	Aluminum melting furnace	0.20	0.20	—	Less than 0.001
SOx	Aluminum melting furnace	—	0.672	—	Less than 0.007
Hydrogen chloride	Aluminum melting furnace	80	80	—	2.2
Chlorine	Aluminum melting furnace	30	30	—	Less than 1.1
Fluorine compounds	Aluminum melting furnace	10	3	—	Less than 1.0

1. Control values are shown in ppm for NOx, g/Nm<sup>3</sup> for PM, Nm<sup>3</sup>/h for SOx, g/Nm<sup>3</sup> for Hydrogen chloride, g/Nm<sup>3</sup> for chlorine, and g/Nm<sup>3</sup> for fluorine and its compounds  
 2. Actual measurements of NOx and PM refer to maximum values with respect to the control values for each particular piece of targeted equipment

### Water Pollution Data (Conforming to the Water Pollution Prevention Law and Prefectural Ordinances)

Substance	Control value			Actual measurement		
	Enactment of Water Pollution Control Law	Prefectural Ordinances	Voluntary Regulation	Maximum	Minimum	Average
pH	5.8 - 8.6	5.8 - 8.6	6.0 - 8.4	8.0	7.7	7.9
BOD	160 (120)	25 (20)	15	1.1	Less than 1.0	Less than 1.0
COD	160 (120)	25 (20)	15	2.0	0.8	1.4
SS	200 (150)	50 (40)	30	Less than 5.0	Less than 5.0	Less than 5.0
Inorganic oil	5	5	3	Less than 2.5	Less than 2.5	Less than 2.5
Fluorine	8	8	8	Less than 0.1	Less than 0.1	Less than 0.1
Zinc	5	3	1	Less than 0.05	Less than 0.05	Less than 0.05
Soluble iron	10	10	8	Less than 0.1	Less than 0.1	Less than 0.1
Soluble manganese	10	10	8	Less than 0.1	Less than 0.1	Less than 0.1
Lead	0.1	—	0.1	0.02	Less than 0.01	Less than 0.01

\*Note 1. Control values show the highest value (daily average)  
 \*Note 2. All figures are shown in mg/l, except for pH

Abbreviations

\*pH: Hydrogen ion concentration

\*BOD: Biochemical oxygen demand

\*COD: Chemical oxygen demand

\*SS: Concentration of suspended solids in water

### PRTR-Target Substances

Substance	Volume handled	Volume released			Volume transferred	Volume recycled	Volume removed	Volume consumed
		Air	Water	Interred on site				
Xylene	9,779	9,181	—	—	598	—	—	—
Toluene	7,205	6,981	—	—	224	—	—	—

Data disclosed in notification to local authorities

Units: Class 1 designated chemical substances other than dioxin, kg; Dioxins, mg-TEQ

Note: Control values indicate the values stipulated by law, prefectural ordinances or regional agreements  
 — indicates not stipulated by law or not measured

● At the following production sites, there are no designated facilities subject to the Air Pollution Control Law, Water Pollution Prevention Law and PRTR Law and no substances subject to these laws are handled.

## Washizu Factory

● Location: Washizu 1424, Kosai-shi, Shizuoka-ken

● Main products: Wiring harnesses

## Niimi Factory

● Location: Nishinokata 2117-1, Niimi-shi, Okayama-ken

● Main products: Wiring harnesses

## Daitou Factory

● Location: Osaka 653-2, Daitou-cho, Ogasa-gun, Shizuoka-ken

● Main products: Wiring harnesses

## Tochigi Factory

● Location: Tsukiji 500, Minaminasu-cho, Nasu-gun, Tochigi-ken

● Main products: Wiring harnesses

## Rokugo Factory

● Location: Doetsu 3-1-43, Shimada-shi, Shizuoka-ken

● Main products: Tachographs, taxi meters

# Independent Review

To Mr. Yasuhiko Yazaki, Chairman  
Mr. Shinji Yazaki, President  
Yazaki Corporation

August 19, 2004

## Independent Review Comments on Yazaki Group's Social and Environmental Report 2004

ChuoAoyama Sustainability Certification Co., Ltd.

This is an English translation of ChuoAoyama Sustainability Certification Co., Ltd's independent review comments of Yazaki's "Social & Environmental Report 2004" (Japanese version). The translation has been done by Yazaki Corporation.

### Objective of Review

The objective of this review is to express our independent views on the features, achievements, developments, and direction of the Yazaki Group's approach towards social and environmental issues, as well as to report on significant corporate activities in such areas contained in the "Social and Environmental Report 2004" (hereafter, "the Report"). Our comments are based on the following procedures:

1. Interviews with top management (Mr. Yasuhiko Yazaki, Chairman and Mr. Shinji Yazaki, President)
2. Inspection of Headquarters (Yazaki Corporation), Haibara Factory (Yazaki Parts Co., Ltd.) and Tenryu Factory (Yazaki Meter Co., Ltd.)
3. Participation in meetings related to compilation of the Report
4. Review of the final Japanese draft of the Report

### Our Comments

#### 1. Yazaki Group – working to protect employment, contribute to local communities, and preserve the environment

The Group regards the shifting of production overseas and the hollowing-out of the Japanese industry as closely related, and takes steps to secure employment, promote local community development and preserve the environment. We believe these initiatives present the Group's deep awareness of corporate social responsibility.

The corporate commitment, "caring about people," is demonstrated at overseas locations to which production has been transferred, through creation of local employment, human resource development, and showing respect for local cultures. Noteworthy achievements include the establishment of a kindergarten and expansion of an elementary school in Brazil and the opening of part-time schooling system in Vietnam.

In Japan, the commitment, "caring about people," is demonstrated throughout the Group. In response to the shift to overseas production, measures for addressing the issue of the hollowing-out of domestic manufacturing have been actively rolled out and include creating new business opportunities and regional redevelopment projects. These new businesses can be broadly divided into nursing-care, recycling, and service businesses. In the nursing-care business for instance, elderly citizens who receive care are placed at the center of the operation. Importance is attached to providing them with meaningful lifestyles, social activities and work opportunities. Operations are organized from a long-term perspective, which does not simply prioritize the convenience of the caregiver or operational efficiency. We look forward to seeing further progress made in this area. Such new businesses are designed to meet the needs of the 21st century.

#### 2. Initiatives at factories

##### (1) Haibara Factory

By compiling and analyzing material flow costs from an environmental perspective, hitherto overlooked improvements in actual product specifications that lead directly to cost savings are being achieved. The use of environmental accounting in this way to facilitate continual product improvements and cost savings is commendable. We look forward to the work done at the Haibara Factory being spread throughout the Group.

##### (2) Tenryu Factory

The Tenryu Factory is making efforts to develop, produce and sell environmentally considerate products such as automatic remote measuring equipment that also displays CO<sub>2</sub> emissions and gas costs. Also, a range of creative process improvements and energy reduction efforts devised by employees are being applied. We believe such efforts made in a positive and creative manner will lead to further progress.

#### 3. Towards further implementation of CSR-related activities

With the corporate policy of being "a corporation needed by society," the Group demonstrates its commitment to fulfilling its corporate social responsibility, and has undertaken a wide variety of relevant activities. However, standards and structures for compliance, risk management and related areas have not been fully developed. In order to organize actual activities in a systematic manner and implement them further, systems for compliance, risk management and other CSR-related areas should be developed.

#### 4. Progress made in the areas we recommended in the previous fiscal year

This is our second year of providing the Yazaki Group with our independent review comments on the Group's Social and Environmental Report. The Group's response to our recommendations presented in the last year's independent review comments is shown in the table below. We recognize that the Group has taken third-party opinion seriously and has made progress.

Our Recommendation	Progress Made
Establishment of a system for collecting environmental and social information on a global basis	Action initiated to establish environmental management systems in Europe, North America, Asia and Oceania. Compilation of environmental performance data began in July 2004.
Expansion of the compilation scope of environmental and social information at domestic sites and improvement of accuracy of data	Scope of compilation: to be expanded to cover domestic sites, etc. Improvement of accuracy: an environmental information collection system utilizing the intranet to be developed.
Disclosure of soil contamination information	Disclosed on page 16 of the Report.

These comments DO NOT express any of our views and/or opinions on the effectiveness and/or reliability of the processes to collect and report the data and information included in the Report.



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### **Editor's Postscript**

This report provides specific and comprehensive descriptions of the Yazaki Group's environmental and social initiatives undertaken and designed to contribute to the development of a recycling-oriented society capable of sustainable development. This report is intended to enhance stakeholders' understanding of those initiatives and to enable the Yazaki Group to incorporate stakeholder opinions in making further improvements in business operations. In preparing this report, the editorial staff adopted easy-to-understand language and layout styles, and made reference to the Environmental Reporting Guidelines and the Environmental Accounting Guidelines issued by the Ministry of the Environment, and the Global Reporting Initiative (GRI).

The 2004 report covers activities undertaken during FY2004 (July 2003 to June 2004). As a Social and Environmental Report, it seeks to give a broad perspective on the social aspects of Yazaki's activities and enhanced company-wide environmental activities, to improve both the content and scope of disclosure through a "highlights" chapter with special feature articles, and to increase reporting on the activities of overseas business sites in an effort to promote the establishment of a global environmental management system.

As was done last year, Yazaki asked the ChuoAoyama Sustainability Certification Organization to prepare a third-party evaluation. In addition to the original Japanese-language report, the English-language version has been prepared this year also. Publication of this report was moved up two months from last year's schedule to October.

If you would like to share your thoughts about the Social & Environmental Report 2004, or have any related queries, please contact:

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## YAZAKI CORPORATION Environmental Affairs Division

Mishuku 1500 Susono-shi, Shizuoka-ken 410-1194  
TEL: 81-55-965-3782 FAX: 81-55-965-3736

E-mail: [kankyou@sys.yzk.co.jp](mailto:kankyou@sys.yzk.co.jp)  
URL: <http://www.yazaki-group/environment/cover.html>

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### Environmental Initiatives in Printing

- [Plate making] This report is compiled utilizing the Computer to Plate (CTP) method that eliminates the use of film for the plate-making process, thus reducing energy consumption, conserving resources and eliminating the use of alkaline developing solutions.
- [Paper] Eco Mark certified 100% recycled paper, with a whiteness level of 70% is used. No chlorine is used for bleaching and no surface processing and special coating is applied.
- [Ink] Usage of petroleum-based solvents is eliminated by a complete switch over to VOC (volatile organic compounds) free soy ink. Furthermore, the ink contains no lead, mercury, cadmium or other heavy metals.
- [Printing] In ink transfer, damping water containing elements such as isopropyl alcohol is not used; instead a waterless process is employed.
- [Processing] A recyclable binding adhesive is used, which does not damage the paper during the paper-recycling process.

Thank you for reading our report.  
Please share with us any comments or impressions  
you may have.

Thank you very much for reading our Social and Environmental Report 2004. The Yazaki Group has published this report to explain the content of activities pertaining to our social and environmental initiatives, but there may be any number of points that you have found insufficient.

We hope that you can share with us any comments or impressions you may have after reading the report, which we will use as feedback for the sake of our business activities and reports in the future.

Please take the time to fill out the questionnaire on the back and send it to the address listed below. We greatly appreciate your cooperation.

Environmental Affairs Div.

Yazaki Corporation

Mishuku 1500 Susono-shi, Shizuoka-ken 410-1194

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e-mail: [kankyousys@yzk.co.jp](mailto:kankyousys@yzk.co.jp)

**FAX: 81-55-965-3736**

# Please send us your comments on the Social and Environmental Report 2004

**FAX 81-55-965-3736**

Environmental Affairs Div.  
Yazaki Corporation

## Q1 What was your impression of the Yazaki Social and Environmental Report 2004?

### 1) Yazaki's environmental initiatives

1. Very good    2. Good    3. Average    4. Rather poor    5. Poor

Please provide specific reasons:

### 2) Content

Very satisfactory    Satisfactory    Average    Rather unsatisfactory    Unsatisfactory

Please provide specific reasons:

### 3) Understandability

Very easy to understand    Easy to understand    Average    Rather hard to understand    Hard to understand

Please provide specific reasons:

### 4) Information content (number of pages)

Too long    Long    Appropriate    Short    Too short

Please provide specific reasons:

## Q2 Was there any particular article in the report that took your interest? (Multiple answers OK) Please provide any detailed reasons you may have.

- |   |  |
|---|--|
| <input type="checkbox"/> 1. Executive Message   | <input type="checkbox"/> 11. Factory Initiatives                             |
| <input type="checkbox"/> 2. Putting the Corporate Policy into Practice                                | <input type="checkbox"/> 12. Logistics                                       |
| <input type="checkbox"/> 3. Highlights of FY2004  | <input type="checkbox"/> 13. Recycling                                       |
| <input type="checkbox"/> 4. Corporate Principles and Structure  | <input type="checkbox"/> 14. Promoting Global Environmental Management       |
| <input type="checkbox"/> 5. The Yazaki Environmental Action Plan                                      | <input type="checkbox"/> 15. Caring About People                             |
| <input type="checkbox"/> 6. Environmental Management System and Environmental Risk Management         | <input type="checkbox"/> 16. New Business Development to Maintain Employment |
| <input type="checkbox"/> 7. Raising Environmental Awareness and Promoting Full Employee Participation | <input type="checkbox"/> 17. Contributions to Society                        |
| <input type="checkbox"/> 8. Environmental and Cost Management   | <input type="checkbox"/> 18. Creating Better Societies Overseas              |
| <input type="checkbox"/> 9. Development and Design  | <input type="checkbox"/> 19. Environmental Chronology                        |
| <input type="checkbox"/> 10. Production   | <input type="checkbox"/> 20. Glossary  |
|   | <input type="checkbox"/> 21. Yazaki Group / Production Site Data             |

No.	Please provide specific reasons:

## Q3 For those who read last year's Social and Environmental Report, how does this year's report compare with it?

Much improved    Improved    No improvement    Previous report was better

Please provide specific reasons:

## Q4 If there were any points you think were insufficient or require improvement, please inform us here.

## Q5 Please inform us of any activities that you think Yazaki should address in the future.

## Q6 What is your position with respect to the workplace, community, etc.?

- |   |   |
|---|---|
| <input type="checkbox"/> Customer                                   | <input type="checkbox"/> Involved with the press                                    |
| <input type="checkbox"/> Business partner                           | <input type="checkbox"/> Person in charge of environmental matters in a corporation |
| <input type="checkbox"/> Person who lives near Yazaki business site | <input type="checkbox"/> Research, education related                                |
| <input type="checkbox"/> Engaged in government administration       | <input type="checkbox"/> Student  |
| <input type="checkbox"/> Member of Environmental NPO/NGO            | <input type="checkbox"/> Yazaki Group employee                                      |
|   | <input type="checkbox"/> Other ( )  |

**Thank you for your cooperation.**  
If you don't mind, please fill in the appropriate information below.

Name \_\_\_\_\_

Gender  Male  Female

Age  10 - 19  20 - 29  30 - 39  40 - 49  
 50 - 59  60 - 69  70 and above

Address \_\_\_\_\_

Occupation / workplace \_\_\_\_\_

Department / title \_\_\_\_\_

Do you wish to have next year's report sent to you?  Yes  No