

# 2012 CSR Report Full-Fledged Report on the Web



## About the 2012 CSR Report

#### **Editorial Policy**

This Report, which introduces the outcome of efforts by Fuji Heavy Industries Ltd. (FHI) with its domestic and overseas affiliates in CSR (Corporate Social Responsibilities), has been released to promote communication with stakeholders, including customers, shareholders, business associates, local communities, and employees, aiming to further strengthen our commitments.

Specifically, in the feature articles, we introduce the FHI Group's unique initiatives that we particularly want to highlight to our stakeholders, while in the section describing the Group's CSR activities, we report on our CSR measures focusing on eight areas: customers and products; employees; the environment; compliance; information disclosure; procurement; social contributions; and corporate governance.

As in our 2011 Report, we asked Professor Mami Oku of Tokyo Metropolitan University for her objective comments as a third party. Her views can be read on page 71.

#### **Period Covered**

- The report covers performance for the period of FY2012 (from April 2011 to March 2012) and a number of undertakings before and up to the release of the report.
- The departments and titles etc. of the people introduced in this report are correct as of the time of writing.

#### **Guidelines Referenced**

GRI Sustainability Reporting Guidelines (Ver. 3) Environmental Report Guidelines (2012) by the Japanese Ministry of the Environment

#### Scope of the Report

### Fuji Heavy Industries Ltd. SUBARU Automotive Business

Gunma Manufacturing Division (Ota City, Gunma Prefecture), Tokyo Office (Mitaka City, Tokyo)

- Industrial Products Company
- Saitama Manufacturing Division (Kitamoto City, Saitama Prefecture) Aerospace Company
- Utsunomiya Manufacturing Division (Utsunomiya City, Tochigi Prefecture) Eco Technologies Company
- Utsunomiya Manufacturing Division (Utsunomiya City, Tochigi Prefecture)

#### Domestic subsidiary Companies (Members of Domestic subsidiary Company Subcommittee) Vusoki Kogyo K.K. (Handa City, Aichi Prefecture)

- Fuji Machinery Co., Ltd. (Maebashi City, Gunma Prefecture)
   Ichitan Co., Ltd. (Ota City, Gunma Prefecture)
- Kiryu Industrial Co., Ltd. (Kiryu City, Gunma Prefecture)
- Subaru Logistics Co., Ltd. (Ota City, Gunma Prefecture)

Overseas subsidiary Companies (Members of North American Environmental Committee) I SIA: Subaru of Indianan Automotive, Inc. (Lafayette, Indiana)

- SOA: Subaru of America, Inc. (Cherry Hill, New Jersey)
- SCI: Subaru Canada, Inc. (Mississauga, Ontario)
   SRD: Subaru Research & Development, Inc. (Ann Arbor, Michigan)

We also introduce activities of other affiliated companies, such as domestic SUBARU dealerships, in addition to those listed above.

#### Publication Time

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#### Contact Information

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\*For Feature Article 1, however, we have posted a full version of the interview at our Web site in HTML format. For the Fuji Heavy Industries Group's CSR measures, we have introduced all the CSR measures in the Web version, while introducing only those we particularly want to highlight in the digest version.

#### **Digest Version (Japanese only)**

Provides stakeholders with the gist of the Fuji Heavy Industries Group's CSR activities

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**Environmental Symbol Logo** 

In June 2005, we created the Fuji Heavy Industries Group's environ-mental symbol logo. The logo has a leaf in the middle, with "Green Earth" and "Blue Sky" to represent our blue planet. This logo expresses our determination to work actively on environmental protection

on environmental protection.



#### Cover Design

Our cover depicts an image of the bright future we hope will be cre-ated by our core products and CSR activities.

#### Full-Fledged Report on the Web (PDF)

#### http://www.fhi.co.jp/english/envi/report/index.html

Provides a comprehensive all inclusive report of the FHI Group's CSR activities in PDF and HTML formats

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Contributing to the Prosperity of Society Developing Sustainably throughout Business Activities Focusing on the Automobile Field



The Fuji Heavy Industries Group deems it its mission to contribute to the sustainable development of society through its business activities, based on its fundamental corporate philosophy: "Contributing to the prosperity of society." Also, in our Motion-V Mid-Term Management Plan (covering the five years to FY2016), we are committed to becoming "a company that offers products and services contributing to the solutions of social issues" and "a company that values its relationship with a variety of stakeholders."

To this end, we are conducting CSR activities by setting targets for eight specific CSR categories: customers and products; employees; the environment; compliance; information disclosure; procurement; social contribution; and corporate governance. In this report we introduce our CSR activities for these eight categories.

With regards to customers and products, we released the new IMPREZA in a range of countries across the world, starting with the United States. We have substantially improved the fuel economy of the automobile by adopting a new horizontally-opposed engine and an idle stop system, and for the Japanese market, we have also adopted the advanced driving support system "EyeSight (ver. 2)", which is already highly appreciated by owners of the LEGACY. We have thus provided customers in Japan with greater peace of mind by increasing safety against collisions. Also, the new SUBARU XV has won a respected reputation among consumers because of its high basic performance and the uniquely stylish exterior design, and sales of the car have been increasing.

The new IMPREZA was developed based on the commitment of all our members-including

those engaged in the development, manufacture, and marketing-to delivering "Enjoyment and peace of mind" to customers. We are receiving far more orders for the model than initially expected and are striving to deliver the products as early as possible to those who have placed orders by enhancing the capacity of manufacturing facilities.

For environmental protection, we have launched measures based on our 5th Voluntary Plan for the Environment (FY2013 to FY2017). This plan was formulated based on our Environmental Policy, which states, "In recognition of the close relationship between the global environment and business activities," and "In order to ensure the sustainable development of the society." For antiglobal warming measures, circulation of resources, prevention of pollution, reduction in the use of hazardous chemical substances, and environmental management, we have set even higher targets and are endeavoring to attain them.

In 2011, we faced a range of difficulties across our supply chains, including the occurrence of the Great East Japan Earthquake in March, subsequent power shortages, and the flooding in Thailand. In the course of tackling these challenges, we reaffirmed the importance of ensuring our business continuity and engendered a strong commitment to fulfilling our corporate social responsibilities.

We will continue to fulfill our obligations as a corporate citizen that is operating businesses across the world, and will strive to become a corporate group that is trusted by people throughout the world. I ask for your kind support to our activities.

> President & CEO Chairman of the CSR Committee

Yasuyuki Yoshinaga *Yoshi*naga

#### About Fuji Heavy Industries Group

#### Corporate Overview (As of March 31, 2012)

Name	Fuji Heavy Industries Ltd.
Established	July 15, 1953
Paid-in Capital	153.8 billion yen
Employees	27,123 (Consolidated) 12,359 (Non-consolidated)
Head Office	Subaru Building, 7-2 Nishi-Shinjuku, 1-chome,Shinjuku-ku, Tokyo, Japan 160-8316 Phone +81-3-3347-2111
Sales	1,517.1 billion yen (Consolidated) 1,038.9 billion yen (Non-consolidated)
Operating Income	44.0 billion yen (Consolidated) 1.1 billion yen (Non-consolidated)
Ordinary Income	37.3 billion yen (Consolidated) 8.1 billion yen (Non-consolidated)
Net income	38.5 billion yen (Consolidated) 9.3 billion yen (Non-consolidated)
Number of Consolidated Subsidiary	49 (Domestic), 21 (Overseas)
Number of Equity Method Subsidiary	5 (Domestic), 4 (Overseas)

\*The figures for Sales through Net Income are for FY2012.





Trends in the Number of Car Sales

(Consolidated) (1,000 units) Overseas sales Domestic sales



Trends in Sales (Consolidated)



Trends in the Number of Employees



 $^{\circ}\textsc{Due}$  to rounding off, the figure in the graph may not match up with the sum of the ratios

#### **Business Sites**

#### FHI and Domestic Subsidiary Companies Isesaki Plant. Kiryu Industrial Co., Ltd. Gunma Manufacturing Division Utsunomiya Manufacturing Division\*1 Fuji Machinery Co., Ltd. Gunma Manufacturing Division Ichitan Co., Ltd. Saitama Manufacturing Division\* Subaru Logistics Co., Ltd. Tokyo Office Yusoki Kogyo K.K. Head Office Handa Plant, Utsunomiya Manufacturing Division **Overseas Subsidiary Companies** SCI: Subaru Canada, Inc. SRD: Subaru Research & Development, Inc. SIA: Subaru of Indiana Automotive, Inc. Head Office SOA: FHI Business Sites Subaru of America, Inc. Affiliated Companies In this report we introduce the producing districts of Aerospace Company as "Utsunomiya Manufacturing Division" and Eco Technologies Company as "Saitama Manufacturing Division" according to circumstances.

#### **Business Overview**

# Our Products Represent Our Commitment to Helping as Many Customers as Possible Lead More Fulfilling Lives

FHI is a transportation manufacturer, with automobiles—under the SUBARU brand—as core products, and operates the following four business units.



The Industrial Products Company develops, manufactures, and markets ROBIN general-purpose engines used in construction and industrial machines as well as products incorporating these engines. It also supplies high-performance engines used in snowmobiles and buggies, engine-driven power generators, projectors, and pumps.

> Location aitama Manufacturing Divis amoto City, Saitama Prefecto

#### Eco Technologies Company

trends.

generation transmission, the "Lineartronic CVT." We are thus

constantly taking on new challenges in response to social

Location

nufacturing Division ki City, Gunma Prefe Town, Oura District)

#### Contributing to Creating Comfortable Living Environments and a Resource Recycling Society

We transferred the wind-power generator business to Hitachi Ltd. on July 1, 2012, and will also transfer the refuse collector business to ShinMaywa Industries, Ltd. on December 28, 2012.

#### Aerospace Company



#### **Developing and Manufacturing a Range of Aircraft**

Aerospace Company inherits its technologies and spirit of aircraft manufacturing from its predecessor, Nakajima Aircraft. Now, It has established unparalleled technologies in many categories, such as its expertise in developing aircraft structures, including composite materials for main wings, IT technology for unmanned aircraft, and sophisticated system integration combined with flight control technology. In addition to developing and manufacturing helicopters, fixed-wing aircraft, and unmanned aircraft, this in-house company also participates in development and production, ranging from smaller jet aircraft to large airliners, aiming for recognition as a world-class aircraft manufacturer.

Location
Utsunomiya Manufacturing Division
(Utsunomiya City, Tochigi Prefecture)



# For the Achievement of "Motion-V"





Based on the growth target set for the SUBARU Automotive Business, which is our core business, we are implementing the Motion-V Mid-Term Management Plan for the period from FY2012 to FY2016, aiming to build the foundations for the attainment of this target.

In line with this plan, we will increase the brand value of SUBARU by providing "Enjoyment and peace of mind" to customers while adhering to our central policy, "Customers come first." We will also enhance our business by expanding our product lineup and strengthening our production system. In the following feature articles, we introduce the measures we are implementing to achieve "Motion-V," while contributing to the solution of social problems.



#### Feature Article 1 —

# Making/Delivering Automobiles to Customers

# Our Philosophy and Technologies to Provide "Enjoyment and Peace of Mind"

We are pursuing the very pinnacle in driving performance in our automobiles, not only for enjoyable driving but also to ensure safety and provide excellent environmental performance. In this article, which includes an interview and the opinions of our field workers, we describe how we are implementing this design philosophy in our actual manufacturing activities and how our manufacturing and sales members are incorporating it in their daily operations.

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#### Feature Article 2 —

## What We Want to Communicate to Children through Automobile Design and Manufacturing

# Subaru's efforts to support the next-generation development and career education

We can help children to learn many things through the manufacture of automobiles, which are familiar products to them. For example, we can invite children on our factory tours and provide them—the next-generation's leaders—with career education as a means to help them grow up with dreams and hopes. In the article, we introduce the specific activities we are conducting to this end.



# Making/Delivering Automobiles to Customers

Our Philosophy and Technologies to Provide "Enjoyment and

Peace of Mind"

#### Dialogue

# Manufacturing Automobiles That Realizes "Fun to Drive"

:37-15

Automobiles are now equipped with a range of technologies to ensure the safety of drivers and passengers, but these technologies are sometimes incompatible with other technologies that improve the performance of the vehicles. Concerning this problem, what have the members of SUBARU Automotive Business been thinking about and doing for their automobiles, which are renowned for outstanding performance? To find an answer to this question, Haruhito Funaki, an economics journalist, interviewed Akihide Takeuchi, who was in charge of developing the new IMPREZA released in December 2011.

#### Drivability, environmental performance and safety performance are not separate

**Funaki:** I am impressed by your manufacturing approach and your commitment to improving the comprehensive performance of SUBARU automobiles by refining safety performance, environmental performance, and driving performance in an integrated manner.

Takeuchi: In the automobile business, we have long been using the phrase "Fun to Drive," not only for the new IM-PREZA but also concerning the development of all SUBARU automobiles. We are committed to making their environmental performance compatible with "Fun to Drive" as part of our job as a development team. To this end we have been pursuing the development of unique technologies, such as the hori-



#### Mr. Haruhito Funaki

Economics journalist After working for a newspaper, became an independent economics journalist in 1989. Serves as the representative of the editing team named "PRESS F." Has been making reports and writing on manufacturing and the IT field and is also an expert in safety issues. Has written a book on the electronic map business (published by Toyo Keizai Inc.) and on new types of business entrepreneurs (published by SHIN-CHOSHA Publishing Co., Ltd.). zontally-opposed engine and the Symmetrical All-Wheel-Drive (AWD) System,<sup>\*1</sup> always in conjunction with safety and environmental technologies, thereby improving the comprehensive performance of our automobiles.

**Funaki:** I associate "comfort" and "freedom" with your basic approach to safety. SUBARU-branded automobiles are indeed characterized by the compatibility of their running performance and comfortable driving and with an interior space clearly optimized for driving.

**Takeuchi:** That's right. Indeed we are strongly committed to delivering automobiles that can be driven without stress and in comfort. Safety is not simply related to the level of possible injuries in the event of an accident but also to "comfort" that allows drivers to concentrate themselves on driving, such as stability in running on expressways and a braking performance that enables drivers to come to a complete stop within the expected distance.

**Funaki:** You design SUBARU automobiles paying special attention to the visibility of objects located within one meter around the driving seat, including four or five-year-old children who might move rather actively around an automobile. This clearly shows your approach to safety.

**Takeuchi:** We call the ergonomic design research conducted at the beginning of the development stage, "packaging examination," and even from this stage we start combining safety with "Fun to Drive." In developing the new IMPREZA, we undertook detailed testing in this regard.

**Funaki:** I took a test drive in the IM-PREZA, and indeed the interior space was so bright that I felt my vision was much improved.

**Takeuchi:** The interior space feels bright because it provides very good visibility, which in turn improves safety. The driver does not need to look this way and that. Also, the brightness makes you feel both uplifted and comfortable.

**Funaki:** It is indeed very important to ensure the comfort of driving in response to the aging of drivers in Japan. It is also important for drivers to "cooperate" with their automobiles, instead of just relying on the functions provided by the vehicle.

#### Man-Machine Communication Will Open a New Era of Safety

**Takeuchi:** For example, the "EyeSight"<sup>\*2</sup> advanced driving support system is a

#### Akihide Takeuchi

PGM, SUBARU Product Planning Division. Joined Fuji Heavy Industries in 1982 and was engaged on the design of the first Alcyone and other chassis development and design. Moved to the Product Planning Division in 2001 and became the third IMPREZA PGM in 2006. Has been developing the fourth IM-PREZA since 2008. Aged 53.



technology to help drivers avoid incidents that could occur even to very careful drivers. In particular, elderly drivers may tend to approach too closely to the car ahead compared with younger drivers, and in such a case, the system helps ensure safety. Thus, the driver and the system "cooperate" together for safe driving.

**Funaki:** It's a great benefit for an automobile to have an "eye" like the Eye-Sight system. The reliability of the technology is provided by semiconductors and MEMS,<sup>\*3</sup> and in the future, I imagine we will see continuing improvements to precision and to driver-machine communications.

**Takeuchi:** Indeed. We will increase precision so that the driver can identify obstacles more clearly, increase the cognitive ability of the system to the level required to discern traffic signals and road signs, and make the system give alarms according to the situation. Moreover, we have incorporated a system to notify a driver who has been driving for two hours of this fact in the multifunction display of the IMPREZA. We may even further advance this system to urge drivers to take specific actions, for example by advising them to take a rest. **Funaki:** So you have incorporated a lot of ideas and technologies in the new IM-PREZA. What was the biggest challenge you faced in developing this new model?

Takeuchi: Well, it was difficult for us to make the model impressive enough to satisfy customers. We wanted to develop a model that would surprise consumers and make them say, "Wow. this cool automobile in this class is available at this price with such wonderful performance!!" I think all the elements of an automobile, not just the engine and power unit, contribute to increasing "Fun to Drive," and we are committed to delivering new value and a higher class of quality through the IMPREZA. As our catch copy for the model states, "New value class."

**Funaki:** What would you like to develop if you were an independent engineer?

**Takeuchi:** I want to develop a beautiful orthodox car, not particularly a sports car. I want to develop a car that can be one of the tools that make your daily life attractive, just like a pair of shoes from a special brand that make your life more stylish. It would be great if the owners of SUBARU automobiles could have that kind of feeling.



Before the interview, Mr. Funaki took a test drive in the IMPREZA to experience the EyeSight (ver.2) pre-collision braking and other advanced functions.



<sup>\*1</sup> The SUBARU Symmetrical AWD System is a unique system composed of a horizontally-opposed engine and a symmetrically designed 4WD power train. The engine can be positioned lower in the vehicle, keeping the center of gravity as low as possible. This also provides superior weight balance, both from back to front and from side to side, leading to excellent driving performance, such as stability on expressways and controllability even under poor road conditions.

- \*2 EyeSight is a unique SUBARU technology to monitor the road ahead using a stereo camera. It also provides Pre-Collision Braking Control to avoid accidents when the automobile comes too close to the vehicle ahead, and incorporates Adaptive Cruise Control with all-speed range tracking function to follow the vehicle ahead at an appropriate inter-vehicular distance, and so on.
- \*3 MEMS: Micro Electro Mechanical Systems Integrated devices that combine electronic circuits and mechanical components, assembled on boards, such as silicon substrates

Making Safe and Enjoyable

# Driving Compatible with Excellent **Environmental Performance**

SUBARU automobile technologies have been developed based on the concept that the driving performance of automobiles should be continuously improved-not just for more enjoyable driving but also for higher safety standards. All automobiles, however, pose the risk of accidents and emit CO2 and other hazardous substances. Based on this recognition, we are committed to developing automobiles that provide safe and enjoyable driving while also offering excellent environmental performance. To this end, we are taking the necessary approaches without being bound by traditional thinking.

#### Pursuing Higher Running Performance Will Also Help Improve Safety and Environmental Performance

A horizontally-opposed engine, in which the pistons are laid out horizontally in a symmetrical manner, offers good rotational balance and provides excellent running performance due to low vibration and low center of gravity. Moreover, in the event of a frontal collision, the engine will slide downwards, helping increase collision safety. The new-generation BOXER horizontally-opposed engine mounted in the new IMPREZA achieves toplevel fuel economy for its class, and also provides highly practical torque characteristics focusing on the medium to low-speed range for high environmental performance and sporty running.

The SUBARU Symmetrical AWD system provides the highest functionality that can be attained with an all wheel drive system, and excels in both running stability and durability. Due to the synergies created between the good weight balance provided by the symmetrical power train-based on the horizontally-opposed engine-and the AWD System. drivers can keep safe and comfortable under any driving conditions.

Moreover, we pursue "zero-stage safety" for SUBARU automobiles, which means to increase safety by incorporating safety measures in initial and basic automobile designs, such as body shape and interface designs. We design automobiles giving careful consideration to every detail, such as visibility, to allow drivers to concentrate on driving without fatigue and with ease of mind, and comfortable seat designs.

#### F Δ C I.

#### Designing a special engine

In developing the next-generation BOXER engine now mounted in the new IMPREZA, we made efforts to improve its environmental performance while also increasing the torque performance in the medium to low-speed range. We are sincerely pleased that we have also made further progress in the development of this engine in our pursuit of higher environmental performance, joy of driving, and higher safety performance. Moreover, we developed a special Lineartronic Continuously Variable Transmission (CVT) for the IMPREZA. The history of SUBARU CVT technology began as part of our measures to increase the fuel economy of mini-cars.



BOXER engine

and as a result we have more expertise in control and fuel economy improvement technologies than most other automakers. In developing the new IMPREZA, I felt both the pleasure of creating a new model and the pressure of meeting very high expectations. The abundant sales of this new model provide proof that it is widely appreciated by consumers, for which I feel very glad.

#### Fuel economy **IMPREZA G4 1.6 BOXER DOHC**



10.15 mode 20.0 km/l (Evaluated by the Japanese Ministry of Land, Infrastruc-

ture, Transport and Tourism) Both figures are for the 1.6 i-L 2WD Lineartronic CVT vehicle. The stated fuel economy in the 10-15 mode is for vehicles weighing less than 1,270 kg.

\*Fuel consumption is estimated based on predefined test conditions, and actual fuel consumption will differ depending upon driving conditions, driving style, maintenance conditions, and so forth. The JCO8 mode was newly established for the estimation of fuel economy based on more practical conditions, and fuel consumption estimated in this mode is generally slightly lower than that estimated in the 10.15 mode



Hiroshi Kijima Manager 1st Power Unit Research & Experiment Dept. SUBARU Engineering Division

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#### Special design for visibility

The Interior Design Department designs and develops seats, control switches, and other items that have direct contact with drivers and passengers, being keenly aware that changes of even a few millimeters to the space between the instrument panel and the seat can alter driving comfort. For the new IMPREZA, we created exceptional visibility by repeating examinations of the interior space and window height. Although an automobile may look better with smaller windows, we attributed more importance to visibility and brightness in consideration of the fact that users of the IMPREZA include a wide range of people. We made the examinations both quantitatively and qualitatively from the viewpoint of customers so that drivers of the new IMPREZA will experience clear visibility and ease of mind.



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Ensuring good visibility with an optimal layout of triangular windows and side mirrors

Masami Handa Assistant Manager Seat Design Sect. Interior & Electronic Design Dept. SUBARU Engineering Division uring

#### Providing Technologies to Help Drivers Control Their Vehicles Efficiently

It is the ultimate goal of an automaker to eliminate car accidents and protect human lives. To ensure safety, we are implementing four types of safety measures: zero-stage safety, achieved through initial and basic designs; active safety (pursuit of extremely high running performance); pre-crash safety (prediction and prevention of crashes); and passive safety (collision safety).

Among these safety measures, the innovative "EyeSight (ver.2)" precrash safety technology, which is adopted for SUBARU automobiles, including the new IMPREZA, is now attracting much attention.

Two CCD cameras installed inside the front window monitor the traffic conditions ahead, and the images taken by the cameras will be processed at super-high speed by the 3-D image processing engine (microcomputer) to estimate the distance to obstacles, as well as the position and speed of the car. Moreover, the Vehicle Dynamics Control (VDC) and other sensors send information about the running status to the vehicle control software, which makes the decisions necessary to control the engine and prevent sideslips. If the system detects a collision risk, it will send an alarm and take preventive action, or at least mitigate the damage by automatic braking (pre-crash brake).

The full-speed range adaptive cruise control function, which enables the car to follow the vehicle ahead at an appropriate inter-vehicular distance, is also provided as part of the EyeSight sensing function.

#### V O I C E

#### Specially designed "EyeSight (ver.2)"

Our "EyeSight" technology is highly appreciated by many customers and I believe that the system will become a standard automobile component in the future. "EyeSight" provides two functions: one that helps drivers prevent collisions, and one that helps them drive more comfortably and safely. The former function tends to attract more attention than the latter, but in fact the latter function provides drivers with great benefits. The two monitoring cameras are positioned with a precision of 1/1,000 millimeter, to ensure the accuracy of the analysis made using the cameras' images. The functions provided by "EyeSight" are supported by our advanced production technologies, including those to ensure high heat resistance and seismic resistance. Further, we have set up the control program, including control timing, by carefully studying the driving styles of skillful drivers and what they think and feel while driving.



Estimating the distance to a vehicle ahead with two cameras, which function like human eyes



Shigeo Usui Manager, 2nd Electronic Product Design Sect. Electronic Product Design Dept. SUBARU Engineering Division

#### Vehicle Dynamics Control (VDC)

The VDC system evaluates the driving situation based on the steering angle, engine speed, and gear and braking conditions, prevents sideslips, and returns the vehicle's positioning to a safe status. All main SUBARU models (excluding mini-cars) are equipped with the VDC system as a standard component.



How the VDC system functions (illustrative image)

#### **New Idle Stop Function**

For greater fuel economy, the new IMPREZA is equipped with an idle stop function. If the car is brought to a halt by braking, the engine will automatically stop in about 0.5 seconds and if the driver takes off the brake, the engine will restart in about 0.35 seconds.



#### External safety assessment

The safety performance of SUBARU automobiles is highly evaluated by external organizations.

Japan ——	<ul> <li>Japan New Care Assessment Program (JNCAP): The LEGACY won five stars in the new overall evaluation for vehicle safety (FY2011).</li> </ul>
Overseas —	<ul> <li>Insurance Institute for Highway Safety (IIHS): Subaru became the only manufacturer with a Top Safety Pick for all 2012 models in US.</li> <li>Euro New Car Assessment Program (NCAP): The SUBARU XV won a five-star rating in 2012.</li> <li>Australian New Car Assessment Program (ANCAP): The IMPREZA and the XV won five-star ratings for the model year 2012.</li> </ul>

# Steady Measures Taken to Manufacture Highly Reliable Automobiles

In order to deliver excellent automobiles designed on excellent ideas, it is necessary to assure manufacturing quality while giving due consideration to the environment and society. In this article, we introduce some of the measures taken at our manufacturing facilities, specifically the measures implemented by the Gunma Manufacturing Division, where leading SUBARU models are manufactured.

Gunma Manufacturing Division Comprising the Gunma Main Plant, the Yajima Plant, and the Ota North Plant (manufacturing automobile parts), which are all located in Ota City, as well as the Oizumi Plant (manufacturing engines and transmissions) located in Oizumimachi, Oura-gun. A total of 7,000 or more employees are working in the Gunma Manufacturing Division. (Photo: Yajima Plant)

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# Automobiles Are Manufactured by People

An automobile comprises around 30,000 parts, and these parts are manufactured and assembled by a range of personnel. Some of the manufacturing processes, such as welding and coating, are automated, but no automobiles can be completed without the skills and expertise of our valued employees. Because a lot of people are working at our manufacturing facilities, we always give special consideration to their safety while making their workplaces as comfortable as possible.

#### **Safety Measures**

We are implementing safety measures based on the concept of the Occupational Health and Safety Assessment Series (OHSAS) 18001. We have installed "health and safety activity signboards" for each of the manufacturing processes, and post safety slogans, targets, results, and examples of accidents on these boards, while encouraging employees to make written safety commitments to increase their safety awareness.



# Making employees even more aware of the importance of safety

We deem fires as the most serious risk to our automobile factories, because we use flammable paints in a site where so many people are working. At the Yajima Factory, a fire occurred in the coating facilities on April 13, 1996, resulting in an area as large as 3,675 m<sup>2</sup> being completely burned out. We called the local fire department for help and caused inconvenience and concern to local inhabitants. After this incident, the Gunma Manufacturing Division designated April 13 as the annual disaster control drill day and have been implementing measures to prevent fires. Also, as part of our risk prediction measures, we have designated the first and third Mondays of every month as "labor accident prevention day," respectively.

In the manufacture of automobiles, we use grindstones, engage in dangerous processes, such as welding, and also use forklifts and cranes. We are promoting safety education for those engaged in such operations in collaboration with the safety staff of each section.



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Masaichi Watanabe Manager, Environment Sect. General Administration Dept. Gunma Manufacturing Division

#### **Creating Comfortable Workplaces**

# Measures for non-Japanese employees

In the Gunma Manufacturing Division, employees from several different countries, including Brazil, Peru, Myanmar, and Nigeria are working, and for even those who can read and write Japanese, it is sometimes difficult to understand the detailed manufacturing instructions and technical terms correctly in another lan-

guage. We have therefore prepared manuals in Portuguese and also employ interpreters.



Manual written in Portuguese

# Reducing physical burdens on workers

In the assembly of automobiles, heavy parts and tires need to be lifted up in some processes, and if workers do this without using the appropriate equipment, they may injure themselves. We have therefore introduced mechanical

assist devices to help them work speedily, while reducing the physical burdens imposed on them.



Power assist for tire fitting

#### For employees with disabilities

In the Gunma Manufacturing Division, staff with disabilities are employed at a ratio exceeding the statutory level. We are bettering our workplaces so that even those with disabilities can work comfortably by measures such as foster-

ing barrier-free design at our manufacturing facilities and offices.



Slope installed at the manufacturing facilities

## Manufacturing Stage: Key to Reducing the Life Cycle Environmental Impact of Automobiles

Among all their life cycle stages, automobiles have the largest environmental impact in the use stage, but the environmental impact from manufacturing, including the manufacture of materials, also account for about 20% of the total life cycle environmental impact of automobiles (for the new IMPREZA). It is therefore essential to reduce environmental impact at the manufacturing stage. We are also committed to releasing no harmful substances or noise both inside and outside our manufacturing facilities.

#### **Energy conservation measures**

The Gunma Manufacturing Division has been introducing cogeneration equipment to conserve energy. At the Main Plant, a new highly efficient cogeneration system (output 7,800 kW) commenced operations in July 2012. In the past, steam generated by a boiler was used to heat the liquid agent necessary for the pre-coating process, but now steam from the new cogeneration facilities can be used, leading to a reduction in the load im-

posed on the boiler. We will also examine a means of using the hot water generated by the cogeneration equipment.



Cogeneration system

#### Management of exhaust

Exhausts from the automobile bumper coating booth smell like paint thinner and we release them to the outside after removing the odor. Also, at the boundaries of the premises, we have installed odor meters and monitor smells based on criteria that are actually stricter than those set by the Japanese Offensive Odor Control Act.

Composting food residues Food residues from the cafeteria are composted at the treatment facilities using bacteria.

Composting facilities

#### Decontamination of wastewater

In the manufacture of automobiles, we use a large volume of water to clean the automobile bodies in the coating process. The used water is repeatedly processed by the wastewater treatment system so that only clean water is released outside the premises.





vater treatment system

Monitoring release to outside the premises with a camera

v 0 C F

#### Noise-proof testing course

The Main Plant has been manufacturing the BRZ sports car since 2012.We need to test the sports car by driving it on a road on which rubber ridges are placed, and we have the necessary equipment on our test course. Because testing with this equipment is rather noisy, we have newly installed a noise-proof wall so as not to create a nuisance to neighboring houses and schools.

The wall contains glass wool and provides high noise resistance because it absorbs and reflects the sound.





Shuichi Tsuii Environment Sect. General Administration Dept. Gunma Manufacturing Division

Recyclability is also important for automobiles

We attribute importance to the recycling of our automobiles for the effective use of limited resources. To this end, we are proactively developing easily recyclable vehicles.

Decontaminating

exhaust from the

coating process efore release

#### Measures to promote the recycling of automobiles

#### Reduce

- Extend the lives of vehicles and liquids (oil, etc.)
- Reduce vehicle weight to improve fuel economy
- Reduce use of coolant for interior air conditioners Reduce the use of materials in the transportation
- of automobiles by adopting returnable pallets and other reusable materials

## Reuse

- Expand sales of second-hand parts (recycled parts)
- Reuse materials in the transportation of automobiles

#### Recycle

- Make automobiles more easily recyclable by making them easier to disassemble
- Foster the use of easily recyclable resins
- Manufacture exterior and interior parts using recycled materials

Source: Website of the Japan Automobile Recycling Promotion Center (http://www.jarc.or.jp/)

#### Automobile Recycling > Page 56

モスハル新港

Communicating Our Commitment to "Enjoyment and Peace of Mind" through Dealers Who Directly Contact Customers

Our automobiles, which were manufactured based on excellent design concepts, are shipped from the factories and delivered to customers via our dealers. Members of our dealer teams build up close relations with customers through SUBARU automobiles by helping them choose their optimal car and providing them with after-sale services, such as inspections and maintenance services. Our dealers are conducting activities to provide customers with the maximum satisfaction by helping them continue driving their SUBARU cars safely and pleasantly.

#### SUBARU Declaration

- We will strive to make SUBARU the No.1 brand by highlighting "Enjoyment and Peace of Mind" as a feature of the brand.
- SUBARU members will propose "Enjoyment and Peace of Mind" to customers and give full support to them.

#### Major initiatives

- Provide the "new SUBARU automobile insurance plan," "inspection package," and "insurance extension plan" as the three safety products that support customers' car-related lives.
- Implement the SUBARU test drive campaign under the slogan, "Norudake OK!" (meaning "You don't need to buy it!")
   Provide a range of test drive options and hold an easy-to-join test drive event
- about once a month. Introduce human resources development measures and the STARS\*1 sales
- qualification program to increase staff's ability to propose "Enjoyment and Peace of Mind"
- We will also implement a range of initiatives to propose "Enjoyment and Peace of Mind" to customers.
- \*1 STARS: A qualification system to help salespersons develop themselves by repeating the process of learning, practicing, and sitting for tests to obtain qualifications

#### **Our SUBARU Declaration**

President

At the SUBARU Declaration

kickoff meeting attended by more than 800 managers and

leaders from SUBARU dealers

Yasuyuki Yoshinaga communicated his ideas about the SUBARU Declaration.

Japan,

across

Making the SUBARU Declaration

SUBARU JAPAN SALES & MARKETING DIV. made the

SUBARU Declaration to demonstrate its aspirations

and action guidelines with a view to making SUBARU a

Each SUBARU dealer has also made their own

SUBARU declaration and is conducting activities to

highlight "Enjoyment and Peace of Mind" as a feature of

the brand to increase its popularity among consumers.

brand to be chosen by more and more consumers.

After SUBARU Japan made the SUBARU Declaration, each dealer also made their own SUBARU declaration, which is implemented every day.

#### NIIGATA SUBARU Head Office in Kurosaki

"We will welcome visitors to our store heartily to make them feel like visiting us again."

#### NARA SUBARU Kashiba Store

"We will always speak from the viewpoint of customers."





#### TOKYO SUBARU Ome Store

"We will provide customers with the pleasure of driving." "We will help customers throw away any doubts or concerns"



#### FUKUOKA SUBARU Kamitsu Store

"We will provide customers with safe and enjoyable driving by offering reliable maintenance services and creating a welcoming atmosphere at our store."



#### Measures to Improve Customer Services

We have introduced the STARS sales professional certification program to SUBARU dealers. Under the program, SUBARU salespersons receive a range of training to improve their ability to undertake business negotiations, as well as their customer service skills, and sit for tests to get higher qualifications as sales professionals. In the test conducted in May 2012, a total of four sales members won the highest qualification (SUBARU Sales Meister).

In June 2012, we held the eighth national Subaru sales competition, in which participants who had won regional competitions competed in their sales skills in a 10-mintue role-playing game. The competition is held in conjunction with the STARS program for staff engaged in selling new cars.

In addition, when a new model is released, we provide salespersons with opportunities to actually drive it on a circuit. Through these measures we are developing sales staff possessing both product knowledge and excellent customer service skills.



Training provided under the STARS program



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Hiroaki Asaoka of TOKYO SUBARU Takenotsuka Store, who obtained the SUBARU Sales Meister qualification

I want to increase my customer service skills as well as my knowledge about our cars using the STARS.

V

I serve customers, giving much importance to understanding their lifestyles. I myself own an IMPREZA and am really fond of SUBARU cars, and so I can give advice to customers with strong confidence.

Akari Yarita Chiba SUBARU Shinminato Store



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#### Environmental Measures Taken at SUBARU Dealers

All SUBARU dealers and bases have already obtained Eco-Action 21\*1 certification. They have conducted energy conservation activities and reduced their power use year-on-year as part of their efforts to obtain certification.

In FY2012 the government announced the need of reducing power use uniformly by 15% in the areas served by Tokyo Electric Power and Tohoku Electric Power, due to power shortages caused by the Great East Japan Earthquake, and in response all SUBARU dealers began conducting measures to reduce their power usage. In particular, TOKYO SUBARU achieved the highest reduction rate (a 30% reduction from the previous fiscal year level) among all SUBARU dealers for electricity used from April to September 2011. We introduced the efforts made by this dealer to other dealers to encourage them towards even greater achievements.

\*1 Eco-Action 21: Environmental management system set by the Japanese Ministry of the Environment based on ISO 14001

Clean Dealers Service 🕨

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Steady efforts of individuals lead to the achievement of higher-than-expected results

TOKYO SUBARU first listed up the appliances for which staff should reduce the use of electricity and made simulations of the suspended/reduced use of electricity for these appliances. Next, the members actually reduced the power use for the appliances and achieved a more than 15% reduction year-on-year. Also, at its service factory, TOKYO SUBARU reduced the operation rate of the air compressor, changed the pressure setting, and reviewed the work procedures to increase the work efficiency of a lift, thereby saving electricity.

Moreover, the Hongo Store was granted a certificate for the achievement of power saving from the Resources and Energy Agency. TOKYO SUBARU was thus able to contribute to resolving the national power shortage problem.

(Left) Hitoshi Takana, Member of the Power Saving Committee (Center) Kazuto Kawada, OM Promotion Section, CSR Promotion Office (Right) Kazuhiro Higuchi, Sales Section Manager TOKYO SUBARU Hongo Store



#### External Evaluations: Results of the Customer Satisfaction Survey

In the first Japanese Customer Service Index (JCSI) survey conducted by Service Productivity & Innovation for Growth (SPRING) in FY2012, SUBARU won the No. 1 rating for the customer satisfaction level in the automobile industry. In the survey, six items, including the causes and outcomes of customer satisfaction (specifically, customer expectations, perceived quality, perceived value, customer satisfaction, word-ofmouth communication, and loyalty) were used as indicators and SUBARU exceeded the median values for all the items, achieving particularly good results for word-of-mouth communication and loyalty.

# What We Want to Communicate to Children through Automobile Design and Manufacturing

Subaru's efforts to support the next-generation development and career education

Fuji Heavy Industries, through its SUBARU automotive business, wants to encourage children to have dreams and hopes about their future careers. To this end, we are supporting them in enhancing their abilities to think, make decisions, and express themselves and encouraging them to have even more "zest for living" through our unique position as an automaker.

#### Learning about the automobile industry in line with the new educational guidelines

In Japan, the education of children is undergoing reform. For elementary schools, the government began to implement its new education guidelines in April 2011. Since then, elementary schools have been giving classes focusing on helping children enhance their abilities to think, make decisions, and express themselves, in addition to acquiring knowledge and skills, in consideration of the present educational situation in Japan and based on the philosophy of giving children a "zest for living." Accordingly, the targets for



each grade and subject have also been renewed.

According to the new education guidelines, elementary school teachers need to encourage fifth graders to take more interest in Japan's industrial development and in the progress of informatization within Japanese society, as one of the targets for social studies. To this end, teachers give children opportunities to investigate how industrial products are supporting people's daily lives and how people engaged in industrial production are devising important measures and making efforts.

For children, the automobile industry is a good example of one type of industry, and in fact there are textbooks that introduce the industry as a major example. The manufacture of SUBARU automobiles is actually introduced in some of them! The automobile industry can help children understand how their lives are related to industry by showing how automobiles, which are familiar products to children, are manufactured. Children can also learn about automobile-related factories and about how the industry is connected to the world, and can actually visit automobile factories to observe how people are working there.

Many fifth graders have visited our

SUBARU automobile factories as part of their social studies classes and we have also supported schools in giving career education to children, conducting relevant activities continuously at each of our sites. In the future, we will give more support to education and help children have more "zest for living" in line with the government's new educational guidelines.

We want to help children understand Japan's industries, the role of work, and relationships between the industries and the global environment as much as possible by showing how we are manufacturing SUBARU automobiles, as well as providing them with tips to develop themselves through aspirations for their future careers. To this end we are conducting a range of activities, some of which are introduced below.

#### Helping children understand how automobiles are manufactured through hands-on experience

"Now, please watch the images that show how SUBARU automobiles are manufactured."

Subaru Visitor Center is located within the Yajima Plant of the Gunma Manufacturing Division. On one day, fifth



graders of Komemaki Elementary School of Minakami Town, Gunma Prefecture were visiting the Center. The children were listening seriously to the explanations given by their attendant<sup>\*1</sup>.

The center has a total of about 100,000 visitors per year, of whom about 90% are elementary school students, including not only children living in Gunma but also those from other prefectures. In the recent boom of "factory tours," the center has been accepting an even greater number of visitors.

Visitors to the center are briefed on the automobile manufacturing processes and the size of the Yajima Plant through visual images and slides before they make a tour of the plant. In the tour, they walk around the entire plant—except for the areas that visitors cannot enter, such as the site for the coating process, which has strictly limited access to prevent dust from entering. The images and slides include explanations about these inaccessible areas.

On the day, after being briefed on the plant, children from Komemaki Elementary School raised questions, such as "You are manufacturing automobiles also during the night. When do people working at night take a rest?" and "When do you eat meals?" These questions show that children are interested in the work style of employees, as well as the automobile manufacturing processes.

After the Q&A session, the children were guided to the exhibition hall, where past SUBARU cars are displayed, including SUBARU 360 and SUBARU 1000. Looking at these models, they commented: "The seats are very different from those of cars today"; "I have never seen a car with this shape"; and many other opinions. They shouted with pleasure when they watched the movements of the horizontally-opposed engine and the symmetrical AWD system in a model displayed without the body to show the internal workings. Although they had already learned about the mechanism through images and in their textbooks, it was really exciting for them to observe the actual engine in operation.

# Children will remember what they have actually experienced

After watching displays in the exhibition hall, the children made a tour of the plant. From an elevated place in the tour course, they could look down over the manufacturing floor, where many employees were engaged in various manufacturing processes and large machinery was being operated.

"What a loud noise!"

"I was surprised that so many people were working on the floor. I thought it would be mostly machines."

"People and machines are cooperating together to make cars."

"It was surprising to see the robot arms moving so elaborately—just like human hands."

In observing the manufacturing processes one by one, children made various comments. They watched large iron plates being press-molded, cut, and promptly transported to be assembled into cars. They will remember this exciting hands-on experience long into the future. The two teachers who were visiting the plant with the children commented, "Every year fifth graders of our school make a tour of the SUBARU plant. This year, we have visited it today in the first school semester, but the lesson on the automobile industry will be given to the children in the second semester. We're sure that children will remember what they have experienced here today, including the movements of the machines, how many people are working here, and what sounds they have heard, for the future lesson. We also want children to understand how automobile safety is being checked at the plant."

At the end of the visit, children expressed their ideas and future dreams in relation to automobiles. "I was surprised to know that a lot of tests are conducted on cars before they are completed"; "The blue car was cool. I want to drive an electric vehicle in the future"; and "In the future, there might be a flying car. I want to drive a car when I become an adult, because it looks to be great fun!"

Making a tour of an automobile factory is just a part of education about industry for children. We believe, however, that hands-on experience outside the classroom will help children understand more deeply about the manufacturing industry, and we will continue to make efforts in this field in future.

\*1 At the Subaru Visitor Center, staff who accept visitors and give them explanations and guidance are called attendants.



SUBARU Visitor Center

The Visitor Center opened in July 2003 as a facility to display and introduce SUBA-RU cars from the past, unique SUBARU technologies, and SUBARU environmental measures to visitors to the Yajima Plant, including those joining a plant tour. The SUBARU Visitor Center accepts many visitors throughout the year. The manufacture of automobiles involves a range of industries, including manufacturers of automobile parts, and indeed the automobile industry provides children with a good example of several aspects of industry. Visitors can watch impressive robots and employees working in teams at the plant, and members of the Visitor Center who are working as "attendants" are committed to helping visitors to take away unforgettable memories at our facilities. I want children to remember what they have experienced here, which they can refer to when they think about their future careers. V O I C E



Noriko Kurosawa Director of the SUBARU Visitor Center

#### Feature Article 2



## Showing a way of life through motorsports

We have been conducting social contribution activities through motorsports in the SUBARU automotive business, including contributing to the development of next-generation leaders. Specifically, since 2006, we have been giving lectures to elementary, junior high, and senior high school students by inviting automobile developers and rally drivers as lecturers, aiming to communicate to children the importance of having aspirations for the future and making efforts to make their dreams come true.

In June 2012 we gave a lecture to students of Ikushina Elementary School of Ota City, Gunma Prefecture, by inviting Mr. Toshihiro Arai, who is a rally driver. This was the seventh lecture given by Mr. Arai at the school.

Ikushina Elementary School gives sixth graders a special class on ways of life and has been cooperating with us to provide children with opportunities to listen to world-class rally drivers and think about their futures seriously.

The lecture was given in the comprehensive learning class for sixth graders. First, an employee engaged in R&D for SUBARU cars explained about SUBARU's manufacturing processes and environmental activities, and then Mr. Arai gave a talk about his life as a rally driver, discussing what is really necessary to make one's dream come true.

Then the sixth graders moved to the school grounds to watch a driving demonstration of the SUBARU WRX STI Group R4<sup>\*1</sup> rally car by Mr. Arai. The car was driven around with the Principal, Osamu Tsuchiya, riding alongside Mr. Arai. Watching the car racing past, the children shouted with joy, their eyes shining. It must have been an extraordinary experience for them to watch a rally car racing across their school grounds!

Such an experience gives children an opportunity to deepen their understanding of automobiles, motorsports, and the global environment. We will continue to conduct this activity to give children, who will be next-generation leaders, both excitement and inspiration.

Increasing children's "zest for living" by giving them hands-on experience

We have also been dispatching employ-

ees to schools in Utsunomiya City to give special environmental classes to children, while at the same time accepting junior high school students to our sites to give them workplace experience. We are thus implementing initiatives to provide children with career education for their futures.

We are continuing all these efforts, seeking to demonstrate the wonder of manufacturing to children by giving them opportunities to watch employees at work in our manufacturing facilities and to learn about our latest technologies and cars, which will encourage their own development in the future.

The aspirations that children currently hold for their futures will, of course, change over time as the industrial structure and economy change, and as the aging of society progresses with the decreasing birthrate. But in any case, we hope that children will grow up having abundant "zest for living" and also the ability to think independently, to which we will continue to contribute through the manufacture of SUBARU automobiles.

\*1 Group R4: Rally car category set by the Federation International de l'Automobile (FIA). Introduced to increase competitiveness in the Group N category, in which the alteration of cars sold in the market is strictly prohibited.

**VOICE** 

We give children lessons on different ways of life, encouraging them to think about their own lives through a range of experiences and by learning about a wide spectrum of fields. I think we are very lucky to have the special lessons held on SUBARU automobiles, which certainly also provide the teachers with opportunities to think from a broader perspective view and help us improve our educational quality.



Osamu Tsuchiya Principal, Ikushina Elementary School, Ota City

Initially I wasn't sure whether it was good for children to watch me driving a rally car around the school grounds. However, the children were truly delighted to see it. My talk provides children with an opportunity to have a direct experience of motorsports and I think it is my mission to show children how it is wonderful to make efforts to become a world No. 1. **VOICE** 



Mr. Toshihiro Arai Independent rally driver

# The Fuji Heavy Industries Group's CSR

In the following pages, we report on the Fuji Heavy Industries Group's CSR activities for each of the 8 CSR activity items.



# **Corporate Philosophy**

We will strive to create advanced technology on an ongoing basis and provide consumers with distinctive products with the highest level of quality and customer satisfaction.

We will aim to continuously promote harmony between people, society, and the environment while contributing to the prosperity of society.

We will look to the future with a global perspective and aim to foster a vibrant, progressive company.

# **Corporate Code of Conduct**

FHI set down a corporate code of conduct to comply with laws and regulations and to fulfill its social responsibilities, based on our corporate philosophy. We will continue to strive to become a company loved by all and contribute to making society more affluent by respecting individuals and the corporate code of conduct and acting on the same sense of values.

We will develop and provide creative products and services while paying sufficient attention to the environment and safety.

- 2 We will respect the rights and characteristics of individuals.
- 3 We will promote harmony with society and contribute to the prosperity of society.
- 4 We will meet social norms and act honestly and fairly.
- 5 We will maintain global perspective and aim to be in harmony with international society.

# What SUBARU Wants to Be (Mid-Term Management Plan)

FHI set the Motion-V mid-term management plan for the period from FY2012 to FY2016, regarding the five years as a period in which the Company should build the foundation to achieve the target of increasing the sales quantity in its core SUBARU automotive business to more than 1 million units within the next decade. In order to attain this goal in line with the plan, we are endeavoring to solve various problems upholding "Confidence in Motion" as a guiding principle for all our activities and giving first priority to customers.

Specifically, we will enhance the SUBARU brand value, which we define as the provision of "Enjoyment and peace of mind" to increase the number of loyal SUBARU users. We will also further improve the safety and driving performance of SUBARU automobiles, for which they are already highly appreciated, while increasing their environmental performance, which is deemed important by society. Moreover we will release new products, including hybrid cars every year to expand our product lineup. In our sales activities, we regard the US and Chinese markets as our core markets and will take on the challenge of increasing sales quantities in these markets by about 30% over next five years. To this end we will enhance our production system and capacity to sell more cars, while strengthening our ability to deal with changes in the foreign exchange market. In order to achieve further growth. we will increase our business size through these

activities; foster cost reduction and promote alliance with other companies; make investments in the development of environmental technologies; and overcome a range of risks, such as surges in the materials cost and fluctuations in the foreign exchange market.

- Also, we will proactively conduct CSR activities to become:
- "Company to provide products and services for contributing to resolution of social issues"
- Company to value the relationship with various stakeholders"

#### "Motion-V" Five challenges

1. Guiding principle for all activities "Confidence in Motion"

- With the basic philosophy of "customers come first," "Provide distinctive Subaru experience"
- **3.**Strengthen sales force and the availability of automotive supply, "Accelerate sales expansion"
- 4.0verhaul of cost structures and promoting alliances with Toyota, "Solidify operational foundation"
  - Strategic Direction for Growth
- 5.Back up concrete approaches for business, "Improvement in Management"

# CSR policies

The CSR Policy was revised with the approval of Committees related to CSR to clearly indicate the fundamental aspect of CSR focused on observance of the Corporate Code of Conduct and other vital rules and the strategic aspect of CSR focused on contribution to solving social issues as a corporate citizen through business activities, which requires the involvement of the whole corporate organization for a company which makes goods favored by customers.

Our CSR activities are the mission of the FHI Group to contribute to the sustainable development of society through global business activities with focus on the relationships with our diversified stakeholders.

#### CSR Policy (Revised in June 2009)

- 1 We will respect the laws and regulations, the human rights, the international standard of behavior and the rights and morale of stakeholders under the "Corporate Code of Conduct" of Fuji Heavy Industries.
- 2 We will get ourselves involved as a corporate citizen in addressing social issues facing the society today.

# The 8 CSR Action Items

FHI has set 8 CSR action items to encourage individual employees to conduct CSR activities in an organizational manner as part of their business operations. For each of the eight categories, we have defined the specific CSR activities to be conducted by employees to meet requests from society.

#### FHI's 8 CSR Action Items

Item	Customers and Products Employees		Environment	Compliance	
ldea	Provide socially useful and safe products and services to earn customers' satisfaction and con- fidence. While respecting the diversit individuality and personality employees, realize comfort ar affluence by securing a safe ar pleasant working environment.		Since the approach to environ- mental problems is an issue common to the mankind, get our- selves proactively involved as an indispensable need for corporate existence and activities.	Observing laws and keeping morality, be fair, transparent and free in competition and conduct right deals. Also, honor confiden- tiality by strictly protecting and managing various information including the data on individuals and customers.	
Item	Information Disclosure	Social Contribution	Procurement	Corporate Governance	
ldea	Communicate widely with stock- holders and others and disclose positively and fairly corporate information.	Get positively involved in social action programs as a "good corporate citizen."	Conduct appropriate procure- ments and work on suppliers for CSR promotion.	The top management works to make CSR rooted deep company- wide and at the group compa- nies, and take initiatives to solve issues in case of emergency.	

\* The ideas of the CSR activities are drawn on the "Charter of Corporate Behavior" by the Japan Business Federation.

# Relationship to Stakeholders

In our mid-term management plan for FY2016, we uphold the themes of making our company "Company to provides products and services for contributing to the resolution of social issues" and "Company to value the relationship with various stakeholders" as the basic requirements to attain our long-term vision of becoming "A Compelling Company with a Strong Market Presence." Based on this vision, we will continue to make efforts to win even more trust from our stakeholders, continue to make useful social contributions, while at the same time increasing our corporate value.



# CSR Promotion System

We have set up a CSR committee and an Environmental Committee and had promoted CSR activities. In FY2011, the CSR Committee was newly established headed by top management to identify such activities in 8 CSR-related categories more clearly and promote them more systematically.

The CSR Committee consists of specialized committees and existing organizational units, each of which is closely linked to any one of the 8 CSRrelated categories, and all organizational units are engaged in these activities acting on their own initiatives under company-wide control. The CSR Committee also has the North American CSR Committee as its component for global promotion of CSR activities.

#### **Organization Chart**



\*1 As for the Organization Chart of Environmental Committee, please see page 34 on this report.

# Main Initiatives Implemented in FY2012 and Activities to Be Conducted in and after FY2013

Based on CSR activities that have been unfolded since FY2007, we will become further involved in activities for the solution of important CSR issues.

In FY2012, we conducted activities focusing on the eight CSR activity items, aiming to achieve the CSR target set as one of the themes for our midterm management plan, while implementing measures to solve a range of social problems through our business operations.

Specifically, we clarified the problems to be solved for each of the activity items and fostered the measures to solve them. We also encouraged employees to communicate more on CSR issues with each other, thereby increasing their CSR awareness and encouraging them to conduct more CSR activities.

Also in and after FY2013, we will continue to conduct CSR activities in a steady and sincere manner.

#### Main Initiatives in FY2012

- Launch of the "New IMPREZA" that excels in environmental and safety performances in Japan, the United States and other world markets
- Activities to support recovery from the Great East Japan Earthquake, including donations from the company and employees, donation of company products to disaster areas and disaster victim employment support in coordination with local governments
- Reinforcement of internal auditing system and of compliance, in face of misconduct within the organization

#### Targets after FY2013

- Continual development and launch of products distinctive of SUBARU in forms adapted to social conditions and demands, including improvement in environmental performance
- Reaffirmation of the BCP\*2 for verification of conditions, such as action on disaster relief, and reorganization of risk management
- Promotion of environmental prevention activities based on the 5th Voluntary Plan for the Environment from FY2013 to FY2017
- \*2 BCP: Business Continuity Plan

# **Customers and Products**

## **Communication with Customers**

#### Activities in the Customer Relations Department

To receive enquiries, conduct consultations, and handle requests and comments from our customers, we have established the "SUBARU Customer Center." We respond to our customers under a simple code of conduct: "prompt, accurate, and fair," aiming to provide "Enjoyment and peace of mind." The valuable comments and requests received from customers are passed on to the relevant departments so that suggestions can be reflected in making future improvements and in product planning, quality, sales, and after-sales services.

#### SUBARU Customer Center SUBARU Call: 0120-052215 (Domestic), +81-3-3347-2626 (International)

(Note that your call will be recorded to confirm the content)

## Please contact SUBARU Customer Center if you have any inquiries as below,

 Opinions / Comments / Guidance (catalog, dealership, changing address, etc)

2 Inquiries / Request for assistance

#### Office Hours (Japan Time) 9:00am – 5:00pm (Weekdays)

**Our Efforts** 

9:00am - 12:00am / 1:00pm - 5:00pm (Saturdays, Sundays and Public holidays)

#### Trends in requests for assistance from customers



#### CS Activities Led by Domestic Dealers

We are offering support and promotional services mainly to domestic SUBARU dealerships to raise the level of customer satisfaction through fundamental improvement of CS which underlies the brand image. Using customer opinions obtained from "SUBARU questionnaires" and from SUBARU dealers, to reflect on our products, the quality, the sales and all the after-services, etc. We also want to ensure that our customers are looked after at our dealers with the highest standards, and are carrying out inspections and supervision at each location.

#### eature Article 1 External Evaluations: Results of the Customer Satisfaction Survey Page 16

#### The SUBARU Academy

The SUBARU Academy opened in Hachioji City, Tokyo in January 2005. This training facility includes 133 rooms for accommodation. The many training programs carried out here span the entire gamut, from helping new recruits to management officers. Employees across the whole job spectrum, from service mechanics to domestic/overseas dealer sales staff have opportunities to develop their skills systematically.



#### **Sales Promotion Department**

#### New Customer Satisfaction Investigation Introduced

To realize the SUBARU Declaration, which began as a part of the FY2012 mid-term management plan, we have revised our SUBARU Customer Satisfaction Investigation. In addition to the existing survey criteria, "level of satisfaction," which is the customers' assessment of the service provided by dealers, a new survey criteria, "level of trust," has been added. This question probes customers' future expectations based on the service quality received towards achieving two of the targets listed in the SUBARU Declaration, "providing Enjoyment and peace of mind" and "building mid- and longterm relationships that make customers choose us every time."



## Quality Management

#### Quality Policy [Established November, 1994]

FHI considers customer satisfaction as the first priority. and will work constantly to improve products and services to provide world-class quality.

Product Quality Management System

- 1 Establish Quality Management System (QMS) based on the Quality Policy and ISO 9001 Standard and put it into practice for orderly and effective operations.
- 2 Clarify the quality targets acceptable to customers at the planning stage.
- 8 Realize the quality targets through quality assurance activities at each stage from development to sales and service.
- 4 Attend to complaints and requests from the market quickly and appropriately to live up to the trust of customers.

#### Response to recalls

#### The total number of recalls in FY2012: 2 (1 recall for SUBARU, 1 recall for Eco Technologies)

FHI website has an open page for recalls.

We are taking measures to prevent accidents and protect drivers and passengers.

Please refer to the FHI website for the details of our response to recalls. (in Japanese only)

http://www.fhi.co.jp/recall/

#### Overseas

#### **Our Efforts**

#### We are working to improve customer satisfaction.

For our customers to safely enjoy traveling in SUBARU cars, the SUBARU Customer Center has been improving technical training and reinforcing the structures for importers across the world, aiming to deliver a uniformly high quality after-sales service through dealers.

#### Technical Training

Improving the skills of car mechanics working at dealers is crucial to gaining the customers' trust through vehicle servicing. To attain this, the SUBARU Academy has developed the "SUBARU Technician Education Program" for worldwide use. This program is used to train our importers as instructors, so that SUBARU mechanics overseas can strengthen their skills through them.

Technical competitions are also held in different regions to motivate mechanics to learn more advanced problem diagnosis and car maintenance skills. The latest SUBARU World Technical Competition, the final tournament among such competitions, was held in Japan last year with representatives from 13 countries.

#### Organizational Reinforcement

The SUBARU Customer Center sets the targets to achieve "top after-sales customer service in the region" as a part of the mid-term management plan, "Motion-V." All our overseas importers are currently uniting their efforts to reinforce the servicing structure in each country. At the same time, we are developing a manufacturing training program to strengthen human resources in SUBARU teams across the world.

Through these efforts, we will build an infrastructure to offer vehicle servicing suited to our customers' needs and embody the "unique-to-Subaru servicing" in the premises of importers and dealers across the world.



"Subaru Way of Service" in After-Sales Customer Sa # ner Satisfaction Confidence in Motion



Participants in the Technical Competition and Ongoing Assessments



## **Making Safe Vehicles**

# Fundamental Philosophy of "Making Safe Vehicles"

SUBARU's goal in making cars is to ensure that any customers enjoy exhilarating rides in comfort and with peace of mind any time. One of the important themes to realize this, we believe, is the "pursuit of safety." SUBARU aims to give first priority to safety in any situations. To this end, we are developing advanced vehicle safety technologies, including: "active safety," which prevents accidents due to any conceivable situation; "pre-collision safety," which reduces accident damage by supporting the driver's operations and automatically reacting to the situation as required to avoid impacts; and "passive safety," which minimizes damage in the event of an accident.

Feature Article 1 Design and Development >

Page 11

#### Approaches to Active Safety

SUBARU has come a long way in the course of refining the fundamentals "Run, Turn and Stop" the capabilities needed to avoid danger in case of functions of a vehicle as it considers emergency and to enable stable driving as usual in a variety of environments. The SUBARU's unique "Symmetrical AWD" realizes high driving stability due to the low center of gravity inherent to a horizontally-opposed engine and an excellent weight balance thanks to a symmetrical in-line layout of the power train. Moreover SUBARU has constantly refined driving performance under diversified situations. Coupled with this base performance, other elements, such as stable braking performance and adoption of VDC (Vehicle Dynamic Control), provide an assured and pleasant driving experience.



Symmetrical AWD (image)

#### Approaches to Pre-Collision Safety

In order to realize "a collision-free vehicle" that can avoid accidents, SUBARU has been working on developing advanced driving support systems. The result is "EyeSight (ver. 2)" using a stereo camera, and installed in the LEGACY from May 2010. "EyeSight (ver. 2)", is equipped with sophisticated functions, such as Pre-Collision Braking Control that is automatically activated to avoid a collision or minimize collision damage, and Adaptive Cruise Control with all-speed range tracking function that enables a vehicle to safely follow another across a wide speed range from a set speed down to zero. "EyeSight (ver. 2)", is now being installed in more of our models, including the new IMPREZA launched in December 2011, and its collision avoiding functions are being further enhanced.



Conceptual representation of "EyeSight (ver. 2)"

#### 40th Anniversary of SUBARU AWD

It has been 40 years since we commenced sales of the SUBARU LEONE Estate Van 4WD in September 1972. LE-ONE was our first car equipped with All-Wheel Drive (AWD). AWD is one of SUBARU's core technologies that supports our safety philosophy and joy of driving. It distributes the engine power to all four wheels in an efficient manner, realizing stable high-speed driving and agile cornering—regardless of road surface or environmental conditions. The total number of AWD vehicles produced\*1 reached 11,782,812 (as of January 31, 2012) occupying 55.7% of the entire output of SUBARU cars. SUBARU continues to deliver "Enjoyment and peace of mind" through our exclusive technologies.

\*1 Including part-time 4WD vehicles.



#### Approaches to Passive Safety

SUBARU cars proprietary use Ring-Shaped Reinforcement Frame Body Structure in their chassis to ensure a high level of safety against impacts from any direction. Our aim is to provide comprehensive safety performance, which includes crash compatibility that minimizes the mutual damage in the event of a collision with another vehicle or person. This is the reason that the IMPREZA was awarded the JNCAP<sup>\*1</sup> Grand Prix in FY2007 and the LEGACY in FY2009, while the FORESTER and EXIGA were awarded the JNCAP Excellent Car in FY2008. Further, in FY2011, the LEGACY won the JNCAP Five Star Award<sup>\*2</sup> in this new car assessment program. Overseas, every car in our U.S. lineup—the LEGACY, OUTBACK, FORESTER, TRIBECCA, and IMPREZA—has been selected as Top Safety Picks<sup>\*3</sup> by the IIHS<sup>\*4</sup> in 2012, the third consecutive year of winning this achievement.



Photo by National Agency for Automotive Safety & Victims' Aid (NASVA)

## **Approaches to Welfare Vehicles**

#### "TRANSCARE Series" – from Mini Cars to Passenger Cars

SUBARU has been playing its role in the development and dissemination of welfare vehicles that allow the disadvantaged and the aged to ride at ease, aspiring toward "sharing the happiness of living through cars for everybody." SUBARU started producing and selling welfare vehicles for the disabled in 1980 and now is well-known for the "TRANSCARE series." The TRANSCARE series offers a wide range of options, from a mini-car to standard-sized cars. We aim to develop vehicles that provide comfortable driving for both people who are in care and for care providers. We will keep working to make an effort to enrich this series for all customers' comfortable and reliable driving experience.

#### FY2012 Car Assessment Results





#### IIHS





# SUBARU became the only manufacturer with a Top Safety Pick for all 2012 models in US.



#### Euro NCAP\*5

SUBARU XV awarded five stars in 2012 rating

#### 



IMPREZA 2012-MY and SUBARU XV 2012-MY awarded five stars

\*1 JNCAP: Japan New Car Assessment Program. A program in which the Ministry of Land, Infrastructure, Transport and Tourism and the National Agency for Automotive Safety & Victims' Aid (NASVA) jointly assess vehicle safety performance and disclose the results to the public.

\*2 To earn five stars, a vehicle must attain a minimum 170 points in the new overall safety performance rating, fulfilling level 4 or better in the full-wrap frontal collision test, offset frontal collision test, side collision test, neck injury protection performance test in a rear collision, pedestrian head protection performance test, and pedestrian leg protection performance test.

\*3 Top Safety Picks: A car safety performance index. To be listed, a vehicle must achieve "good" ratings in high-speed front and side crash tests, a rollover test, and evaluations of seat/head restraints for protection against neck injuries in rear impacts. The vehicle must also be equipped with electronic stability control as standard in consumer models. \*4 IIHS: Insurance Institute for Highway Safety.

\*5 Euro NCAP: Car safety assessment program conducted since 1997 by an independent body comprising transport authorities and vehicle-related organizations in European countries.

\*6 ANCAP: Car safety assessment program conducted since 1993 by an independent body comprising transport authorities and vehicle-related organizations in Australia and New Zealand.



STELLA TRANSCARE Wing Seat (Lift type)

#### Number of TRANSCARE series sold



# **Employees**

## Human Resource Development

# Nurturing "Self-Development with a Spirit for Challenge"

FHI is enhancing support to develop ideal talent, those employees who embody the "Spirit of Challenge and Self-Development." We offer a variety of training programs to support each employee in creating a vision of their future self and proactively make efforts to realize this vision.

As a part of the programs per grade, a Startup Program is offered for employees who moved up to a higher grade to learn the skills of logical problem solving. As a part of the programs per job skill, we offer support for employees to attend a business school, etc. to acquire and improve business skills.

Finally, the global talent development programs offer different courses according to the employee's level to support their self-motivated learning aspirations.

#### SUBARU Technical School

We opened SUBARU Technical School (STS) in 2005 to transfer safe and high-quality expertise and work knowhow to young technicians who forge the future by training them in classes tailored to their skill levels, for supply of high-quality products.



A scene from a machining training at STS



#### **Educational Organization Chart**

# Working System to Empower Every Employee

#### Supporting Each Employee's Work-Life Balance

To enable each employee to exert their abilities to the full, it is important to prepare a working environment that supports the work-life balance for those who have family members to care for. Examples include the childcare leave system that can be extended to the first April after the child becomes two years old; the short work-time system available until children commence 4th grade in elementary school; and the leave or short work-time system for elderly care. To ensure these systems are thoroughly understood and fully utilized by both male and female employees, we provide the "Maternal Leave and Childcare Leave Handbook," the "Short Work-Time for Childcare and Elderly Care page" on the intranet, and promotional sessions for different work levels.

In accordance with the Next Generation Education and Support Promotion Act, we formulated our corporate voluntary action plan in two phases and completed the plan, achieving the targets for the first phase (April 2005 through March 2007) and the second phase (April 2007 through March 2010), which led to the acquisition of the Certification by the Minister of Health, Labor and Welfare Minister (the *Kurumin* Mark).



Kurumin certification mark

#### Employment of People with Disabilities

The percentage of FHI employees with disabilities was 1.96% as of March 2012, exceeding the legally mandated rate of 1.80%. At present, 161 staff with disabilities work at FHI. Universal Design is being introduced in our factories to create an environment in which people with disabilities can work comfortably. We aim to help realize a society in which they can find joy and pride through their jobs.

We are making an active effort to employ people with disabilities in order to create an affluent society that allows everyone to lead a satisfactory life. In the future, we will continue our efforts to hire and employ people with disabilities.



Switches for operation desks and automatic doors accomodate wheelchair employees.



#### Number of Employees Taking Child-care Leave

#### **Employment Rate for People with Disabilities**



<sup>\*</sup> The number of employees who took child-care leave during a fiscal year counts employees taking leave during any portion of that year.

# Senior Partner Program of Reemployment for 60-year-olds who've Retirement Age

We introduced the "Senior Partner Program" in 2003 to rehire employees after the 60-year-old retirement age. This reemploys the aged and better strengthens on human resources. We revised part of this program to accord with the 65 year-old-retirement age, which became mandated by the Revised Law Concerning Stabilization of Employment of Older Persons." In FY2007, these programs were revised to further promote human resourcing among senior workers after their retirement. We have also been improving the working environment to make it more suitable for senior employees since FY2011. We have been improving the work environment so that the reemployed will be able to work more comfortably. We will promote re-hiring senior people after their retirement at 60 to use their experience and abilities for fostering new generation by handing down their expertise.

#### **Reemploying Staff**



# Communication with Labor Union

Fuji Heavy Industries and its labor union have a Labor and Management Council for smooth corporate management and mutual communication. Both have established a solid relationship based on mutual understanding and trust through close communication. The council helps labor and management maintain a good relationship.

#### Volunteer Leave System\*1

We established the volunteer leave system in April 2011, with a view to helping employees support the recovery of areas afflicted by the Great East Japan Earthquake as volunteers. In FY2012, a total of 18 employees participated in afflicted area support activities under the system, which is designed to enable employees to make more social contributions as volunteers while continuing their jobs.

In FY2013, we expanded the target of this system to include any kinds of disaster volunteer activities, not limited to those conducted to support recovery from the Great East Japan Earthquake.

\*1 Volunteer leave system adopted in FY2013

Under the system, employees can take paid holidays up to five consecutive days for each volunteer activity and up to 10 days per year.

# Promoting Healthy Bodies and Minds

We are aggressively promoting employee health management. Our approach is not only to prevent health problems, but also to systematically maintain and promote mental and physical health.

Specifically, we are working to prevent diseases and administer healthcare by assigning staff at each division for health checkups and specialized health guidance (e.g. rem-

edies to avoid metabolic syndrome, exercise guidance, mental healthcare, nutritional guidance), health consultations to those diagnosed with a cautionary concern in a medical checkup, counseling and other healthcare services.



**Health Support Office** 

#### **Our Efforts**

#### Health support by occupational health physicians, pubic health nurses and nurses

Each business site incorporates a health support office/center that offers a range of advice by occupational health physicians, health nurses, and nurses. These facilities monitor hazards in the working environment, such as temperature, noise, organic solvents, and dust, and make recommendations for improvements. We also investigate health risks in ways of working and suggest corrective measures, such as activities that may cause backache, and whether people are wearing ear plugs and masks as required. Finally, we provide health checkups. For those who have shown health risk signs, including high blood pressure and diabetes, private interviews and life style change suggestions are given. Medical treatment can also provided, as required.

In addition to these supports above, emergency care for sudden illness while at work and mental health care, a growingly important health issue today, are being provided in coordination with the occupational health and safety staff and outside medical institutions. As corporate physicians and nurses, we hope to assist the employees in maintaining a quality work environment.



Norimitsu Yanagiya Gunma Yajima Plant Health Support Center Manufacturing Division

## Industrial Health and Safety

#### Basic Concept of Health and Safety "Health and safety take priority in any business"

Basic Policy of Health and Safety

Aiming for zero incidents of occupational accidents, traffic accidents, diseases, and fire disasters; all employees recognize the importance of health and safety; improve the equipment, environment, and working methods; and improve management and awareness in order to create safe and comfortable workplaces.

#### Aiming for Zero Industrial Accidents

FHI is conducting a Safety and Health Kick Off Meeting at all its business sites at the beginning of each fiscal year. The meeting aims to raise awareness concerning industrial accidents, road safety, and heath management. In this annual meeting, chief general managers of site inform workplace leaders about the safety and health policy and the year's activity focuses, encouraging all employees to achieve zero industrial accidents throughout the year. All sites are making continuous efforts in improving industrial safety, health management, and risk assessment activities to improve standards and implement effective accident prevention measures.



Safety and Health Kick Off Meeting



# Occurrence of Industrial Accidents and Rate of Lost-Worktime Injuries

#### Making Comfortable Workplace

To meet the guidelines of comfortable workplaces, we are proceeding with systematic improvement activities in such areas as working environment, work method and environmental facilities. Also, rest stations, toilets, smoking areas, dining rooms and other areas. are being improved for better workplaces, including universalization of facilities.

#### Improving the Work Environment

Since taking out a panel, which weighed 7 to 10 kg and had the width of 2 to 2.4 m, by bending over used to easily cause backaches, an assist device was set up to ease the work burden.



Working by using an assist device

#### **Our Efforts**

#### Human Resources Department

#### Encouraging Employees to Be More Aware of Traffic Safety

We conduct a range of activities to raise employees' awareness of traffic safety, wanting to prevent them from getting involved in traffic accidents both in their business and private lives. The Gunma Manufacturing Division provides employees with hands-on safe driving education as part of voluntary traffic safety activities conducted by employees. In the education, employees learn about both dangerous driving behaviors and appropriate driving methods, such as how to turn to the right in a timely manner, not only from drivers' view-points but also from pedestrians' viewpoints.

At the Handa Plant of the Utsunomiya Manufacturing Division, employees attend the "school for night traffic safety" to learn how to drive safely during night. For example they learn differences in visibility between day and night and the influences given to visibility by far and near headlights, colors of pedestrians' clothes, and the use of reflective jackets by pedestrians.



# Environment

## Message from the Chairman of the Environmental Committee

#### Implementing Environmental Measures to Achieve Sustainable Development

The third Earth Summit "(Rio + 20") was held in Rio de Janeiro in June 2012. One year after the organization of the first Earth Summit in Rio de Janeiro in 1992, FHI established its Environmental Committee. Since then, we have been fostering environmental measures, committed toachieving sustainable development as stated in our Environmental Policy. As a manufacturer of

transportation, we are determined to fulfill our social responsibility towards the solution of global environ mental problems throughout our business operations, including the development of products, procurement of parts, manufacturing and transportation of products, and sales activities.

In order to implement environmental initiativesin a systematic manner, we integrated the environmental management systems across all our sites, including the head office, and obtained ISO 14001 certification for this integrated system. This system has made it possible for us to manage environmental issues centrally and more efficiently.

In March 2011, all SUBARU dealers and base in Japan obtained the "Eco Action 21" environmetal

management system certification from the Ministry of the Environment as part of their efforts to improve their environmental measures. Also, outside Japan, four FHI Group companies, namely SIA, SOA, SCI, and SRD acquired ISO 14001 certification. Moreover, in May 2012, SIA acquired ISO 50001 certification for its energy management system, with a view to improving its environmental measures in North America.

We are thus pressing forward with environmental measures across our supply chain, establishing the necessary systems on a group-wide basis.

In our 4th Voluntary Plan for the Environment (for FY2008 to FY2012), we set out the target, "to make contributions to society through our products by offering our customers greener products through a system of environmentally clean plants, logistics networks and dealers, and by carrying out appropriate environmental activities, including compliance with laws, regulations, and agreements and cooperation with the automotive industry." Not only FHI but also other Group companies have been sharing this target as one of their corporate principles and conducting activities towards resolving a range of environmental problems involving the Group. As a result, we have achieved successful results in most of our environmental activities.

We have newly formulated the "5th Voluntary

Plan for the Environment (for FY2013 to FY2017)" as a follow-up to the 4th plan. In this new plan, we have set out new targets and objectives to meet as many requests from our stakeholders as possible, while adhering to our basic principles. We will report on the progress being made with this new plan in our future CSR reports.

The environment surrounding FHI, including

global environmental problems, has been continuing to change, but we will continue to implement environmental measures to achieve sustainable development.



Mitsuru Takahashi Chairman of the Environmental Committee Director and Corporate Executive Vice President

Environmental Policy [Established in April 1998 Revised in March 2010]

In recognition of the close relationship between the global environment and business activities, we will deliver "Green Products" from "Clean Plants and Offices" through "Green Logistics" and "Clean Dealers" to customers in order to ensure the sustainable development of the society.

Also, while strictly observing laws and regulations, local agreements and industrial codes, we will commit ourselves to contributing to society and local communities, voluntary ongoing improvement and the prevention of pollution.

- Green Products Design and R&D of environment-friendly SUBARU brand products written CSR Policy
- Clean Plants Reduction of environmental burden in the production process
- Clean Offices Reduction of environmental burden through our business operations
- Green Logistics Reduction of environmental burden in the distribution of products
- Clean Dealers
   Support to dealerships in their environmental preservation activities
- Upgrading of management Contribution to the society, information disclosure and stepped up environmental activities by the whole SUBARU Group

### **Environmental Management**

#### Interaction of Global Environment and Business Activities

Our products have an impact on the environment throughout their life cycle stages, including the procurement of materials, manufacture, use, and disposal, because of the use of resources such as energy and materials and because of the emission of greenhouse gases and the generation of waste.

In order to reduce the life cycle environmental impact of our products, we are implementing environmental measures in all stages of our business activities across the supply chain (including R&D design, procurement, production, transportation, sales, and disposal).

**Environmental Impact of Business Activities** 

#### Creation of a Low-Carbon Society

We believe that we can make a contribution to the creation of a low-carbon society through the development and release of low-emission and eco-friendly vehicles, improvements in the fuel economy of general-purpose engines, and the reduction of aircraft weight by the use of the composite materials technology. We are also implementing measures to reduce CO<sub>2</sub> emissions from our business operations. For example, the new head office building to which we will move in 2014 is designed to be an S-class building under CASBEE\*1. "I CASBEE: Comprehensive Assessment System for Built Environment Efficiency

Environment

Automotive	-R&D and launching of fuel efficient vehicles and		
	eco-cars		
Industrial Products —	Improvement of fuel economy of general-purpose engines		
Aerospace	Weight saving through composite materials technology		
All Divisions	Proactive involvement in saving energy and controlling $\mbox{CO}_2$ emissions		



#### Product Lifecycle

#### Environmental Risk Management

We are managing and reducing the environmental risks posed by our business activities. For example, we have set out environmental criteria for warehouses storing hazardous materials, painting-related facilities, and wastewater treatment facilities to reduce the risks to the environment posed by these sites, such as leaks.

Before starting the driving tests of completed automobiles near the edge of our premises, we undertook noise asses ments and established a soundproof fence, giving due consideration to the outer appearance and green space. Thanks to the fence, noise levels have been lowered by approx. 17 to 18 dB.



Soundproof fence erected giving due consideration to green space

#### Organization

The FHI Group environment management system is structured around the Company-Wide Environmental Management System (EMS) and the Environmental Committee that works across the business divisions to implement the Environmental Policy and the Environmental Voluntary Plan. The director appointed for environmental issues represents the Company-Wide EMS and serves as chairperson of the Environmental Committee, conducting twice-yearly reviews. We actively promote environmental protection activities through comprehensive management of progress and revising the direction of future efforts.

#### Establishing an EMS/EnMS of the FHI Group



#### FHI Group Environmental Organization Chart (as of March 2012)

# Establishing the Environmental Management System

We are keen to build a group-wide environmental management structure. An EMS has been established and external certifications acquired across business sites, business partners, domestic and overseas consolidated manufacturing companies, and SUBARU dealerships at home and abroad. In particular, in March 2011, all 44 domestic dealers over 477 sites obtained Eco Action 21 certification. This was the first achievement in Japan for a manufacturer-led dealership. Further, in May 2012, Subaru of Indiana Automotive, Inc. (SIA), our North America production sites, became the first U.S. car manufacturing plant to receive ISO 50001, an international certification for energy management systems. The plant continues to improve its energy management.

Through global business activities as a part of the FHI Group, we are also working on "Green Procurement" in the supply chain and a comprehensive EMS across our nine business sites. We will further expand our EMS and Green Procurement activities that require a reduction of substances with environmental impact to include our business partners inside and outside Japan.

	Manufacturing Division/Office				Dealership	
Categories	FHI	Suppliers	Domestic Affiliated Companies	Overseas Affiliated Companies	Domestic Dealerships	Overseas subsidiary Dealerships
Divisions	Integrated EMS Gunma Manufactur- ing Division Tokyo Office Utsunomiya Manufacturing Division Handa Plant Handa Plant Saitama Manufactur- ing Division Head Office Yusoki Kogyo K.K. F.A.S.Co., Ltd.	Green procurement suppliers Total: 655	Fuji Machinery Co., Ltd. Kiryu Industrial Co., Ltd. Ichitan Co., Ltd. Yusoki Kogyo K.K. Total: 4	SIA (Producing) *1 SRD (Research & Development) Total: 2	All domestic SUBARU dealerships Total: 44	SOA*', SCI Total: 2
Acquired EMS/EnMS	ISO14001	ISO14001,EA21, or self-assessment	ISO14001	ISO14001/ISO50001*2	EA21	ISO14001

\*1 Three subsidiary companies (SIA, SOA and SRD) have already obtained ISO 14001 integrated certification.
\*2 SIA acquired both ISO 14001 and ISO 50001 certification.

#### **Environmental Communication**

We value the close communications maintained with the communities neighboring our business sites. This is why we set up multiple contact channels and publish environmental information in a variety of ways, such as our CSR report and through the Internet, as a reliable corporation and to provide peace of mind to our stakeholders. In the SUBARU Visitor Center located in the Gunma Manufacturing Division, our environmental efforts are explained in an exhibition corner called the Recycle Lab. The Utsunomiya and Saitama Manufacturing Divisions also have areas to demonstrate their waste recycling efforts.

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Environmental information disclosed on the Internet for each model



Recycle Lab

#### Participating in Eco-Products 2011

We have participated in the Eco-Products exhibition every year, regarding it as an important opportunity to meet a range of people who are interested in the environment and to introduce our environmental measures to them. We have received comments from many of the visitors to our booth, who were surprised by the fact that FHI, which is manufacturing SUBARU automobiles, is also engaged in other business fields. In Eco-Products 2011, we introduced our ecofriendly products, which people do not usually notice in their daily lives, by displaying actual products and using images, and publicized a range of measures that we are fostering for

the environment. sions also have areas to demonstrate their waste recycling efforts.



SUBARU Booth in Eco-Products 2011

#### Environmental Communication for Children

FHI had been distributing a brochure on the "SUBARU automobile manufacturing process" to children coming to the visitor center. We had also been publishing a "special CSR report" to show SUBARU social and environmental measures to fifth and sixth graders of elementary schools and "Factory Story" for the online introduction of our production factories. In FY2013, we published a new brochure for

children by combining the contents of these three publications.

We created this brochure by incorporating the opinions of people who had made tours of our factories. In the brochure, the manufacturing process is explained in an easy-to-understand manner and a range of information is provided, including our environmental initiatives and measures.



Brochure for children, which introduces the SUBARU automobile manufacturing process

#### **Environmental Education and Awareness**

We provide employees with a range of environmental education according to their job ranks and job details, deeming it as one of its social responsibilities to conduct activities towards resolving environmental problems.

In April 2011, we provided the 199 new employees of the automotive business unit with education on environmental protection. An employee in charge of environmental issues served as the lecturer for the course, and briefed attendants on global environmental problems, SUBARU environmental policies and environmental protection activities, and the importance of making individual efforts by introducing specific examples to participants.

We also held a seminar to develop internal ISO 14001 auditors to enhance the internal auditing system for the ISO 14001 environmental management system and to foster en-

vironmental protection activities conducted at our workplaces. In the twoday seminar held with an invited external lecturer, participants received education as candidates for internal auditors. We also invited employees of affiliated companies to this seminar, in order to build a more environment-friendly value chain. We will continue providing environmental education and fostering awareness among employees.



Teaching material for the seminar held to develop internal auditors for the ISO 14001 system

#### Online Education for Employees

In December 2011, about 700 employees at the head office received online education on environmental protection and were tested on their level of understanding using the in-house e-learning system.



Top page of e-learning system
#### Approaches to Biodiversity

Based on our environmental policy, FHI protects biodiversity making reference to the "Guidelines for Private Sector Engagement in Biodiversity (Ministry of the Environment)" and the "Declaration of Biodiversity by Keidanren—Guide to Action Policy (Keidanren)."

SOA, which sells SUBARU automobiles in the United States, established a "Rain Garden" within the premises of its head office, jointly with Rutgers University and a local soil protection organization. In the garden, employees are growing plants that are certified by the State government to contribute to environmental protection, which will eventually help purify the water in nearby rivers. The Rain Garden project also raised the environmental awareness of those living here, who are now highly motivated to clean local riverheads. In FY2013, the company will create another garden giving due considerations to biodiversity and with the participation of local citizens.

In Japan we own a number of forests, which extend to over 194 hectares in total. We thin the forests to develop and manage them. The reservoirs located within the premises of our sites are used as water sources for local agriculture. Also, a walking path was established in Kanayama, Ota City, by the SUBARU Group Local Exchange Organization, where weeds were removed and azaleas grown with support from local people.

#### Compliance with Environmental Laws

The total number of complaints received concerning environmental issues, cases exceeding the legal limits, and accidents have all declined over the last five years.

#### Cases of Exceeding Environmentally Regulated Values in FY2012

We have set our voluntary standards, which are 20% stricter than the environmental standards set by law. We are committed to achieving "zero non-compliance" with both the legal and voluntary standards and achieved this target in FY2012.

## Environmental Complaints Received in FY2012

We are striving to reduce environmental complaints to zero, but received one complaint in FY2012.

Name	Number of Cases	Details	Main Corrective Measures
Studio SUBARU	1 (noise)	Complaint about noise from the power generator (in Nov. 2011)	Moved the power generator as a temporary emergency measure, and will replace it with one with low noise



Retention basin within a SUBARU facility



Paulownia tree in the site

Flowers growing around the site

# Transition in the Number of Environmental Incidents, Accidents, and Complaints



#### **Environment-related Accidents in FY2012**

We are implementing measures to reduce environmental incidents to zero, including those giving no impact to outside our premises. In FY2012, we had three incidents within our premises but had no incidents giving impact to outside the premises.

Name	Number of Cases	Details	Main Corrective Measures
Gunma	2 (water	Leakage of water-soluble paint to the water purification tank within the premises (June. 2011)	Reeducation on the treatment of water-soluble paints
Manufacturing Division	pollution)	Discharge of industrial waste (sludge) to a road within the premises (Oct. 2011)	Provision of training to the manager to prevent the reoccurrence of similar problems
SUBARU Parts Center	1 (water pollution)	Spill of oil from two 20-liter oil cans within the premises (Aug. 2011)	Posting of a cautionary statement

## Environmental Accounting (FHI Group's Results in FY2012)

#### Index and Calculation Method of Environmental Cost and Economic Effect

With reference to the guidelines of the Ministry of the Environment, FHI formulated its own guidelines<sup>\*1</sup> according to its environmental conservation activity organization, based on which the environmental cost and economic effects are calculated. (The same method is applied to FHI group companies.) Please refer to pages 9 to 13 in the Supplementary Volume for Data related to 2006 Environmental & Social Report for details on calculation method.

\*1 Calculation method has been partly changed from FY2006 data collection

#### Method Used for Calculating the Environmental Cost and the Amount of Money Invested in Facilities

The amount of money invested (Amount invested >25 million yen) in facilities that have been introduced for both environmental and other purposes, plus related costs (maintenance management cost etc.), and finally labor cost are calculated on differential or pro-rata basis. For example, investment amount and environmental cost for energy saving at one manufacturing facility is calculated as follows: Regarding small facilities whose investment amount is less than 25 million yen, and anything purchased primarily for environmental purposes, any costs related to these environmental facilities, such as investment amount and maintenance cost, are all included in the calculation. Please note that depreciation cost of facilities invested is not included in the environmental cost from the view point of placing value on cash flow. Small expenses such as fixes asset tax and insurance cost are also extracted from the total. Environmental cost and economic effect by environmental facilities are only recorded for 3 years starting from the 2nd year after the facilities are put into operation.

Environment

#### FY2012 Calculation Result

Environmental costs came to 17.7 billion yen on an unconsolidated basis, up 1.35 billion yen (8.2%) from the previous fiscal year, while it amounted to 18.5 billion yen on a consolidated basis, up 1.31 billion yen (7.6%) year-on-year. The cost increase was mainly due to an increase in research and development costs (increased by 1.3 billion yen on an unconsolidated basis). The ratio of environmental cost to sales, which is one of the environmental management indexes used on a consolidated basis, came to 1.26%.

Amount invested in facilities, environmental cost = K x (amount invested in the manufacturing facilities, maintenance cost, etc.) This K is an environmental impact factor that is calculated by the following scheme: K = (Total amount invested – Amount invested without energy saving targets)/Total amount invested

#### **Results of Environmental Cost and Trial Effect for FY2012**

			Envi	ronmenta	al Costs (	¥mil)			Enviror	mental li	nvestmer	nt (¥mil)	
Item	Group	Und	Unconsolidated			Consolidated		Unconsolidated			Consolidated		
		FY2010	FY2011	FY2012	FY2010	FY2011	FY2012	FY2010	FY2011	FY2012	FY2010	FY2011	FY2012
	① Pollution prevention cost	316	310	306	515	462	447	54	102	116	56	103	155
(1) Cost in the busi- ness area	② Global environmental con- servation cost	47	41	53	90	71	84	343	90	195	352	99	235
	③ Resource circulation cost	416	447	466	774	772	777	1	0	0	5	0	1
(2) Upstream and downstream costs	Cost for collection, recycling, resale, and proper disposal of used products. Difference from typical goods and services procurement	143	140	158	143	140	158	-	-	-	-	-	-
(3) Administration cost	Cost for monitoring environ- mental impact. Cost for the implementa- tion and maintenance of an environmental management system. Cost for environmental train- ing of employees	95	84	92	141	178	127	-	-	-	-	-	-
(4) R&D cost	R&D cost to develop products that contribute to environmental conservation	14,774	15,179	16,474	15,049	15,421	16,749	1,026	814	788	1,026	821	792
(5) Social activity cost	Cost related to donation or financial support of environmental groups	62	107	106	65	109	109	-	-	-	-	-	-
(6) Environmental remediation cost Cost related to environmental aquatic, ground, and geologi environments		102	80	94	116	90	99	-	1	0	_	1	0
(7) Other costs		7	0	0	14	0	0	-	-	-	-	-	-
Grand Total			16,388	17,748	16,907	17,243	18,550	1,424	1,007	1,099	1,439	1,024	1,183

\* Due to rounding, the sum may not exactly match the corresponding total.

#### Calculation of Economic Effects for FY2012

Itom	Economic effects (in millions of yen)			
item	Unconsolidated	Consolidated		
Reduction in energy cost due to energy conservation	179	225		
Proceeds from the recycling of metals, waste liquids and cardboard boxes as valuable resources	1,207	2,363		
Reduced use of raw materials due to recycling (re- duced packaging materials cost)	5.98	5.98		

Companies included in the consolidated calculation

#### Five subsidiaries in Japan

Yusoki Kogyo K.K., Fuji Machinery Co., Ltd., Ichitan Co., Ltd., Kiryu Industrial Co., Ltd., and Subaru Logistics Co., Ltd.

Four subsidiaries outside Japan SIA, SOA, SCI, and SRD

## **Environmental Performance**

#### **Environmental Performance**

The main aspects of our environmental performance in FY2012 are as shown in the following graphs. CO<sub>2</sub> emissions, waste generation, emission of PRTR chemical substances and the use of water have increased from the previous year. This is due to increased production volumes of each plant compared to the previous year.

We have achieved zero emissions\*1 since FY2005 in terms of landfill waste.

\*1 FHI's definition of zero emissions: The total amount of landfill waste (waste materials directly landfilled + waste materials landfilled after intermediate treated) is less than 0.5% of the total amount of waste materials excluding scrap metal (industrial waste + industrial waste subject to special control + general waste from business operations).

#### Amount of CO<sub>2</sub> Emissions and Energy Consumption per Unit of Production at All Manufacturing Plants



# Volume of Water Used at All Manufacturing Plants



#### Waste Generation (includes scrap metal sold)



#### Amount of PRTR Chemical Substances Used and Emitted at All Manufacturing Plants





#### Amount of NOx and SOx Emissions

#### Amount of Nitrogen, Phosphorus, BOD Emissions



#### **Reducing VOC Emissions**

The amount of VOCs emitted from the automobile coating process was 47.3 grams per square meter in FY2012, down 48.2% from the FY2001 level. This was due to a decrease in the use of cleaning thinner and an increase in the recovery rate of used thinner. In the new coating factory opened in 2007, use of a water-based coating has been fostered to substantially reduce VOC emissions.



New coating factory

#### Preventing Soil and Underground Water Pollution

We have voluntarily conducted soil and underground water surveys at all manufacturing plants since 1998 and have reported the results to the government. We are continuously conducting sampling surveys of underground water even at manufacturing plants where purifying measures for soil and underground water have already been taken, such as the Utsunomiya Manufacturing Division, and continue to report the results to the government.

#### Status of Storage and Disposal of Equipment Containing PCB

We store PCB appropriately in accordance with the laws and regulations related to PCB. We applied and registered early for the disposal of equipment (such as transformers and condensers we currently store) containing high concentrations of PCB. The disposal process commenced in FY2012.



Loading PCB waste to a truck

# Summary of the Activities Conducted in Line with the 4th Voluntary Plan for the Environment (FY2008 to FY2012)

Environment

In FY2007, FHI formulated the 4th Voluntary Plan for the Environment as its voluntary environmental protection plan to be implemented during the period from FY2008 to FY2012. In this section, we will report on activities conducted during the five years. We have achieved the targets for almost all the activity items, but have yet to attain the targets for some items. During FY2013 and beyond we will conduct environmental protection activities to achieve the targets set out in the 5th Voluntary Plan for the Environment, which we have newly formulated as a plan for the period from FY2013 to FY2017.

### Overview of the 4th Voluntary Plan for the Environment

#### We are making every effort to prevent global warming

- We will continue working to improve fuel economy with every full vehicle model change and annual model change.
- We will reduce CO<sub>2</sub> emissions at manufacturing plants by 15% compared to FY1991 levels by FY2011.
- Regarding logistics, we will reduce energy consumption per unit by 5% compared to FY2007 levels by the end of FY2012.
- We will promote the development and marketing of products that use clean energy, such as electric vehicles and wind turbine systems

#### We will address various environmental issues by making continuous improvements throughout all stages

- We will make further progress in reducing emissions produced by our automobile lineup and promote popularization of low emissions vehicles.
- We aim to achieve a 95% recycling ratio in 2015 by taking recyclability into account in new model designs.
- We will reduce emissions of VOCs per painted surface area of bodies (g/m<sup>2</sup>) in vehicle production lines by 30% compared to FY2001 levels by the end of FY2011.
- We will reduce the amount of land filled waste by controlling sources of waste and continuing zero emissions at all manufacturing plants.
- We will promote green procurement, which requires suppliers in and out of Japan to establish Environmental Management Systems and reduce substances with environmental impact.
- We will support the environmental activities of dealers.
- We will conduct social contribution activities and disclose environment-related information.

**1** 

#### [1] Green Products

Item	Targets and Actions	FY 2012 Plans	Results for FY2012	Overall Results for FY2008 to FY2012	Ev. :Evaluation O:Achived X:Not Achived
Improving fuel	Continue to improve fuel economy (FE) for every full model change and annual model change.	Continue to improve fuel economy (FE) for every full model change and annual model change.	Improved fuel economy by approx. 20 to 27% for the new IMPREZA by adopting the new generation BOX- ER engine, new Lineartronic system and idle stop function, improving aerodynamic performance, and re- ducing the body weight.	<ul> <li>Achieved higher fuel economy in all weight classes by continuing full and annual model changes.</li> </ul>	0
economy [Automobiles]	Oncrease models that achieve FY2010 FE Standards.	◇The scope of vehicles which meet the FY2010 FE Standards by over 15% im- proved to be expanded.	◆Increased the percentage of vehi- cles performing 15% better or more compared to the FY2010 FE Stan- dards from 71.5% in FY2011 to 81.3%.	<ul> <li>Increased the number of vehicles meeting the FY2010 FE Standards every year.</li> </ul>	0
	◇Promote improvement of FE to- ward the FY2015 FE Standards.	◇FE to be improved continuously to meet the FY2015 FE Standards.	◆For the new IMPREZA and TREZIA, released models meeting the FY2015 FE Standards.	◆Released vehicles meeting the FY2015 FE Standards into the market.	0
Cleaner exhaust emission [Automobiles]	Improve on technology which has already achieved a 75% reduc- tion on the FY2005 FE Standards for exhaust emissions in order to further reduce exhaust emissions and promote the use of low ex- haust emission vehicles.	♦Further increase the number of cars certified with emissions reduced by 75% from the FY2005 FE Standards. (Vehicles to be produced by FHI)	Increased the percentage of SU- LEV vehicles from 91% in FY2011 to 94%.	<ul> <li>Increased the number of vehicles achieving emissions by 75% lower than the FY2005 FE Standard year-on-year by applying emis- sions reduction technology.</li> </ul>	0
	OHybrid vehicles: Develop a new hybrid system etc. in collaboration with new alliance partner.*1	Observe to be continued.	<ul> <li>Promoted the development of a new hybrid system for release in the market in 2013.</li> </ul>	Developed a new hybrid system for release in the market.	0
	Electric vehicles: Develop vehicles for launch on the market in addition to business use.*1	◇The production of the Plug-in STELLA discontinued, but joint verification tests with relevant municipalities to be con- tinued.	<ul> <li>Conducted demonstration experi- ments on the Plug-in STELLA jointly with related local governments.</li> </ul>	Promoted the development of EVs for release into the market as ve- hicles for business use, and leased the Plug-in STELLA to national and local governments and corpora- tions.	0
Developing products using clean energy	♦ Continue development of wind tur- bine systems and market expan- sion.*2	♦ The first large-scale wind power gener- ation system scheduled to start opera- tions at a mountainous site.	<ul> <li>Started operations of the first large- scale wind power generation sys- tem at a mountain site as planned.</li> </ul>	<ul> <li>Began producing, selling, and oper- ating the SUBARU 80/2.0 large- scale wind power generation sys- tem in 2008.</li> </ul>	0
	Expand market for applied prod- ucts which use LPG/CNG en- gines. <sup>12</sup>	◇The development of the 3kW engine for the RV generator to be continued with production startup in Feb. 2012.	<ul> <li>Made progress to start the produc- tion of LPG engines for 3kW RV generators by ensuring high dura- bility and meeting exhaust gas and OEM requirements.</li> </ul>	Released the LPG/CNG dual fuel engine in the market in FY2010 and made preparations for the re- lease of LPG engines for genera- tors in FY2012, thereby achieving the target of 'releasing a product using an LPG/CNG engine,' as set at the start of the 4th Voluntary Plan.	0
Improving recyclabillity [Automobiles]	Improve design to increase recy- clability in new models to achieve a recycling rate of 95% in 2015.	OMaintain the recycling rate at over 95%.	<ul> <li>Recycling rate realized 98.9%, thereby achieving the target of "95% or higher".</li> <li>Used highly recyclable olefin resin as material in almost all new auto- mobiles.</li> </ul>	<ul> <li>Continued to achieve the target of "95% or higher recycling rate".</li> <li>Expanded the use of olefin resin in new models to foster the 3Rs and designed products giving more consideration to their recyclability, for example by decreasing the number of components.</li> </ul>	0
Reducing substances with environmental impact [Automobiles]	Enhance management of sub- stances with environmental im- pact and further reduce the use of such substances.	Replacement of lead compounds with non-lead substitutes will be promoted step by step.	Discontinued use of lead in solder- ing for switches, relays, etc. for al- most all new models in 2011, there- by reducing total use of lead.	Based on the voluntary action plan set out by the Japan Automobile Manufacturers Association, dis- continued or reduced the use of four substances of concern (lead, mercury, cadmium, and hexava- lent chromium) and achieved the targets in 2007, while also foster- ing lead-free soldering for electric and electronic parts.	0
Reducing exterior noise	Continue to promote development of technology to reduce noise that is compatible with both fuel econ- omy improvement and exhaust emissions reduction.	Continue to promote development of technology to reduce noise that is com- patible with both fuel economy improve- ment and exhaust emissions reduction.	◆For the new IMPREZA, adopted the new-generation BOXER engine and CVT Lineartronic system to provide excellent fuel economy and com- fortable acceleration with optimal engine speed, while also reducing noise levels on urban roads.	<ul> <li>Introduced technologies for higher fuel economy and lower exhaust gas emissions, including the new CVT, FB engine, and vehicle weight reduction technologies, while reducing noise from vehi- cles.</li> </ul>	0
Curbing global warming regarding air	◇Promote further reduction in the amount of refrigerant (HFC134a) per vehicle.	Reduction of the used amount and leaks to be promoted as before.	Equipped new models with energy- saving cooling devices, thereby re- ducing the use/leakage of coolants.	Reduced the use and leakage of coolants as planned.	0
conditioning refrigerants [Automobiles]	◇Advance the development of air conditioner with low GWP refrig- erant.	Study on alternative refrigerants in place of HFC134a to be promoted.	◆Developed and started manufacture of an air conditioner equipped with HFO-1234yf alternative coolant.	Developed an air conditioner using alternative coolants as planned.	0
Research on traffic environ- ments [Automobiles]	♦ Work further on Intelligent Transport Systems (ITS) that realize a safe and comfortable motorized society.	◇The development of the advanced safe driving assist system "EyeSight (ver.2)" to be promoted for wider application. ◇Involvement in Intelligent Transport System (ITS) and the Advance Safety Vehicle (ASV) project will be promoted.	<ul> <li>Expanded the use of the "EyeSight (ver.2)" advanced safe driving sup- port system (in more models and markets) and promoted further de- velopment of the system.</li> <li>Participated in the 5th ASV project and fostered the initiative, while ac- celerating measures for smart traf- fic control to mitigate congestions on expressways.</li> </ul>	Applied the "EyeSight (ver.2)" advanced safe driving support system to products for the creation of a safe and comfortable motorized society. Participated in the 4th ASV project, developed a driving support system based on inter-vehicle and verified the effects of the system through demostrative experiments.	0
Developing environment- related products and businesses	◇Advance environment-related busi- nesses such as development of re- fuse collection vehicles and envi- ronmental equipment and devices." <sup>4</sup>	◇The annual sales target for the "Fuji- mighty Electra" set at 12 units for CO₂ reduction by 42 tons a year and noise reduction. ◇Target CO₂ reductions of about 166 tons a year by promoting the modal shift to ocean transport.	<ul> <li>Sold 17 "Fuji-Mighty Electra" units. thereby contributing to reductions of both CO<sub>2</sub> emissions and noise levels.</li> <li>Promoted modal shift to marine transportation, thereby reducing CO<sub>2</sub> emissions by 138 tons a year.</li> </ul>	<ul> <li>As for refuse collection vehicles, released the "Fuji-Mighty Electra" in the market, thereby contributing to CO<sub>2</sub> emissions and noise reduc- tion.</li> <li>Promoted modal shift to marine transportation for the transporta- tion of refuse collection vehicles to West Japan and won a commenda- tion.</li> </ul>	0



Item	Targets and Actions	FY 2012 Plans	Results for FY2012	Overall Results for FY2008 to FY2012	Ev. :Evaluation O:Achived ×:Not Achived
Curbing global warming	◇Aim to reduce CO₂ emissions by 15% from manufacturing plants compared to FY1991 level by FY2011.	<ul> <li>CO2 emissions to be reduced by 15% against FY1991. [Add-on challenge: We will proceed with carbon dioxide re- duction by 22% against FY1991.]</li> </ul>	◆Reduced CO₂ emissions by 26.0% from FY1991 level to 202,721 tons- CO₂	◆Reduced CO₂ emissions by 26.0% from FY1991 level to 202,721 tons-CO₂	0
	Continue reducing emissions of PRTR chemical substances to the environment.		Emissions of PRTR substances to- taled 673 tons (633 tons for the Gunma Manufacturing Division).	Proactively adopted alternatives containing no PRTR substances.	- *1
Control and reduction of substances with environmental impact at	Reduce VOC emissions (g/m <sup>2</sup> ) in vehicle production lines by 30% compared to the FY2001 level by the end of FY2011.	◇Reduction of VOC emissions in g/m to be reduced by 30% or more against FY2001 to be maintained. [Add-on chal- lenge target: 49.7 g/m, a reduction by 45.7% against FY2001.]	<ul> <li>Reduced VOC emissions by 48.2% from FY2001 level to 47.3 g/m<sup>2</sup> by reducing the use of thinner at coat- ing facilities and strictly managing VOC recovery equipment.</li> </ul>	Introduced thinner recovery equipment that could be easily cleaned and maintained to the manual coat- ing process, as well as to updated/ newly introduced coating ma- chines.	0
manufacturing plants	Reduce environmental risks through Environmental Risk As- sessment and totally eliminate the occurrence of incidents, claims and cases where voluntary stan- dards are exceeded.	Preventative response to risks and communication with residents nearby to be stepped up and activities for "zero" in all items to be promoted.	<ul> <li>Recorded 3 in-plant spills and 1 noise complaint.</li> <li>Carried out environmental risk assessment at the launch of new model and reduced environmental impact in regard to noise and odor.</li> </ul>	<ul> <li>Steadily implemented risk prevention activities based on environmental risk assessment.</li> <li>Continued "risk communication" with local people.</li> </ul>	×
Reducing waste	OReduce the amount of waste mate- rials by controlling sources of waste including increasing yield ratio, reducing removal stock, in- creasing coating efficiency and improving packaging.	Additional measures will be taken to control emissions.	◆538 tons of sold waste from the metal polishing process as resources and excluded it from industrial waste. As a result, the amount of industrial waste came to 79.284 tons, down 11.8% from FY2000 level.	◆Conducted activities to reduce waste generation and save costs in 2007 and 2008, and focused on cost reduction in and after 2009, while selling waste as resources for further waste reduction.	0
plants	OContinue zero emissions (zero lev- el of landfilled waste both directly and indirectly).     OZero emissions to be continued.		<ul> <li>Continued to achieve zero emissions through the appropriate conclusion and management of agreements with waste disposal companies.</li> </ul>	<ul> <li>Continued to achieve zero emis- sions by ensuring compliance with laws and selecting disposal com- panies for appropriate waste dis- posal.</li> </ul>	0
Saving water resources	Aim to reduce amount of water used at manufacturing plants by 45% compared to the FY2000 level by FY2012.	Water usage to be reduced by 45% against FY2000. [Add-on challenge tar- get: Reduction by 49.2% against FY2000.]	♦Reduced water use by 51.3% from FY2000 level to 3,032,000 m <sup>3</sup> .	♦Reduced water use by 51.3% from FY2000 level to 3,032,000 m <sup>3</sup> .	0
Green purchasing	<ul> <li>Request domestic and overseas suppliers to reduce substances with environmental impact and to establish an Environmental Man- agement System (EMS).</li> <li>The following are the targets for establishing EMS.</li> <li>Automotive Business Unit and In- dustrial Products Company: Main- tain the completed system.</li> <li>Eco Technologies Company: Aiming to complete establishment of the system.</li> </ul>		<ul> <li>Fully completed for 52 suppliers.</li> <li>Automotive: 17</li> <li>Aerospace: 0</li> <li>Eco Technologies: 1</li> <li>Industrial Products: 34</li> </ul>	<ul> <li>◆Fully Completed the establishment for a total of 655 companies.</li> <li>Automotive: 388</li> <li>Aerospace: 79</li> <li>Eco Technologies: 51</li> <li>Industrial Products: 137</li> </ul>	0
activities		Efforts to reduce environmental load substances to be continued.	<ul> <li>Automotive: Conducted a survey on suppliers' lead-free solder mea- sures.</li> <li>Aerospace: Confirmed the non-use of regulated substances in pur- chased materials.</li> <li>Eco Technologies: Checked the safety of purchased materials.</li> </ul>	Conducted surveys and reduced the use of substances of concern in purchased materials to ensure compliance with laws and regula- tions, such as EU directives.	0
	Set CSR procurement guidelines, and disseminate these to the sup- pliers.	CSR procurement guidelines to be set up for distribution to suppliers.	<ul> <li>Aerospace, Eco Technologies, and Industrial Products: Began prelimi- nary examinations for the formula- tion of CSR guidelines.</li> </ul>	<ul> <li>Automotive: Published "CSR guide- lines for suppliers" and distributed copies to suppliers.</li> </ul>	0

\*1 The scope of evaluation was (-) following the revision of the PRTR Act concerning data for FY2011 onwards. Reduction activities, however, have been continued.

#### [3] Green Logistics

Item	Targets and Actions	FY 2012 Plans	Results for FY2012	Overall Results f35.75or FY2008 to FY2012	Ev. :Evaluation O:Achived ×:Not Achived
Reducing the	<ul> <li>Be certain of meeting the Revised Energy Saving Law.</li> <li>Try to reduce energy used per sale by 5% compared to FY2007 by the end of FY2012.</li> </ul>	◇The Revised Energy Saving Act to be surely addressed. [The energy used per unit is to be re- duced by 5% against FY2007 by the end of FY2012] Add-on challenge tar- get: 25% reduction against FY2007.	Steadily achieved targets and con- tinued reduction measures.	<ul> <li>Fostered efficient transportation of completed vehicles, the most ener- gy-consuming of our transporta- tion activities, while facing various changing factors.</li> </ul>	0
Heducing the environmental burden caused by logistics	Offer support and cooperation to environmental activity groups.	Efforts to hike the reuse rate of current foam materials to be continued. (Target: 95%)	Increased the reuse rate of foam materials to 96.9%, exceeding the target.	Implemented measures to foster the reuse of materials, expanding the target over, engine subcompo- nents, rear quarter glasses, col- umn shifts, gear boxes, drive shafts, and rear differentials by the first to fourth rounds of the activi- ty.	0

2

#### [4] Clean Dealers

Item	Targets and Actions	FY 2012 Plans	Results for FY2012	Overall Results for FY2008 to FY2012	Ev. :Evaluation O:Achived X:Not Achived
	Support environmental conserva- tion activities by dealers.	◇Voluntary environmental conservation activities by dealers leveraging the "Eco-Action 21*1* to be backed up.	<ul> <li>Dealers continuously conducted voluntary environmental activities based on "Eco-Action 21".</li> <li>Dealers in the Kanto and Tohoku regions saved electricity in re- sponse to power shortages result- ing from the megaquake and achieved substantial cost reduc- tions.</li> </ul>	<ul> <li>All dealers and bases attained "Eco-Action 21" certification as the foundation to conduct environ- mental activities as a team.</li> <li>As a result, they can now share in- formation about their measures while reducing their costs (elec- tricity, etc.) by fostering voluntary environmental activities.</li> </ul>	0
		Collecting used bumpers to be contin- ues.	<ul> <li>Recovered 33,376 used bumpers. (down 6,462 from the FY2011 lev- el)</li> </ul>	<ul> <li>Steadily continued the recycling of used bumpers, and in FY2013 will renew the recovery system ap- plied to dealers to increase the number of used bumpers recov- ered.</li> </ul>	0
Promoting environmental conservation	Continue to collect changed warn- ing flares.	Collecting changed warning flares to be continued.	◆Recovered 129,750 replaced warn- ing flares (down 4,650 from the FY2010 level).	<ul> <li>Continued recovery and recycling of warning flares.</li> </ul>	0
environmental conservation activities at dealers	♦ Continue to comply with the ELVs Recycling Law.	◇Compliance with the ELVs Recycling Law to be continued for higher recy- cling rate.	<ul> <li>Recycling based on the Act on Recycling, etc. of ELVs.</li> <li>In FY2012, recovered 25.774.5 tons of shredder dust (ASR) from 164.618 ELVs and recycled 24.156.5 tons, thereby increasing the ASR recycling rate to 93.7% and achieving the statutory rate for 2015 (70%).</li> <li>Also recovered 200.635 airbags from 87.037 ELVs and sent 16.063.5 kg to recycling facilities, of which 15.033.6 kg were recycled, thereby increasing the recycling rate to 93.6% and achieving the statutory rate of 85%.</li> <li>Recovered CPC6s (37.071.7kg) from 132.636 ELVs and properly disposed of them</li> </ul>	◆ASR recycling rate increased by more than 20% from 72.9% in FY2008 to 93.7% as a result of the efforts made for recycling, includ- ing the use of new recycling facili- ties. Achieved zero ASR landfill since May 2011 and will further in- crease the recycling rate in and after FY2013.	0

\*1 Eco-Action 21: The environmental management system based on ISO14000 set by the Ministry of the Environment to help environmental activities of small- to medium-sized corporations.

#### [5] Improving Environmental Management

Item	Targets and Actions	FY 2012 Plans	Results for FY2012	Overall Results for FY2008 to FY2012	Ev. :Evaluation O:Achived ×:Not Achived
Implementation of Social Contribution Activities	Continue to join environmental events, communicate with local residents at plants, and welcome visitors to plant tours. Continue to join cleaning and tree- planting activities in local commu- nities around plants. Coffer support and cooperation to environmental activity groups.	OParticipation in environment-related events to be continued.	<ul> <li>Continued cleanup activities around sites.</li> <li>Continued recovery of eco-caps.</li> </ul>	<ul> <li>Continued to organize factory tours, held events within the prem- ises, and gave environmental classes.</li> <li>Accepted study visits of junior and senior high students to the head of- fice.</li> </ul>	0
Information Disclosure of Environmental Information	◇Continue to publish social and environmental (S&E) reports, and aim at releasing S&E information through publicity channels from time to time. ◇Improve and upgrade the contents of S & E reports (e.g., compliance with guidelines, and reports including affiliates).	Environment-related information to be disclosed via CSR Reports and Eco- Products Exhibitions.	<ul> <li>Participated in "Eco-Products" in FY2012 (participant since 2008) to publicize the company's envi- ronmental activities.</li> </ul>	Published social and environmen- tal reports up to 2008 and have published the CSR report since FY2010 to provide the public with the company's environmental in- formation, while making efforts to improve both paper and online re- ports to make them more intelligi- ble and useful for stakeholders.	0
Implementation of Environmental Education and Awareness Activities	Continue to incorporate social and environmental education into the company education system and put it into practice. Continue to implement educational campaigns through company edu- cation newsletters and various media. Continue to implement lectures and presentations of operation im- provement case studies at work- sites.	OThe environmental education and motivation activities to be continued.	<ul> <li>Created additional copies of the environmental card to distribute to temporary staff.</li> <li>Continued to provide internal ISO auditor training.</li> <li>Continued to provide new employees with environmental education.</li> </ul>	<ul> <li>Fostered energy conservation ac- tivities and continued environmen- tal education for higher environ- mental performance.</li> </ul>	0
Environmental Management System Establishment	Continue to improve the EMS at all business sites with ISO 14001.Continue to improve cooperation with subsidiaries and establish consolidated EMS.	OEMS under ISO 14001 systems to be continuously improved.	<ul> <li>Maintained consolidated EMS through the group of domestic subsidiaries in charge and through the North America Environmental Committee.</li> </ul>	<ul> <li>Integrated the EMSs of the company's five sites into an efficient and effective EMS and acquired ISO 14001 certification for the inte- grated system in February 2010.</li> </ul>	0
Approach to the Revised Energy Conservation Law	Work out mid- and long-term ener- gy saving plans and control stan- dards to promote efficient man- agement of progress by an environmental data collection sys- tem.	Energy used per unit to be reduced by 1% annually.	♦FY2012 results: Per-unit energy use increased to 13.81 kl/100 mil- lion yen, up 5.8% year on year.	<ul> <li>In progress to achieve a 1% reduc- tion per year on average for the five-year period.</li> </ul>	- *2

\*2 Will be evaluated after obtaining final data on energy usage for the five years from FY2010 to FY2014.



FHI has formulated the 5th Voluntary Plan for the Environment targeting the period from FY2013 to FY2017. Based on our environmental policy, we have set even higher environmental protection targets in the plan, while also incorporating appropriate environmental measures in it, such as those to ensure compliance with laws and regulations and to foster cooperation within the industry. Based on the plan, we will make contributions to society through our products, specifically by shipping even greener products from our clean plants and offices to customers through clean dealers by green logistics. The entire FHI Group will share the plan as the Group's guidelines and proactively make improvement efforts to solve a range of environmental problems in the fields of Global Warming Countermeasures, Resource Recycling, Pollution Prevention and Reduction of Hazardous Chemical Substance Usage, and Environmental Management, as introduced below.



FHI 5th Voluntary Plan for the Environment (FY2013 to FY2017)

#### [1] Global Warming Countermeasures

Field	Item			Target/Initiative(FY2017)
	Improving fuel economy	Automo	Continue to improve fuel economy through full model changes and annual model changes.	Olmprove fuel economy by 30% compared with previous models through innovative shift to envi- ronmental engines/CVT. Ointroduce horizontally opposed direct-inject engines to the market.
		biles	Improve fuel economy to ensure compliance with fuel economy/GHG emissions standards in each country/region.	◇Japan: Meet the 2015 Fuel Economy Standards without fail. ◊Overseas: Meet the fuel economy/GHG emissions standards in each region.
		Ī	Release a hybrid car into the market.	♦ Release a hybrid car into the Japanese market in 2013.
A. Green Products			◆Conduct research to release EVs in the market.	
Us	Using clean energy		Improve diesel engines to expand their sales in the market.	$\Diamond$ Promote measures to comply with the Euro 6 regulation for horizontally opposed diesel engines.
		Industrial products	Establish technologies to reduce exhaust gas and improve fuel economy by applying electronic control to general-purpose engines.	Olncrease the number of models for fuel-injection general-purpose engines and foster their market introduction.
	Curbing global warming regarding air condi- tioning refrigerants	Automo- biles	<ul> <li>Promote the development of air conditioners using refrigerants with low global warming potentials.</li> </ul>	OFurther promote the development of air conditioners using refrigerants with low global warming potentials.
			◆Reduce CO₂ emissions per unit of sales at domestic manufacturing plants.	OReduce CO <sub>2</sub> emissions per unit of sales by 10% from the FY2007 level by FY2017 at domestic manufacturing plants.
B. Clean Plants,	Manufacturing plants		◆Foster CO₂ emissions reduction activities at overseas manufacturing plants. *1	$\diamondsuit$ Set the medium-term CO_2 emissions reduction targets and conduct activities to attain them at overseas manufacturing plants.
Offices	Logistics		◆Ensure compliance with the Act on the Rational Use of Energy.	OReduce per-unit energy use by 1% every year. (comparing to: FY2007)
	Offices		Ensure compliance with the Act on the Rational Use of Energy.	OReduce per-unit energy use by 1% across the company (including offices) every year. (comparing to: FY2010)

Environment

#### [2] Resource Recycling

A. Green Products Improving recyc	Improving recyclability	A u t c bile	Continue to implement measures to comply with the Act on Recycling, etc. of ELVs.	
		s mo-	<ul> <li>Continue to implement measures to make parts and materials more detachable/ separable.</li> </ul>	95% by 2015.
	Manufacturing plants		Continue the appropriate disposal of waste and the suppression of waste generation.	Ocntinue the appropriate management of waste and the suppression of waste generation by increasing the yield and packaging methods.
B. Clean Plants and			Continue zero emissions (zero landfill waste either directly or indirectly) at both domestic and overseas plants.	Continue zero emissions at both domestic and overseas plants.
Offices (Dealers)			Reduce water use at both domestic and overseas plants.	OReduce water use across Group companies in and outside Japan.
	Offices (Domestic deal- ers)	Automo- bies	♦Continue the recovery of used bumpers.	♦ Continue the recovery of used bumpers.

### [3] Pollution Prevention and Reduction of Hazardous Chemical Substance Usage

	Reduction in exhaust gas	Automobile	◆Foster the introduction of low-emission vehicles for the improvement of air quality.	◇Japan: Increase the number of FHI's automobile models achieving emissions by 75% lower than the 2005 emission standards. ◇Overseas: Foster the introduction of low-emission vehicles to improve air quality in each country and region.
A. Green Products	Reduction in noise	Se	Develop technologies to achieve higher fuel economy and reduction in exhaust gas and noise.	ODevelop noise reduction technologies in consideration of the driving conditions on urban roads.
	Reduction in the use of substanc- es of concern		Foster management and reduction in the use of substances of concern.	An analysis the menogramment of chamical substances used in products
			Overseas: Ensure compliance with related laws and regulations, including the EU directives.	Certification of the management of chemical substances used in products. Obvelop technologies to foster replacement with substances with lower environmental impact.
			◆Continue to reduce the release of PRTR substances to the environment.	Oldentify and manage the chemical substances regulated by the PRTR law and reduce the use of these substances.
B. Clean Plants	Management and reduc- tion in the use of sub- stances of concern at	Automo- biles	◆Further reduce per-unit VOC emissions (g/m²) from manufacturing lines.	$\Diamond Reduce per-unit VOC emissions to below 41.3 g/m^2. (a 54.9% reduction from the FY2001 level)$
	manufacturing plants		<ul> <li>Conduct activities to reduce leakages of hazardous substances to outside the premises, complaints, and incompliance with the legal standards to zero.</li> </ul>	Conduct activities to reduce environmental incident, complaints, and incompliance with the legal standards to zero.

#### [4] Environmental Management

	Research on traffic envi-	Automobiles	<ul> <li>Work further on ITS and foster the development of traffic accident prevention technologies for a safer and more comfortable motorized society.</li> </ul>	OFoster measures for the development of an advanced safety vehicle (ASV). OFoster measures for the development of a driving safety support system (DSSS).	
	ronments		Foster the use of the advanced safe driving system and develop technologies to further sophisticate it.	Opevelop more technologies for the expanded use of the "EyeSight (ver. 2)" advanced safe system.	
	Promotion of lifecycle assessments		◆Disclose more lifecycle assessment (LCA) data.	Obsclose LCA data starting with cars that have undergone full model changes.	
Improving Environmental Management	Green procurement activity		<ul> <li>Request both domestic and overseas suppliers to establish and maintain environmental management systems.</li> </ul>		
			◆Reduce the use of substances of concern.	$\Diamond Encourage$ suppliers to enhance the management and reduce the use of substances of concern in parts and materials.	
			Set the supplier CSR guidelines and distribute the copies to suppliers. (Aero- space and Industrial Products Companies) (Already set and distributed by the automotive business unit)	$\Diamond Set$ the guidelines and increase suppliers' awareness of the guidelines.	
	Support to dealers' envi-	Automo- biles	◆Give support to dealers' environmental activities.	$\diamondsuit$ Support all dealers in maintaining the "Eco Action 21"*2 certification.	
	ronmental protection activities			OSupport the voluntary implementation of environmental measures, such as energy conservation and waste reduction measures under the "Eco Action 21".	
	Promotion of environmental pro- tection activities, including bio- diversity conservation in coop- eration with local communities		Continue to participate in environmental events, make exchanges with local inhabitants, and hold plant tours. Continue to conduct cleanup and greening activities, including biodiversity conservation efforts. Give support to environmental organizations' activities.	OProactively continue to hold plant tours and events within the premises, and give environmental classes. Continue cleanup activities around the premises. Foster greening activities in consideration of biodiversity conservation.	
	Disclosure of Environmental In- formation		<ul> <li>Timely disclose environmental information through regular publication of re- ports and other documents.</li> </ul>	OReport about environmental activities in the CSR report and provide latest information at t website.	
			<ul> <li>Improve and enhance the content of environmental reports. (compliance with the environmental reporting guidelines, inclusion of Group companies in the scope of reporting)</li> </ul>	OFoster compliance with the environmental reporting guidelines and improve the content of environmental reporting.	
			<ul> <li>Participate in environmental fairs to publicize the company's environmental measures.</li> </ul>	Continue to participate in Eco-Products to widely publicize the company's eco-friendly prod and services.	
	Implementation of environmental education and awareness ac- tivities		Continue environmental and social education under the internal education system.		
			Continuously enlighten employees through in-house magazines and other me- dia.	$\Diamond {\sf Hold}$ more education, enlightenment and presentation events for the environment.	
			Continue to hold lectures and workplace meetings to present improvement examples.		
	Environmental Management Sys- tem Establishment		♦Maintain ISO 14001 certification for the integrated EMS at all the bases.	♦ Share the internal auditing and environmental education systems for more rational EMS activities.	
			♦Make continuous improvements to the EMS.		
			Increase cooperation with subsidiaries to maintain and enhance the consolidated EMS.	OEncourage more subsidiaries to acquire certification for the integrated EMS to level up the system.	

### **Clean Products**

## Approaches and Strategy to Fuel Efficiency

Compared with other car manufacturers, SUBA-RU is unique manufacturer in terms of offering carefully selected models and producing cars that embody driving safety and fun by combining a horizontally-opposed engine, symmetrical AWD, and integrated safety performance.

In today's environmental era, we hope to provide customers with a range of products that they truly want by making the best use of our uniqueness. Our primary focus is to improve fuel efficiency, followed by innovation and then final good is to offer cars that meet customer's needs.

In Japan we will release a series of products with fuel economy higher than the FY2015 Fuel Economy Standards for all the classes by starting with the new IMPREZA, which is equipped with a new-generation BOXER engine (entirely remodeled for the first time in 21 years), a new, lighter and more energy-efficient Lineartronic CVT, and also with a lighter and low-resistant body.



(From rear left) Hideyuki Arai, Yoshio Yamanaka (From frontleft) Masaya Kudo, Toshiro Sekine (PGM), and Yoshiyuki Shimizu Environmental PGM Group SUBARU Engineering Division

#### Fuel Economy Standards

#### Japan Clearing the FY2010 Fuel Economy Standards in All the Weight Categories

Gasoline-powered passenger cars meeting the 2010 Fuel Economy Standards accounted for about 94% of the total production, clearing the FY2010 Fuel Economy Standards in all the weight categories.

Gasoline-powered mini trucks met the Standards in all weight categories in FY2002. All models met the Standards in FY2003 and thereafter.

The number of automobiles which meet the FY2010 Fuel Economy Standard for Eco-car Tax Break System has accounted for 81.3% of the total, an increase of 9.8 points compared with FY2011.

## United States Meeting the Model Year 2011 Corporate Average Fuel Economy (CAFE) Standards

We met the MY2011 CAFE standards for passenger vehicles and light trucks as a whole.

We will make further efforts to release vehicles with higher fuel economy to meet the fuel economy standard and CO<sub>2</sub> emissions standards that are becoming stricter and stricter across the globe.

# Compliance with the FY2010 Fuel Economy Standards



#### Improving the Engine

For the first time in 21 years, we developed a new-generation engine to replace the EJ engine long mounted on SUBA-RU vehicles. The FB engine developed to meet an increase in the needs for higher environmental performance provides higher fuel efficiency and practical output performance focusing on medium- to low-speed torque, in addition to having the inherent merits of a horizontally opposed engine. This engine will be the mainstream next-generation engine for SUBARU vehicles.

As for the lineup of the engine, three types are available, including 2.5-liter, 2.0-liter and new 1.6-liter engine replacing the conventional 1.5-liter engine. Except for the engine block, almost the same components are adopted for the three types to achieve both high fuel economy and output performance. The new 1.6-liter engine, with the displace-

ment increased by 100 cc compared with a conventional 1.5-liter engine, has higher output performance across the speed range, optimizing linear responses to acceleration to improve both comfort in driving and fuel economy.



FB engine

#### Improving the Transmission

We developed a light, compact and highly environment-friendly CVT. This transmission, by being used in combination with the new-generation BOXER engine, provides far better environmental performance and engine performance. In particular, the chain-type CVT adopted for the new Lineartronic system provides both a wide transmission range and high transmission efficiency for higher fuel economy. At the same time, the CVT enables smooth transmission as its feature and allows the vehicle to make linear responses according to the driver's intention.



New Lineartronic CVT

#### Measures to Improve the Actual Fuel Economy of All Vehicles

We are proactively improving the fuel economy of its vehicles for users. Specifically, we are improving the engine and transmission characteristics, reducing air resistance and the rolling resistance of tires, and decreasing the engine load through optimal air conditioning with a view to increasing fuel economy without compromising comfort in driving and the in-vehicle environment.

For the new IMPREZA, we added a cover to prevent hot air inside the engine room from flowing into the air conditioner inlet, while also devising a better method to introduce external air to the engine room to save energy used for air conditioning.

Moreover we have devised a means to keep the in-vehicle space comfortable even while the engine is being stopped by the idle stop function. To maintain the air conditioning performance level even while the engine is being stopped especially in summer, the air conditioner is controlled in a more exquisite manner. For example, we have added a temperature sensor to inside the air conditioning system to keep the temperature and amount of air supplied from the system at a comfortable level. We have thus made it possible to prolong the idle stop duration to increase fuel economy while keeping the in-vehicle space comfortable.

We will continue to improve the actual fuel economy of our vehicles giving due consideration to the environment.



# Temperatures of the air supplied by the air conditioning system during idle stop



## Approaches and Strategy to Eco Driving Assist Devices

We introduced Eco Driving Assist Devices—the Eco Gauge and Shift-Up Indicator (for MT vehicles)—to the LEGACY in 2006, for better manmachine communications. Since then, the number of models featuring these devices has gradually increased.

The new IMPREZA is now equipped with a more readable Eco Gauge (all vehicles) and Shift-Up Indicator (except North American models), as well as an idle stop system, the first among SUBARU cars.

We will continue to develop Eco Driving Assist Devices that enable drivers naturally to drive in an environment-friendly manner through easy-toread devices.

Kenichi Yamamoto Deputy General Maneger Total Vehicle Performance Integration Dept. SUBARU Engineering Division



#### Idle Stop System

We developed a unique SUBARU idle-stop system to increase fuel economy without compromising comfort in driving from drivers' viewpoint.

While a driver of a car equipped with an idle-stop system using a general starter can restart the vehicle only after the engine completely stops, a driver of a car equipped with an idle stop system using a tandem solenoid starter can restart the vehicle even before the engine completely stops. We have therefore adopted the latter starter for our idle stop system, which allows drivers to restart their cars immediately after coming to a stop at a traffic signal or in congestion.

#### How the idle stop system works (illustrative image)



#### **Displaying Fuel Economy Information**

#### Eco Gauge

The Eco Gauge needle indicates fuel efficient driving. Drivers can expect to improve fuel economy by about 5% (inhouse testing) by consciously controlling the accelerator to

keep the needle in the "+" or "green" direction.



#### Shift-up Indicator

When an optimal engine rpm is reached, the indicator starts blinking, prompting the driver to shift up.



#### Low Exhaust Emissions

#### Basic Concept of Low Exhaust Emissions

Substances such as carbon monoxide (CO), hydrocarbons (HC), and nitrogen oxides (NOx), which are emitted from automobiles, are one of the causes of air pollution in metropolitan areas where there is intensive motor traffic. In order to improve the state of the air, SUBARU is gradually launching low emission vehicles (certified by the Ministry of Land, Infrastructure, Transport and Tourism) that meet standards stricter than the regulations.

We are launching low emission vehicles that meet strict global regulations to the market.

#### Target of Low Exhaust Emissions

With further technical developments, we are working to expand low emission models which outperform the 2005 emission standards by 75% reduction.

#### Increases in the Number of Models Certified to Be Low-Emission Vehicles

All SUBARU vehicles equipped with NA engines are certified by the Japanese Ministry of Land, Infrastructure, Transport and Tourism to have achieved a 75% reduction from the regulatory values specified in the 2005 emissions standards, and such vehicles accounted for 94% of the total production quantity of SUBARU gasoline-powered passenger cars, with the percentage of models certified by the Ministry to be lowemissions vehicles reaching nearly 100% of the total.

We will continue to make efforts to release even more lowemission vehicles.

#### Percentage of Low-Emission Gasoline-Powered Passenger Cars

Certified to have achieved a 50% reduction from the 2005 regulatory values (\*\*\*)
 Certified to have achieved a 75% reduction from the 2005 regulatory values (\*\*\*\*)



## Year-on-Year Reduction of NOx Emissions by the Release of Low-Emission Vehicles

High concentrations of NOx are worried to harm human health, cause acid rain, and give various other adverse impacts to the environment. NOx emissions from SUBARU vehicles have been changing over years due to the release of a series of low-emission vehicles, including those meeting the government's certification, as shown in the following graph. FHI will continue to release low-emission vehicles into the market.

#### Average NOx Emissions of SUBARU Vehicles<sup>\*1</sup>



\*1 Calculated from the values meeting corresponding regulation (10.15 + JC08 mode) at the time of shipment.

The current mode means the JCO8 mode for new models and the combined mode of the 10. 15 mode and the JCO8 mode for existing models.

## Trends in Shipments of Cars Certified as Low Emission in FY2012

(Shipments of cars certified to have high fuel economy with low economy and low  $\mbox{emission}^{\ast_2}$  )

		Passer	ger car	Tn	ıck	
		Standard cars Small cars	Mini cars	Standard cars Small cars	Mini cars	Percentage of total
	Electric vehicle	0	0	0	0	0 (0%)
Low- emission car	Certified to have achieved a 75% reduction from the 2005 regulatory values ★★★★	76,439	32,118	0	40	108,597 (61.8%)
Car certified to have high fuel economy with low emissions	Certified to have achieved a 50% reduction from the 2005 regulatory values ★★★	466	467	0	1,810	2,743 (0.5%)
	Total	76,905	32,585	0	1,850	111,340 (62.3%)
				Tot	al shipment	178,689

\*2 Cars which achieved in advance the FY2010 fuel economy standard based on the Energy Saving Act and were certified as low emission cars according to the low-emission cars certification procedure.

#### Noise Reduction

We are also committed to effectively reducing vehicle noise from such prime sources as tires, engines and intake and exhaust systems.

For the new IMPREZA released in December 2011, we have adopted the BOXER engine and new-generation Lineartronic CVT to achieve both high fuel economy and comfortable acceleration with the optimal engine speed, while also reducing the noise level on urban roads.

# Management of Chemical Substances (Operation of the IMDS)

Since the enforcement of the REACH regulations<sup>\*1</sup>, a range of chemical substances has been regulated in various countries across the world, and also the automobile industry is required to disclose information and foster management regarding the use of chemical substances in automobiles.

FHI is enhancing its supply chain management by using the IMDS\*<sup>2</sup> to identify the names and amounts of chemical substances used in several ten thousands of parts that comprise its automobiles.

Through these measures we are discontinuing the use of substances of concern (lead, mercury, cadmium, hexavalent chromium, etc.), replacing regulated substances with alternatives and fostering the disclosure of REACH-related information.

\*1 REACH regulations are implemented in Europe on all chemical substances to ensure that the substances are managed and controlled according to the risks they might pose to human health and the environment.

<sup>\*2</sup> The International Material Data System (IMDS) is a system managed by the Japanese, American and European automobile companies.

#### Use of Clean Energy

Fossil fuels, which are mainstream fuels for automobiles, are limited resources and now the diversification of automobile fuels is required, including the use of biofuels and other renewable fuels to replace conventional fuels.

For all SUBARU gasoline-powered vehicles sold across the world, FHI has completed the measures to meet the requirements for E10 fuel (E3 fuel in Japan) for gasoline-powered vehicles and the requirements (on the functions and reliability) for B7 fuel for diesel-powered vehicles.

We will continue to implement measures to foster the diversification of automobile fuels toward the creation of a sustainable motorized society.

#### Life Cycle Assessment

Life Cycle Assessment (LCA) quantitatively evaluates the environmental impact across the entire life cycle of a vehicle. We are working to reduce the environmental impact throughout the life cycle of our cars.

According to the LCA carried out on the new IMPREZA, which was fully redesigned in FY2012, overall CO<sub>2</sub> emissions for the car have been reduced by 14% compared to the previous model.

#### LCA of New IMPREZA





#### VOICE

SUBARU'S LCA includes calculations concerning a number of parts used in a car. The calculation formula was based on studies conducted over several models that are actually on the market. In determining the appropriate formula, we considered reliability and objectivity by comparing and testing the results using different calculation methods.

> Yoshitada Michile Environment and Safety Policy Planning Dept. SUBARU Engineering Division



## **Clean Plants and Offices**

#### Major Resource Inputs and Waste Emissions in Car Manufacturing

We are a transportation manufacturer focusing on automobiles. Automobiles, a convenient and comfortable form of transportation, are now indispensable for living in a modern society. On the other hand, automobiles draw on limited global resources as materials and fuels. Consequently, they emit CO<sub>2</sub>, which causes global warming, as well as other air pollutants. We have to work very hard to realize an affluent automobile society but fully understand that automobiles also have disadvantages as well as their benefits. With these in mind, we must work even harder for a better future. SUBARU accepts the task of working towards the fusion of a global environmental response (drastically improving fuel economy and reducing gas emissions) with the benefits of automobiles (pleasant driving, comfort, and reliability) by considering environmental impacts and reducing the environmental burden throughout the entire life cycle of automobiles, including development, production, use, disposal, and recycling.

#### **Overall Environmental Burden for the Automotive Business**



\*1 VOC: Volatile Organic Compounds. Chemicals that are volatile at normal temperature, including formaldehyde and toluene. Regarded as one of the causes of photochemical oxidants.

<sup>12</sup> PRTR: Pollutant Release and Transfer Register. System for tracking, compiling, and reporting on the discharge, usage, and transportation of pollutant chemicals.

\*3 ASR: Automobile Shredder Residue. Residue after scrapped metals for recycling have been removed from shredded car bodies. Also known as Shredder Dust.

#### Approaches to Preventing Global Warming

We have installed a total of six natural gas cogeneration systems in Utsunomiya Manufacturing Division, Gunma Manufacturing Division, and SUBARU General Training Center. These systems not only generate power but also utilize exhaust heat for air conditioning and other purposes. In July 2012 we installed an additional cogeneration system as a countermeasure against power supply shortages.

As well as these cogeneration systems, we have been implementing various means of CO<sub>2</sub> emissions reduction and energy saving, such as reducing standby electricity and making energy intensive processes more efficient. Although the total emissions volume varies from year to year due to changes in production volume, a total of about 203,000 tons of CO<sub>2</sub> was emitted in FY2012. This was 26% lower than the level of FY1991. We successfully achieved our FY2012 target set in the 4th Voluntary Plan for the Environment, which was a "15% reduction for the total CO<sub>2</sub> emissions volume against FY1991," and then realized our subsequent target to "further reduce CO<sub>2</sub> emissions by 22% against the FY1991 level."

#### Energy Saving During Summer

Power shortages have become increasingly serious following the Great East Japan Earthquake. During summer 2011, when supply insufficiencies were common, we participated in reducing the nation-wide peak power usage as a member of the automobile industry by altering our business closing days from weekends to Thursdays and Fridays. We also managed to keep power consumption at our business sites, where power is supplied by Tokyo Electric Power Co., Inc., down to 85% of the allowance by increasing the efficiency of our business operations and introducing our own power generation systems.



Energy saving promotion poster

#### **Our Efforts**

#### Shinjuku SUBARU Building, Omiya SUBARU Building, SUBARU General Training Center

#### Super Cool Biz as an Energy Saving Measure

In the Shinjuku SUBARU Building, Omiya SUBARU Building, and SUBARU General Training Center, we adopted the "Super Cool Biz scheme" from June 1 to October 31 as a part of our FY2012 summer energy saving measures. The Super Cool Biz scheme allows employees to wear light and less formal clothing in the office during the summer time so that they can work comfortably with the room temperature set to 28°C+1°C. This group effort by many employees resulted in reducing power consumption by 15% during the period.

#### **Our Efforts**

#### Reducing the Number of Severs

The System Data Center is replacing its servers with energy-saving models one by one. The new models can host multiple systems on a single server, and we are further reducing the number of servers by integrating them. The maximum number of servers possessed by the Center was about 350, which was reduced by 45 at the end of March 2012. This can be converted to an 88.695 ton-CO<sub>2</sub> emissions reduction<sup>\*1</sup> per year. The fewer the number of servers, the less the heat to be exhausted. Thus, the workload of the air conditioners has also been reduced, as well as our power usage contract. We are continuing our efforts by aiming to reduce the System Data Center

number of servers to approximately 100 by the end of FY2017.

\*1 The calculation uses the government-recommended CO<sub>2</sub> emission factor (0.375 kg-CO<sub>2</sub>/ kWh), suggested in the Ministerial Ordinance Concerning Calculation of Carbon Dioxide Equivalent Greenhouse Gas Emissions by Specified Emitters' Business Activities (Ordinance of the Ministry of the Environment No. 3 of 2012).

#### **Our Efforts**

#### SUBARU Parts Distribution Center

#### Replacing SUBARU Parts Distribution Center Lighting with LED Lights

SUBARU Parts Center has been systematically updating the premises' lighting. In March 2012, we changed all the lighting in the premises from conventional fluorescent lights to LED lights—which have the advantage of much lower energy consumptions—as a part of our energy saving activities. The replacement LED lights achieved a 61.9% reduction in lighting

power consumption, while also increasing brightness by 1.3 times over previous levels, where necessary.

#### Waste Reduction

Maintaining Zero Emissions for Waste Materials at All Manufacturing Plants

All manufacturing plants have maintained zero emissions for waste materials since 2004. Outline of waste materials generated and treated in FY2012 is as follows.

#### Outline of Waste Materials Generated and Treated at All Manufacturing Plants and Automobile Manufacturing (Gunma Manufacturing Division) in FY2012



#### Efforts to Reduce Waste Materials

Since we consider that the generation of waste materials itself is a "waste," we have been making a continuous effort to achieve "zero emissions" and to curb the generation of waste materials.

We have been striving to effectively utilize resources by improving the yield ratio of raw materials used in the production stages and enhancing coating efficiency at paint factories. The right graph shows the indexes obtained by dividing the ratio of the amount of by-products under the laws for the Promotion of the Effective Utilization of Resources. In FY2012, we got the best result ever: 6.83 ton/100 million yen.

# Amount of By-products Generated to outputs of Products



## **Green Logistics**

#### Reducing Environmental Burden by the Completed Vehicles Transportation

We have contributed to reducing environmental burdens caused during the transportation of completed vehicles, by improving transportation efficiency through such means as setting optimum standard transportation routes, promoting modal shifts and improving carrying efficiency.

In FY2012, by promoting the cooperative transport of completed vehicles with other companies in the same industry, the total of consigned-to and consigned-from vehicles was 18,214.

As we pulled out from mini car production in FY2012, all the cars for shipment became standard-sized cars. Although this increased the total shipping weight, the shipping fuel efficiency was limited to a fall of less than 1% from the previous year by promoting eco-driving and improving vehicle equipment, such as by increasing the usage of a digital tachographs in cooperation with transportation companies.

#### **Reuse of Packaging Materials**

SUBARU Logistics Co., Ltd., which handles packing designs for knockdown parts, has been involved in activities to reduce environmental burden primarily focusing on the reuse of packaging materials. They started a project in the latter half of FY2006 to reuse packing materials of expanded polystyrene foam for engine parts. The 1st stage started in March 2006, followed by the 2nd from December 2007, the 3rd from March 2009, and 4th from June 2011 throughout which the reuse of the foamed materials for the rear differential gears was stepped up.

We will continue working to extend the reuse of packing materials for reduction of environmental burden.





Status of reuse checking and keeping of packaging materials

#### Number of Vehicles Carried through Cooperative Transport





#### Amount of Styrene Foam Packaging Materials for Reuse



#### Amount of Newly purchased Styrene Foam Packaging Materials



## **Clean Sales and Services**

#### All Domestic Dealers Obtain "Eco Action 21" Certification

In order to reinforce the environmental conservation efforts by SUBARU domestic dealers, we have actively encouraged them, as well as providing support, to implement the "Eco Action 21" environmental management system created by the Ministry of the Environment based on ISO 14001.

The dealers under TOKYO SUBARU first received certification in January 2009, followed by all the other SUBARU authorized dealers in Japan (44 companies) by March 2011. SUBARU will continue to support dealers with their voluntary environmental conservation activities.



Koshinetsu/Hokuriku SUBARU certification ceremony



SUBARU is utilizing recycled resin for some of the interior and exterior components in its cars. This resin is made from the used bumpers collected through SUBARU dealers.

Collected used bumpers



Shizuoka SUBARU certification ceremony

#### **Our Efforts**

#### **Environmental Volunteer Activities**

CHIBA SUBARU conducts a variety of environmental activities. As a part of the orientation for new starters, employees participate in clearing the areas near the office together with the local volunteer group. Last year the volunteers cleaned up the nearby beach. Such activities will raise awareness among new employees that "we are not simply helping in environmental activities, but are actually contributing to the local community as members of society."

We installed a donation box in each business site eight years ago and the money offered by employees and customers is donated to prefectural environmental groups to help recover nature in the area. We also organize a charity market on "Thanks Day," which takes place twice a year, and the profit from the market is donated to the Red Cross Society and Fukushima Prefecture. Finally, three years ago we introduced ecocap collection boxes to collect PET bottle caps in different business sites. The collected caps are sent to an NPO that uses them to fund vaccines for children in developing countries. Our social contributions thus span the range from local to international.





#### CHIBA SUBARU

## Automobile Recycling

#### Promotion of Recycling Conscious Design

In order to utilize limited resources, we promote recycling conscious design in manufacturing cars.

#### Advances in Wiring Harness Dismantling

Wiring harnesses use large amount of copper. If the harnesses can be removed from used cars before they are shred-

ded, the collection and separation of iron and copper will be enhanced and their value as resources will increase.

We are conducting studies for a harness layout and structure to enable efficient retrieval in a shorter time. The results of these studies are benefitting the 5th LEGACY and following models.



#### Material Identification Improvement

It is most important that the materials composing each part can be recognized easily when we recycle. We first started to identify the types of materials used in plastic parts in 1973—even before guidelines for the industry were established. Traditionally, material identification labels were placed on hard-to-see inner surfaces, so the material could not be checked unless disassembled. Now, the identification location has been changed so that parts can be sorted without disassembly before recycling for more efficient operations. From 2001, we changed the bumper material identification positions on all car models, including the LEGACY, IMPREZA, FORESTER, EXIGA, and the BRZ.



#### Easily Recycled Materials

We are using Olefin Resin, which is extremely easy to recycle, as the resin material for the interiors and exteriors of most new and remodeled vehicles. We will continue to expand usage of recyclable materials.



#### Reduction of Substances of Environmental Concern

We are actively working on reducing the environmental impact from End of Life Vehicles (ELV).

#### Reduction Targets and JAMA's\*1 Voluntary Action Program for New Models

Substance	Target (period achieved)	Details of Reduction Efforts
Lead	Since Jan. 2006	Reduce the amount per a vehicle produced to less than 1/10 of 1996 level
Mercury	Since Jan. 2005	Use prohibited, except a few applications (e.g., minute amounts in combination panels, discharge headlights, and liquid crystal panels of GPS systems)
Cadmium	Since Jan. 2007	Use prohibited
Cadmium Chromium (VI)	Since Jan. 2008	Use prohibited

\*1 JAMA: Japan Automobile Manufacturers Association, Inc.

#### **SUBARU Engineering Division**

#### Our Efforts

#### Aiming at Recycling Conscious Design

We are promoting the importance of vehicle design that allows easy disassembly in the annual CS training session for young technicians in their second year in the company. As a result of such efforts, recycling-conscious designs are being increasingly employed. For example, all SUBARU cars now have air conditioner valves above the engine space so that the CFC gas can be more easily removed.



#### Reducing VOCs\*1 in Vehicle Interiors

In order to reduce the use of VOCs, such as formaldehyde and toluene, which can cause nose and throat irritation, we are revising the substances contained in the components and adhesive agents used in vehicle interiors. In the LEGACY, IMPREZA, FORESTER, EXIGA, and BRZ, we achieved the voluntary target by JAMA\*<sup>2</sup> by reducing the concentrations of the 13 substances defined by the Ministry of Health, Labor and Welfare. And, in the future, we will continue our efforts to reduce the levels of VOCs and such substances to make the environment in vehicle interiors ever more comfortable.

\*1 VOC (Volatile Organic Compounds)

Organic compounds easy to volatilize at ordinary temperatures, such as formaldehyde and toluene. Recently thought to be one of primary factors in "sick house syndrome," which can cause irritation to the eyes, nose, and throat when entering new houses or buildings. "2 Voluntary target by JAMA

To reduce interior concentrations of the 13 substances identified by the Ministry of Health, Labor and Welfare to levels equivalent to or lower than the figures stipulated in the guidelines for new vehicle models (produced and sold in Japan in 2007 and after) under the Voluntary Approach in Reducing Cabin VOC Concentration Levels initiated by JAMA.

#### Processing of End of Life Vehicles (ELV)

The Act on Recycling, etc. of End-of-Life Vehicles (Automotive Recycling Law) enforced in 2005 obligates car manufacturers to fully remove and appropriately treat "automobile shredder residue," "CFCs," and "airbags." We joined the "Automobile Shredder Residue Recycling Promotion Team (ART)" particularly to achieve appropriate treatment of shredder residue and promote recycling.

In the first year after the Automotive Recycling Law enforcement, we achieved a 70% recycling rate compared to the minimum 30% standard specified by the law. In FY2012, we raised this to 93.7%—significantly greater than the minimum legal specification of 50%. These results attribute to the recycling rate improvement measures implemented through the united efforts of the Team and existing recycling facility partners, as well as the rising number of new recycling facility partners.

The recycling situation in the first half of FY2012 was particularly difficult due to the aftermath of the Great East Japan Earthquake. While several major recycling facilities were closed due to significant damage, the Team redirected the shredder residue to other operating facilities and to newly contracted facilities. Through such efforts, the Team managed the abovementioned 93.7% recycling rate, nearly 10% better than the 84.0% result for FY2011.

In such difficult situations, the Team also realized the zero disposal of "automobile shredder residue" in landfills in May 2011, which was originally our aim for the end of FY2012 (March 2012). We have maintained this record every month since then.

Along with other car manufacturers, Article 28 of the Automotive Recycling Law applies to us as we handle more than 90% of the automobile shredder residue.

We will continue to work together with other Team members and manufacturers to improve the recycling rate and contribute further to protecting the global environment.





#### Number of Scrapped Bumpers Collected



#### Parts Produced from Scrapped Bumpers

Car Model	Parts
LEGACY	Trunk trim
FORESTER	Under floor cover
IMPREZA	Trunk trim

#### VOICE

Our year started with handling the aftermath of the Great East Japan Earthquake. Some of the disaster-affected recycling facilities were forced to cease operations for about four months immediately following the Earthquake. To cope with such an extreme situation, the Automobile Shredder Residue Recycling Promotion Team (ART\*3) united all efforts in distributing the recycling work across other facilities. As a result, the recycling rate significantly increased over the previous year, and we achieved zero waste sent to landfill within the

term. Not only as a member of ART, but also as a member of Fuji Heavy Industries, I am proud that I was able to contribute in improving the recycling rate. We will continue to work on increasing the recycling rate, promptly responding to environmental changes.

> Ikuo Tamura Article 28 Compliance Team Leader Automobile Shredder Residue Recycling Promotion Team Environmental Promotion Office



#### \*3 ART: Automobile Shredder Residue Recycling Promotion Team

## Environmental Activities of Overseas subsidiary Companies

#### Approaches to Global Environmental Activities

#### North American Environmental Committee

SUBARU Group organizes the North American Environmental Committee (NAEC), involving the four manufacturing and sales subsidiary companies in North America, SIA, SOA, SCI and SRD which have a particularly high environmental impact among our overseas subsidiaries. This committee meets twice yearly (or as needed) to share and spread successful cases with member companies, promoting efficient and streamlined environmental activities.

In FY2012, the NAEC held meetings in June and November. NAEC member companies reported their CSR and environmental activities to the Committee, and we also reported our environmental activities being undertaken in Japan. We are encouraging this Committee to further share SUBARUrelated information across the world.

## Establishing an Environmental Management System

All members of the North American Environmental Committee, that is, SIA, SOA, SCI, and SRD, had already acquired ISO 14001 Environmental Management System certification by December 2006 and have retained this certification since then. SIA, SOA, and SRD received integrated certification in FY2010. They are working on pollution prevention and reduction of environmental burdens through educational training, on-site legal compliance programs, internal auditing, and other measures.

On May 28, 2012, SIA received ISO 50001 Certification from an international ISO certification body, DEKRA Certification, Inc., becoming the first car manufacturing plant in the U.S. to achieve this internationally recognized accreditation.

Major Overseas subsidiary Companies	
Subaru Research & Development,Inc.	_ / / _ 3
SIA:	/
Subaru Canada,Inc.	/
Subaru of America,Inc.	

ISO 50001 details the requirements for energy management systems (EnMS), announced in 2011 as the international standard that provides organizations with management strategies to increase energy efficiency, reduce costs, and improve energy performance. SIA's accreditation demonstrates the company's commitment to continual improvement in the area of energy conservation and its environmental leadership within the auto industry. SIA was also the first U.S. car manufacturing plant to achieve ISO 9001 Quality Management Certification and ISO 14001 Environmental Management Certification.



SIA Celebrating ISO Certification

(From Left) Tom Easterday (Sr. Vice President), Pierre Salle (DEKRA Certification, Inc.), Brent Lank (Energy Management System Administrator), Jim Edwards (Energy Specialist), Darring Spragg (Energy Manager), and Masaki Okawara (President & CEO)

#### **Curbing Global Warming Activities**

#### Achievements in FY2012

To counter the serious issue of global warming, each of our North American companies is working hard to reduce total  $CO_2$  emissions through various measures. The amount of  $CO_2$  emitted by the four companies in North America in FY2012 totaled 137,293 tons- $CO_2$ , a decrease of about 2.1% compared with 140,303 tons- $CO_2$  in FY2010.

#### **CO<sub>2</sub> Emissions**



In order to reduce CO<sub>2</sub> emissions when production volumes are increasing, our North American companies are gradually replacing their lighting systems with low-energy consumption models.

SCI replaced 293 metal halogen lights in its warehouse and the Technical Training Center with T8 LED tubes, and installed 188 motion sensors in the warehouse to eliminate needless lighting when no staff are present. Within the first year of the installation, energy usage was reduced by 22.5%.

In SIA, 44 compressor motors for air conditioning systems

were replaced with Variable Frequency Drives (VFDs). This successfully reduced annual CO<sub>2</sub> emissions by 4,638 tons-CO<sub>2</sub>.



#### Efforts to Reduce Waste Materials

#### FY2012 Results

FY2012 disposal in landfills by the four companies in North America reached 372.0 tons, which is approximately 9% higher than 340.3 tons in FY2010. This was due to the significant increase in their business operations.

#### The 3R Activities on Waste

The four companies in North America promote activities based on the 3Rs (Reduce, Reuse, and Recycle) to reduce the amount of waste generated.

SIA started composting three tons of scraps from its cafeteria. The compost is shared among employees and used in their gardens.

SRD aims to attain their recycle targets by holding regular 5S Days.\*1 On the 5S Day, monthly recycling facts and tips are posted to all employees through emails, and recycling training sessions are held.





\*1 5S are Seiri (Tidiness), Seiton (Orderliness), Seiso (Cleanliness), Seiketsu (Standardization), and Shitsuke (Discipline).



#### Other Activities

#### Earth Day 2011

The four companies in North America participated in the Earth Day and Earth Hour to raise environmental awareness among employees and help sustain energy resources.

In April 2011, SOA employees volunteered at Saddler's Woods near their office, to help clear trails, remove invasive plant species, and collect trash and debris. Also, a group of Western Region employees participated in a cleanup at the

Bluff Lake Nature Center to remove invasive plants.



## New Auto Parts Distribution Training and Office Complex Receives "LEED Silver"

November 2011 saw the opening of our "LEED Silver" Auto Parts Distribution Training and Office Complex in Portland. This facility further enhances SOA's environmental credentials, demonstrating a commitment to sustainable construction practices.



#### **Environmental Education**

SIA was accepted as a member of the Indiana Environment Stewardship Program in 2009, based on an evaluation of SIA's proactive participation in environmental activities. In FY2012, SIA gave presentations concerning the SIA's Environment Stewardship activities to more than 73 companies and over 1,000 members. SIA was also honored with "the Green Manufacturing Award" from the American Manufacturing Strategy Awards (AMSA) committee in recognition of their environmental schemes undertaken in the plant, and inducted into the AMSA Hall of Fame.

# SRD Recognized as a Clean Corporate Citizen

Subaru Research and Development, Inc. (SRD) has once again been recognized as a Clean Corporate Citizen by Michigan State in June 2011, marking a total of six years. SRD is also a 4th term of participation in the Washtenaw County Community Partners for the Clean Streams program.



# Compliance

## **Compliance with Legal Regulations**

# Corporate Code of Conduct and Conduct Guidelines

FHI has established a Corporate Code of Conduct and Conduct Guidelines as the standards to ensure compliance with laws and regulations. These are described in detail in the Compliance Manual, which all officials and employees carry in order to ensure legal and regulatory compliance in their daily actions.



Compliance Manual

## **Compliance System and Administration**

#### **Compliance Regulations**

We established the Compliance Regulations in 2001 after approval of the board of directors. These regulations contain basic compliance policies, which provide for the system, organization, and operational methods related to corporate compliance.

#### Compliance System/Organization and Administration

A Compliance Committee has been established as a company-wide committee organization to promote corporate compliance. The committee conducts deliberations and discussions, renders determinations, and exchanges information on key compliance issues. Every year, each department devises a compliance implementation plan (compliance program) to enhance corporate compliance and takes the initiative to advance continuous and systematic implementation activities.

#### Compliance Hotline System

We have a "Compliance Hotline" as an alternative communication channel which can be used by people who work in our group and others to report any dubious compliance-related acts or practices they have found inside the group directly to the Hotline Desk.

The Hotline Desk is located inside and assigned employees receive directly reports or information by mail, phone or e-mail and then investigate allegations and take appropriate actions according to rules. The names and sections of informants are kept confidential without their consent to protect them with utmost care from any disadvantage or inconvenience.

Starting from April 2008, an outside compliance hotline reception desk has been in operation to extend the time for receiving hotline service and to enhance confidential treatment of names and sections of informants in an effort to make the hotline system easier to use.





Compliance Hotline Card

#### Compliance Hotline(Flow from consultation to solution)

Compliance

## **Personal Information Protection**

#### Our Efforts for Personal Information Protection

In response to enforcement of the Personal Information Protection Act, we have reviewed our internal system and regulations and announced privacy policy. Especially for domestic SUBARU dealers, because they directly handle a large amount of our customers' personal information, we managed to thoroughly overhaul our internal system for each dealer and prepared and made use of the Personal Information Protection *Handbook for SUBARU Dealer Staff*, which is common for all the dealers to help each staff member properly understand personal information protection.





Handbook for SUBARU Dealer Staff

#### **Our Efforts**

#### FY2012 Compliance Activity Achievements Overview

In order to ensure compliance with laws and regulations, FHI and all our group companies join forces and work in harmony. In FY2011, over 2,200 people including employees of group companies took part in compliance and practical legal training hosted by the Legal Department, and education sections of Human Resources Department.

In addition, each department and group company has their own unique education programs built into their compliance action programs and complement the above seminars by holding study meetings on legal matters required in their jobs and compliance motivation training. Staff are sent as lecturers to these meetings and training from our Legal Department to make such events even more fruitful.

We also prepare and provide various support tools, including ones specially intended for affiliated companies and domestic SUBARU dealers, to promote compliance in day-to-day operations. Urgent information is released on a timely basis in our "Compliance Information" to alert the entire group.



Training in Legal Compliance





Compliance Handbook for Affiliated Companies

100 Case Studies of Compliance Issues

#### Financial Misconduct in the Clean Robot Division

On August 10, 2011, inappropriate accounting handling in the Clean Robot Division, the Eco Technologies Company of FHI, was identified during a tax inspection by the Tokyo Regional Taxation Bureau.

In response to this finding, an internal investigation committee—including both lawyers and accountants—was formed and commenced further investigations by clarifying financial flows, including those concerning suppliers, and questioning those involved. The investigations found that improper claims were made regarding certain projects commissioned and subsidized by the Ministry of Economy, Trade and Industry (METI), the New Energy and Industrial Technology Development Organization (NEDO), and the Japan Science and Technology Agency (JST). At the same time, accounting irregularities, such as window dressing the performance of the Clean Robot Division, had occurred under the direction of the former general manager.

FHI has reported the facts to METI and other relevant authorities. FHI will return the funds obtained through the improper claims for both the commissioned and the subsidized projects, based on the findings by a third-party investigation committee and the relevant authorities.

FHI expresses its most sincere apologies to its shareholders and clients, and to all other related parties, for causing great anxiety and inconvenience. FHI takes this matter extremely seriously and is determined to revise the internal auditing system and further strengthen compliance in order to prevent any recurrence of similar incidents.

**Compliance Activities** 

# **Disclosure of Information**

### Information Disclosure to Shareholders and Investors

#### Information Disclosure at Our Website

FHI website includes an "Investor Relations" section to provide updated IR information. The latest IR-related information such as financial reports is also distributed via free e-mail updates to those who register. Currently more than 900 people have booked in for this service.

Also, our IR site was ranked 1st in the industry in the "Fiscal 2011 Listed Company Website Quality Ranking" hosted by Nikko Investor Relations Co., Ltd. for 5 years in a row (about 4,000 companies evaluated), and also positioned 1st in the industry in the "Investor Relations Site Ranking in 2012" by Gomez Consulting Co., Ltd. for 6 consecutive years.

### **Explanatory Meetings to Private Investors**

We opened explanatory meetings to private investors. At these events topics such as our company history and latest performances were presented in an easy-to-understand way. We take such opportunities to have attendees deepen their understanding of our company through questionand-answer sessions. Such meetings will be held periodically as before.

#### Plant Tours for Shareholders

We have been holding "plant tours for our shareholders." The plant tour is intended to provide shareholders with opportunities to see on-site operations for their understanding of our corporate policy and daily production activities.

After the plant tour, time is set to hear their views and for questions and answers. We expect they will communicate with our officers at the meeting and hope to review their opinions and reflect them in various improvements.

#### C F

We would like to express our deep appreciation to our shareholders and investors for their constant support. We are working to proactively disclose business information to increase the understanding of shareholders and investors. For this purpose, we have created an easy-to-use Website and straightforward documentation. We also organize plant visits for shareholders to offer an opportunity to gain an insight into our production activities. Koji Mitsuno



General Administration Dept.

Manager

## **Communications with Customers and Local Community Members**

#### Participating in the Ota Festival

In July 2011 Gunma Manufacturing Division participated in the locally held Ota Festival, by joining a parade with SUBARU cars, including the SUBARU 360 and R-2. A large audience enjoyed the parade. The adults were excited to see our classic models, while children looked into the cars curiously. We also gave away fans during the parade and people appreciated cooling themselves with them.





FHI website

Please refer to the FHI website for our latest IR information http://www.fhi.co.jp/ir/index.html (Japanese) http://www.fhi.co.jp/english/ir/index.html (English)

# Procurement

### Establishing Mutually Beneficial Relationships with Business **Partners**

#### Basic Approach to Procurement

Following its corporate principles, FHI aims to procure environment-friendly parts, materials, and equipment with high quality and excellent cost performance. To realize this aim, it is important to establish mutually beneficial relationships with our business partners, whereby we can trust each other and improve ourselves on an equal footing.

#### **Promoting Fair-Trade**

We have been working to faithfully observe laws and regulations related to the procurement business such as the Anti-Monopoly Act and the Act against Delay in Payment of Subcontract Proceeds, etc. We also are promoting programs for fair business transactions along the "Fair Trade Guidelines of the Automotive Industry" announced by the Ministry of Economy, Trade and Industry in June 2007. As a part of the promotion, consultation service is provided to suppliers in our supply chains.

#### Fundamental Procurement Policy

FHI has been promoting procurement activities under the following basic policy.

#### Oppliance & Green Procurement

We will engage in procurement activities in a way to harmonize man, society and the environment and conduct transactions paying due care to observe legal and societal rules and to protect the environment.

#### 2 Establish Best Partnership

We will establish "WIN-WIN" relationships with suppliers through transactions based on mutual trust under the doctrine of good faith.

#### 8 Fair and Open Way of Selecting Suppliers

In selecting suppliers, the door will be wide-open to all firms, domestic and overseas, for fair and equitable business to procure goods and services most excellent from six perspectives: quality, cost, delivery, technical development, management and environment.

#### Approaches to CSR Procurement

To promote our CSR activities throughout the supply chain, we have created the SUBARU Supplier CSR Guidelines that cover issues concerning safety and quality, human rights and labor, the environment, compliance, and information disclosure. The Guidelines were also distributed to business partners of SUBARU Automotive Business. Many of the stipulations in the Guidelines have already been in practice under the trust between SUBARU and its business partners. however, we believe that documenting such practices will help our partners to clearly understand SUBARU's stance concerning CSR and implement our level of standards in their own businesses. Our aim is to fulfill CSR, working together with all parties in the supply chain.

Issuance of the CSR Guidelines for Suppliers is being prepared in the Aerospace Company and Industrial Products Company following SUBARU Automotive Business. FHI will further promote CSR-based procurement.

#### Overview of the SUBARU CSR Guidelines for Suppliers

Based on the JAMA CSR Guidelines for Suppliers, we have created the SUBARU CSR Guidelines for Suppliers by incorporating our CSR policy for the business partners of SUBARU Automotive Business. We expect these guidelines will help our partners to conduct further CSR activities and expand such activities jointly with their own business partners.

Five Topics in the SUBARU CSR Guidelines for Suppliers

#### Safety and Quality

- Providing products and services that meet consumer and customer needs
- Providing appropriate information concerning products and services
  Ensuring safety of products and services
  Ensuring safety of products and services

#### 2 Human Rights and Labor Issues

- Striving to avoid discrimination
   Respecting human rights
   Prohibiting child labor
- Prohibiting forced labor Compliance with the law on remuneration
- Compliance with the law on working hours
   Practicing dialogue and consultation with employees
- Ensuring a safe and healthy working environment 
   Providing human resource training

#### 8 Environment

- Implementing environmental management
   Reducing greenhouse gas emissions Preventing air, water, and soil pollution
   Saving resources and red
   Managing chemical substances
   Conservation of the eco system es and reducing waste

#### Compliance

 Compliance with laws
 Compliance with competition laws
 Preventing corruption Managing and protecting confidential information
 Managing export trading Protecting intellectual property

#### Information disclosure

Disclosing information to stakeholders

Please refer to the FHI website for the SUBARU CSR Guidelines for Suppliers. http://www.fhi.co.jp/english/envi/csr/csr/procurement.html

# **Social Contribution**

## **Social Contribution Policy**

#### Gratitude for the Local Communities

SUBARU Group has focused on CSR activities with environmental, traffic safety and social contribution activities. We have established the Social Contribution Policy to promote social contribution activities more actively.

#### Social Contribution Policy

- We will contribute to the development of science and technology and automobile culture and to the diffusion of road safety.
- We will contribute to the fostering of human resources who understand the pleasure, importance and preciousness of creative manufacturing.
- We will contribute to the development of the communities we operate in.
- We will support each other in contributing to society as good citizens.

### Support for Recovery from the Great East Japan Earthquake

#### Major Supports for Recovery

General-purpose engines produced by the Industrial Products Company have a high reputation as a reliable power source under a range of demanding usage conditions. Thus, our engines are utilized for disaster recovery across the world.

Immediately after the Great East Japan Earthquake, we determined to offer the largest scale of donation in our history. Despite the severely damaged transportation conditions, we distributed the engines utilizing our own transportation networks to the head offices of SUBARU car dealerships in the three disaster-affected prefectures, who then passed them over to the NPOs working in the respective areas. The engines were used for lighting and water purification in the areas where lifelines were completely shut down. These engines remain installed in community halls and other public facilities for use in future power cuts.

We would like to give special thanks to all those who offered donations, not only from FHI Group companies, but also from dealerships inside and outside Japan. These donations have been forwarded to charities such as the Japan Red Cross Society to assist in the disaster recovery.

#### Recruitment Support in Ishinomaki City, Miyagi Prefecture

One of our major plants is located in Ota City in Gunma Prefecture. After the Great East Japan Earthquake, the Junior Chamber International (JCI) organizations in Ota and Kiryu in Gunma were supporting JCI Ishinomaki in disasteraffected Miyagi Prefecture. In response to a request from the Ota and Kiryu JCIs, FHI together, with Ota City, offered temporary working opportunities to evacuated people.

Ota City offered 100 private let-properties within the city at no charge for two years, and we offered temporary jobs manufacturing SUBARU cars.



Power generators and other goods to be delivered



SAMBARs lent out free of charge



Support goods to be delivered



Six garbage collection vehicles ready for dispatch

We also offered 10 SUBARU SAMBARs that had been used as company cars, and other support goods. The cars and goods were delivered by Gunma Manufacturing Division employees to the disaster-affected area.

## **Development of Automobile Culture and Road Safety**

#### Traffic Safety Campaign

We believe that one of the responsibilities of a vehicle manufacturer is to address traffic safety and are engaged in various activities in our practical approach to traffic safety in local communities

Each of our business sites cooperates with the police and the Safe Driving Supervisor Association and hosts driving training sessions, such as that for young drivers in local communities and a safe motorbike driving demonstration by police motorcyclists. We raise awareness of traffic safety and road accident prevention through events such as offering traffic safety guidance services in the school zones around the business sites.

As a member of the traffic society we actively promote awareness among employees by providing accident prevention meetings before holiday seasons and other occasions.





ffic safety support near schools

Young driver training

#### SUBARU Visitor Center

The SUBARU Visitor Center opened on July 15, 2003. This facility introduces SUBARU's past models, models that set world records. SUBARU efforts to develop unique technologies and approaches to the environment. In FY2012, 67,494 people came to see the facilities. (In 2011, the Center was closed from April to September because of the Great Earthquake Disaster.)



For a Plant Tour application (10 to 200 people) and detailed information on the Visitor Center, please refer to the link below. http://www.subaru.jp/about/showroom/vc/index.html (Japanese only)

## Creative Design and Manufacturing, Fostering Human Resources

#### Accepting Students' Company Visits

Our head office accepts approximately 10 company visits per year by junior and senior high school students as a part of their school excursion to Tokyo, in the hope that the visit will help the students' in their social studies and give them some inspiration for their future career. In the visit, we explain SUBARU's business processes, from development and production, to sales, and the range of tasks handled by the Management Department. We hope this provides a good insight into the entire life story of a car to its eventual owner and the people and work involved in this journey.

In each visit we always receive a number of questions from the students, such as why we chose to work for FHI and about the fulfillment that we find in our jobs. Recently, we find that more and more students are interested in the work-life balance and active promotion of female workers.



Students on the company tour

#### Utsunomiya Manufacturing Division Offers Visiting **Environmental Lessons**

Utsunomiya Manufacturing Division offers visiting environmental lessons to local elementary schools to deepen pupils' understanding of the environment. The lesson is targeted at grade 5 pupils in the elementary school, and our employees visit the class as teachers to talk about global warming and other environmental issues through experiments and talks. In FY2012, 46 classes for 1,432 pupils were held, making a total of 183 classes delivered to 5,548 pupils since the start of the lessons in 2006. The lessons are now well routed in the community and we have received numerous letters of thanks from the children.



Messages from the children

### Social Contribution in the Local Area

#### SUBARU Community Exchange Association

SUBARU Community Exchange Association is an organization which consists of our Gunma Manufacturing Division and its business associates with the purpose of promoting communication with Ota City and local residents to make the community a better place to live through local development.

#### FY2012 Major Activities

- At "Flower-full Activity," flower saplings were distributed [June, September, December]
- Charity Concert [September, December]
- Charity and Friendship Golf Competition [November]
- Rakugo and Lecture of Local Rakugo Storyteller [March]

#### **Charity Concert**

At the "Friendship Concert" sponsored by the SUBARU Community Exchange Association, customers bring in towels, soaps and other daily necessities for donations to the Welfare Council in the region.



For details, please access the website of the SUBARU Community Exchange Association. Ichitan Co., Ltd., Kiryu Industrial Co., Ltd. and Subaru Logistics Co., Ltd. are the member of the Association.

http://www.chiiki-kouryuukai.com/(Japanese only)

### **Support of Volunteer Activities**

#### Awarding Volunteer Activities

The social contribution policy sets forth clearly the participation of each employee in social action programs as a citizen. The policy is intended to make employees conscious of the need for their proactive social contributions so that a culture to do something for society remains firmly rooted company-wide. As a specific example, an award system to honor employees who are active in volunteer activities using their own time was established in 2006. The 7th award ceremony was held in June 2012 and 3 employees were honored with the volunteer award.

We introduced a volunteer leave system in the last fiscal year to enable employees to proactively participate in ac-

#### Local Area Cleaning

Saitama Manufacturing Division conducts a monthly cleaning scheme called "Shiny Kitamoto Cleaning Program" to sweep and tidy the area around the plant. Many employees participated in the cleaning each month (except the period of severe heat) in FY2012. We aim to continue our contributions to clean community near our business sites.



Shiny Kitamoto Cleaning Program

#### Support for Cultural Activities

FHI offered six SUBARU cars for the Kusatsu International Summer Music Academy & Festival held between 17 and 30 August, 2011, to be used by music lecturers, students, and staff members.

The festival is held each August to provide an opportunity

for young musicians to receive lessons from internationally acclaimed players. Concerts by these musicians were also held. FHI will continue to support cultural activities such as this into the future.



Offered SUBARU cars

tivities to support people in the areas affected by the Great East Japan Earthquake. In our 7th Volunteer Awards, the Earthquake Disaster Award was specially set up and 14 employees who helped

people in disaster-affected areas were each honored with a medal of appreciation.



7th Volunteer Awards

### **Overseas Approaches**

#### Efforts by Subaru of America Inc. (SOA)

#### Towards Solving Local Hunger

SOA is working to alleviate the food insecurity suffered by some in the U.S. through several food supply projects. In 2011, we donated 142.5 tons of food and fresh produce through various hunger initiatives, such as Subaru Drive Out Hunger, and Subaru Share-the-Love Gardens, conducted in Colorado and New Jersey.

#### Supporting Educational Programs

SOA offers support for many educational programs, with a particular focus on early literacy acquirement among children. The Children's Literacy Initiative, one of the programs we support, collaborates with teachers and schools to encourage children to engage in study and reading. In another program, Reading is Fundamental, we help provide children's books and promote reading habits at home.



SOA employees help load food donations collected from our employees





Children's Literacy Initiative

#### Efforts by Subaru Canada, Inc. (SCI)

#### SCI Joins Dragon Boat Race Again

Two teams comprising SCI employees participated in the Mississauga Dragon Boat Festival, which is held to raise public awareness of breast cancer and raise money for charities.

In the 8th race in 2011, the final stage was competed by the two SCI teams, with Team No. 2 finishing first and No. 1 second. A total of 50,000 Canadian dollars was donated by all the participating teams to the Betty Wallace Women's Health Centre in Canada.



SCI teams competing in the final race

# Sponsoring the Japan Exhibition at the Canadian Museum of Civilization

SCI sponsored an exhibition called "Japan: Tradition. Innovation." held at the Canadian Museum of Civilization from May 20 to October 10, 2011. The exhibition covered the history of Japanese culture—known for the craftsmanship and technology that has influenced the world—with the SUBARU 360 on display as one of the main features to entertain visitors. The exhibition was enjoyed by around 1.2 million people. For added exposure, 12 hotels in the Ottawa-Hull area issued 10,000 room keys printed with the name of the exhibition.



SUBARU 360 displayed in the exhibition

#### Efforts by Subaru of Indiana Automotive, Inc. (SIA)

#### **Recycling Promotion**

SIA has been promoting the Students and Teachers Achieving Recycling Success (S.T.A.R.S.) \*1 program over the last six years to spread environmental stewardship through the local school districts. This year, SIA conducted a contest designed to reduce a school's ecological footprint, with awards of \$1,000 for elementary schools, \$2,000 for middle schools, and \$3,000 for high schools.

#### \*1 S.T.A.R.S. : Students and Teachers Achieving Recycling Success

#### Medical Services for Employees

SIA opened a Health & Wellness Center in July 2011 to offer healthcare services to employees and their family members. The Center is staffed and managed by an independent organization, We Care, TLC, which provides a primary care physician, licensed nurse practitioners, and registered nurses.



Students learning about recycling





Opening Ceremony

#### Efforts by Subaru Research & Development, Inc. (SRD)

#### Invitation to a Factory Tour

On December 16, 2011, SRD invited a group of students from 4 to 16 years old from the True Life Educational Home School and their parents (40 participants in total) on a factory tour.

#### **Rice Cake Making Festival**

On January 7, 2012, SRD co-sponsored and participated in the Mochitsuki (rice cake making) Festival with the Japanese Student Association. We enjoyed making rice cakes with people from the local community and also donated 500 USD to the festival.



Students and parents enjoying the tour



Employees helping in the rice cake making

# **Corporate Governance**

### System of Corporate Governance

# Further Reinforcement of the Corporate Governance System

Since June 1999, FHI has employed an executive officer system that helps clarify responsibilities to carry out operations in each division. In addition, since June 2003, the terms of directors and executive officers have been reduced from two years to one. Also, since June 2004, according to the decision of the Board of Directors, we have given responsibility for the selection of corporate officer candidates to the Executive Nomination Meeting and given responsibility for evaluating performance, determining the remuneration of corporate officers and others to the Executive Compensation Meeting.

Also, the execution of important business operations is decided and supervised by the board of directors and audited by the board of corporate auditors. The board of directors consists of 7 members with one of them invited from the outside as an independent member to enhance governance. The board of corporate auditors consists of 4 members with two of them invited from the outside for higher objectivity to monitor business management. In addition, we will take various measures to further strengthen internal control, and will also disclose information fairly and in a timely manner in order to increase management transparency.





## **Establishment of Internal Control System**

#### Enhancing the Whole FHI Group Internd Control System

Internal control is an indispensable mechanism to achieve corporate objectives, and top management is responsible for establishing it and maintaining its effectiveness and efficiency. Specifically, companywide departments, centering on Corporate Planning Department (which plays a central role in the common functions of each business), maintain close links with other departments and companies to enhance risk management.

Internal Audit Department systematically audits group companies and their operations. In addition, to regulate the internal control system, there are systems and organizations Establishment of Internal Control System to promote compliance, which is positioned as the most vital element in risk management. Also, the internal control system of the whole group has been overhauled and reinforced to comply with the "Standards for Management Assessment and Audit concerning Internal Control Over Financial Reporting" which was released to the public on February 15, 2007 by the Business Accounting Council of the Financial Service Agency, in the following areas:

- 1. Effectiveness and efficiency of business operations
- 2. Reliability of financial reporting
- 3. Compliance with applicable laws and regulations related to business activities
- 4. Safeguarding of assets

### **Risk Management**

#### Risk is Classified and Properly Managed

We understand that risk is an uncertain element with potential for negative impact on our business operations. There are many types of risk. Among them, what concerns management seriously, are emergency situations which cannot be dealt with through the regular decision-making channels. These situations are categorized as "crisis risk" and classified by type into risks associated with natural disaster, accident, internal and external human factors, social factors (domestic and overseas) and compliance.

In the event of an emergency, we follow instructions on communication channels and the most appropriate actions for dealing with a particular situation as provided in a manual designed to respond to various types of emergencies.



FHI emergency response procedure manual and crisis management (disaster prevention) guidelines

#### Mapped out BCP\*1 by Business Unit

BCP is formulated to continue or restore business as rapidly and completely as possible. In each emergency situation, we will exert the utmost effort to minimize negative impacts on services to customers, the market share and any loss of corporate value. In this respect, if our business resources including personnel, properties and monetary assets are affected under an emergent situation, we go all out to minimize business interruption prioritizing available resources to restore operations expeditiously to pre-mishap levels.

Setting the basic policy to meet emergency situations as follows, we mapped out BCP by business unit and are promoting uninterruptable business operations.

- 1 Life and physical safety precede all other things.
- 2 Minimize the loss of the interests of stakeholders and corporate value.
- 3 Always act with honesty, fairness and transparency even in an emergency.

\*1 BCP: Business Continuity Plan

## Revising Disaster Risks after the Great East Japan Earthquake

As a part of revision activities after the Great East Japan Earthquake, we are currently improving our BCP, particularly in the area of initial response. Each business site is now equipped with emergency power generators and seismic detectors that are linked with the evacuation guide announcement system to enable smooth evacuation in the event of an emergency. At the same time, we are working to identify a variety of risks at revised earthquake levels, including those in procurement, production, and distribution, to minimize such risks and create an action plan for disaster recovery.

# **Third-Party Opinion**



#### Ms. Mami Oku

Tokyo Metropolitan University

Profile

Profile Graduated from the Faculty of Economics, Yokohama Na-tional University. After completing her postgraduate course in the Department of International and Business Law of the said university, from 1993 through 1998, she served as re-searcher at the Tokyo Institute for Municipal Research, and from 1998 through 2006 as Assistant Professor at the Fac-ulty of Environmental Studies of Nagasaki University. At present, she is Professor and Director of the Division of Ur-ban Policy. Faculty of Urban Liberal Arts of Tokyo Metro-politan University. She also serves as a member of the Eco-Action 21 steering committee. Specializing in environmental law and administrative law, Prof. Oku is the author of Envi-ronmental Laws System of EC and Environmental Manage-ment Measures (Judis):erc the Tokyo Institute for Municipal Research): Approaches to Environmental Laws (SEIBUNDO Publishing Co., Ltd.): Frontlines of Municipal Environmental Administration (GYOSEI Corporation): Environmental Busi-ness Handbook (Chuohoki Publishing Co., Ltd.); and others.

#### Third-Party Opinion on the Last Year's CSR Report and Evaluations for the Countermeasures against the Opinion

#### In last year's third-party opinion I pointed out the following four issues:

 The New Mid-Term Management Plan set two major aims: to be known as "a company that offers products and services contributing to solutions of social issues," and as "a company that values its relationship with a variety of stakeholders"; along with the eight CSR activity categories that come under the said two aims: "customers and prod-"employees," "environment," "compliance," "informaucts." tion disclosure," "social contribution," "procurement," and "corporate governance." My comment last year suggested to list the concrete social issues to be addressed concerning each aim and category and present these issues in a comprehensive manner.

2 Assess whether the emergency response basic manual and crisis management guidelines, and the Business Continuity Plans (BCPs) per business site have worked effectively in coping with the Great East Japan Earthquake, and identify any problems so that countermeasures can be implemented in improving these emergency management plans.

3 As for the conservation of biodiversity, this activity should not be limited to providing environmental education and preserving company-owned woodland. Try to expand the scope of activities to understand the quantitative impact on the biodiversity from the company's business activities throughout each product life cycle, including supply chains that begin with procurement of materials and parts, and each stage of use, disposal, recycling and reuse. Then formulate conservation measures based on this analysis and implement them over a multi-year period.

4 Incorporate some method to let readers know how comments and requests from stakeholders are specifically addressed and reflected in corporate operations to the CSR report.

This year's CSR report addressed these points as follows: As for issuelabove, the details have been explained in a more structured manner. However, there is no concrete description concerning issue 2. An intention to work on issue 3 in the future was stated. Finally, again there was no concrete description concerning issue 4. It is eagerly anticipated that some action will be taken for issues 2 and 4, and concrete results will be achieved regarding issue 3 over the next few years.

#### **Timely Response to Social Issues**

As mentioned earlier, this year's CSR report presents the social issues recognized by FHI in a clearer manner. However, some social issues remain unchanged over the years, while others alter and shift as the time and social realities change. It is important for a corporation to fulfill its corporate responsibilities by grasping those social issues to be addressed promptly, announcing the company's stance on such issues, along with the concrete measures to be taken. One example of such an urgent matter is energy and power. The energy and power problem drew rising social attention after the Great East Japan Earthquake. How FHI understands the energy and power issue, how it has been handling the issue, and what is to be their future approach-companies today are more exposed to questions such as these that probe their attitude to such problems. I had hoped that the report would include a substantial number of articles focusing on energy and power. As a part of the car industry initiative of last summer, FHI contributed to power demand reduction by closing offices and factories in unison on week days or shifting working days. Activities like this should not be handled as a continuation of conventional energy saving efforts, but considered to be part of the company's CSR strategy concerning energy conservation measures.

#### **Comments on the Report in General**

#### (1) Disclosure of Negative Information

The CSR report conveys FHI's enthusiasm and determination to pursue driving quality, protection of the environment, and safety throughout the development and production processes of its cars and other products. At the same time, there is an impression that only positive information that FHI would like to promote to stakeholders is included in the report. The CSR report is a tool for communication with stakeholders. Going back to this basic understanding, it is also necessary to disclose negative information-the company's inadequate aspects that require improvementalong with the actual comments and requests from stakeholders that led to realization of such aspects. This approach will help the company to stride towards further advancement and make continuous improvement.

#### (2) Offering Comparability of Voluntary Plans for the Environment

Learning that the 5th Voluntary Plan for the Environment commenced from this fiscal year to FY2016, a report on FHI's further efforts in the environmental area will be eagerly awaited. The CSR report summarized that most of the targets set through the 4th Voluntary Plan conducted up to last fiscal year had been achieved, along with an overview and schedule for the following Voluntary Plan. I think it would have been helpful for readers if a comparison between the 4th and 5th plans had been made, showing the revised points and continuing activities in an organized and easy-to-understand manner. This would provide comparability of achievements in the current plan with those in previous ones, while also assessing the effectiveness of the plan.
### Thoughts on the Third-Party Opinion

Following on from the previous year, we again asked Professor Mami Oku of Tokyo Metropolitan University to provide us with a third-party opinion on our CSR report We sincerely value her objective assessment and comments, and further deepen the level of FHI Group's CSR activities by reflecting these views in the PDCA cycle related with our CSR activities.

In FY2011, FHI revised the CSR activity structure and set up and defined eight specific categories in order to concretize the activities under each one. As this year's report was designed to systematically explain such activities per category, we were delighted to receive acknowledgement of this improvement. At the same time, two issues were pointed out: there is no clear reference to the stakeholders' opinions; and the lack of comparability of the old and new Voluntary Plans for the Environment. Because the 5th Voluntary Plan was created under the company's environmental policy and based on the assessment and findings to improve of the 4th Voluntary Plan, we view the succeeding plans as continuous and consistent. However, we realize that we should have ensured that the presentation and layout clearly reflected this understanding. We will improve these points, deepening the communication related to CSR activities in general, and providing even wider information disclosure.

As for revision of the risk management at the time of Great East Japan Earthquake, we accept that our study of the effectiveness of the emergency plan and implementing systems was not sufficient as we were pressed by having to implement a number of temporary measures for business continuation in the emergency situation and the imminent energy and power saving schemes. We also understand that it is necessary to make reference to the negative aspects of our activities and commit to making improvements. We take these points as the important revision focuses of our CSR activities and are considering how to reflect them in future plans.

We will continue working towards social challenges, such as energy and power issues, through constantly striving to improve the fuel efficiency of our cars and energy saving in plants towards realizing a low-carbon society. We are also keeping an eye on national discussions to expand our vision and identify any further reforms that we could make.

# Improvements on the 2011 Edition

### CSR Activity Report Based on the Eight Categories

Reporting on CSR activities by dividing them into eight categories set the standards for the activity contents and report contents. This clarified the challenges and related countermeasures to make it easily understandable to readers.

#### Narrowing the Topics to Report

We received some comments such as "character fonts are too small to read," and "the report focus is blurred as too many topics are covered." Based on these comments, we have reduced the number of topics and increased the text font size. Now the report is much easier to read and understand.

#### More Approachable Presentation

Explanation of our concrete activities tended to become rather technical. We have utilized diagrams and photographs to help the understanding of our readers and without requiring expert knowledge of the topic. **Results of 2011 CSR Report Questionnaire** We would like to thank the many people for the cooperation on the 2011 CSR Report Questionnaire. The views and impressions received were reflected in our following Report.

#### 1 Did the 2011 report provide sufficient information?

	Sufficient 30%
	Generally sufficient 40%
	Neutral 16%
	Somewhat insufficient 10%
Insufficient 0	1%
No ans	wer 3%
2 What wa	is the most interesting topic?
Ranking 1	Feature Article 1: Approach to Traffic Safety
	Feature Article 4: Fostering Children to Support
	the Next Generation
Raking 2	Top Message
	Feature Article 3: New Clean Plant,
	5th Plant of Oizumi Plant
	Support for the Recovery from
	the Great East Japan Earthquake
Ranking 3	Together with Employees
3 What kir	d of information would you like to see

- What is FHI's idea about hybrid cars, which are becoming
- main-stream in the market?
- Would like to know more about the current EV situation.
- Further improvement in the working environment is expected.
- Would like to know more about disaster prevention aspects.
- Need to demonstrate more about the company's social contribution overseas.

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