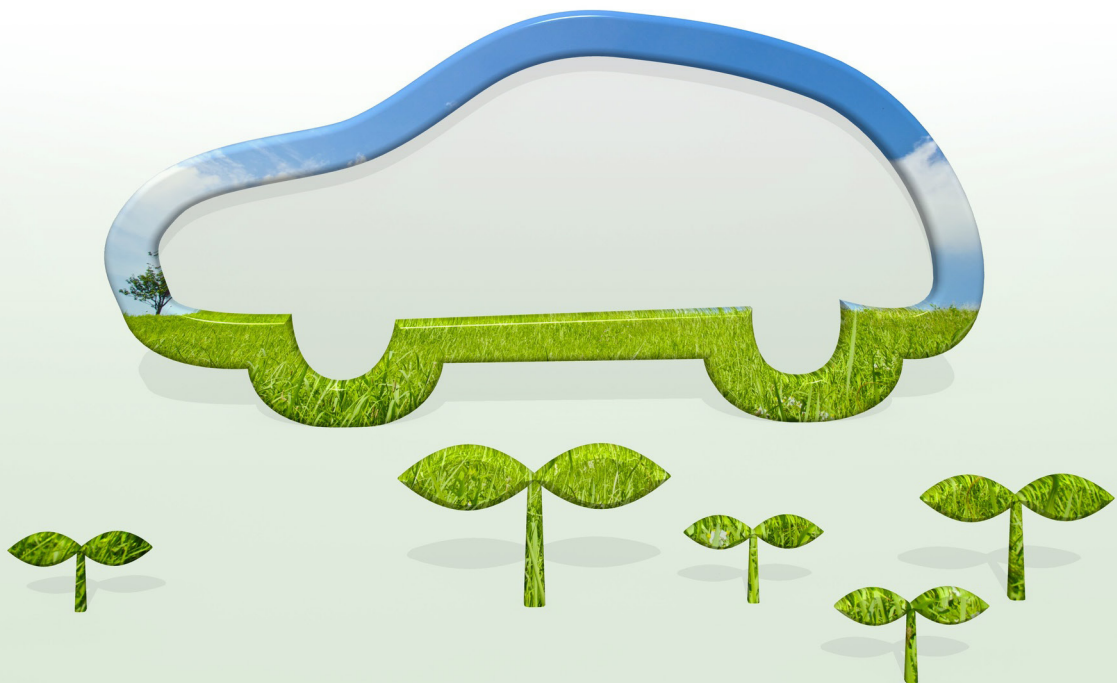




# 2014 Environmental Report





# Environmental Vision

## Message from the Chairman of the Environmental Committee

### Toward the Sustainable Development of Society

#### ◎ The Global Environment and Industrial Activities

Recognizing the close connection between the global environment and our business activities, Fuji Heavy Industries, Ltd. (FHI) strongly believes that it is essential to reduce the environmental impact by carrying out global warming measures and resource recycling in the manufacturing and sales of automobiles, aircraft, and engines.

#### ◎ Looking Back on FY2013

We formulated our independent Voluntary Plan for the Environment in 1993, and are currently implementing the 5th Voluntary Plan for the Environment (FY2012–2016). In 2013, we launched the SUBARU XV HYBRID, Subaru's first hybrid vehicle, and it was well-received as a "fun-to-drive hybrid" that contains the unique characteristics of Subaru vehicles. In addition, the LEVORG, a new type of sports touring vehicle, was announced, thereby answering the problem of the coexistence of driving and environmental performance with new ideas and technology.

In the manufacturing process, we have implemented initiatives to reduce CO2 emissions, continue achieving zero emissions, and reduce environmental risk.

We also supported Subaru dealerships to further advance their environmental efforts.

As for environmental management, we have continued to work toward ISO 14001 integrated certification, and were able to gain certification as planned.



Mitsuru Takahashi

Director and Corporate  
Executive Vice President

Chairman of the  
Environmental Committee

#### ◎ Toward the Sustainable Development of Society

In 2014, we will continue to implement the 5th Voluntary Plan for the Environment (FY2012–2016) and contribute to the sustainable development of society by reliably promoting global warming measures, resource recycling, pollution prevention and reduction of hazardous chemical use, and environmental management.

## Environmental Policy

### Environmental Policy (Established in April, 1998, revised in March 2010)

Recognizing the close connection between the global environment and our business activities, we strive to work towards the sustainable development of society by bringing "Green Products" from "Green Factories and Offices" through "Green Distribution and Retail" to the customers.

In addition to observing laws and regulations, global conventions, and industrial standards, we intend to work towards social and global contributions, independent and sustainable improvements, and pollution prevention.

- Green Products - Research and development (R&D) and product design of environmentally friendly Subaru brand products
- Green Factory - Reduction of environmental impact in the manufacturing phase
- Green Office - Reduction of environmental impact, primarily focusing on office work
- Green Distribution - Reduction of environmental impact in the distribution phase
- Green Retail - Support for environmental conservation activities of dealerships
- Enhanced Management - Enhancement of Subaru group environmental activities such as social contributions and information disclosure

# Summary of the 5<sup>th</sup> Voluntary Plan for the Environment (FY2012-2016)

As the 5th Voluntary Plan for the Environment, we created a voluntary environmental conservation plan for the period from FY2012 to FY2016. This plan is based on our Environmental Policy, and we have set even higher environmental conservation targets and are incorporating precise environmental measures so as to contribute to society with our products by delivering green products from green factories and offices through green distribution and retail to the customer.

This idea is held in common among all group companies, not just our company, as a guideline, and the entire group is proactively involved in improving environmental problems on a continuous basis. Our environmental initiatives introduced here are categorized into four groups: global warming measures, resource recycling, pollution prevention and reduction of hazardous chemical use, and environmental management.

## ◎ The 5<sup>th</sup> Voluntary Plan for the Environment (FY2012-2016)



# Fuji Heavy Industries Voluntary Plan for the Environment (FY2012-2016)

 [1. Global Warming Measures](#) [PDF]

 [2. Resource Recycling](#) [PDF]

 [3. Pollution Prevention and Reduction of Hazardous Chemical Use](#) [PDF]

 [4. Environmental Management](#) [PDF]

## The 5th Voluntary Plan for the Environment (FY2012 to FY2016)

### [1] Global Warming Measures

Field	Item	Target/Initiative (Up to FY2016)	FY2013			FY2014		
			Target	Results	Evaluation	Target		
A. Green Products	Fuel economy improvement	<ul style="list-style-type: none"> <li>Continue to improve fuel economy through full model changes and annual improvements.</li> <li>Promote fuel economy improvements to conform to fuel economy/GHG emissions standards in each country/region.</li> </ul>	<ul style="list-style-type: none"> <li>Improve fuel economy by 30% over older models through innovations to environmental engines/CVTs.</li> <li>Introduce horizontally opposed direct-injection turbo engines to the market.</li> </ul>	Promote the development to improve fuel economy for full model changes.	Completed the development of a new-type LEGACY with a 10% improvement in fuel economy over older models due to overall improvements in the vehicle including the engine, transmission, and body.	○	Promote expanding the use of fuel improvement technology introduced in the new-type LEGACY to FORESTER and IMPREZA.	
		<ul style="list-style-type: none"> <li>Promote fuel economy improvements to conform to fuel economy/GHG emissions standards in each country/region.</li> </ul>	<ul style="list-style-type: none"> <li>Japan: Meet the 2015 Fuel Economy Standards.</li> <li>Overseas: Meet the fuel economy/GHG emissions standards in each region.</li> </ul>	Conduct fuel economy monitoring in China in addition to continuing monitoring in Japan and Europe.	Japan: Met the 2015 Fuel Economy Standards in five out of 19 nine categories. A 4% average improvement in fuel economy over 2012 figures. Europe: Over-achieved regulatory values. A 1% average CO <sub>2</sub> emission reduction was achieved compared to 2012 figures. China: Over-achieved regulatory values. Implemented a 3% average fuel economy improvement over 2012 figures.	○	Continue to conduct monitoring in each country/region.	
	Clean energy use	<ul style="list-style-type: none"> <li>Introduce hybrid cars into the market.</li> <li>Conduct research aimed at the launch of electric vehicles in the market.</li> <li>Promote diesel engines' improvement and launch into the market of diesel engines.</li> </ul>	<ul style="list-style-type: none"> <li>Introduced hybrid cars into the Japanese market in 2013.</li> <li>Promote electric vehicle research.</li> <li>Promote compliance with the Euro 6 for horizontally-opposed diesel engines.</li> </ul>	Promote further performance improvements to the hybrid system.	Introduced the XV Hybrid to the Japanese market in June 2013. Completed the review of specifications to begin verification testing.	○	Begin verification testing and complete verification.	
		<ul style="list-style-type: none"> <li>Promote and establish technologies to reduce exhaust gas and improve fuel economy by fusing electronic control and general-purpose engines.</li> </ul>	<ul style="list-style-type: none"> <li>Promote development of fuel-injection general-purpose engine models and promote their wide introduction into the market.</li> </ul>	Continue to promote research for introducing electric vehicles and PHEVs into the market.	Completed feasibility study in the US and other markets for introducing electric vehicles and PHEVs.	○	Continue to promote research for introducing electric vehicles and PHEVs to the market.	
		<ul style="list-style-type: none"> <li>Promote the development of air conditioners that use low global warming potential refrigerants.</li> </ul>	<ul style="list-style-type: none"> <li>Further promote the development of low global warming potential air conditioners.</li> </ul>	Utilize Euro 6 compliant technologies to promote domestic introduction.	Completed development of Euro 6 compliant diesel engine.	○	Continue to promote introduction of Euro 6 compliant vehicles to the market.	
	Control of global warming from air conditioning refrigerants	<ul style="list-style-type: none"> <li>Promote and establish technologies to reduce exhaust gas and improve fuel economy by fusing electronic control and general-purpose engines.</li> </ul>	<ul style="list-style-type: none"> <li>Promote development of fuel-injection general-purpose engine models and promote their wide introduction into the market.</li> </ul>	Continue to work toward establishing production specifications for fuel-injection system.	Added a fuel-injection system to the engine for working vehicle and began its mass production. The vehicle manufacturer verified that actual fuel consumption was reduced by 50% over conventional specifications (carburetor specifications).	○	Address the issues of cost and making general-purpose engines more compact, and promote evaluation and verification of fuel economy improvement with other applications.	
		<ul style="list-style-type: none"> <li>Promote the development of air conditioners that use low global warming potential refrigerants.</li> </ul>	<ul style="list-style-type: none"> <li>Further promote the development of low global warming potential air conditioners.</li> </ul>	Promote development of low global warming potential air conditioners.	Continued development of low global warming potential air conditioners.	○	Promote development of low global warming potential air conditioners.	
	B. Green Factories, Distribution, and Offices	Production facilities	<ul style="list-style-type: none"> <li>Reduce CO<sub>2</sub> emissions per unit of production at domestic production facilities.</li> <li>Promote activities to reduce CO<sub>2</sub> emissions at overseas production facilities<sup>1</sup>.</li> </ul>	<ul style="list-style-type: none"> <li>Reduce CO<sub>2</sub> emissions per unit of production by 10% from FY2006 level by FY2016 at domestic production facilities.</li> <li>For overseas production facilities, set medium term CO<sub>2</sub> emissions targets and conduct activities to attain them.</li> </ul>	Reduce CO <sub>2</sub> emissions per unit of production at domestic production facilities by 7% from FY2006 level.	Reduced CO <sub>2</sub> emissions per unit of production by 40% from FY2006 level at domestic production facilities.	○	Reduce CO <sub>2</sub> emissions per unit of production at domestic production facilities by 8% from FY2006 level.
			<ul style="list-style-type: none"> <li>Promote CO<sub>2</sub> emissions reduction activities synchronized with the Energy Saving Law.</li> <li>Ensure compliance with the Energy Saving Law.</li> </ul>	<ul style="list-style-type: none"> <li>Use FY2006 per unit of CO<sub>2</sub> emission as BM, and reduce emission by 1% every year.</li> <li>Use FY2009 per unit of energy use as BM, and reduce energy use by 1% every year (across the company including offices).</li> </ul>	Set targets up to FY2014.	Set the targets up to FY2014. Overseas: SIA maintained a zero landfill rate.	○	Set targets up to FY2015. Overseas: SIA shall continue to keep zero landfill level.
		Distribution	<ul style="list-style-type: none"> <li>Promote CO<sub>2</sub> emissions reduction activities synchronized with the Energy Saving Law.</li> </ul>	<ul style="list-style-type: none"> <li>Use FY2006 per unit of CO<sub>2</sub> emission as BM, and reduce emission by 1% every year.</li> </ul>	Aim for a 7% reduction of per unit of CO <sub>2</sub> emissions using FY2006 as BM.	Reached the annual target (per unit of CO <sub>2</sub> emission of 31.88 kg/unit for completed vehicles by achieving 28.69 kg/unit. (Results: a 10% reduction).	○	Aim for an 8% reduction of per unit of CO <sub>2</sub> emissions using FY2006 as BM.
Offices		<ul style="list-style-type: none"> <li>Ensure compliance with the Energy Saving Law.</li> </ul>	<ul style="list-style-type: none"> <li>Use FY2009 per unit of energy use as BM, and reduce energy use by 1% every year (across the company including offices).</li> </ul>	Aim for a 4% reduction from BM (FY2009 results). Target per base unit = 13.32 kJ/100 million yen.	Achieved an energy use per unit of 9.99 kJ/100 million yen, a 28% reduction from the BM (FY2009 level).	○	Achieve average annual reduction of 1% per base unit.	

\* SIA: Subaru of Indiana Automotive, Inc.

## The 5th Voluntary Plan for the Environment (FY2012 to FY2016)

### [2] Resource Recycling

Field	Item	Target/Initiative (Up to FY2016)	FY2013			FY2014	
			Target	Results	Evaluation	Target	
A. Green Products	Recyclability improvement	<ul style="list-style-type: none"> <li>Continue to implement measures to comply with the Automobile Recycling Law.</li> <li>Continue to implement measures to make parts and materials more detachable, separable, and sortable.</li> </ul>	<ul style="list-style-type: none"> <li>Promote new model designs that consider recycling, and contribute to an actual recycling rate of 95% by 2016.</li> </ul>	Maintain an actual recycling rate of 95% or greater.	Maintained a recycling rate of 95% or greater.	○	Maintain a recycling rate of 95% or greater.
B. Green Factories and Offices (Dealerships)	Production facilities	<ul style="list-style-type: none"> <li>Continue the appropriate disposal of waste and reducing waste generation.</li> <li>Continue zero emission (zero landfill waste either directly or indirectly) at both domestic and overseas production facilities.</li> </ul>	<ul style="list-style-type: none"> <li>Continue the appropriate management of waste and reducing waste generation by improving yield and packaging.</li> <li>Continue zero emission at both domestic and overseas production facilities.</li> </ul>	Reduce the volume of waste generation to 17,045 tons <sup>1</sup> or less. Continue appropriate management of waste and the suppression of waste generation.	Reached the target of 16,517.6 tons of waste generation. Through the introduction of waste plastic fees, reduced the amount of industrial waste generated.	○	Suppress waste generation to 18,121 tons or less. Continue the maintenance and clarification of generated volumes through fees and production changes the suppression of waste generation.
		<ul style="list-style-type: none"> <li>Reduce water use at both domestic and overseas production facilities.</li> </ul>	<ul style="list-style-type: none"> <li>Reduce water use at production facilities across Group companies in and outside Japan.</li> </ul>	Japan: Maintain zero emission. Overseas: Maintain zero emission.	Japan: Maintained zero landfill waste. Overseas: SIA maintained zero landfill waste.	○	Japan: Continue zero landfill waste. Overseas: SIA to continue zero landfill waste.
		<ul style="list-style-type: none"> <li>Reduce water use at both domestic and overseas production facilities.</li> </ul>	<ul style="list-style-type: none"> <li>Reduce water use at production facilities across Group companies in and outside Japan.</li> </ul>	Reduce water use per unit of production at domestic production facilities by 2% from FY2011 level.	Reduced water use per unit of production at domestic production facilities by 3% from FY2011 level.	○	Reduce water use per unit of production at domestic production facilities by 3% from FY2011 level.
	Offices (Domestic dealerships)	<ul style="list-style-type: none"> <li>Continue the collection of used bumpers.</li> </ul>	<ul style="list-style-type: none"> <li>Continue the collection of used bumpers.</li> </ul>	Reduce water use at overseas production facilities.	The water use at overseas production facilities increased by 3% over the previous year due to the heat wave in North America and increased production.	×	Reduce water use at overseas production facilities.
		<ul style="list-style-type: none"> <li>Continue the collection of used bumpers.</li> </ul>	<ul style="list-style-type: none"> <li>Continue the collection of used bumpers.</li> </ul>	Continue to operate and improve the new recycle scheme.	Through the General Affairs IT Specialists Committee, the new scheme continued to be improved, and 37,073 bumpers were collected. Among them, 141.6 tons were used as recycled material, and 96.0 tons in the company's products.	○	Continue to operate and improve the new scheme, and promote resource recycling of exchanged bumpers after repairs at dealerships.

<sup>1</sup> The targets for the FY 2013 generated waste volumes were revised in light of production increases. (Originally 15,861 tons -- Revised to 17,045 tons; the original unit base 1.19 tons/100 million yen -- Revised to 1.06 tons/100 million yen)

■The 5th Voluntary Plan for the Environment (FY2012 to FY2016)

(3)Pollution Prevention and Reduction of Hazardous Chemical Use

Field	Item	Target/Initiative (Up to FY2016)	FY2013			FY2014	
			Target	Results	Evaluation	Target	
A. Green Products	Reduction in emissions	<ul style="list-style-type: none"> <li>Promote the introduction of low-emission vehicles to improve air quality.</li> </ul>	<ul style="list-style-type: none"> <li>Japan: Increase the number of models (produced by FH) achieving a 75% reduction from the 2005 regulatory values.</li> <li>Overseas: Promote the introduction of low-emission vehicles to improve air quality in each country and region.</li> </ul>	<ul style="list-style-type: none"> <li>Japan: Continue to increase the number of models achieving a 75% reduction from the 2005 regulatory values.</li> <li>Overseas: Promote the introduction of low-emission vehicles in each country and region.</li> </ul>	<ul style="list-style-type: none"> <li>Started mass production of the new-type WRX that is compliant with Euro 6b.</li> </ul>	<ul style="list-style-type: none"> <li>Japan: Continue to increase the number of models achieving a 75% reduction from the 2005 regulatory values.</li> <li>Overseas: Continue to introduce low-emission vehicles in each country and region.</li> </ul>	<ul style="list-style-type: none"> <li>○</li> </ul>
	Reduction in noise	<ul style="list-style-type: none"> <li>Promote the development of technologies for noise reduction that can also improve fuel economy and reduce emissions.</li> </ul>	<ul style="list-style-type: none"> <li>Promote the development of noise reduction technologies that consider driving conditions on urban roads.</li> </ul>	<ul style="list-style-type: none"> <li>Promote the development of technologies that reduce environmental noise and provide driving enjoyment.</li> </ul>	<ul style="list-style-type: none"> <li>Implemented CVT control that both considers the environment and provides driving enjoyment into the LEVORG.</li> </ul>	<ul style="list-style-type: none"> <li>○</li> </ul>	<ul style="list-style-type: none"> <li>Further pursue driving methods and establish consideration for the environment and driving enjoyment at a high level.</li> </ul>
	Reduction in the use of environmentally hazardous substances	<ul style="list-style-type: none"> <li>Promote the management and reduction in the use of environmentally hazardous substances.</li> <li>Overseas: Comply with related laws and regulations, including the EU directives.</li> </ul>	<ul style="list-style-type: none"> <li>Improve management of chemical substances contained in products.</li> <li>Promote the development of technologies to switch to substances with lower environmental impact.</li> </ul>	<ul style="list-style-type: none"> <li>Promote improved management of chemical substances using the International Material Data System (IMDS).</li> <li>Promote switching to substances with lower environmental impact.</li> </ul>	<ul style="list-style-type: none"> <li>Started obtaining IMDS data even in Japan and promoted improved management of chemical substances using IMDS.</li> <li>Promoted switching from lead and brominated flame retardants to substances with lower environmental impact.</li> </ul>	<ul style="list-style-type: none"> <li>○</li> </ul>	<ul style="list-style-type: none"> <li>Promote expanding (+US) the range of IMDS data acquired.</li> <li>Promote switching to substances with lower environmental impact.</li> </ul>
B. Green Factories	Management and emission reduction of environmentally hazardous substances at production facilities	<ul style="list-style-type: none"> <li>Continue to reduce emissions of PRTR substances into the environment.</li> </ul>	<ul style="list-style-type: none"> <li>Identify and manage the chemical substances regulated by the PRTR law and promote further reduction in the use of these substances.</li> </ul>	<ul style="list-style-type: none"> <li>Improve accuracy in identifying and managing specified chemical substances, and enhance initiatives for emission reduction.</li> </ul>	<ul style="list-style-type: none"> <li>Continued identifying the use and emissions of PRTR regulated substances through improved and maintained accurate management.</li> </ul>	<ul style="list-style-type: none"> <li>Improve accuracy in identifying and managing specified chemical substances, and promote initiatives leading to emissions reduction.</li> </ul>	<ul style="list-style-type: none"> <li>○</li> </ul>
		<ul style="list-style-type: none"> <li>Further reduce per unit of VOC emissions (g/m<sup>2</sup>) at production lines.</li> </ul>	<ul style="list-style-type: none"> <li>Reduce per unit of VOC emissions to below 49.3 g/m<sup>2</sup> (a 48.1% reduction from the FY2000 level).</li> </ul>	<ul style="list-style-type: none"> <li>Reduce per unit of VOC emissions to below 49.3 g/m<sup>2</sup>.</li> </ul>	<ul style="list-style-type: none"> <li>Achieved a reduction to 49.2 g/m<sup>2</sup>, and satisfied the target.</li> </ul>	<ul style="list-style-type: none"> <li>○</li> </ul>	<ul style="list-style-type: none"> <li>Reduce per unit of VOC emissions to 47.2 g/m<sup>2</sup> or less by improving finer emission control.</li> </ul>
		<ul style="list-style-type: none"> <li>Promote activities targeting the elimination of occurrences of hazardous substances leaking off site, complaints, and exceeding legal standards.</li> </ul>	<ul style="list-style-type: none"> <li>Promote activities targeting the elimination of occurrences of hazardous substances leaking off site, complaints, and exceeding legal standards through environmental risk reduction activities.</li> <li>Set stricter voluntary standards and conduct small-risk elimination activities.</li> </ul>	<ul style="list-style-type: none"> <li>Eliminate the occurrences of hazardous substances leaking off site, complaints, and exceeding legal standards.</li> <li>Complete corrective action of two on-site accidents that occurred the previous fiscal year, deploy measures horizontally, and promote prevention of off-site leaking incidents.</li> </ul>	<ul style="list-style-type: none"> <li>Although there were two minor accidents that were dealt with on-site, the goal of eliminating off-site leaking incidents and complaints was met.</li> <li>There was one incident of exceeding legal standard in water quality measurements. (A pH of 4.5 was measured compared to the standard pH of 5-9 of the Aerospace Company).</li> </ul>	<ul style="list-style-type: none"> <li>○</li> </ul>	<ul style="list-style-type: none"> <li>Eliminate all occurrences of hazardous substances leaking off site, complaints, and exceeding legal standards.</li> <li>Enhance management of trends of periodic analysis for observance of legal standards, promote the corrective action for the two on-site accidents that occurred in FY2013, deploy the measures horizontally, and continue prevention of off-site leaking incidents.</li> </ul>

\*1 Target values for VOC emissions for FY2013 and beyond were revised due to change in the production method (FY2013: revised to 49.3 g/m<sup>2</sup> from 48.9 g/m<sup>2</sup>; FY2016: revised to 47.4 g/m<sup>2</sup> from 45.5 g/m<sup>2</sup>).

■The 5th Voluntary Plan for the Environment (FY2012 to FY2016)

(4)Environmental Management

Field	Item	Target/Initiative (Up to FY2016)	FY2013			FY2014	
			Target	Results	Evaluation	Target	
A. Green Products	Research on traffic environments	<ul style="list-style-type: none"> <li>Work further on Intelligent Transport System (ITS) and the development of traffic accident prevention technologies in order to realize a safer and more comfortable roaduser society.</li> </ul>	<ul style="list-style-type: none"> <li>Promote efforts to develop an Advanced Safety Vehicle (ASV).</li> <li>Promote efforts to develop a safe driving support system that is in coordination with infrastructure.</li> </ul>	<ul style="list-style-type: none"> <li>Conduct activities based on the 5th Advanced Safety Vehicle (ASV) promotion plan.</li> <li>Promote development and industry-wide feasibility study of the Cooperative Adaptive Cruise Control (CACC) system.</li> <li>Present demonstrations of accident prevention support by inter-vehicle communications and a CACC test bed at the Tokyo ITS World Congress 2013.</li> </ul>	<ul style="list-style-type: none"> <li>Each working group continued to promote activities based on the FY2013 plans.</li> <li>Identified developmental issues for making CACC into practical use through field tests, and took part in activities for reviewing guidelines for application.</li> <li>Participated in the Tokyo ITS World Congress 2013 Showcase. Carried out demonstrations of accident prevention support by inter-vehicle communications and CACC field tests to introduce the technology.</li> </ul>	<ul style="list-style-type: none"> <li>Continue to promote activities based on the 5th ASV promotion plan.</li> <li>Promote development to put accident prevention support by inter-vehicle communications and CACC into practical use.</li> <li>Continue to promote development of advanced safety system for further expansion and advancement.</li> </ul>	<ul style="list-style-type: none"> <li>○</li> </ul>
		<ul style="list-style-type: none"> <li>Expand deployment of an advanced safe driving system and promote the development of technologies for further enhancement.</li> </ul>	<ul style="list-style-type: none"> <li>Further promote technological development to expand deployment of "EyeSight (ver. 2)"; advanced safe driving assist system.</li> </ul>	<ul style="list-style-type: none"> <li>Continue the global deployment plan for "EyeSight (ver. 2)" and promote compatibility with prevention safety assessment of each country.</li> </ul>	<ul style="list-style-type: none"> <li>To be compatible with assessment of each country, continued to promote development based on the global development plan. EyeSight equipped LEGACY, OUTBACK, and FORESTER vehicles received a Superior rating from the IIHS (US) for the forward collision avoidance performance evaluation and was awarded the 2014 TSP (Top Safety Pick+).</li> </ul>	<ul style="list-style-type: none"> <li>○</li> </ul>	<ul style="list-style-type: none"> <li>Continue to identify assessment trends of each country and promote rolling of deployment plans and continuous technological development.</li> </ul>
	Promotion of lifecycle assessment	<ul style="list-style-type: none"> <li>Promote disclosure of lifecycle assessment (LCA) data.</li> </ul>	<ul style="list-style-type: none"> <li>Promote disclosure of LCA data starting with cars that have undergone full model changes.</li> </ul>	<ul style="list-style-type: none"> <li>Continue to calculate and disclose LCA data for cars that have undergone full model changes.</li> </ul>	<ul style="list-style-type: none"> <li>Calculated LCA for the XV HYBRID, and disclosed the results on the internet.</li> </ul>	<ul style="list-style-type: none"> <li>○</li> </ul>	<ul style="list-style-type: none"> <li>Continue to calculate and disclose the LCA data for models that have undergone full model changes.</li> </ul>
Green procurement activities	<ul style="list-style-type: none"> <li>Request both domestic and overseas suppliers to maintain the structure to establish environmental management systems (EMS).</li> <li>Reduce environmentally hazardous substances.</li> </ul>	<ul style="list-style-type: none"> <li>Maintain the structure to establish EMS including new suppliers.</li> <li>Review the green procurement guidelines and revise as necessary.</li> </ul>	<ul style="list-style-type: none"> <li>Maintain the structure to establish EMS.</li> </ul>	<ul style="list-style-type: none"> <li>Maintained the structure to establish EMS.</li> <li>Automobile (264 companies established (100%))</li> <li>Aerospace (CF) 79 companies established (100%)</li> <li>Industrial Products (CF) 139 companies established (100%)</li> </ul>	<ul style="list-style-type: none"> <li>Promote the reduction of environmentally hazardous substances.</li> <li>Automobile (1) Investigated contents of outsourced parts.</li> <li>2) Investigated contents and replacement of environmentally hazardous substances.</li> <li>3) Confirm compliance to laws and regulations related to reduction of environmentally hazardous substances.</li> <li>Continued non-use of regulated parts/substances.</li> <li>Industrial Products (CF) Continued non-use of regulated parts/substances.</li> <li>Continuing the collection of investigation reports.</li> </ul>	<ul style="list-style-type: none"> <li>Promote the reduction of environmentally hazardous substances.</li> <li>Automobile (1) Investigated contents of outsourced parts.</li> <li>2) Investigate contents and replacement of environmentally hazardous substances.</li> <li>3) Confirm compliance to laws and regulations related to reduction of environmentally hazardous substances.</li> <li>Continued non-use of regulated parts/substances.</li> <li>Industrial Products (CF) Continue non-use of regulated parts/substances.</li> <li>Formulate a plan to replace environmentally hazardous substances.</li> </ul>	<ul style="list-style-type: none"> <li>○</li> </ul>
		<ul style="list-style-type: none"> <li>Set supplier CSR guidelines and deploy them to suppliers. (Aerospace and Industrial Products Companies)</li> <li>Automobile Division has already finished setting and deploying.</li> </ul>	<ul style="list-style-type: none"> <li>Set guidelines and promote deployment and awareness raising of the guidelines to suppliers.</li> </ul>	<ul style="list-style-type: none"> <li>Promote CSR procurement activities based on guidelines.</li> <li>Study making the guidelines' company-wide version.</li> <li>Aerospace (CF) Deploy guidelines.</li> <li>Industrial Products (CF) Disseminate guidelines.</li> </ul>	<ul style="list-style-type: none"> <li>Promoted CSR procurement activities based on the guidelines.</li> <li>Automobile (264 companies established (100%))</li> <li>Aerospace (CF) 79 companies established (100%)</li> <li>Industrial Products (CF) 139 companies established (100%)</li> <li>Continuing the collection of investigation reports.</li> </ul>	<ul style="list-style-type: none"> <li>○</li> </ul>	<ul style="list-style-type: none"> <li>Promote CSR procurement activities based on the guidelines.</li> <li>Disseminate and promote the guidelines.</li> <li>Study biodiversity conservation activities.</li> </ul>
		<ul style="list-style-type: none"> <li>Support dealerships' environmental activities.</li> </ul>	<ul style="list-style-type: none"> <li>Support all dealerships maintain "Eco Action 21" certification.</li> <li>Support voluntary implementation of environmental measures, such as energy conservation and waste reduction measures, under "Eco Action 21".</li> </ul>	<ul style="list-style-type: none"> <li>Confirm continuation of "Eco Action 21" certification.</li> <li>Continue to propose recovery of different wastes and work toward energy conservation, particularly electricity and gas, using Eco Action 21 both in order to reduce costs and improve the environmental awareness of dealerships.</li> </ul>	<ul style="list-style-type: none"> <li>In addition to continuing support, the General Affairs IT Specialists Committee deployed points of concern at the time of certification renewal.</li> <li>By having General Affairs IT Specialists Committee take up environmental projects, supported waste reduction and energy conservation of dealerships.</li> </ul>	<ul style="list-style-type: none"> <li>○</li> </ul>	<ul style="list-style-type: none"> <li>In continuation of the previous fiscal year, support all dealerships to maintain "Eco Action 21" certification.</li> <li>In addition to supporting D-SPECS utilization, urge reduction activities at the dealerships by proactively sending energy use results from FH.</li> </ul>
C. Expanding Environmental Management	<ul style="list-style-type: none"> <li>Promotion of environmental conservation activities, including biodiversity conservation, in cooperation with local communities.</li> </ul>	<ul style="list-style-type: none"> <li>Continue to participate in environmental events, and make friendly exchanges with and support factory tours of residents near factories.</li> <li>Continue to conduct cleanup and greening activities, including biodiversity conservation efforts, near factories.</li> <li>Support activities of and work with environmental organizations.</li> </ul>	<ul style="list-style-type: none"> <li>Continue to give factory tours, hold on-site events, and carry out environmental exchange classes.</li> <li>Continue cleanup activities around factories and offices.</li> <li>Promote greening activities taking biodiversity conservation into consideration.</li> </ul>	<ul style="list-style-type: none"> <li>Continue to implement teacher training, environmental education at elementary schools, and on-site middle school students training.</li> <li>Disclose biodiversity initiatives in the 2013 CSR report.</li> <li>Continue to identify the connection between biodiversity and our business activities.</li> </ul>	<ul style="list-style-type: none"> <li>Conducted 43 environmental class visits (1368 participants) at the Utsunomiya Manufacturing Division.</li> <li>Disclosed biodiversity initiatives in the 2013 CSR Report.</li> <li>Prepared to foster identification of the connection between biodiversity and our business activities.</li> </ul>	<ul style="list-style-type: none"> <li>Continue environmental class visits.</li> <li>Continue to foster identification of the connection between biodiversity and our business activities, and release the results.</li> </ul>	<ul style="list-style-type: none"> <li>○</li> </ul>
		<ul style="list-style-type: none"> <li>Disclose environmental information through regular publication of environmental reports and other documents in a timely manner.</li> </ul>	<ul style="list-style-type: none"> <li>Provide environment report in the form of CSR report and provide updated information on the website.</li> </ul>	<ul style="list-style-type: none"> <li>Issue the 2013 CSR report.</li> <li>Create a new Environmental Top Page in our website, and provide information effectively.</li> </ul>	<ul style="list-style-type: none"> <li>Issued the 2013 CSR Report in August, and its English version and brochure in November.</li> <li>Created a new top page, and improved navigation and usability.</li> </ul>	<ul style="list-style-type: none"> <li>○</li> </ul>	<ul style="list-style-type: none"> <li>Create a 2014 environmental website and provide information there.</li> </ul>
		<ul style="list-style-type: none"> <li>Improve and enhance the contents of environmental reports. (Compliance with environmental reporting guidelines, inclusion of Group companies in the scope of reporting)</li> </ul>	<ul style="list-style-type: none"> <li>Improve compliance to environmental reporting guidelines of the Ministry of the Environment, and improve the content of environmental reporting.</li> </ul>	<ul style="list-style-type: none"> <li>Improve compliance with the 2012 environmental reporting guidelines, and promote enhanced report content.</li> </ul>	<ul style="list-style-type: none"> <li>Referenced not only the environmental reporting guidelines but also the GRI guidelines (G2000), and posted a comparison table for the GRI guidelines (G2000).</li> </ul>	<ul style="list-style-type: none"> <li>○</li> </ul>	<ul style="list-style-type: none"> <li>Enrich the content of the report.</li> </ul>
Promotion of environmental education and awareness activities	<ul style="list-style-type: none"> <li>Participate in environmental events and publicize corporate environmental efforts.</li> </ul>	<ul style="list-style-type: none"> <li>Continue to participate in Eco-Products Exhibitions to widely publicize the company's eco-friendly products and efforts.</li> </ul>	<ul style="list-style-type: none"> <li>Participate in the 2013 Eco-Products Exhibition and widely publicize the company's eco-friendly products and efforts.</li> </ul>	<ul style="list-style-type: none"> <li>Participated in the 2013 Eco-Products Exhibition, and publicized our environmental vehicles including the XV HYBRID.</li> </ul>	<ul style="list-style-type: none"> <li>○</li> </ul>	<ul style="list-style-type: none"> <li>Participate in the 2014 Eco-Products Exhibition to widely appeal our eco-friendly products and efforts.</li> </ul>	
	<ul style="list-style-type: none"> <li>Continue environmental and social education under the in-house education system.</li> </ul>	<ul style="list-style-type: none"> <li>Hold more environmental education, enlightenment and presentation events.</li> </ul>	<ul style="list-style-type: none"> <li>Using a variety of opportunities, proactively implement environmental education and educational activities.</li> </ul>	<ul style="list-style-type: none"> <li>In the October 2013 issue of Nihon Ecology, our President's message was featured in interviews of top environmental managers and introduced the company's environmental efforts such as the XV HYBRID, SIA, and e-learning.</li> <li>The e-learning system was updated, and all employees underwent environmental education using the e-learning system at the Tokyo Office and Headquarters.</li> </ul>	<ul style="list-style-type: none"> <li>○</li> </ul>	<ul style="list-style-type: none"> <li>Using a variety of opportunities, proactively implement environmental education and educational activities.</li> </ul>	
	<ul style="list-style-type: none"> <li>Continue to hold lectures and workplace meetings to present improvement examples.</li> </ul>	<ul style="list-style-type: none"> <li>Promote sharing the internal auditing and environmental education systems for more practical ESG activities.</li> </ul>	<ul style="list-style-type: none"> <li>Continue mutual internal auditing and aim at improving the system overall by sharing forms.</li> </ul>	<ul style="list-style-type: none"> <li>Created an unified, company-wide internal audit check sheet, and held 10 audits (two more than previously) between Aug 25 to Sep 27, and identified four inconsistencies and 15 recommendations.</li> </ul>	<ul style="list-style-type: none"> <li>○</li> </ul>	<ul style="list-style-type: none"> <li>Promote making unified company-wide procedures for internal audits.</li> </ul>	
Establishment of an Environmental Management System	<ul style="list-style-type: none"> <li>Maintain ISO 14001 integrated certification of all company outlets.</li> <li>Make continuous improvements to the Environmental Management System.</li> <li>Increase cooperation with subsidiaries and maintain and improve the Environmental Management System structure.</li> </ul>	<ul style="list-style-type: none"> <li>Promote sharing the internal auditing and environmental education systems for more practical ESG activities.</li> <li>Encourage more subsidiaries to acquire the ISO 14001 integrated certification in order to improve the system.</li> </ul>	<ul style="list-style-type: none"> <li>Promote group-wide integrated certification focused on domestic affiliated companies that are the members of Domestic Affiliated Companies Division.</li> </ul>	<ul style="list-style-type: none"> <li>The meeting of the Domestic Affiliated Companies Division was convened and three companies were confirmed for joining (one has already joined).</li> </ul>	<ul style="list-style-type: none"> <li>○</li> </ul>	<ul style="list-style-type: none"> <li>Continue to promote activities for group-wide integrated certification.</li> </ul>	

\* Eco Action 21: An environmental management system developed by the Ministry of the Environment based on ISO 14001, aiming at easy implementation by small-to-medium sized corporations.



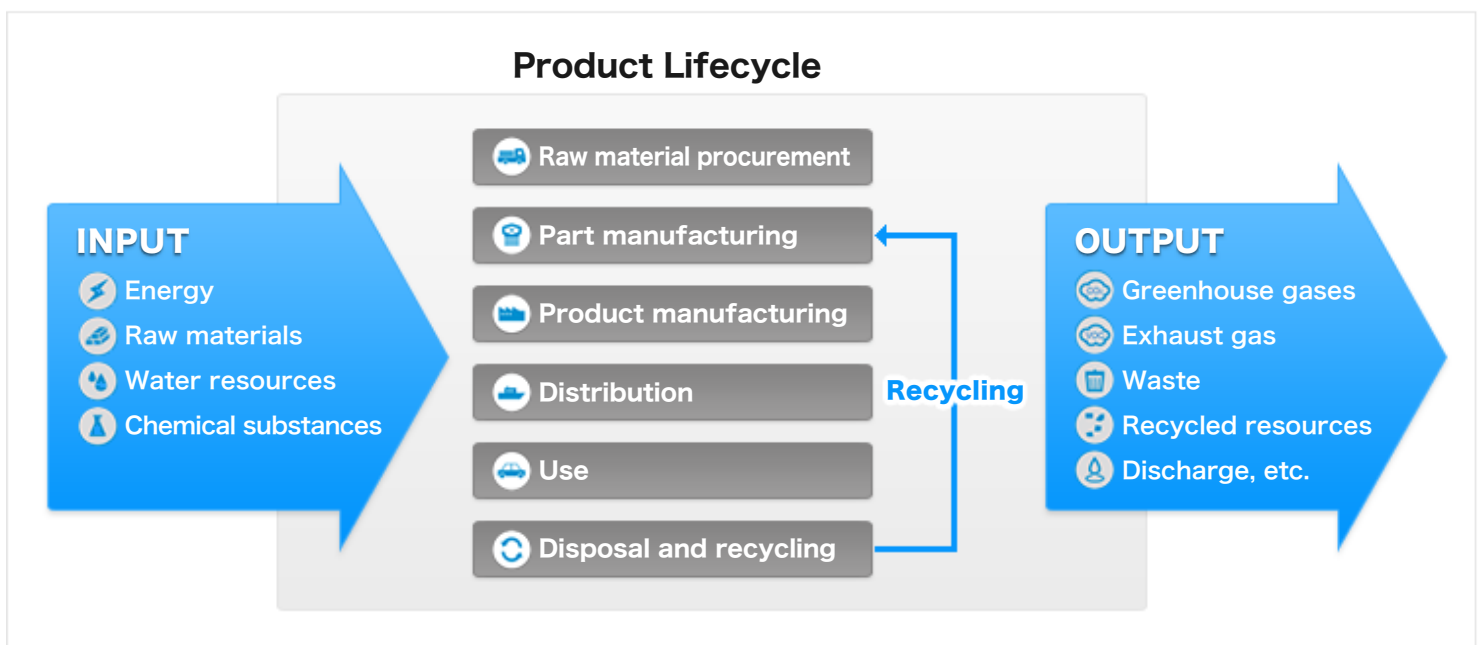


# Environmental Management

## Connection between Global Environment and Business Activities

The Fuji Heavy Industries Ltd. (FHI) Group recognizes environmental conservation as one of the most important issues that we face, and promotes environmental management by the Group as a whole. Our products have an impact on the environment throughout their life cycle stages, including the procurement of raw materials, manufacture, use, and disposal. These impacts include the use of resources such as energy and materials, the emission of greenhouse gases and the generation of waste. In order to reduce the environmental impact of our products during their life cycles, we are promoting environmental initiatives at all stages of our business activities including the supply chain.

## Business Activities and Environmental Impact



## Building a Low Carbon Society

The FHI Group promotes initiatives to control CO<sub>2</sub> emissions across the value chain. We believe that we are contributing to building a low-carbon society through our business activities of developing and launching fuel efficient and eco-friendly vehicles, improving the fuel economy of general-purpose engines, and reducing the weight of aircraft by using composite material technologies. Furthermore, the FHI Group as a whole strives to prevent global warming by carrying on proactive efforts such as energy conservation and controlling CO<sub>2</sub> emissions in manufacturing and improving transportation efficiency in distribution.

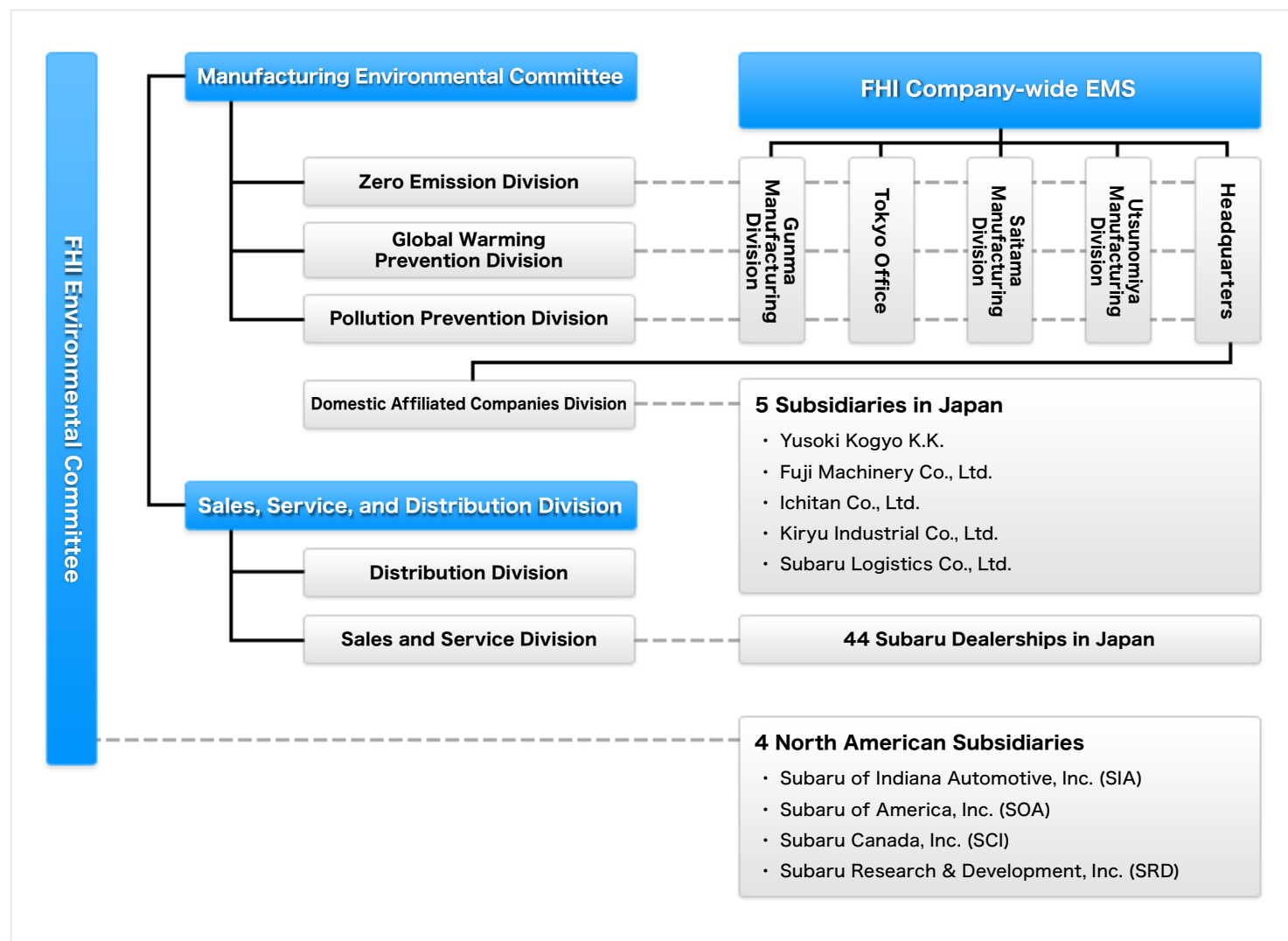
- Automobile: R&D and launch of fuel efficient and eco-friendly vehicles
- Industrial Equipment: Improvement in fuel economy of general-purpose engines
- Aerospace: Weight reduction by using composite material technologies
- Common: Efforts in energy conservation and controlling CO<sub>2</sub> emissions

## Organization

We established an environmental management structure across the organization with two pillars of the Company-wide Environmental Management System (EMS) and the Environmental Committee in order to reach the goals of our Environmental Policy and Voluntary Plan.

Serving as the head of the Company-wide EMS and the chairperson of the Environmental Committee, the director responsible for environmental issues conducts environmental reviews twice a year. The director proactively promotes environmental conservation activities, comprehensively managing the progress and the direction of our efforts.

### FHI Group Environmental Management Organization (as of June 2014)



## Status of Establishing the Environmental Management System

We are also actively engaged in building a group-wide environmental management structure, and have established an EMS at our offices, vendors, domestic and overseas consolidated manufacturing companies, and Subaru dealerships at home and abroad, and have acquired external certifications.

In March 2011, all of our 44 domestic dealerships and their 477 outlets obtained Eco Action 21 (EA21) certification, which was the first in Japan among all automobile manufactures.

In May 2012, SIA, the center of production in North America, also became the first automobile production facility in the United States to obtain ISO 50001 certification, the international standard for energy management systems (EnMS), and continues to actively promote these activities.

Further, in March 2013, Subaru Logistics Co., Ltd., received ISO 14001 certification.

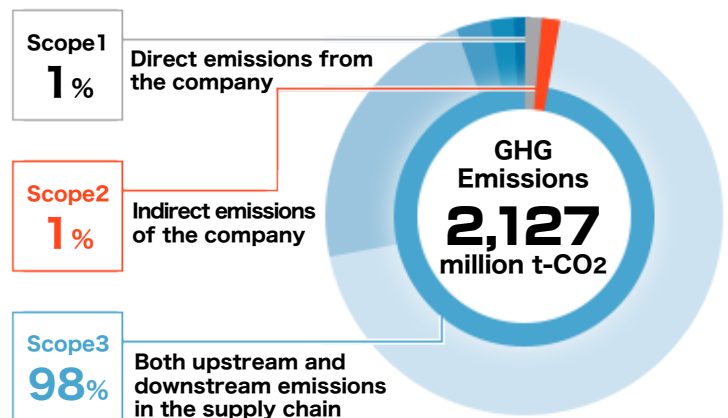
In addition to these achievements, through global business activities as the FHI Group, we continue to promote green procurement in the supply chain, establishment of a company-wide environmental management system covering nine company offices, and green procurement in the group to reduce environmentally hazardous substances.

## Status of Establishing EMS/EnMS in the FHI Group

Factories and Offices					Dealerships	
Category	FHI	Vendor	Domestic Consolidated Production and Distribution Companies	Overseas Consolidated Production Company	Domestic Consolidated Dealerships	Overseas Consolidated Dealerships
Divisions	<b>Company-wide EMS</b> Gunma Manufacturing Division Tokyo Office Utsunomiya Manufacturing Division Handa Plant West Handa Plant Headquarters Yusoki Kogyo K.K. F.A.S. Co., Ltd.	Green procurement Raw material procurement vendors	Fuji Machinery Co., Ltd. Kiryu Industrial Co., Ltd. Ichitan Co., Ltd. Yusoki Kogyo K.K. Subaru Logistics Co., Ltd.  Total: 5 companies	SIA	All domestic Subaru dealerships  Total: 44 dealerships	SOA SCI  Total: 2 dealerships
Acquired EMS/EnMS	ISO14001	Either ISO 14001 or Eco Action 21	ISO14001	ISO14001 ISO50001	Eco Action 21	ISO14001

## Green house Gas Emissions in the Supply Chain

Green house gas (GHG) emissions in the supply chain for FY2013 was 212.74 million t-CO<sub>2</sub>. In FY2013, we participated in the Ministry of the Environment "Support for Calculating Supply Chain Green house Gas Emissions toward an Environmental Information Disclosure Infrastructure," and received assistance from NTT Data Institute of Management Consulting, Inc. in Scope 3 calculations. We will continue to promote identifying and managing GHG emissions.





## © Scope 3 Breakdown

Division	Category	Category Greenhouse Gas Emissions (t-CO <sub>2</sub> )	Calculation Scope, etc.
Upstream	1 Purchased goods and services	5,497,952	Consolidated
	2 Capital goods	229,606	Consolidated
	3 Fuel and energy related activities not included in Scopes 1 or 2	44,508	Those businesses subject to Energy Saving Law
	4 Transportation and delivery (upstream)	617,590	Those businesses subject to Energy Saving Law + non-consolidated domestic automobile division
	5 Waste generated in operations	3,617	Major domestic and foreign outlets consolidated
	6 Business travel	3,111	Consolidated
	7 Employee commuting	10,012	Consolidated
	8 Leased assets (upstream)	–	N/A
Downstream	9 Transportation and delivery (downstream)	–	N/A
	10 Processing of sold products	3,194	Consolidated domestic automobile divisions
	11 Use of sold products	14,273,196	Domestic and foreign automobiles + domestic general-purpose engines
	12 End-of-life treatment of sold products	23,535	Non-consolidated domestic automobiles
	13 Leased assets (downstream)	–	N/A
	14 Franchises	52,806	Domestic outlets not subject to Energy Saving Law
	15 Investments	–	N/A

## Biodiversity conservation activities

Based on our environmental policy, we are involved in biodiversity conservation, referencing to the “Guidelines for Private Sector Engagement in Biodiversity,” “Declaration of Biodiversity – Guide to Action Policy by Keidanren, Federation of Economic Organizations,” etc.

In FY2013, we made preparations for understanding the relationship between business activities and biodiversity and identifying the potential risks, and began activities in FY2014.

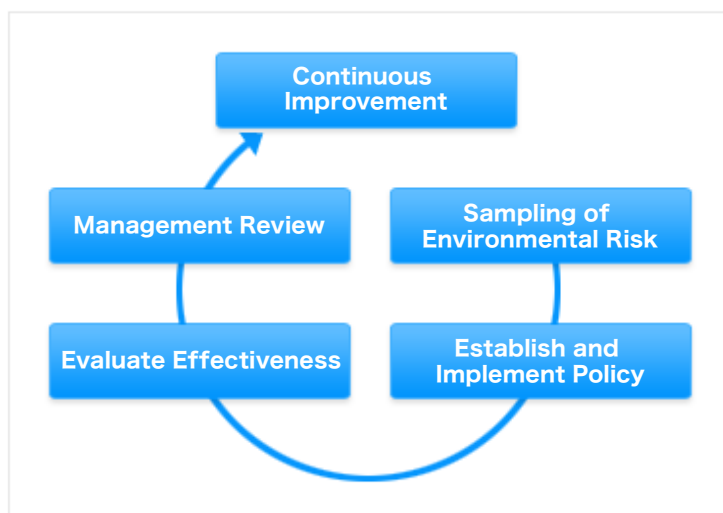
We are also involved in biodiversity conservation overseas. For example, the Subaru of Indiana Automotive, Inc. (SIA) manufacturing plant in the U.S. has teamed with a local high school to actively develop paths taking into consideration the status of endemic vegetation and also a botanical garden that allows the school to grow some of its food for school cafeteria. In addition, the high school students, leaders in the next generation, were introduced to SIA environmental and biodiversity conservation activities, and were led to a deeper understanding of the biodiversity of the region.

We will continue with activities aimed at harmony with the natural environment of the region as we promote global biodiversity conservation initiatives.



## Environmental Risk Management

We work to prevent and minimize environmental risk in our business activities (such as environmental accidents, pollution, or non-compliance with laws and regulations) by periodic sampling and management of environmental risks. In addition, we standardize the management flow in case of environmental risk and practice during non-emergency times so that when an environmental risk does occur, emergency response or measures to prevent reoccurrence can be implemented immediately. This also prevents secondary risk due to confusion from occurring.

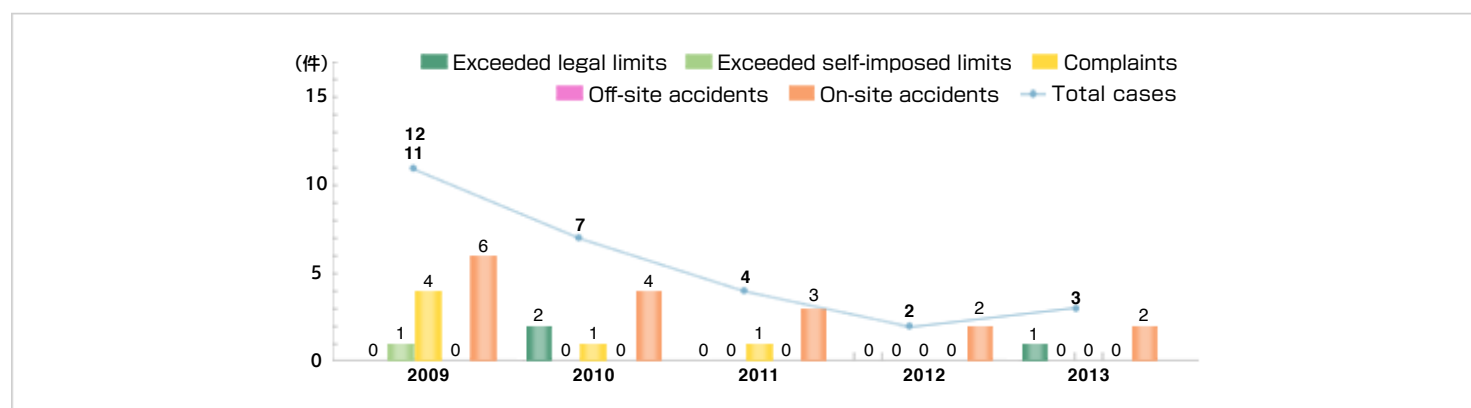


## Status of Compliance with Environmental Laws and Regulations

We strive to be in compliance with environmental laws and regulations, and to eliminate environment-related accidents and complaints.

The figure below shows the results of the last five years.

### Number of Cases Exceeding Environmental Laws and Regulations, Environmental Accidents, and Complaints



### ◎ Status of Compliance with Environmental Laws and Regulations in FY2013

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. In FY2013, there was one case of exceeding legal limits and we implemented measures to prevent a reoccurrence.

Name	Number of Cases	Details	Main Corrective Measures
Utsunomiya Manufacturing Division	1 case for water quality	March 2014: Concentration of hydrogen ions exceeded the legal standard (Concentration was pH4.5 while the legal standard is ph5-9.).	Work procedures were reviewed and staff was retrained.

### ◎ Environmental Complaints Received in FY2013

No complaints were received.

## ◎ Status of Environmental Accident Occurrences in FY2013

We are striving to achieve the goal of zero accidents, both on and off site. Although there were no incidents of off-site accidents, two incidents were recorded on-site. We accordingly put measures in place to prevent recurrence of these incidents.

Name	Number of Cases	Details	Main Corrective Measures
Gunma Manufacturing Division	2 cases for water quality	July 2013: Waste fluid flowed out of the waste fluid tank. The leak was contained on-site.	Work procedures were reviewed and equipment was improved.
		January 2014: Fuel leaked from parts delivery truck. The leak was contained on-site.	The parts delivery company was instructed to prevent reoccurrence, and other parts delivery companies were asked to prevent occurrences.

## Environmental Accounting (FHI Group FY2013 Results)

### Environmental Cost Approach and Calculation Method

Independent guidelines have been established according to the FHI environmental conservation activity organizations, referring to the Guidelines of the Ministry of the Environment, and environmental costs are calculated and summarized according to these guidelines. FHI Group companies in Japan and abroad use the same for calculations.

### Environmental Cost and Capital Investment Calculation Method

Capital investments and related expenses for environmental equipment (investments of 25 million yen or more), and labor costs are calculated on a differential or pro-rata basis.

For example, investments and environmental costs for energy conservation at a production facility are calculated as follows:

$$\text{Capital investment and environmental cost} = \{(\text{Total investment} - \text{Investment not for energy conservation}) / \text{Total investment}\} \times (\text{Capital investments for the production facility, maintenance costs, etc.})$$

In case of smaller facilities with investments of less than 25 million yen, the costs for capital investments and maintenance costs are totaled, as long as they are for environmental purposes.

In addition, depreciation of equipment investment is not included in the environmental cost from the viewpoint of cash flows. Small expenses, such as fixed assets taxes and insurance costs, are also omitted from the total.

Environmental cost and economic effect of environmental facilities are only included for three years starting from the second year after the facilities are put into operation.

### FY2013 Calculation Results

Environmental cost came to 21 billion yen on a non-consolidated basis, up 2.46 billion yen (13.3%) from the previous fiscal year, and 22.2 billion yen on a consolidated basis, up 2.73 billion yen (14.0%).

The cost increase was mainly due to an increase in research and development (R&D) costs (2.55 billion yen on a non-consolidated basis).

The ratio of environmental cost to sales, which is one of the environmental management indexes used on a consolidated basis, came to 0.92%.

## FY2013 Environmental Costs and Effects Calculation Results

Item	Category	Environmental Cost (Millions of yen)						Environmental Investment (Millions of yen)					
		Non-consolidated			Consolidated			Non-consolidated			Consolidated		
		FY 2013	FY 2012	FY 2011	FY 2013	FY 2012	FY 2011	FY 2013	FY 2012	FY 2011	FY 2013	FY 2012	FY 2011
(1) Cost in the business area	1. Pollution prevention cost	340	395	306	489	543	447	167	167	116	215	215	155
	2. Global environmental conservation cost	28	32	53	90	48	84	360	360	195	376	376	235
	3. Resource recycling cost	513	515	466	1,098	900	777	0	0	0	0	0	1
(2) Upstream and downstream costs	Recycling related cost Cost arising from changes in product materials	128	163	158	128	163	158	-	-	-	-	-	-
(3) Administration cost	Cost for monitoring environmental impact Cost for the Environmental management Cost for environmental education	86	95	92	137	151	127	-	-	-	-	-	-
(4)R&D cost	R&D cost for environmental impact reduction	19,696	17,149	16,474	19,999	17,426	16,749	2,275	1,763	788	2,276	1,764	792
(5) Social activity cost	Cost related to donation, etc. for environmental conservation groups	103	91	106	106	93	109	-	-	-	-	-	-
(6) Environmental remediation cost	Cost to remedy soil and underground pollution	103	98	94	103	99	99	6	6	0	6	6	0
(7) Other cost		0	0	0	0	0	0	-	-	-	-	-	-
<b>Grand Total</b>		<b>20,997</b>	<b>18,537</b>	<b>17,748</b>	<b>22,150</b>	<b>19,423</b>	<b>18,550</b>	<b>2,807</b>	<b>2,295</b>	<b>1,099</b>	<b>2,874</b>	<b>2,362</b>	<b>1,183</b>

Note: Due to rounding, the sum may not exactly match the corresponding total.

## FY2013 Economic Effect Calculation Results

Item	Economic effect (Millions of yen)	
	Non-consolidated	Consolidated
Reduction in energy cost from energy conservation	11	34
Sales from recycling (sales of valuable items: metals, waste liquids, and cardboard boxes)	1,811	2,959
Reduction in use of raw materials due to recycling (reduced packaging materials cost)	7.07	12.12

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.

Five subsidiaries outside Japan: SIA, SOA, SRD, SCI and SOMI



# Environmentally Friendly Automobiles

## Fuel Economy

### Approaches and Strategies for Improving Fuel Economy

An automobile releases carbon dioxide (CO<sub>2</sub>) in proportion to the fuel consumed.

Traditionally, the focus was on saving as much fuel as possible, but now the issue for companies is how to reduce carbon dioxide emissions and contribute to preventing global warming. In other words, we are now transitioning to an environmental era for total emission control.

Compared with other passenger automobile manufacturers, Subaru is unique in terms of offering a carefully selected limited number of models and of producing cars that embody safe and enjoyable driving by combining a horizontally-opposed engine, symmetrical AWD, and integrated safety performance. In response to the transition to the new environmental era, we believe we can provide customers with products that they want by making the best use of our uniqueness.

In Japan, we continue to expand the lineup sequentially with models that surpass the 2015 Fuel Economy Standards. Since introducing the new generation Boxer engine, we have deployed technologies to improve fuel economy such as the new lightweight, high-efficiency Lineartronic CVT, low drag coefficient car bodies with enhanced aerodynamics and an idling stop system in the LEGACY, IMPREZA and FORESTER. In addition, the LEGACY and FORESTER adopt the next-generation Boxer direct injection turbo engine and high-torque-ready Lineartronic CVT, achieving smooth, high performance drive as well as exceptional environmental efficiency. In June 2013, we introduced a hybrid system model that delivered dramatically improved fuel economy while letting drivers experience the fun drive unique to Subaru. Also in June 2014, we launched the newly developed, new-type LEVORG with a 1.6L direct injection turbo engine (intelligent DIT) that provides both superior fuel economy and power performance.

We will continue to work on improving fuel economy, producing innovation for the future, and offering vehicles with the distinctive character and high quality that customers can enjoy.



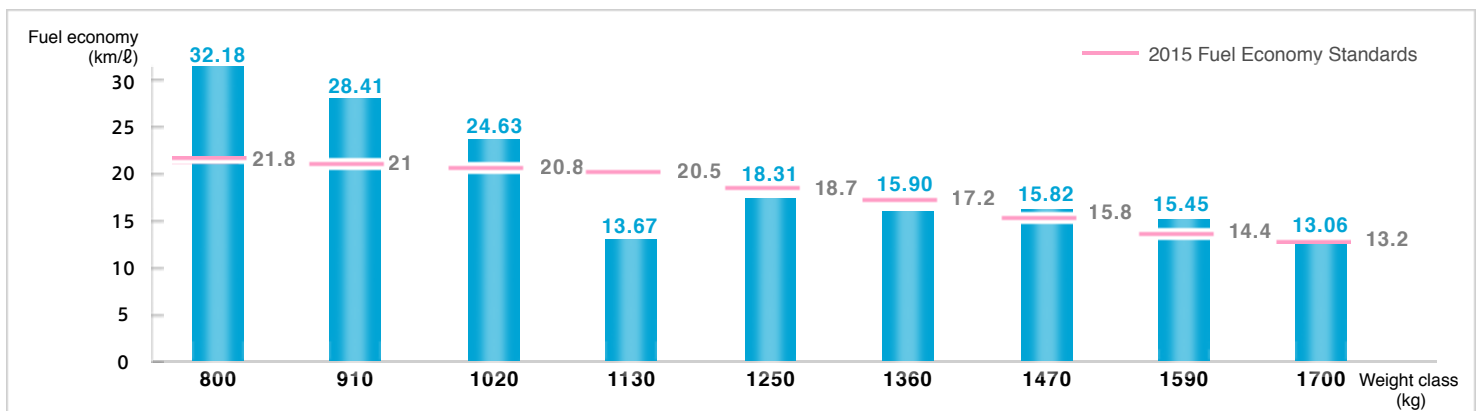
### Fuel Economy Standards

#### Japan: Achieved 2015 Fuel Economy Standards in 5 of 9 Weight Classes

Gasoline-powered passenger cars meeting the 2015 Fuel Economy Standards accounted for about 87% of the total production, and 5 of the 9 weight classes of Subaru vehicles sold cleared the 2015 Fuel Economy Standards.

Looking toward the 2020 Fuel Economy Standards, the Subaru XV Hybrid has already achieved the standards for two weight classes, while the proportion of manufactured vehicles that achieved the standard has come to be 11%.

#### FY2015 Fuel Economy Standards Achievement Status



## US: Achieved 2013 Model Year Corporate Average Fuel Economy (CAFE) Standards and Greenhouse Gas (GHG) Standards

While CAFE standards and GHG standards becoming stricter every model year, we met both standards for the 2013 model year. Not only clearing fuel economy and CO<sub>2</sub> regulations that are becoming stricter worldwide, Subaru is also set to further spread vehicles with greater fuel economy in the global market.

## Low Exhaust Emissions

### Approach to Low Exhaust Emissions

Carbon monoxide (CO), hydrocarbons (HC), nitrogen oxides (NO<sub>x</sub>), and particulate matter (PM) emitted from automobiles are a cause of air pollution, particularly in urban areas with a high concentration of automobiles.

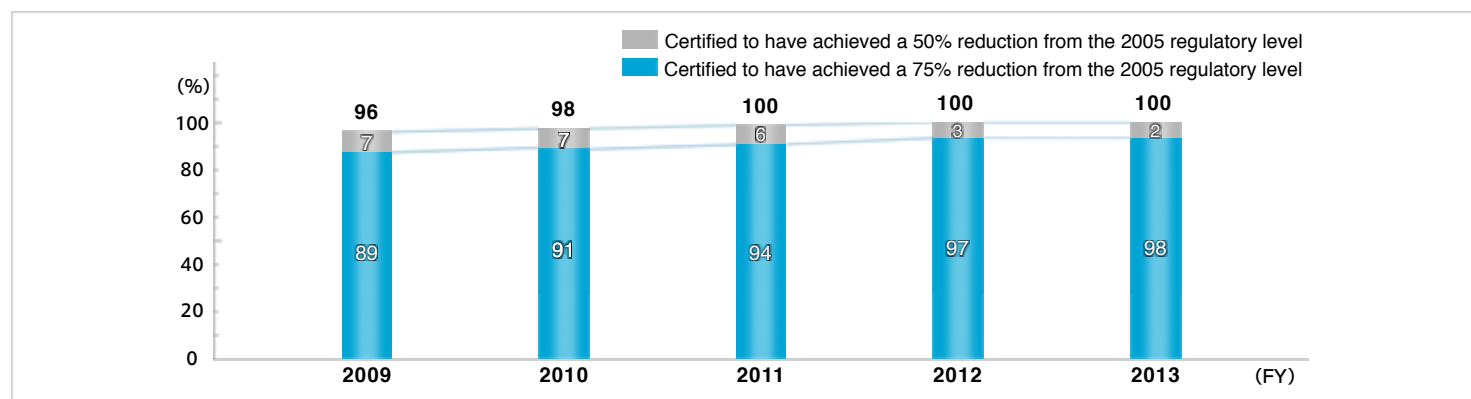
In order to improve the state of air pollution, Subaru introduced low emission vehicles (certified by the Ministry of Land, Infrastructure, Transport and Tourism) that meet standards stricter than the regulations.

We shall strive to conform with exhaust gas standards that are becoming increasingly strict worldwide, and sequentially introduce ever greener automobiles to the market.

### Improvement and Popularization of Certified Low Emission Vehicles

All Subaru vehicles equipped with Natural Aspiration (N/A) 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 the number of vehicles achieving the 75% reduction increased to 98% of the total production quantity. All vehicles produced by Subaru are certified low-emission vehicles (certified to have achieved at least a 50% reduction from the 2005 regulatory values).

## Percentage of Low Emission Gasoline-powered Passenger Vehicles

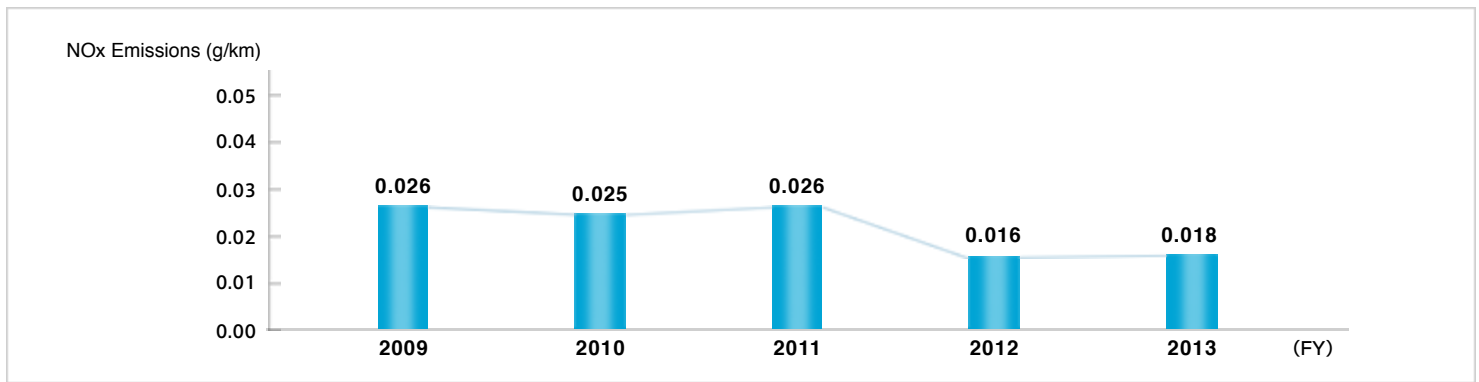


### Year-on-year Reduction of NO<sub>x</sub> Emissions by the Release of Low-emission Vehicles

A high concentration of NO<sub>x</sub> affects human health and negatively impacts the environment, such as by causing acid rain. The volume of NO<sub>x</sub> emissions from Subaru vehicles has been changing over time due to the release of a series of low-emission vehicles, including those meeting the government's certification, as shown in the following figure.



## ◎ Average NOx Emissions of Subaru Vehicles\*1



\*1 Calculated from the values meeting corresponding regulation (JC08CH, 10.15 + JC08C mode) at the time of shipment. In the case of models that do not support the current test mode, calculations were made from the regulation value or conversion value corresponding to the current test mode. The current mode is JC08CH mode for new models, and the combined mode of the 10.15 mode and the JC08C mode for existing models.

## ◎ Number of Eco Cars\* Shipped (FY2013)

Percentage of eco cars shipped now accounts for 87% of all.

		Passenger cars		Trucks	Percentage
		Standard-sized cars	Mini cars	Light trucks	
Certified to have achieved a 75% reduction from the 2005 regulatory values	Hybrids	13,438	0	0	7%
	Internal combustion engines	108,080	39,395	1,500	80%
Certified to have achieved a 50% reduction from the 2005 regulatory values		0	0	28	0%
Total		121,518	39,395	1,528	87%
Total number of vehicles shipped in FY2013					186,248

\* Eco cars: vehicles that achieved both the fuel economy standards based on the Energy Saving Law and low emission vehicle certification based on the low emission vehicle certification procedures.

## Noise Countermeasure

We are working to actively reduce road noise from automobiles.

We promote the development of technology that can effectively reduce vehicle noise from primary sources such as tires, engines and intake and exhaust systems.

Following the new FORESTER released the previous year, the LEVORG, which went on sale in June 2014, adopted the new-generation Boxer engine and new-generation Lineartronic CVT to reduce noise level on urban roads, while achieving both high fuel economy and fun-to-derive acceleration with the optimal engine speed.

## Management of Chemical Substances (Operation of the IMDS)

Since the enforcement of the Registration, Evaluation and Authorization of Chemicals (REACH) regulations, various chemical substances have been regulated in countries across the world, and at the same time, the automobile industry has been required to disclose information and foster management regarding the use of chemical substances in automobiles.

We are promoting improvement in supply chain management by using the IMDS in order to identify the names and amounts of each chemical substance used in the several tens of thousands of parts that are in our automobiles.

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

## Clean Energy Use

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Fossil fuels, which are mainstream fuels for automobiles, are limited resources, and a shift to diverse fuels that are both interchangeable and renewable such as biofuels is now required.

All Subaru gasoline-powered vehicles sold worldwide are compatible (functionality and reliability) with E10 fuel (E3 fuel in Japan) and the diesel-powered vehicles with B7 fuel.

We will continue to promote compatibility with a diversity of automobile fuels for the creation of a sustainable motorized society.



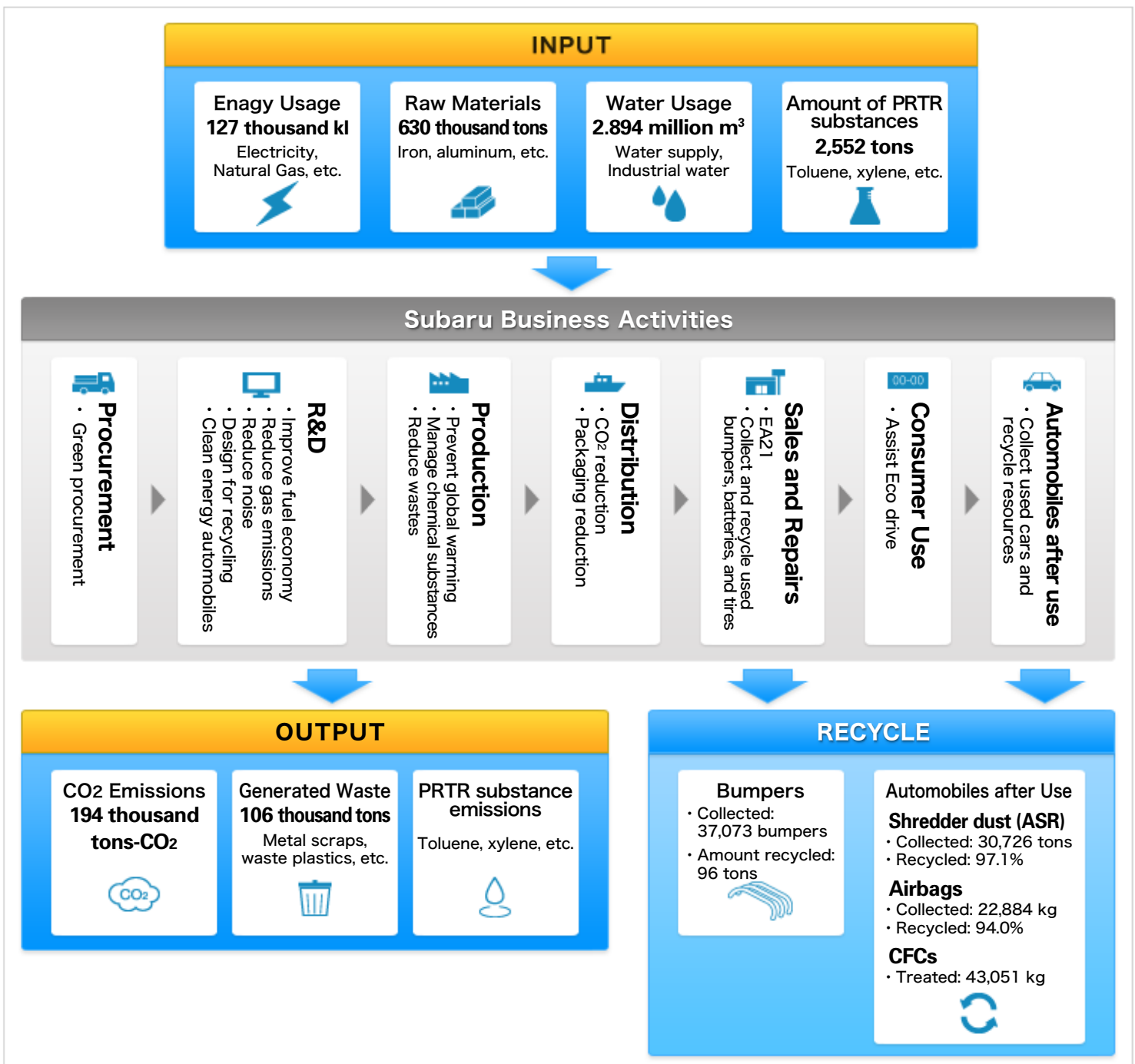
# Plant and Office Initiatives

## Main Input Resources and Emission Matters in Automobile Manufacturing

We are a transportation machine manufacturer focusing on manufacturing and selling automobiles. Automobiles have become a convenient and comfortable mode of transportation that are indispensable for our lifestyles. On the other hand, automobiles consume limited global resources and emit CO<sub>2</sub>, which causes global warming. We recognize these two sides to the automobile, and based on this recognition we believe that we must work toward an “affluent automobile society.”

We believe that it is our responsibility to work towards a fusion of global environmental support (major improvement in fuel efficiency) with the benefits of automobiles (comfortable ride, convenience, reliability) by considering the impact on the environment and reducing the environmental burden throughout the entire life cycle of our automobiles, including development, production, use, disposal, and recycling.

### Our Overall Environmental Burden from Automobiles



## Global Warming Prevention Activities

We promote global warming prevention activities by continuing various energy conservation programs such as installing energy conserving equipment, improving productivity, and fuel conversion.

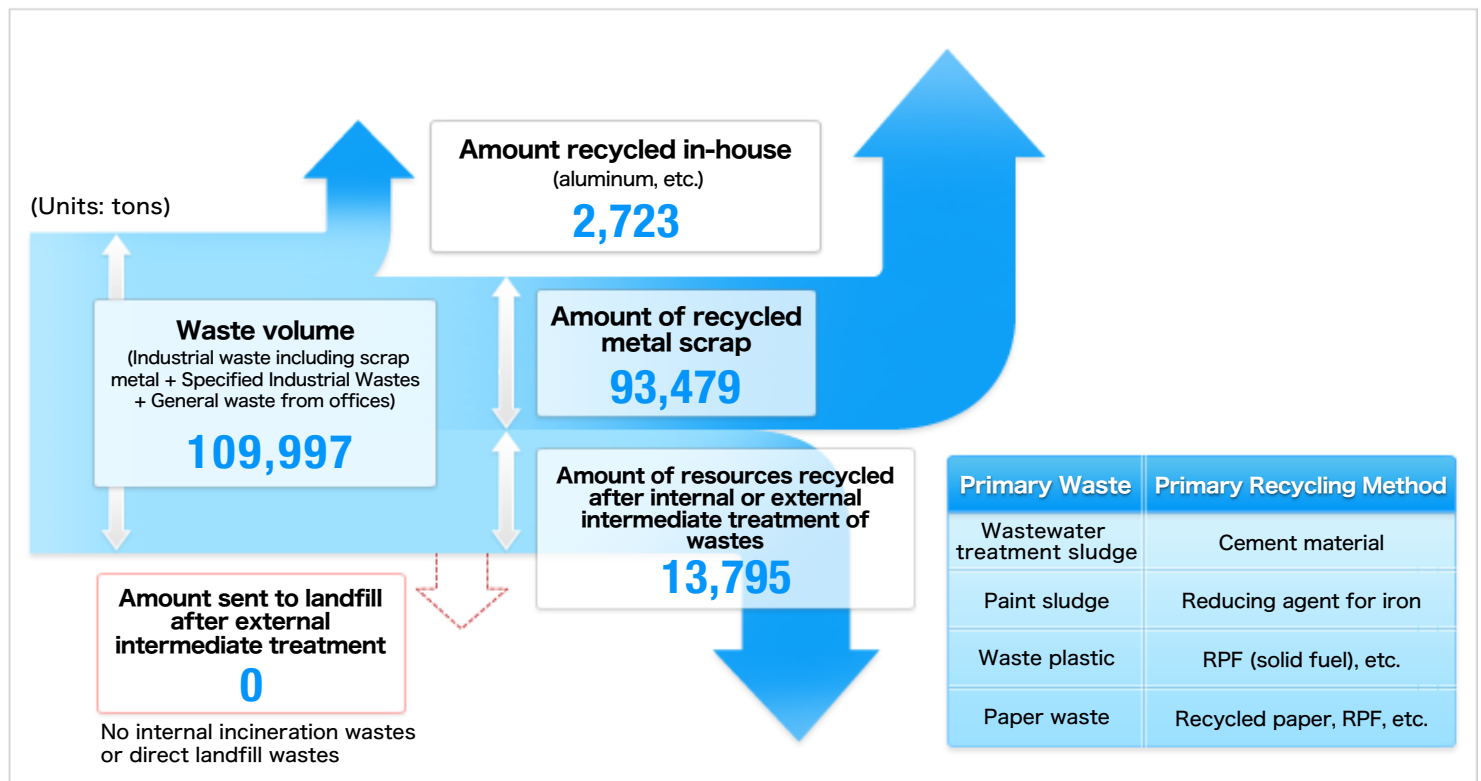
The 5th Voluntary Plan for the Environment called for 40% reduction in CO<sub>2</sub> emissions per unit of sales in FY2013 from FY2006, which was achieved.

## Waste Reduction

All our manufacturing plants in Japan and abroad have maintained zero emission for waste materials since FY2004.

A summary of total waste generated and treated in FY2013 is as follows.

### Summary of Total Waste Generated and Treated in FY2013 for All Business Offices and Automobile Manufacturing (Gunma Manufacturing Division)



## VOC Reduction

The amount of volatile organic compounds (VOCs) emitted from the automobile coating process was 49.2 g/m<sup>2</sup> in FY2013, down 46.2% from FY2000 levels.

This was due to a decrease in the use of cleaning thinner and increase in the recovery of used thinner, as well as partial use of a water-based coating.

## Prevention of Soil and Underground Water Pollution

We have voluntarily performed soil and groundwater tests at our facilities since 1998, and implemented purification measures and groundwater monitoring as required.

Since the 2003 Soil Contamination Countermeasures Act came into effect, we have been filing reports and conducting tests in accordance with the law.

## Status of Storage and Management of PCB Wastes

We store polychlorinated biphenyl (PCB) waste materials on-site.  
In FY2013, PCB wastes (condenser) from both the Gunma and Utsunomiya Manufacturing Division were treated.



PCB waste transportation operation

## Eco Initiatives at New Head Office

We promote energy conservation not only at our manufacturing sites but also in our offices.

In August 2014, we move our headquarters from Shinjuku to Ebisu.  
For the new Head office, we pursue an environmentally friendly office that conserves energy and reduces environmental impact by maximizing use of natural energies, such as solar lighting, solar power generation, solar water heating, air conditioning with external air, and by installing environmental equipment such as green roofs, and LED lighting with presence sensors.





# Initiatives for Distribution

## Reducing the Environmental Impact of Transporting Subaru Automobiles

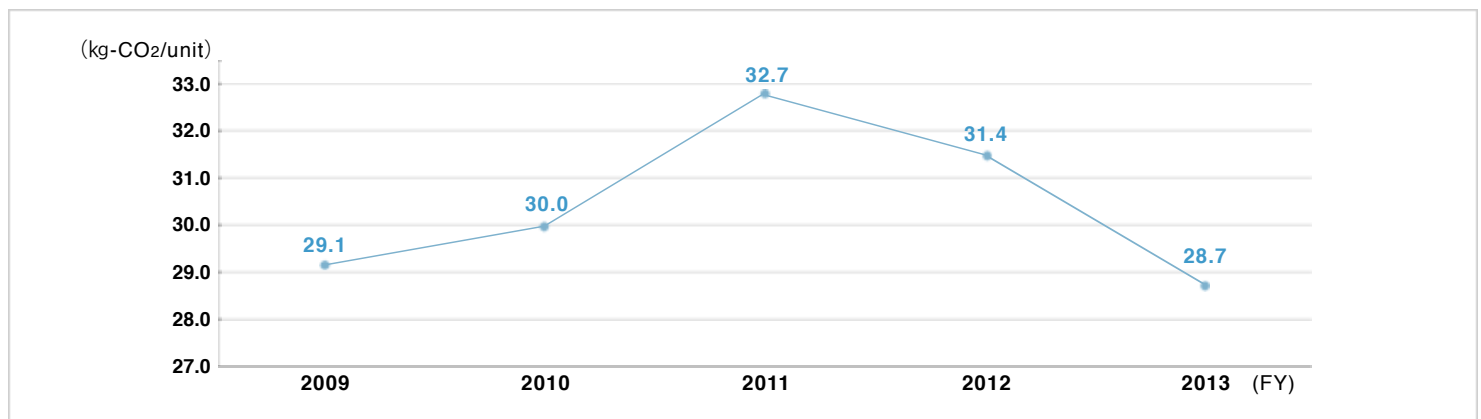
During the transport of Subaru automobiles, we are contributing to reducing the environmental burden by promoting efficient transport, such as setting optimized transportation routes, promoting modal shifts, and improving loading efficiency.

Since FY2013, we were able to improve fuel economy by using the highways in the Tokyo metropolitan area. We also reduced CO2 emissions by 22% from the previous year by reviewing the overseas transportation routes for OEM vehicles.

In FY2013, the shared transport of finished vehicles with other companies in the same industry was 67% of the previous year.



### CO2 Emissions during Transport per Subaru Vehicle



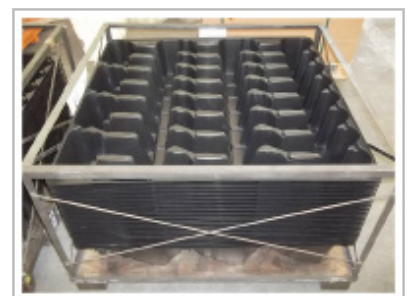
## Reuse of Packing Materials

Subaru Logistics Co., Ltd., which handles packaging and transport for complete knock-downs (CKD) parts of Subaru automobiles, has been carrying out activities to reduce environmental impact, focusing on the reuse of packaging materials.

The amount of reused packaging material in FY2013 was 486.5 tons, an increase of 296% over the previous year, and the ratio of newly purchased reused packaging materials was 41.9%, a 40 point increase from the previous year.

The increase was due to adding dunnage used for aluminum wheels to the list of new reused packaging materials.

We will continue activities to reduce environmental impact by expanding the reuse of packaging materials.



Dunnage for aluminum wheels

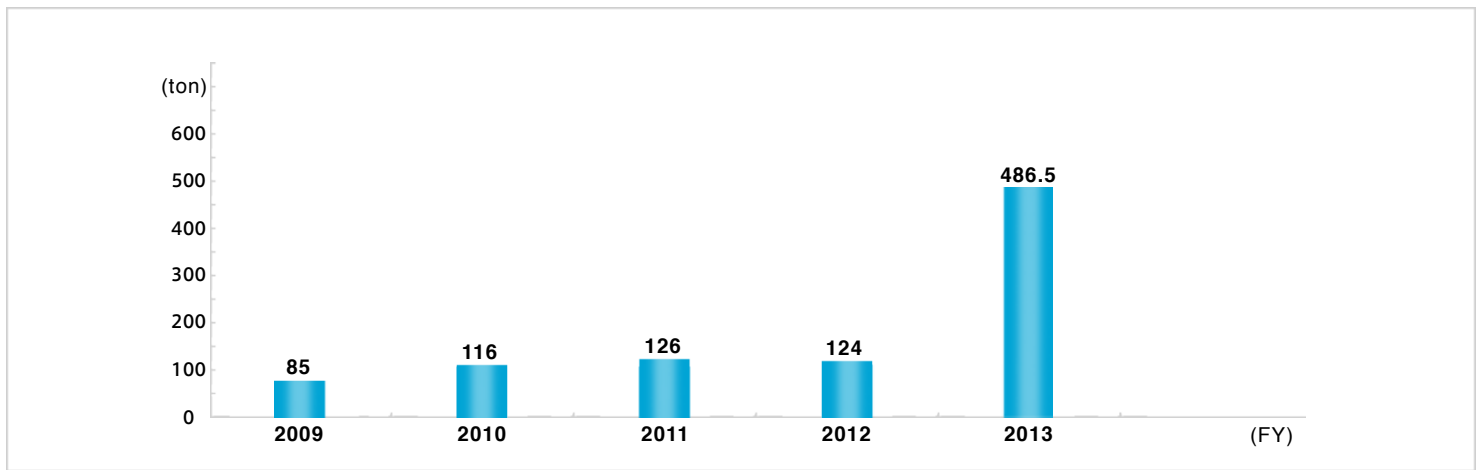


Small part packaging

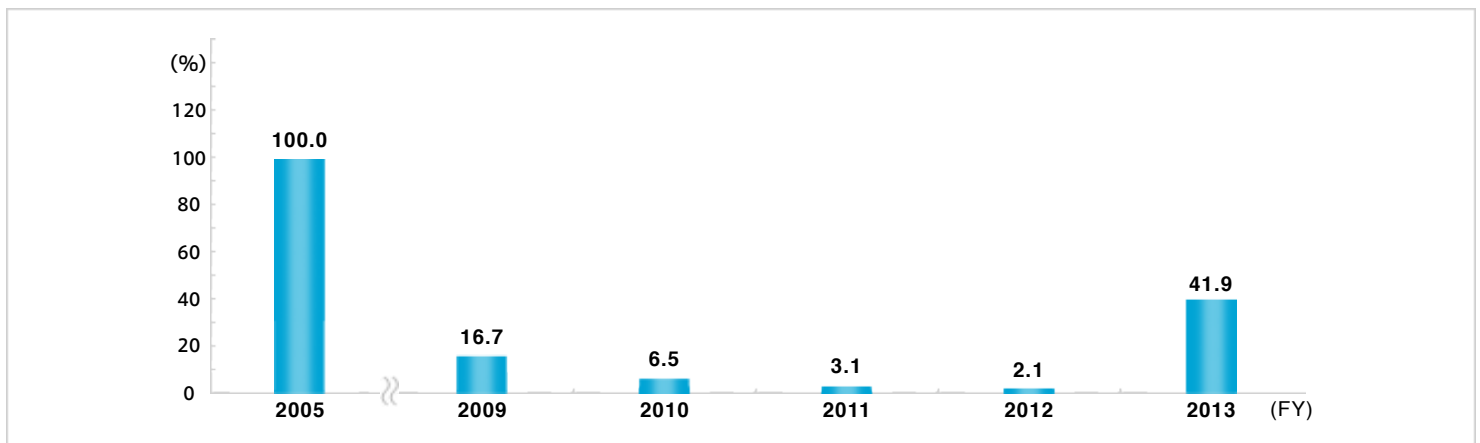
\* CKD : Complete knock down



## Amount of Reused Packaging Materials



## Newly Purchased Ratio for Reused Packaging Materials





## Initiatives for Sales

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

In order to strengthen the environmental conservation efforts by Subaru domestic dealers, we have actively encouraged, as well as provided support for introducing the "Eco Action 21" environmental management system, created by the Ministry of the Environment based on ISO 14001.

Certification was first acquired by Tokyo Subaru Inc. in January 2009, and certification of all dealers and outlets in Japan were completed in March 2011. Since then we are striving to keep up our efforts. We are the only domestic automobile manufacturer to acquire Eco Action 21 certification for all companies, outlets, and offices.

We will continue to support the Subaru team with voluntary environmental conservation activities through Eco Action 21.

### Zero Emission at Dealers

From April 2012, Subaru dealers began improving appropriate treatment activities for waste generated from their business activities to promote environmental conservation.

Collaboration and cooperation with a body of companies and industrial organizations are being carried out for resource recycling as well as a review of conventional treatment methods, leading to zero emission activities targeting resource recycling within Japan. Various activities are being developed, including recycling of used lead-acid batteries, waste oil, used tires, etc.

The result of these activities in FY2013 was that 1,052 tons of used lead-acid batteries, 1,783 kiloliters of used oil, and 91,134 used tires were collected and recycled.

We believe that by promoting zero emission activities at dealers closest to stakeholders, environmental conservation activities that are more familiar can be advanced.

By defining corporate responsibility, and promoting effective resource use and appropriate treatment on a national scale, we believe it possible to provide a safe and secure environment in addition to providing products.

### Energy saving at Dealers

In addition to installing environmentally friendly equipment, such as LED lighting, at our dealers, we are promoting installation of "Heat Shielding Natural Cooling Roof" in order to improve the work environment and air conditioning load of service facilities that keep customer's vehicles.

The Heat Shielding Natural Cooling Roof allows reduction of the load due to air conditioning during summer, improvement in the work environment for staff, and prevention of heat stroke. The performance of this roof is not degraded by dirt accumulation or the passage of time because the heat shield is formed by shade and air layers. With this equipment, the interior temperature of service facilities is lowered 3-5°C and power consumption for air conditioning is reduced by about 30%.

We aim for a better work environment where we can take good care of our customers' precious vehicles.



# Automobile Recycling

## Promotion of Recycling Conscious Design

In order to use limited resources effectively, we promote recycling conscious design in automobile manufacturing.

### Advances in Wiring Harness Dismantling

#### Advances in Wiring Harness Dismantling

Since wiring harnesses use a large amount of copper, if harnesses were removed from used cars before shredding, the separation of iron and copper can be improved and the value as resources increased.

We are conducting research into a harness layout and structure that enables efficient retrieval in a shorter time. The results are incorporated into new models subsequent to the 5th generation LEGACY (released in Japan in 2009).



### Material Identification Improvement

#### Material Identification Improvement

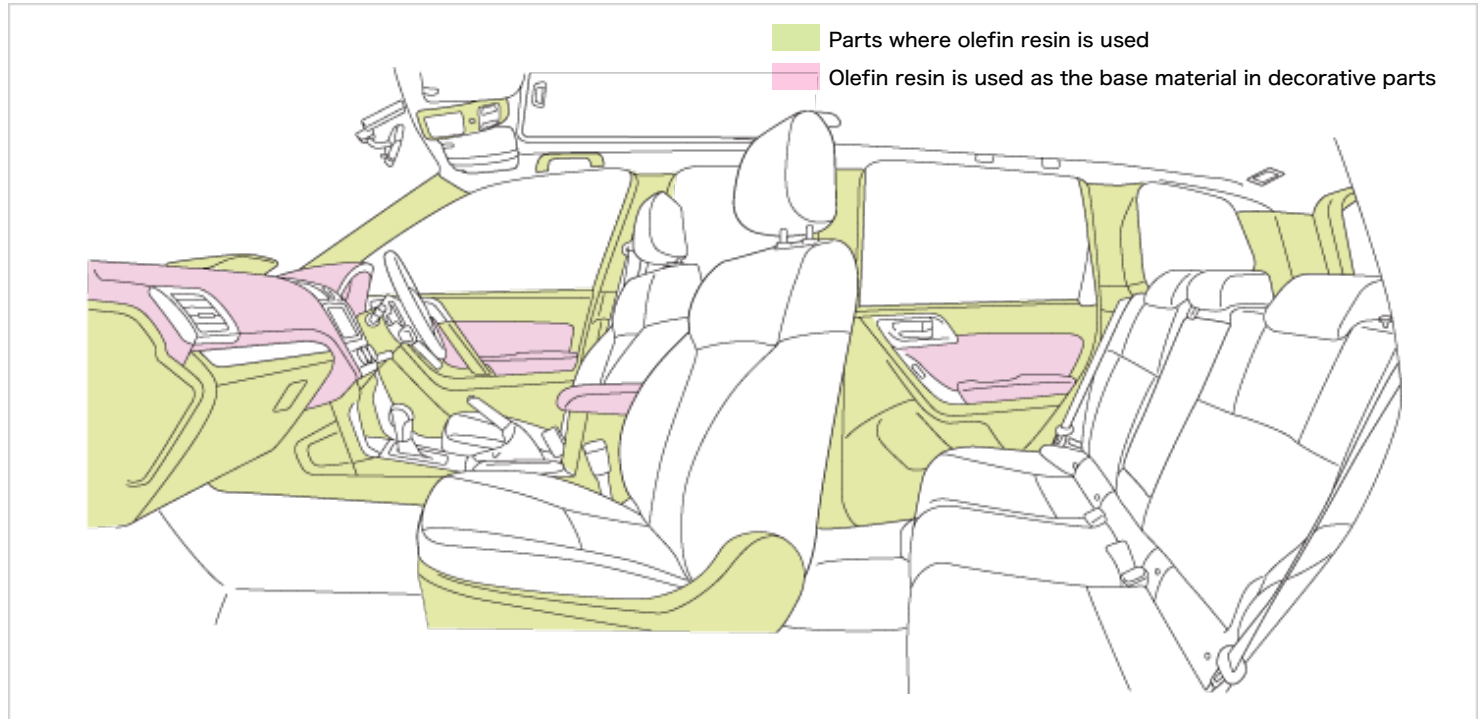
The verification of materials is important for recycling part materials. We were the first to start the identification of the types of materials used in plastic parts in 1973, before guidelines for the industry were established. Previously, material identification labels were placed on hard-to-see inner surfaces, so the material could not be verified 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 implemented this labeling for bumpers on all Subaru models, including the LEGACY, LEVORG, IMPREZA, FORESTER, EXIGA, and BRZ.



## Use of Easily Recyclable Materials

We use olefin resin, which is extremely easy to recycle, as the resin material for the interiors and exteriors of most FMCs and new models.

We will continue to expand its use.



## Reducing Environmentally Hazardous Substances

We are also actively working on reducing the environmentally hazardous substances in automobiles.

We promote achieving the Japan Automobile Manufacturers Association (JAMA) reduction targets for cars in development, further reducing lead and mercury and using alternatives to environmentally hazardous substances such as brominated flame retardants.

### Reduction Target and JAMA\*s Voluntary Action Program

Substance	Target(Implemented since)	Details of Reduction Efforts
Lead	Since Jan. 2006	Reduce the amount used per vehicle to less than 1/10 of 1996 levels
Mercury	Since Jan. 2005	Use prohibited, with a few exceptions (e.g., minute amounts in discharge headlights, and liquid crystal panels)
Cadmium	Since Jan. 2007	Use prohibited
Hexavalent Chromium	Since Jan. 2008	Use prohibited

\* JAMA: Japan Automobile Manufacturers Association, Inc.

## Reducing VOCs in Vehicle Interiors

We are reviewing the components and adhesive agents used in vehicle interiors in order to reduce the use of volatile organic compounds (VOCs), such as formaldehyde and toluene, which are said to cause nose and throat irritation.

In the LEGACY, LEVORG, IMPREZA, FORESTER, EXIGA, and BRZ, we achieved the voluntary target by JAMA\* by reducing the concentration of the 13 substances defined by the Ministry of Health, Labor and Welfare to levels below the indoor concentration guideline values.

We will continue our efforts to reduce the levels of VOCs and such substances to further make the environment in vehicle interiors comfortable.

\* Voluntary target by JAMA: To reduce cabin 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 models (produced and sold in Japan in 2007 and after) under the Voluntary Approach in Reducing Cabin VOC Concentration Levels initiated by JAMA.

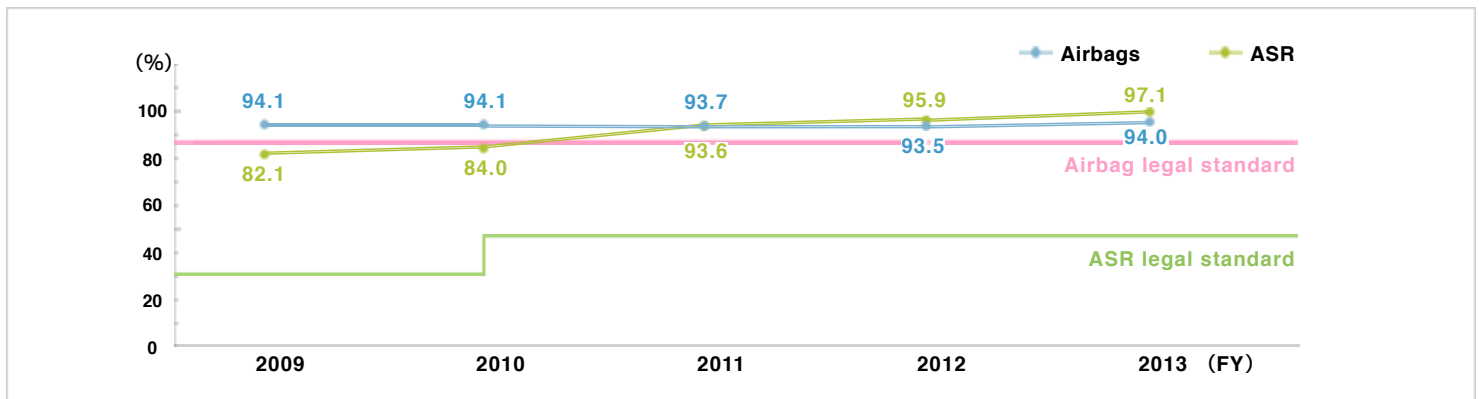
## Processing of End-of-Life Vehicles (ELVs)

The Automobile Recycling Law enacted in 2005 obligates automobile manufacturers to fully remove and appropriately treat “Automotive Shredder Residue (ASR),” “Chlorofluorocarbons (CFCs),” and “Airbags.”

The ASR recycling rate for FY2013 was 97.1%, already satisfying the 2015 legal standard of 70%. In addition, we have been keeping our monthly record of zero landfill, which was first attained in May 2011.

As for airbags, we attained a recycling rate of 94%, exceeding the legal standard of 85%. Also, the entire amount of recovered CFCs has been appropriately treated.

### Recycling Rate and Legal Standards for ASR and Airbags





# Environmental Communication

## Environmental Communication

We value the relations with all our stakeholders, and to become a trustworthy corporation that brings peace of mind to our stakeholders, we widely disseminate environmental information through various media, such as CSR reports and our website. We provide additional environmental information to communities neighboring our factories through a “Site Report” issued for each of our factories.



Homepage of our environment website



Environmental information of each model

## Environmental Communication for Children

We promote a variety of activities for children living near our production facilities.

### ◎ Gunma Manufacturing Division

At the Gunma Manufacturing Division, we continue to welcome study visits to the plant as part of elementary school education. In FY2013, we had around 83 thousand children visit the site.



### ◎ Utsunomiya Manufacturing Division

In FY2006, we started the environmental class visit program, where our employees visit elementary schools in Utsunomiya City to deepen children's understanding about environmental problems. In FY2013, about 1,370 children participated.

We also started the environmental class visit program in Handa, Aichi, in FY2014.



We will continue to improve our programs on environmental communication for children





## Environmental Education

### Environmental Education

We regard initiatives for environmental problems as one of our social responsibilities as a corporation, and provide employees at all levels and departments with a range of environmental education programs.

In April 2013, we began implementing “New Employee Environmental Conservation Education” for the 329 new employees of the automotive business division and the 170 new employees at headquarters. The lecturer, a member of the Environmental Section, explained to participants, using concrete examples, the importance of individual efforts towards global environmental problems and Subaru’s environmental policy and environmental protection activities.

We also hold an ISO 14001 internal auditors training seminar to enhance the internal auditing system for the ISO 14001 environmental management system and environmental conservation activities conducted at the workplace. In this seminar, an external lecturer was invited for the two-day session, in which participants studied to be internal auditors.

In addition to these courses and workplace education initiatives, we also offer environmental education using an E-learning system.

We believe it is important for employees to be fully aware of environmental problems and environmental efficiency on a daily basis, and to exercise this awareness in business and environmental activities. To this end, we continue to promote environmental education and enlightenment for employees.



## Participated in “Eco Products 2013”

In December 2013, we exhibited Subaru’s first hybrid vehicles, the “SUBARU XV HYBRID” and “LEVORG,” at the Eco Products Expo, Japan’s largest environmental exhibition. We introduced our wide range of efforts for the environment as well as an enjoyable eco car lifestyle that features both our unique driving experience and environmental performance.





# Global Initiatives

## Global Environmental Initiatives

In May 2012, Subaru of Indiana Automotive, Inc. (SIA) that manufactures Subaru vehicles received ISO 50001 Certification, becoming the first car manufacturing plant in the U.S. to achieve this internationally recognized accreditation. ISO 50001 details the requirements for energy management systems (EnMS). SIA was also the first U.S. car manufacturing plant to achieve ISO 9001 Quality Management System Certification and ISO 14001 Environmental Management System Certification. SIA's accreditation demonstrates its environmental leadership within the automobile industry.



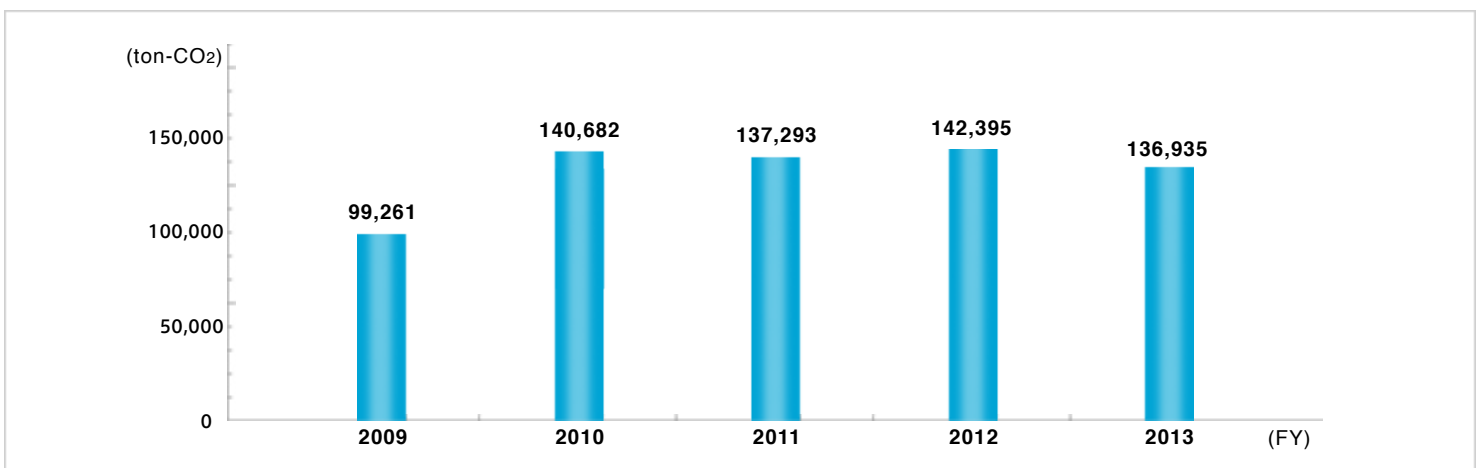
## Global Warming Prevention Initiatives

To counter the serious issue of global warming, each of our North American companies is working hard to reduce total CO<sub>2</sub> emissions through various measures. The amount of CO<sub>2</sub> emitted by the four North American companies in FY2013 totaled 136,935 tons-CO<sub>2</sub>, a decrease of about 3.8% from FY2012.

As the CO<sub>2</sub> emission volume increases along with the increased production volume, each of our North American companies is making various efforts to reduce CO<sub>2</sub> emissions.

SIA has implemented detailed management of energy usage based on ISO 50001, and Subaru of America, Inc. (SOA), which sells Subaru automobiles, and Subaru Research & Development, Inc. (SRD), which performs research and development, have switched over to LED lighting.

### CO<sub>2</sub> Emissions (Total from 4 North American Companies)

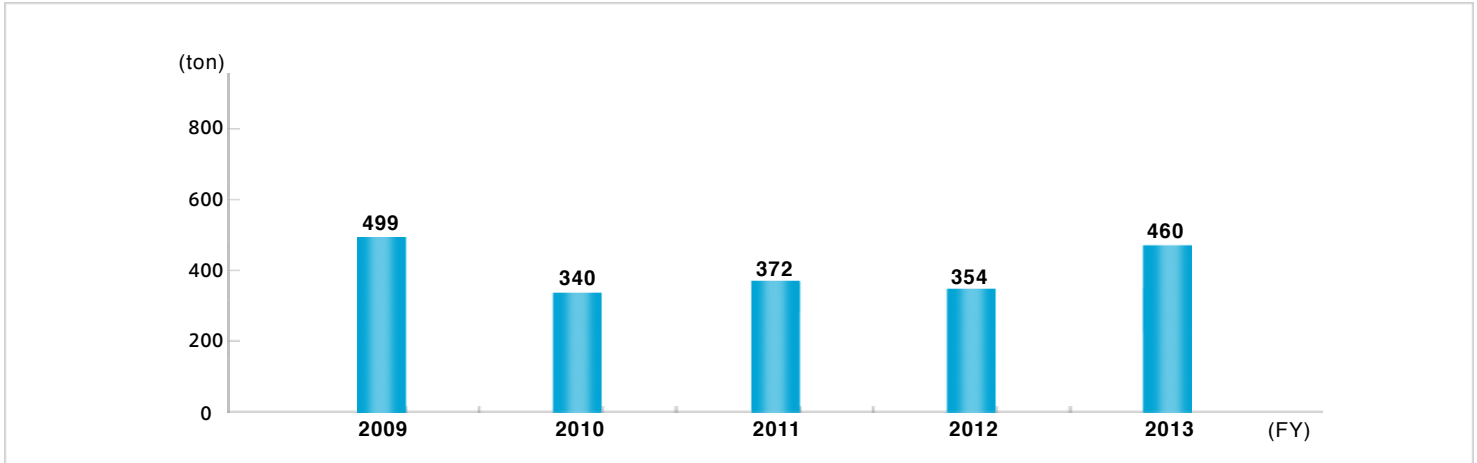


## Efforts to Reduce Waste Materials

The amount of waste sent to landfill by the four North American companies in FY2013 was 460 tons, an increase of about 30% over the 354 tons in FY2012, due to the increase of transient waste. However, SIA, where Subaru automobiles are manufactured, has continued to keep all waste from landfills since 2004.

SOA and Subaru Canada, Inc. (SCI), which sells Subaru automobiles, have stopped using paper towels and switched to hand driers, working to further reduce waste.

### Waste sent to Landfill (Total from 4 North American Companies)



## Other Initiatives

### Establishment of an Environmentally Friendly Parts and Training Center

At SOA, a parts and training center that achieved LEED certification, which is awarded to environmentally friendly buildings, opened in Florence, New Jersey in June 2013. This facility has a solar panel array on the roof capable of generating 1 megawatt of energy, and has installed new-type of servers that consume about half the energy of traditional servers.



### Winner of the Innovation Challenge Award for Zero Waste

SIA won the Zero Waste category for the 2013 Innovation Challenge by the National Safety Council, recognizing the organization or corporation with the most innovative plans and challenges. SIA achieved zero emission to landfills in 2004, and continues to do so even now, leading to this award.



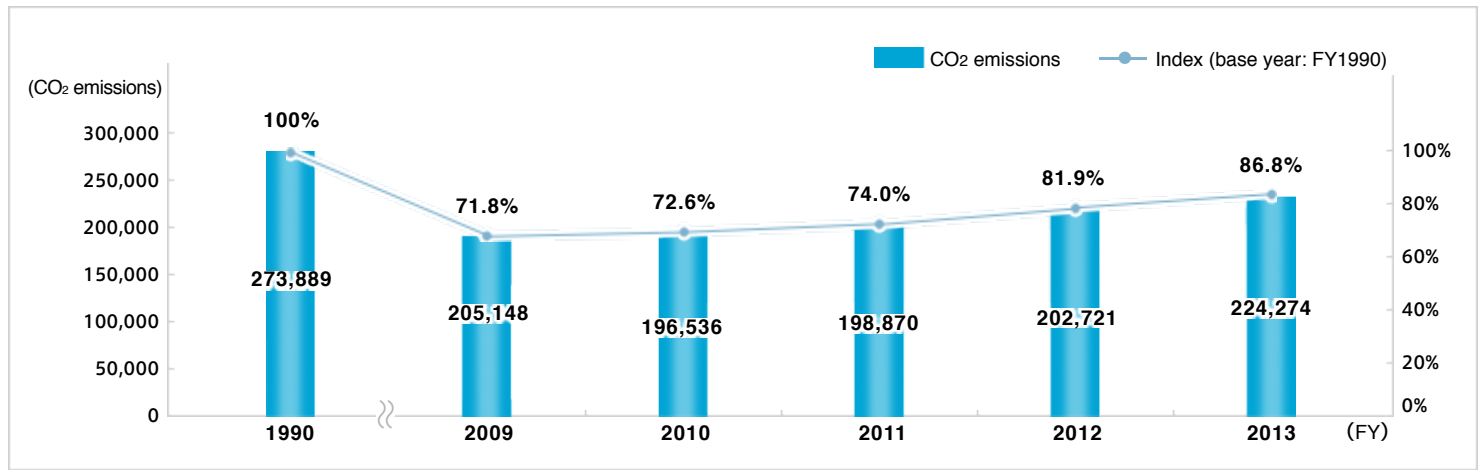


# Environmental Data

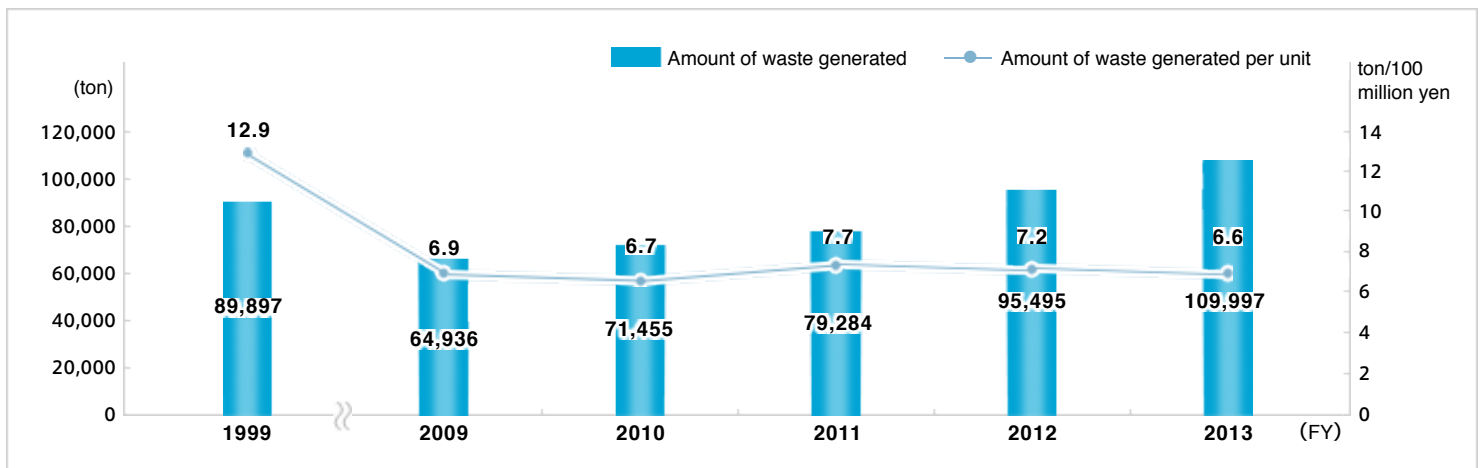
The main aspects of FHI's environmental performance\* in FY2013 are shown in the following figures. CO2 emissions, waste generation, water usage, etc. have all increased from the previous year due to increased production.

\* Manufacturing Divisions covered: Gunma, Utsunomiya, Saitama and Tokyo

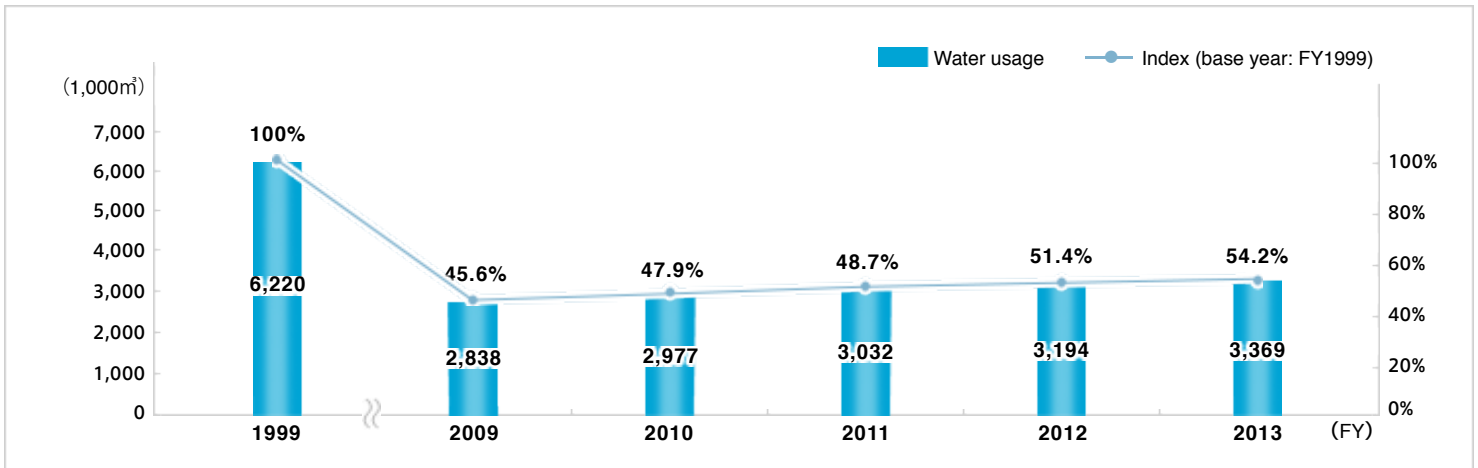
## CO2 Emissions



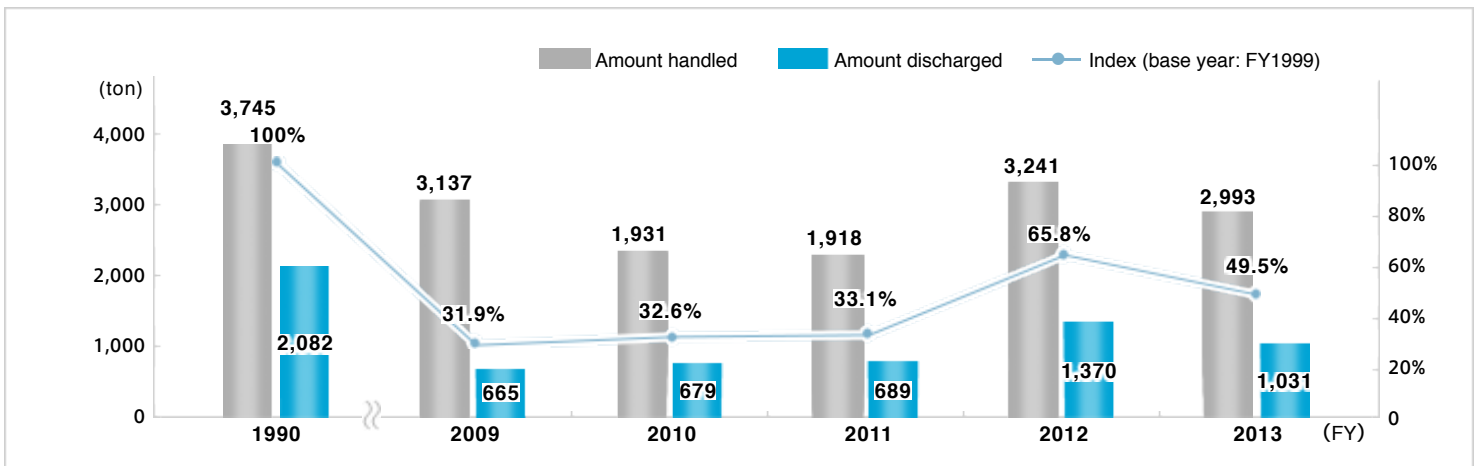
## Waste Generation (including Scrap Metal Sold)



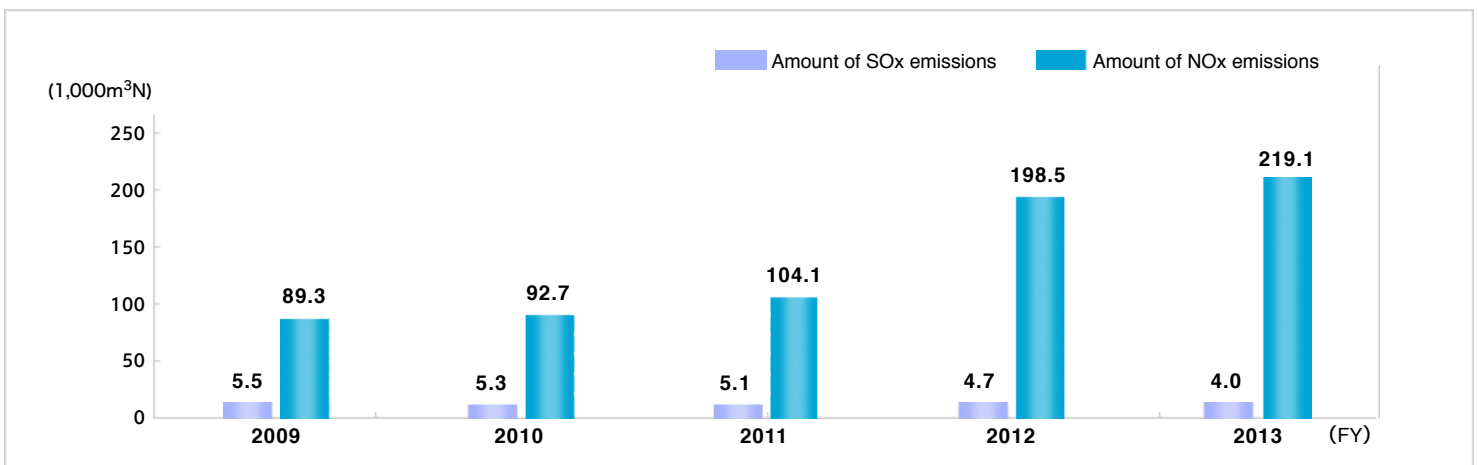
## Water Usage



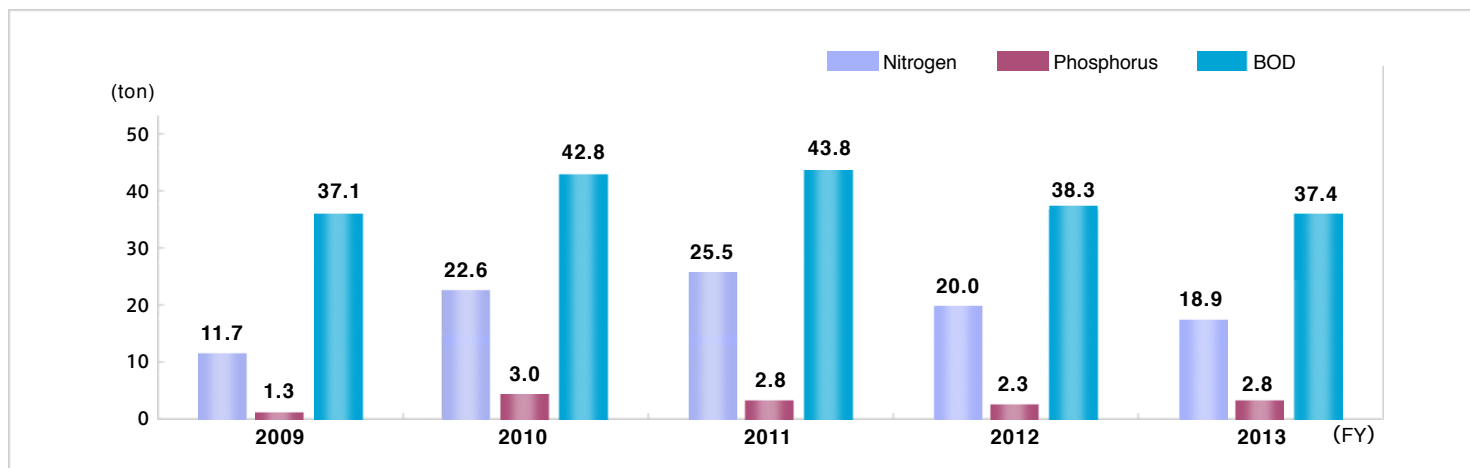
## PRTR Chemical Substances Emissions



## NOx and SOx Emissions



## Nitrogen, Phosphorus, and BOD Emissions



## Affiliated Companies in Japan

The main environmental performances of the Domestic Affiliated Companies Division\* in FY2013 are shown in the following figures.

Due to increased production, CO<sub>2</sub> emissions and waste generation have increased from the previous year.

\* Consists of the following five affiliated companies: Yusoki Kogyo K.K., Fuji Machinery Co., Ltd., Ichitan Co., Ltd., Kiryu Industrial Co., Ltd. and Subaru Logistics Co., Ltd. (SLCO)

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



### Waste Generation

