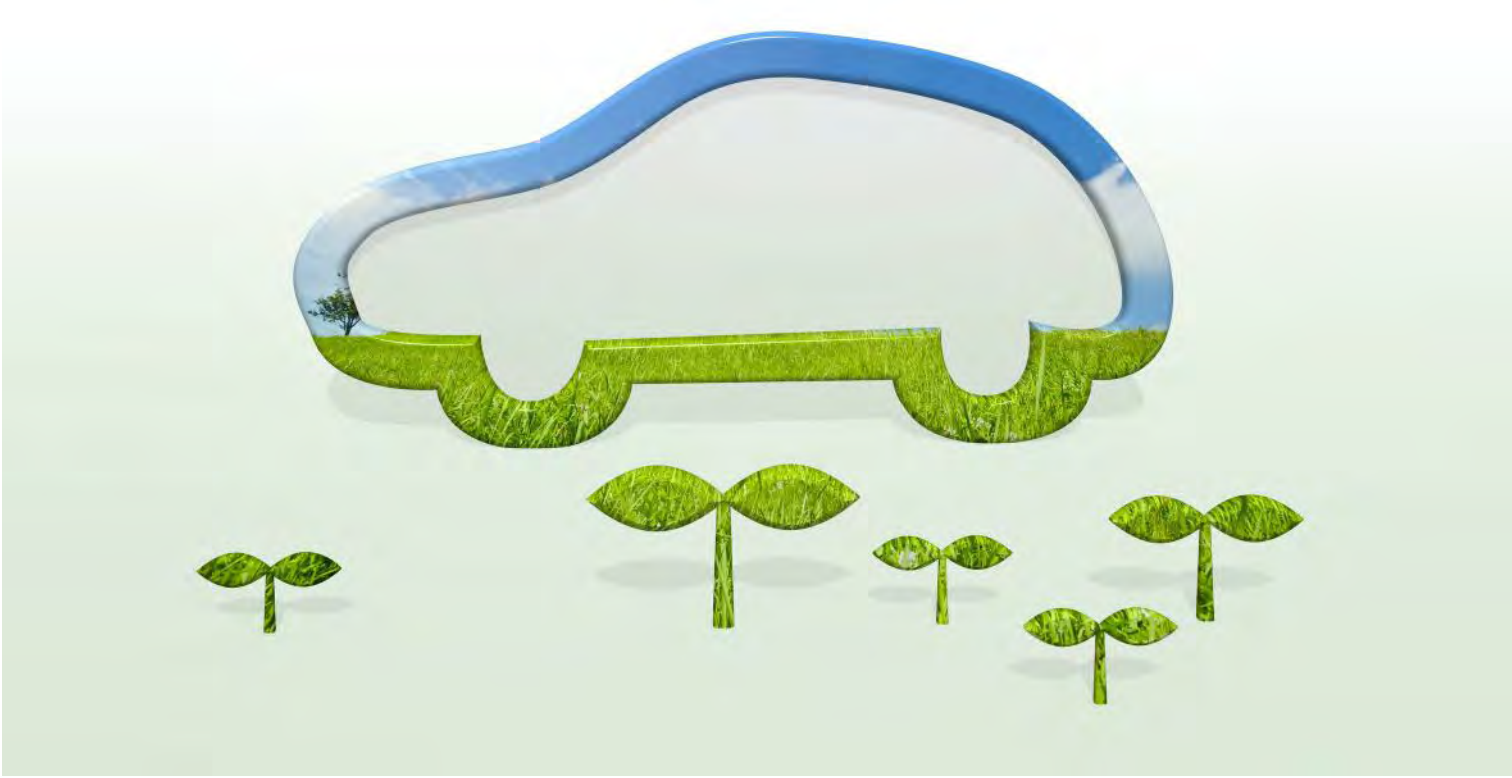
SUBARU

2016 Environmental Report



Environmental Vision

Message from the Chairman of the Environmental Committee

Aiming at Achieving a “Sustainable Society”

◎ The relationship between the global environment and business activities

Recognizing that our business activities in the manufacturing and sales of automobiles, aircraft, aerospace equipment, and engines have a close connection to the global environment, such as mitigating and adapting to climate change, resource recycling, and preservation of biodiversity, we are striving to solve environmental problems through our business activities.

◎ Looking back on FY2016

In November 2015, we established the Corporate Governance Guidelines to allow our group companies to grow sustainably and to improve medium- and long-term corporate worth. The Guidelines describe that Subaru aims to be an “Attractive Company with Presence” and to practice car manufacturing that is thoroughly considered and reliably manufactured with the linchpin of “Customer First,” contributing to creating a better society and environment by continuing to provide “Safety and Enjoyment” to the customer, and engaging in CSR activities to realize a sustainable society.

◎ Aiming at achieving a “Sustainable Society”

Our group aims to realize a “Sustainable Society” while overseeing the entire supply chain and product life cycle, from procurement of raw materials to production, distribution, sales, recycling and disposal.
FY2017 is the final year in the Fifth Voluntary Plan for the Environment FY2013-FY2017. We will finish strong and work toward creating our next Voluntary Plan for the Environment.

Mitsuru Takahashi

Director and Corporate Executive Vice President

Chairman of the Environmental Committee

Environmental Policy

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 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: Research and development (R&D) and product design of environmentally friendly Subaru brand products
- 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

Summary of the 5th Voluntary Plan for the Environment (FY2013-FY2017)

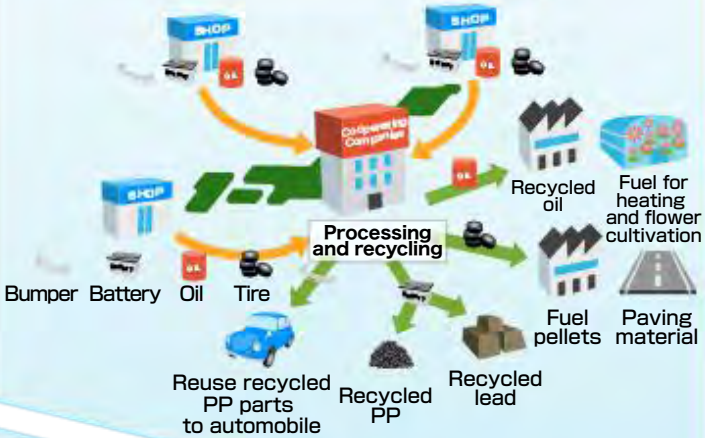
As the 5th Voluntary Plan for the Environment, we created a voluntary environmental conservation plan for the period from FY2013 to FY2017. This plan is based on our Environmental Policy, and we have set even higher environmental conservation targets and are incorporating precise environmental measures 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 5th Voluntary Plan for the Environment

Global Warming Measures

Resource Recycling



Pollution Prevention and Reduction of Hazardous Chemical Usage

Environmental Management

Fuji Heavy Industries Voluntary Plan for the Environment (FY2013-FY2017)

- 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 (FY2013 to FY2017)

【1】Global Warming Measures

Field	Item		Target/Initiative (Up to FY2017)	FY2016 Target	FY2016 Results	FY2016 Evaluation	FY2017 Target
A. Green Products	Fuel economy improvement	Automobiles	◆ Continue to improve fuel economy through full model changes and annual improvements.	◇ Improve fuel economy by 30% over older models through innovations to environmental engines/CVTs. ◇ Introduce horizontally opposed direct-injection turbo engines to the market.	Complete development of the next-term IMPREZA that incorporates the environmental engine and CVT.	Completed development of sedan/wagon vehicles for all destinations.	○	Introduce the next generation IMPREZA incorporating the environmental engine and CVT to the marketplace.
			◆ Promote fuel economy improvements to conform to fuel economy/GHG emissions standards in each country/region.	◇ Japan: Meet the 2015 Fuel Economy Standards. ◇ Overseas: Meet the fuel economy/GHG emissions standards in each region.	Continue to conduct monitoring in each country/region.	Japan: Met the FY2015 Fuel Economy Standards in seven of the nine categories, and made it possible to compensate with credit for the remaining two categories. Europe: Exceeded regulatory values by 4g･CO_2/km China: Met 2015 fuel consumption regulations.	○	Continue to conduct monitoring in each country/region.
	Clean energy use		◆ Introduce hybrid cars into the market.	◇ Introduced hybrid cars into the Japanese market in 2013.	Continue to develop next generation hybrid vehicles for introduction to the marketplace.	Reflected the results of verification of environmentally improved hybrid systems into the design details for next term testing.	○	Transition from advanced development to the mass production development stage, and prepare for making design specifications more precise and adding an outlook that includes productivity.
			◆ Conduct research aimed at the launch of electric vehicles in the market.	◇ Promote electric vehicle research.	Continue to promote research for introducing electric vehicles into the market.	Completed basic desktop review of EV, and transitioned to a state where the next step (verification testing) can be taken.	○	Continue to promote research for introducing electric vehicles and PHEVs to the market.
			◆ Promote diesel engines' improvement and launch into the market of diesel engines.	◇ Promote compliance with the Euro 6 for horizontally-opposed diesel engines.	Complete market introduction of Euro 6 compliant vehicles for all vehicle lines.	Completed market introduction of Euro 6 compliant vehicles for all vehicle lines.	○	(Completed the final target for the Fifth Voluntary Plan one year ahead of schedule).
		Industrial products	◆ Promote and establish technologies to reduce exhaust gas and improve fuel economy by fusing electronic control and general-purpose engines.	◇ Promote development of fuel-injection general-purpose engine models and promote their wide introduction into the market.	Based on FY2015 results, promote evaluation of the system using prototypes.	Compiled structural reviews and optimization procedures and added the expectation to expand development to other models.	○	Make efforts to reduce exhaust gas and improve fuel economy with feedback control technology.
	Control of global warming from air conditioning refrigerants	Automobiles	◆ Promote the development of air conditioners that use low global warming potential refrigerants.	◇ Further promote the development of low global warming potential air conditioners.	Promote development of low global warming potential air conditioners.	Continued development of low global warming potential air conditioners. Clarified the North American introduction plan.	○	Further promote development of low global warming potential air conditioners.
B Green Factories, Distribution, and Offices	Production facilities		◆ Reduce CO_2 emissions per unit of production at domestic production facilities.	◇ Reduce CO_2 emissions per unit of production by 10% from FY2007 level by FY2017 at domestic production facilities.	Reduce CO_2 emissions per unit of production at domestic production facilities by 9% from FY2007 level.	Reduced CO_2 emissions per unit of production by 48% from FY2007 levels at domestic production facilities.	○	Reduce CO_2 emissions per unit of production at domestic production facilities by 10% from FY2007 level.
			◆ Promote activities to reduce CO_2 emissions at overseas production facilities*1.	◇ For overseas production facilities, set medium term CO_2 emissions targets and conduct activities to attain them.	Reduce CO_2 emissions by 1% from FY2015 level.	Failed to meet target with the result of 200,921 t-CO_2.	×	CO_2 emissions increased due to factory expansion. The target is set to 251,151-CO_2.
	Distribution		◆ Promote CO_2 emissions reduction activities synchronized with the Energy Saving Law.	◇ Use FY2007 per unit of CO_2 emission as BM, and reduce emission by 1% every year.	Aim for a 9% reduction of per unit of CO_2 emission using FY2007as BM (Base unit target for completed cars in 2015 is 31.26 kg/unit).	Achieved a 9% reduction of per unit of CO_2 emission with 2007 as the reference point. (Achieved 26.39 kg/unit compared to the 31.25 kg/unit annual target for the CO_2 base unit of completed cars.)	○	Aim for a 10% reduction in per unit of CO_2 emissions using FY2007 as the reference point. (Annual target for completed cars: CO_2 base unit of 30.94 kg/unit)
	Offices		◆ Ensure compliance with the Energy Saving Law.	◇ Use FY2010 per unit of energy use as BM, and reduce energy use by 1% every year (across the company including offices).	Achieve average annual reduction of 1% per base unit.	Achieved the 1% average annual reduction from the BM year across the entire business.	○	Achieve average annual reduction of 1% per base unit.

*1 SIA: Subaru of Indiana Automotive, Inc.

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

【2】Resource Recycling

Field	Item		Target/Initiative (Up to FY2017)	FY2016 Target	FY2016 Results	FY2016 Evaluation	FY2017 Target
A. Green Products	Recyclability improvement	Automobiles	◆ Continue to implement measures to comply with the Automobile Recycling Law. ◆ Continue to implement measures to make parts and materials more detachable, separable, and sortable.	◇ Promote new model designs that consider recycling, and contribute to an actual recycling rate of 95% by 2015.	Continue to promote designs that consider recycling.	(FY2016 results) Achieved a recycling rate of 95% or greater. Promoted designs that consider recycling.	○	Continue to promote designs that consider recycling.
B. Green Factories and Offices (Dealerships)	Production facilities		◆ Continue the appropriate disposal of waste and reducing waste generation.	◇ Continue the appropriate management of waste and reducing waste generation by improving yield and packaging.	Reduce the volume of waste generation to 14,905 tons or less.	Failed to reach the target of 14,905 tons with 15,904 tons generated.	×	Set the target value of 13,707 tons for the quantity of industrial waste generation only. Promote reduction measures. Intensify suppression of waste generation.
			◆ Continue zero emission (zero landfill waste either directly or indirectly) at both domestic and overseas production facilities.	◇ Continue zero emission at both domestic and overseas production facilities.	Japan: Maintain zero landfill waste. Overseas: Maintain zero landfill waste at SIA.	Japan: Maintained zero waste disposed at landfills throughout the year. Overseas: Maintained zero waste disposed at landfills throughout the year.	○	Japan: Zero waste disposal at landfills. Continue to maintain zero emissions. Overseas: Zero waste disposal at landfills. Continue to maintain zero emissions.
			◆ Reduce water use at both domestic and overseas production facilities.	◇ Reduce water use at production facilities across Group companies in and outside Japan.	Japan: Reduce water use per unit of production at domestic production facilities by 4% from FY2012 level.	Japan: Reduced water use per unit of production at domestic production facilities by 44% from FY2011 level.	○	Reduce water use per unit of production at domestic production facilities by 5% from FY2012 level.
					Overseas: Reduce water use by 1% from FY2015 levels.	Overseas: Failed to reach target with water use at 673,726 m³ due to increased use in line with opening a new paint factory. Increased by 3.7% from the previous year.	×	Overseas: Revise target value in line with operations of the new paint factory and set the target to 987,432 m³.
	Offices (Domestic dealerships)	Automobiles	◆ Continue the collection of used bumpers.	◇ Continue the collection of used bumpers.	Continue the collection scheme and promote recycling of repair-exchanged bumpers.	Continued the collection scheme into the last quarter, and promoted recycling of repair-replacement bumpers. There were 39,149 units collected this fiscal year.	○	Continue the collection scheme and promotion of recycling of repair-exchanged bumpers.

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

【3】Pollution Prevention and Reduction of Hazardous Chemical Use

Field	Item		Target/Initiative (Up to FY2017)	FY2016 Target	FY2016 Results	FY2016 Evaluation	FY2017 Target
A. Green Products	Reduction in emissions	Automobiles	◆ Promote the introduction of low-emission vehicles to improve air quality.	◇ Japan: Increase the number of models (produced by FHI) achieving a 75% reduction from the 2005 regulatory values Overseas: Promote the introduction of low-emission vehicles to improve air quality in each country and region.	Promote development in compliance with the latest exhaust gas regulations and low-emission systems in each country and region in order to reduce exhaust gas on a global scale.	Completed development with the following for next-term Impreza: ・Compliance with North American LBT ・Compliance with the EU EURO6c regulations.	○	In order to reduce emissions on a global scale, continue to promote development in compliance with the latest exhaust gas regulations and low-emission systems of each country and region.
	Reduction in noise		◆ Promote the development of technologies for noise reduction that can also improve fuel economy and reduce emissions.	◇ Promote the development of noise reduction technologies that consider driving conditions on urban roads.	By increasing torque in the lower RPM range for NA cars, suppress unnecessary EG rotation increase in the city in order to reduce environmental noise.	Achieved global expansion of CVT transmission that can both be considerate of the environment and add fun to driving.	○	Promote development of car models that reduce environmental noise for actual city driving.
	Reduction in the use of environmentally hazardous substances		◆ Promote the management and reduction in the use of environmentally hazardous substances. ◆ Overseas: Comply with related laws and regulations, including the EU directives.	◇ Improve management of chemical substances contained in products. ◇ Promote the development of technologies to switch to substances with lower environmental impact.	Promote improved management of chemical substances using IMDS. Promote switching to substances with lower environmental impact.	Promoted improved management of chemical substances using IMDS in North America. Promoted replacing lead, mercury, and plasticizers with substances with a lower environmental impact.	○	Promote preparations for testing all parts as part of the improved management of chemical substances using IMDS. Promote switching to substances with lower environmental impact.
B. Green Factories	Management and emission reduction of environmentally hazardous substances at production facilities	Automobiles	◆ Further reduce per unit of VOC emissions (g/m²) at production lines.	◇ Reduce per unit of VOC emissions to below 49.3 g/m²*2 (a 48.1% reduction from the FY2001 level).	Continue improving thinner recovery devices, and set target to 48.3 g/m² or less.	The goal was met with an annual result of 48.1 g/m², with contributions from reducing thinner use and maintaining the recovery rate, etc.	○	Continue improving thinner recovery devices, and set the annual target to be 47.8 g/m² or less.
			◆ Continue to reduce emissions of PRTR substances into the environment.	◇ Identify and manage the chemical substances regulated by the PRTR law and promote further reduction in the use of these substances.	In addition to continuing to perform accounting management for PRTR substances, support proposals, etc. for the approval of the new accounting system plan to improve management precision.	Completed all accounting for FY2016.	○	Continue to perform accounting management for PRTR substances.
			◆ Promote activities targeting the elimination of occurrences of hazardous substances leaking off site, complaints, and exceeding legal standards.	◇ Promote activities targeting the elimination of occurrences of hazardous substances leaking off site, complaints, and exceeding legal standards through environmental risk reduction activities. ◇ Set stricter voluntary standards and conduct small-risk elimination activities.	Eliminate all occurrences of hazardous substances leaking off site, complaints, and exceeding legal standards. To prevent environmental accidents and complaints, improve communication with regional and local residents, and work towards raising their awareness aimed at thorough understanding of laws and regulations.	Received four complaints of obnoxious odors from neighboring residents. Explained the current status of production and received understanding. Received one complaint regarding exceeding night-time noise standards. No incidents of off-site spills.	x	Eliminate all occurrences of hazardous substances leaking off site, complaints, and exceeding legal standards. To prevent environmental accidents and complaints, promote improvement in equipment and improve communication with regional and local residents.

*2 As for VOC emission targets after FY2015, the annual targets were revised due to changes in production volume. (FY2015: revised to 47.2 g/m² from 48.8 g/m²; FY2017: revised to 47.4 g/m² from 47.8 g/m²).

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

【4】Environmental Management

Field	Item		Target/Initiative (Up to FY2017)	FY2016 Target	FY2016 Results	FY2016 Evaluation	FY2017 Target
A.Green Products	Research on traffic environments	Automobiles	◆ Work further on Intelligent Transport System (ITS) and the development of traffic accident prevention technologies in order to realize a safer and more comfortable motorized society.	◇ Promote efforts to develop an Advanced Safety Vehicle (ASV). ◇ Promote efforts to develop a safe driving support system that is in coordination with infrastructure.	Conduct activities based on the 5th Advanced Safety Vehicle (ASV) promotion plan. Promote technological development for practical use of accident prevention technology utilizing inter-vehicle communications and the Cooperative Adaptive Cruise Control (CACC) system. Continue to promote expansion of advanced safety systems and development of system advancement focusing on automated driving.	Continued activities based on the ASV promotion plan, and promoted development of accident prevention technology that utilizes inter-vehicle communications. Participated in public-private partnerships efforts for SIP automated travel systems. Promoted technological development for practical use of automated driving.	○	Continue to promote activities in line with the promotion plan for SIP (Strategic Innovation Promotion Program) automated travel systems and development toward putting of accident prevention technology utilizing inter-vehicle communications into practical use. Continue to promote development to expand advanced safety systems and development for early implementation of automated driving.
			◆ Expand deployment of an advanced safe driving system and promote the development of technologies for further enhancement.	◇ Further promote technological development to expand deployment of "EyeSight (ver.2)," advanced safe driving assist system.	Continue to identify assessment trends of each country. Continue to promote rolling out of deployment plans and technological development to remain top class.	In line with the deployment plans for EyeSight version 3, promoted development that is compatible with the assessment in each country. Clarified future assessment trends in the primary expansion region and started planning development.	○	Continue to identify assessment trends of each country. Continue to promote technological development to remain top class.
	Promotion of lifecycle assessment		◆ Promote disclosure of lifecycle assessment (LCA) data.	◇ Promote disclosure of LCA data starting with cars that have undergone full model changes.	Continue to calculate and disclose LCA data for cars that have undergone full model changes.	There was no vehicle appropriate for LCA calculations.	-	Continue to calculate and disclose the LCA data for models that have undergone full model changes.
C. Expanding Environmental Management	Green procurement activities		◆ Request both domestic and overseas suppliers to maintain the structure to establish environmental management systems (EMS).	◇ Maintain the structure to establish EMS including new suppliers. ◇ Review the green procurement guidelines and revise as necessary.	Maintain the structure to establish EMS. Revise green procurement guidelines.	Maintained the structure to establish EMS. [Automobile] 369 companies established including 2 new vendors (100%) [Aerospace CP] 86 companies established including 3 new vendors (100%) [Industrial Products CP] 133 companies established including 3 new vendors (100%) Revised green procurement guidelines and notified vendors.	○	Continue to maintain the structure to establish EMS. Continue to disseminate information to vendors.
			◆ Reduce environmentally hazardous substances.	◇ Encourage suppliers to further improve management of and reduce the use of environmentally hazardous substances contained in parts and materials.	Continue to investigate content of environmentally hazardous substances. Reduce environmentally hazardous substances by using alternatives	Continued to investigate content of environmentally hazardous substances. [Automobile] Investigated content of 3 substances in plastic regulated by IMDS and REACH. [Aerospace CP] Investigated status of vendor use of environmentally hazardous substances. [Industrial CP] Continued JAMA sheet investigations. Reduced environmentally hazardous substances through switching to alternatives. [Automobile] Promoted switching 3 PVC substances regulated by REACH. [Aerospace CP] Continued review of alternatives in order to reduce use of environmentally hazardous substances [Industrial CP] Completed partial switchover to alternatives for compliance with RoHS.	○	Continue to investigated content of environmentally hazardous substances Reduce environmentally hazardous substances by using alternatives
			◆ Set supplier CSR guidelines and deploy them to suppliers. (Aerospace and Industrial Products Companies) Automobile Division has already finished setting and deployment.	◇ Set guidelines and promote deployment and awareness raising of the guidelines to suppliers.	Promote CSR procurement activities based on the guidelines. • Revise and disseminate the guidelines that include a response to conflict minerals. • Continue to study biodiversity conservation.	Promoted CSR procurement activities based on the guidelines. [Automobile] Revised guidelines and notified vendors. [Aerospace CP] Revised guidelines and notified vendors. [Industrial CP] Revised guidelines and notified vendors.	○	Promote CSR procurement activities based on the guidelines. Continue to disseminate information to vendors.
	Promotion of environmental conservation activities among dealerships [Green Retail]	Automobiles	◆ Support dealerships' environmental activities.	◇ Support all dealerships maintain "Eco Action 21"*4 certification.	Sequentially verify progress status of EA21 mid-term evaluation and recertification audit at all dealerships. Support them to maintain the certification.	Implemented a review of the schedule, implementation status, results, etc. for the recertification audits for dealerships. Also, confirmed that all dealerships are continuing EA21 through submission of copies of the certificate.	○	Sequentially verify progress status of mid-term evaluation and EA21 recertification audit at all dealerships. Support them to maintain the certification.
				◇ Support voluntary implementation of environmental measures, such as energy conservation and waste reduction measures, under "Eco Action 21".	Continue D-SPECS system utilization, support quantitative management to be established, and help reduction activities at the dealerships.	Supported compliance with the Energy Saving Act (power equalizing) at dealerships through system improvements.	○	Continue D-SPECS system utilization, support quantity management to be established, and help reduction activities at the dealerships.
	Promotion of environmental conservation activities, including biodiversity conservation, in cooperation with local communities		◆ Continue to participate in environmental events, and make friendly exchanges with and support factory tours of residents near factories. ◆ Continue to conduct cleanup and greening activities, including biodiversity conservation efforts, near factories. ◆ Support activities of and work with environmental organizations.	◇ Continue to give factory tours, hold on-site events, and carry out environmental exchange classes. ◇ Continue cleanup activities around factories and offices. ◇ Promote greening activities taking biodiversity conservation into consideration.	Continue environmental class visits. Continue to welcome visitors to the Gunma Visitor's Center. Continue to implement clean-up activities around each business site. Advance the biodiversity initiatives road map and promote the initiatives.	Carried out a class visit program in Utsunomiya as a social contribution activity. Employees visited elementary and middle schools in Tochigi Prefecture where students learned about the mechanism of global warming through instruction and experimentation. 25 school (1,717 students). The Gunma Visitor's Center received 100,000 visitors. Advanced the biodiversity initiatives road map. A biodiversity element was included in the review for greening the Tokyo Office.	○	Continue environmental class visits. Continue to welcome visitors to the Gunma Visitor's Center. Continue to implement clean-up activities around each business site. Advance the biodiversity initiatives road map and promote the initiatives.
	Disclosure of environmental information		◆ Disclose environmental information through regular publication of environmental reports and other documents in a timely manner.	◇ Provide environment report in the form of CSR report and provide updated information on the website.	Create a 2015 environmental website and provide information there.	Made preparations for creating an Environmental website for the next fiscal year.	○	Create a 2016 environmental website and provide information there.
			◆ Improve and enhance the contents of environmental reports. (Compliance with environmental reporting guidelines, inclusion of Group companies in the scope of reporting)	◇ Improve compliance to environmental reporting guidelines of the Ministry of the Environment, and improve the content of environmental reporting.	Enrich the content of the report.	Planned enrichments to the content of the environmental report for the next fiscal year.	○	Further enrich the content of the report.
			◆ Participate in environmental events and publicize corporate environmental efforts.	◇ Continue to participate in Eco-Products Exhibitions to widely publicize the company's eco-friendly products and efforts.	Participate in the 2015 Eco-Products Exhibition and widely publicize the company's eco-friendly products and efforts.	Exhibited the Impreza Sport Hybrid at the 2015 Eco-Products Exhibition and held a test ride event.	○	Participate in the 2016 Eco-Products Exhibition to widely appeal our eco-friendly products and efforts.
	Promotion of environmental education and awareness activities		◆ Continue environmental and social education under the in-house education system. ◆ Continue employee education through in-house magazines and other media. ◆ Continue to hold lectures and workplace meetings to present improvement examples.	◇ Hold more environmental education, enlightenment and presentation events.	Using a variety of opportunities, proactively implement environmental education and educational activities.	Participated in the Ministry of the Environment sponsored "COOL CHOICE" and announced to society the eco-responsiveness of Subaru products. • Exhibited the Impreza Sport Hybrid, which was favorably received. Implemented environmental awareness education with E-learning. (Head Office, Tokyo)	○	Using a variety of opportunities, proactively implement environmental education and educational activities.
	Establishment of an Environmental Management System		◆ Maintain ISO 14001 integrated certification of all company outlets. ◆ Make continuous improvements to the Environmental Management System.	◇ Promote sharing the internal auditing and environmental education systems for more practical EMS activities.	Renew ISO14001 certification through recertification audit in November/December. Make adjustments to respond to the 2015 revision of the ISO14001 standards	Renewed ISO14001 certification through the recertification audit in November/December. Created a revised 2015 roadmap.	○	ISO14001: Complete transition to the revised 2015 standards.
			◆ Increase cooperation with subsidiaries and maintain and improve the Environmental Management System structure.	◇ Encourage more subsidiaries to acquire the ISO 14001 integrated certification in order to improve the system.	Proceed to make adjustments with affiliated companies for a specific time period and method for integration.	Met with 3 affiliated companies regarding EMS integration.	○	Promote EMS integration process with the 3 affiliated companies. Recommend that the affiliated companies and suppliers become ISO14001 or EA21 certified (FHI prefers EA21).

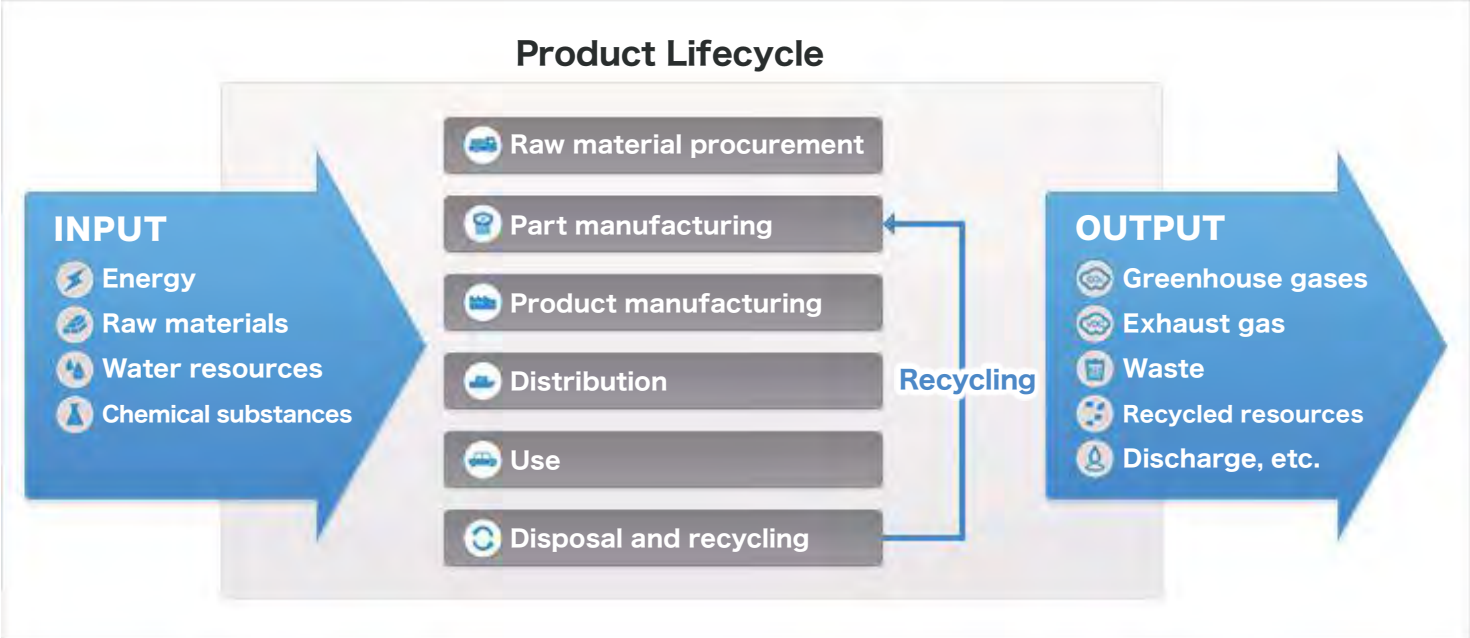
*4 Eco Action 21: An environmental management system developed by the Ministry of the Environment based on ISO 14001, aiming at easy implementation by small-to-medium sized corporations.

Environmental Management

Connection between Global Environment and Business Activities

At the Fuji Heavy Industries Ltd. (FHI) Group, the life cycle of a product, from the procurement of raw materials to manufacture, use, and disposal, involves INPUT of energy, raw materials, etc. and OUTPUT of greenhouse gases, waste, etc. Throughout the product life cycles and the supply chain, FHI is working toward the use of sustainable resources, mitigating and adapting to climate change including creating a low carbon society, and preserving biodiversity.

Business Activities and Environmental Impact

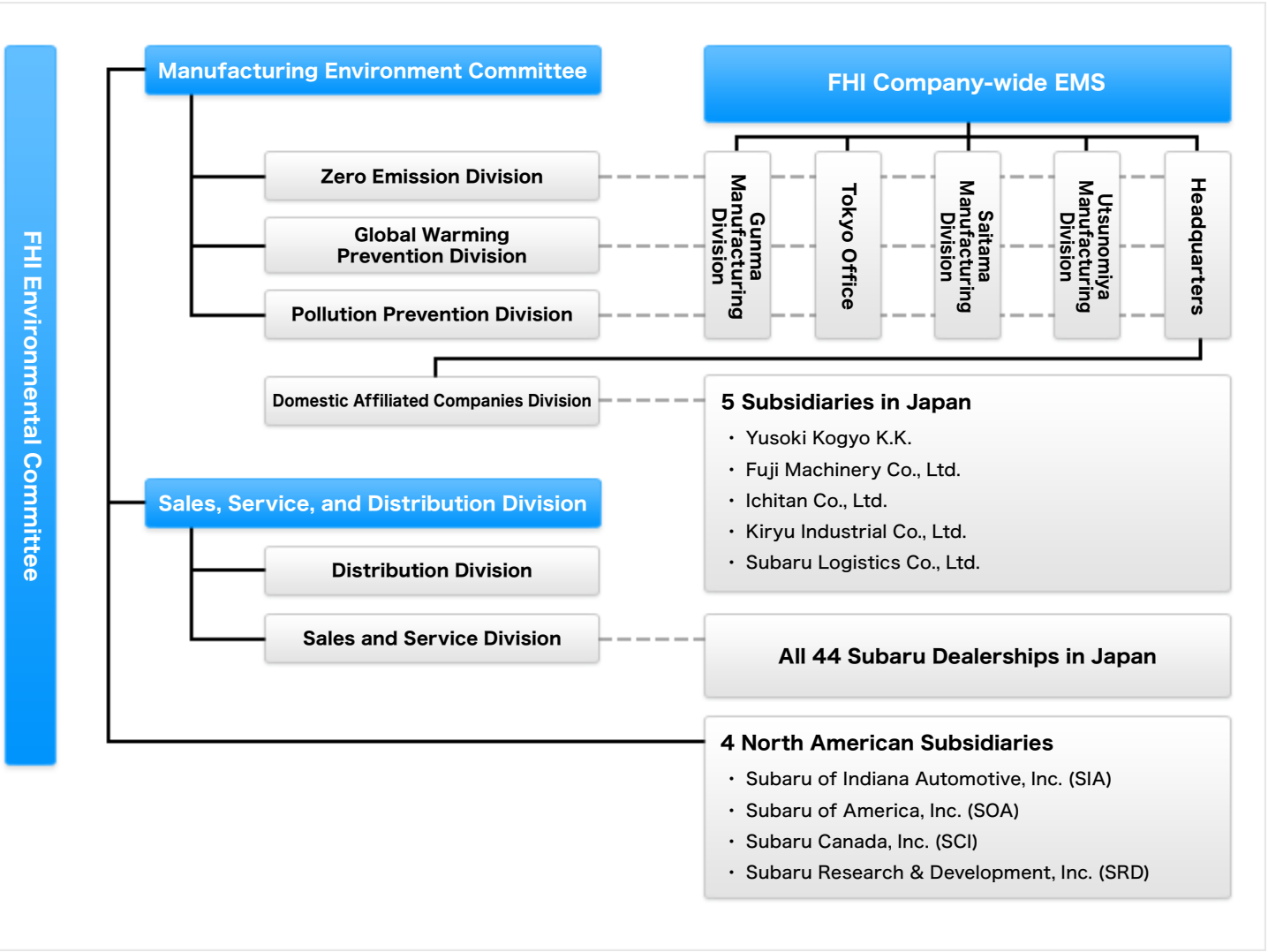


Organization

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 2016)



Status of Establishing the Environmental Management System

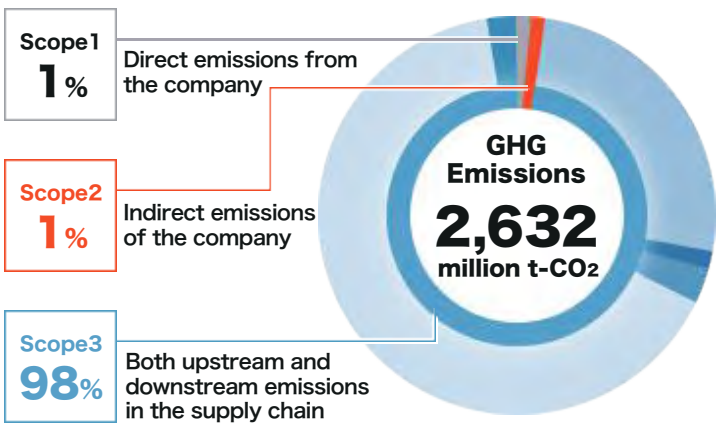
We are also actively engaged in building a group-wide environmental management structure, and have established an EMS at our offices, vendors, domestic and overseas consolidated manufacturing companies, and Subaru dealerships at home and abroad, and have acquired external certifications.
In March 2011, all of our 44 domestic dealerships and their 700 outlets obtained Eco Action 21 (EA21) certification, which was the first in Japan among all automobile manufacturers.
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, Subaru Logistics Co., Ltd. received ISO 14001 certification in March 2013, received ISO 39001 certification, which is the international standard for road traffic safety management systems, in September 2015, and is currently working toward receiving ISO 9001 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	Distributors
Category	FHI	Vendor	Domestic Consolidated Production and Distribution Companies	Overseas Consolidated Production Company	Domestic Consolidated Dealerships	Overseas Consolidated Distributors
Divisions	**Company-wide EMS** 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. Fuji Jukou House Corporation Total: 6 companies	SIA	All domestic Subaru dealerships Total: 44 dealerships	SOA SCI Total: 2 distributors
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_2. 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		Greenhouse GasEmissions (t-CO_2)	Calculation Scope, etc.
Upstream	1	Purchased goods and services	6,632,996	Domestic and overseas
	2	Capital goods	444,958	Domestic and overseas
	3	Fuel and energy related activities not included in Scopes 1 or 2	71,036	Domestic and overseas
	4	Transportation and delivery (upstream)	647,441	Domestic and overseas
	5	Waste generated in operations	14,724	Domestic and overseas
	6	Business travel	4,050	Domestic and overseas
	7	Employee commuting	10,926	Domestic and overseas
	8	Leased assets (upstream)	-	N/A
Downstream	9	Transportation and delivery (downstream)	-	N/A
	10	Processing of sold products	3,396	Domestic and overseas
	11	Use of sold products	17,246,287	Domestic and overseas
	12	End-of-life treatment of sold products	528,667	Domestic and overseas
	13	Leased assets (downstream)	-	N/A
	14	Franchises	49,583	Domestic and overseas
	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 FY2015, a working group that spanned across all business offices and divisions was established, clarified the relationship between business activities and biodiversity, and created a road map to promote measures, dividing business activities into two separate aspects of risk and opportunities.

FY2016 Major Initiatives

・Implemented a survey on use of biologic resources such as leather and plant derived raw materials. Confirmed that there was no negative impact on the environment during the procurement process.

・Switched the copy paper used at the Head Office to 100% recycled paper that does not use any new trees as a resource.

・Added “No use of raw materials that are a cause of social problems,” and “Make efforts to be situationally aware and to respond appropriately with the goal of not using raw materials associated with conflict minerals and social problems such as human rights violations” to the human rights and labor item in the CSR Guidelines for Suppliers and published this on the website.

・Implemented periodic investigations on the trends for certification for non-biologic resources such as aluminum, tin, and mining.

・Activities for preserving rare species
Using corporate sites as safe places to preserve endangered rare species has been gathering attention. In the Tokoji temple in Kitamoto City, where our Saitama Manufacturing Division is situated, there stands Ishito Kabazakura (cherry tree), one of the Nihon Godai Zakura (the five major cherry trees in Japan), designated as Japan's natural monument in 1922. We have inherited and are carefully nurturing the descendants of the tree at our site. We had elementary school children, who came to our site for field trips, learn the history of the cherry tree and the importance of preserving endangered rare species.

・Forest Conservation Activities in China: “31 Forest Star Tours”
We established “Subaru Ecological Forests” in 31 natural conservation zones from 2013 and supplied 31 Foresters. This year, Subaru again invited guests and provided them with opportunities to learn about the importance of forest conservation and to experience tree planting activities.

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

March 2003: The descendent tree were planted.

The tree brings forth pretty blossoms every spring.

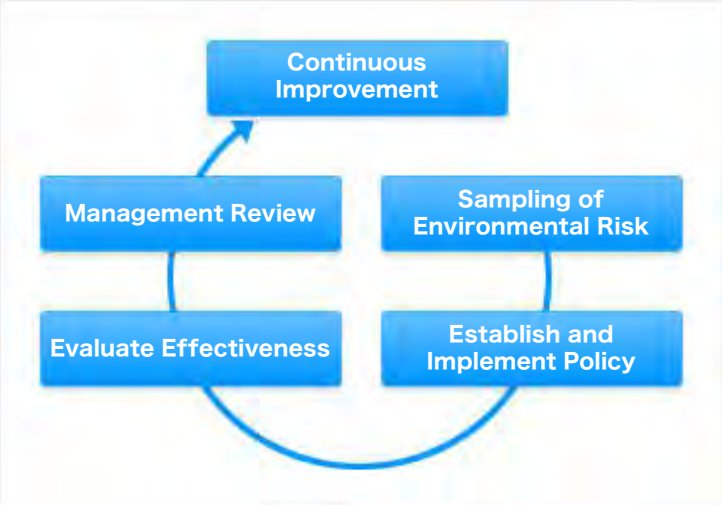
“31 Forest Star Tours” in China

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 July 2015, the Tokyo Office implemented training that simulated leaks from an underground tank to check emergency operations and emergency communications systems for hazardous materials facility security personnel. Thirteen employees attended the training to minimize the impact on the surrounding environment.

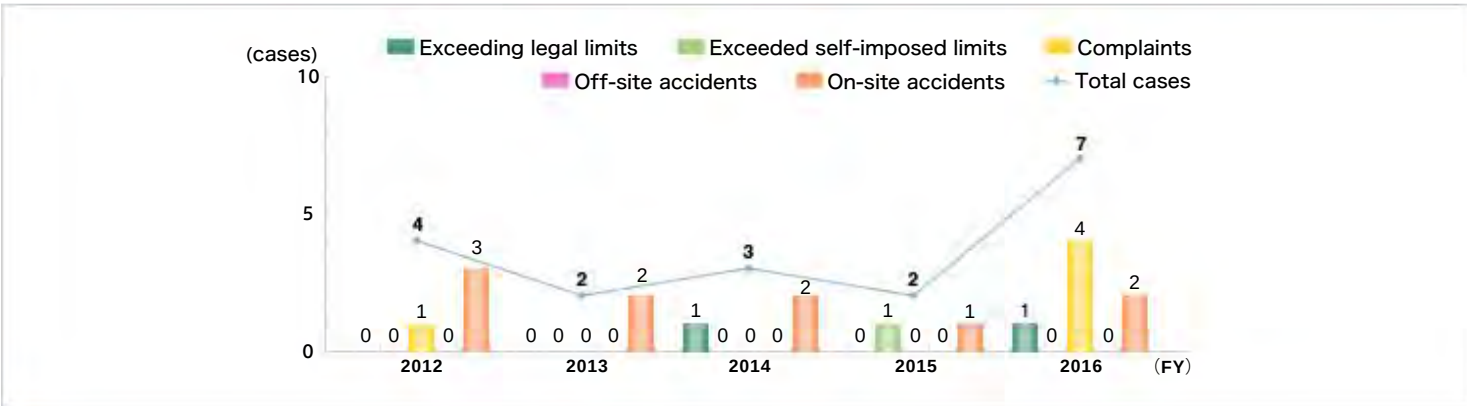
We will continue to periodically carry out training in order to improve our emergency response capacity.



Status of Compliance with Environmental Laws and Regulations

At Subaru, 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 FY2016

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. There was one case of exceeding legal standards, so measures were implemented to prevent a recurrence.

Name	Number of Cases	Details	Main Corrective Measures
Saitama Manufacturing Division	1 case for noise	March: Exceeded noise regulations for night.	Reviewed night time operations that were the cause of the noise.

Environmental Complaints Received in FY2016

We are working toward a goal of “zero” environmental complaints. We received 4 environmental complaints.

Name	Number of Cases	Details	Main Corrective Measures
Gunma Manufacturing Division	4 cases of offensive odors	October–January: Received complaints about paint odor.	Implemented provisional measures to remove the odor; currently planning equipment improvements.

Status of Environmental Accident Occurrences in FY2016

We are striving to achieve the goal of zero accidents, both on and off site. There were two incidents of on-site accidents. We implemented measures to prevent recurrence.

Name	Number of Cases	Details	Main Corrective Measures
Gunma Manufacturing Division	2 cases for water quality	July and August: Alkaline waste water and cloudy water from an onsite construction site flowed into the onsite waterway.	Educational support was provided for the construction sections..

Environmental Accounting (FHI Group FY2016 Results)

Environmental Cost Approach and Calculation Method

Referencing to the Guidelines of the Ministry of the Environment, independent guidelines had been established for FHI environmental conservation activity organizations (Calculation methods have been changed partially starting FY2005), and environmental costs are calculated and summarized according to these guidelines. (FHI Group companies use the same guidelines for calculations.)
As for the details of calculation methods, please refer to pages 9-13 of Supplementary Volume for Data related to the 2006 Environmental & Social Report.

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:

Capital investment and environmental cost =
{(Total investment − Investment not for energy conservation)/Total investment} x (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.

FY2016 Calculation Results

Environmental cost came to 32.3 billion yen on a non-consolidated basis, up 2.43 billion yen (8.2%) from the previous fiscal year, and 33.7 billion yen on a consolidated basis, up 2.67 billion yen (8.6%).
The cost increase was mainly due to an increase in research and development (R&D) costs (2.35 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 1.04%.

FY2016 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 2016	FY 2015	FY 2014	FY 2016	FY 2015	FY 2014	FY 2016	FY 2015	FY 2014	FY 2016	FY 2015	FY 2014
(1) Cost in the business area	①Pollution prevention cost	479	389	340	656	549	489	206	206	167	656	656	215
	②Global environmental conservation cost	21	21	28	43	142	90	39	39	360	93	93	376
	③Resource recycling cost	547	540	513	1,144	1,011	1,098	0	0	0	3	3	0
(2) Upstream and downstream costs	Recycling related cost Cost arising from changes in product materials	129	122	128	129	122	128	–	–	–	–	–	–
(3) Administration cost	Cost for monitoring environmental impact Cost for the Environmental management Cost for environmental education	77	81	86	143	142	137	–	–	–	–	–	–
(4) R&D cost	R&D cost for environmental impact reduction	30,809	28,462	19,696	31,328	28,786	19,999	2,546	2,302	2,275	2,568	2,324	2,276
(5) Social activity cost	Cost related to donation, etc. for environmental conservation groups	91	84	103	95	88	106	–	–	–	–	–	–
(6) Environmental remediation cost	Cost to remedy soil and underground pollution	124	147	103	126	149	103	0	0	6	0	0	0
(7) Other cost		0	0	0	0	0	0	–	–	–	–	–	–
Grand Total		32,278	29,845	20,997	33,664	30,990	22,150	2,790	2,547	2,807	3,320	3,076	2,874

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

FY2016 Economic Effect Calculation Results

Item	Economic effect (Millions of yen)	
	Non-consolidated	Consolidated
Reduction in energy cost from energy conservation	8	20
Sales from recycling (sales of valuable items: metals, waste liquids, and cardboard boxes)	1,552	2,364
Reduction in use of raw materials due to recycling (reduced packaging materials cost)	1	1

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_2) in proportion to the fuel consumed.
Traditionally, the issue for companies is how to conserve fuel while reducing carbon dioxide emissions and how to contribute to preventing global warming. Global trend is the 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 environmental era working at a global scale, we believe we can provide customers with products that they want by making the best use of our uniqueness.

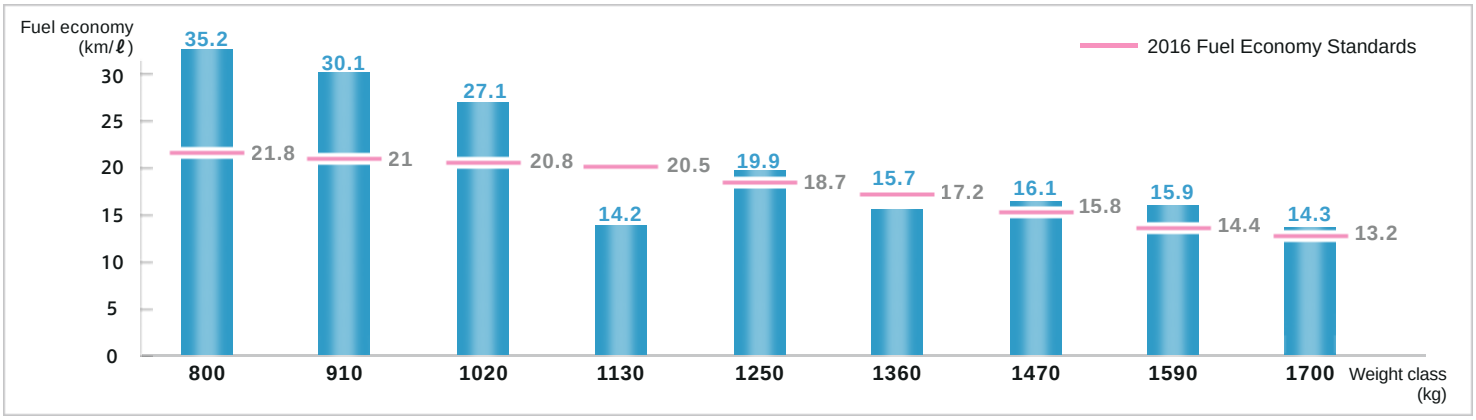
In Japan, we continue to expand with models that surpass the 2020 Fuel Economy Standards. After introducing the new generation Boxer engine in 2010, we have deployed technologies to improve fuel economy such as the new lightweight, high-efficiency Lineartronic CVT, efforts to lower the drag coefficient of car bodies with enhanced aerodynamics and an idling stop system in the LEGACY, IMPREZA and FORESTER. The LEGACY and FORESTER adopt the new-generation engine with direct injection turbo and high torque Lineartronic CVT, and also in 2014, by introducing the Levorg with a downsized 1.6L displacement turbo, high performance driving as well as exceptional environmental efficiency were achieved. We expanded the use of the hybrid system adopted in the SUBARU XV model, which allowed drivers to experience the driving enjoyment unique to Subaru, to the IMPREZA SPORT in 2015 to better meet market needs.
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 the FY2016 Fuel Economy Standards in 7 of 9 Weight Classes

Passenger cars meeting the FY2016 Fuel Economy Standards accounted for about 91% of the total production, and 7 of the 9 weight classes of Subaru vehicles sold met the FY2016 Fuel Economy Standards.
Looking toward the FY2021 Fuel Economy Standards, three models, including the Subaru XV Hybrid, have already achieved the standards, and the proportion of manufactured vehicles that achieved the standard has reached 12%.

◎FY2016 Fuel Economy Standards Achievement Status



US: Achieved 2015 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 2015 model year. Not only clearing fuel economy and CO_2 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

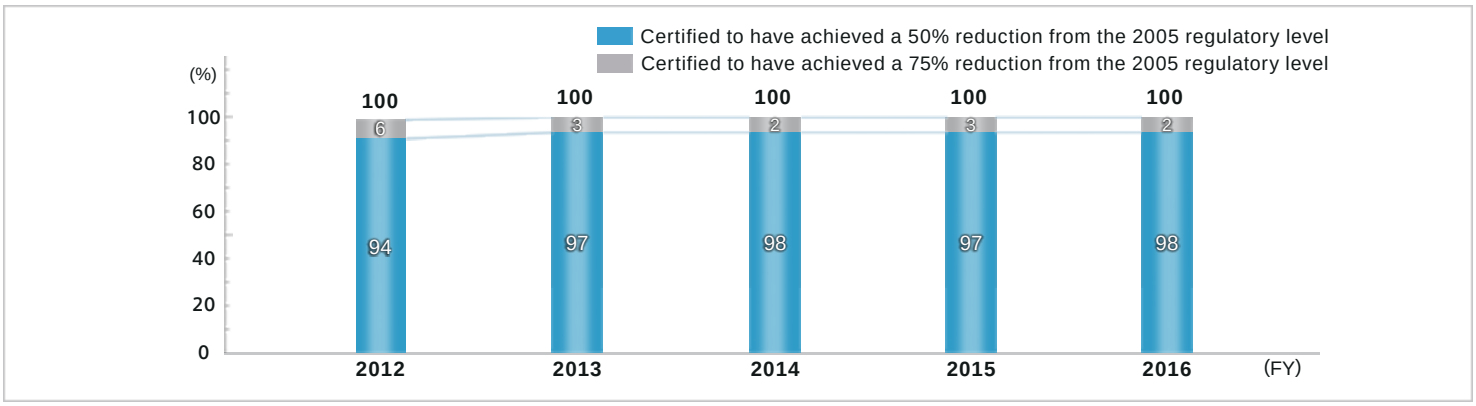
Approach to Low Exhaust Emissions

Carbon monoxide (CO), hydrocarbons (HC), nitrogen oxides (NOx), 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 numbers of vehicles achieving the 75% reduction have remained in the higher 90% range of the total production quantity since FY2013. Additionally, all vehicles we produce are certified Ultra Low Emission Vehicles (U-LEV) achieving a 50% reduction from the regulatory values specified in the 2005 emissions standards).

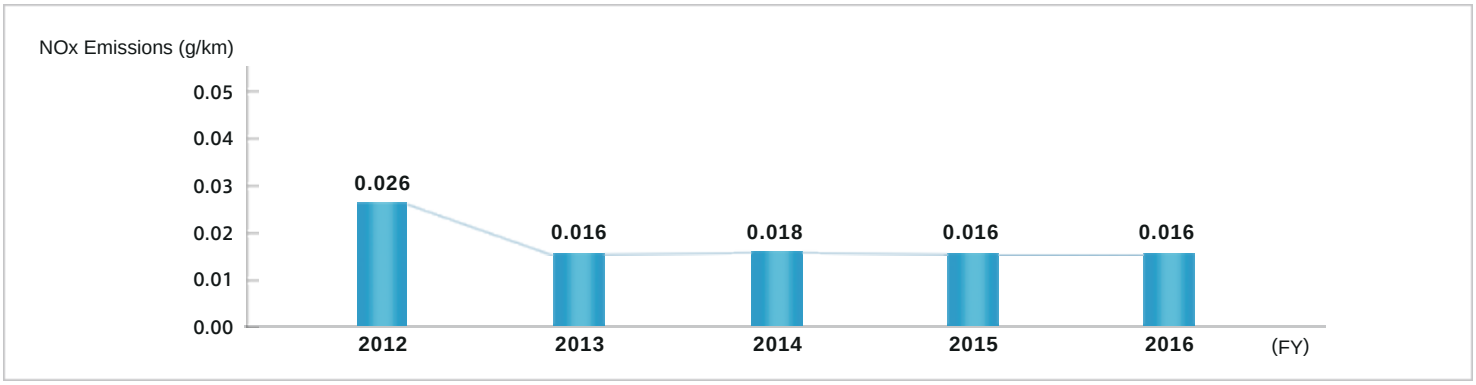
Percentage of Low Emission Gasoline-powered Passenger Vehicles



Year-on-year Reduction of NOx Emissions by the Release of Low-emission Vehicles

A high concentration of NOx affects human health and negatively impacts the environment, such as by causing acid rain. The volume of NOx 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.

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.
By adopting the newly developed 2.0L horizontally opposed direct-injection engine, the new model Impreza, planned for introduction to the market this year, achieved both fun-to-drive acceleration and reducing noise level on urban roads.

Management of Chemical Substances (Operation of the IMDS)

Since the enforcement of the European Union's Registration, Evaluation and Authorization of Chemicals (REACH) regulation, 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 proper 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 we are promoting management system that can promptly disclose information regarding the usage of substances requiring management according to EU REACH, etc.

Renewable Fuel Use

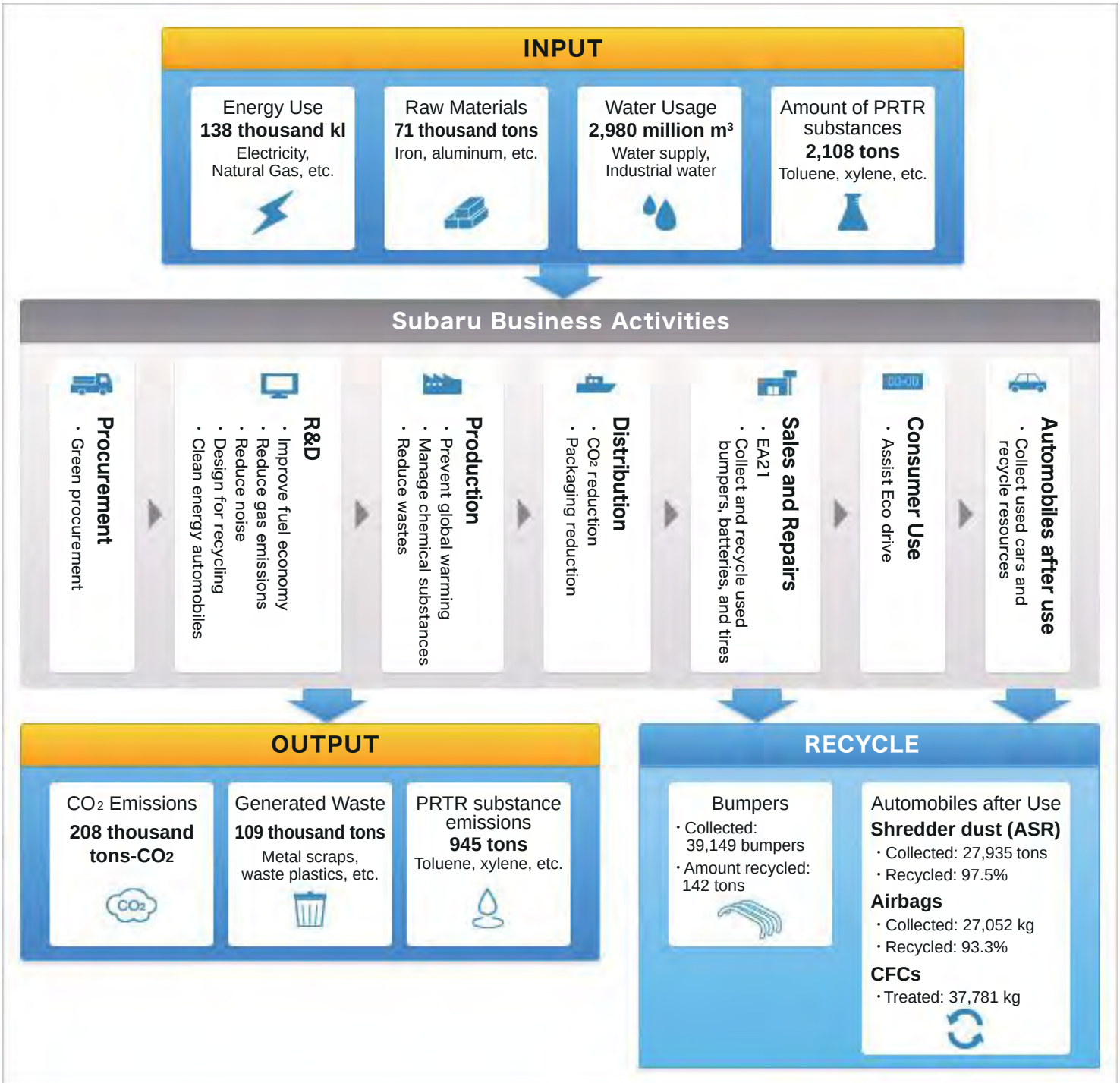
Fossil fuels, which are mainstream fuels for automobiles, are limited resources, and a shift to diverse fuels that are both interchangeable and renewable such as biofuels is now required.
All Subaru gasoline-powered vehicles sold worldwide are compatible (functionality and reliability) with E10 fuel (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_2, 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



Note: These are the main environmental impacts arising from our automobile manufacturing, sales, etc. In addition to this, we carry out LCA and Scope 3 calculations.

Global Warming Prevention Activities

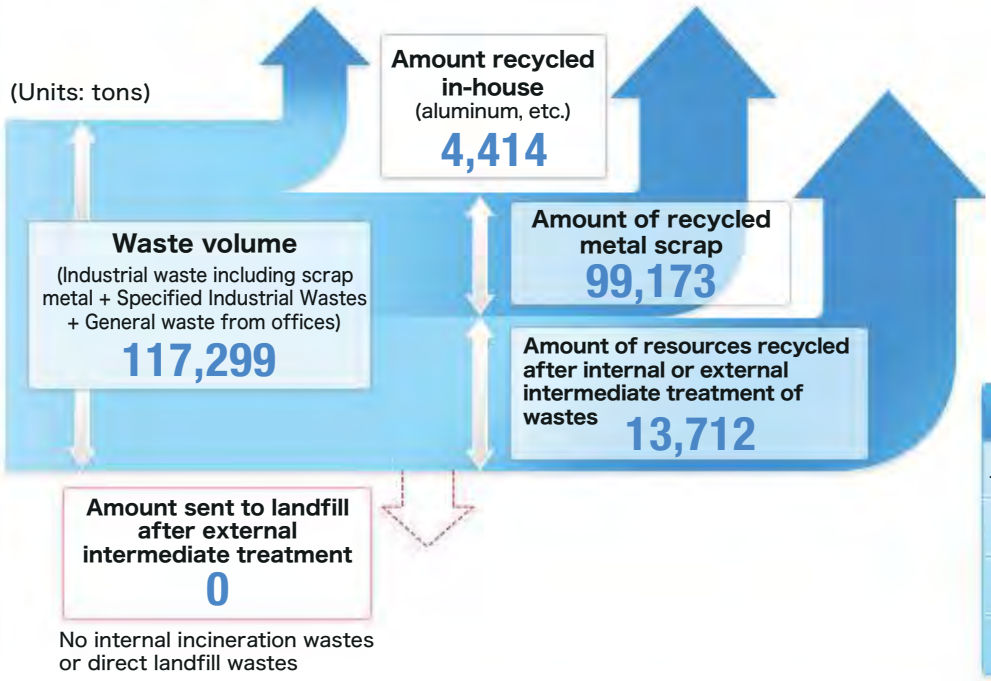
We promote global warming prevention activities by continuing various initiatives to reduce CO_2 emissions such as installing energy conserving equipment, improving productivity, etc.

The 5th Voluntary Plan for the Environment called for 48% reduction in CO_2 emissions per unit of sales in FY2016 from FY2007, which was achieved.

Waste Reduction

All our manufacturing plants in Japan and abroad have maintained zero land fille for waste materials since FY2005.

◎Summary of Total Waste Generated and Treated in FY2016 for All Business Offices and Automobile Manufacturing (Gunma Manufacturing Division)



Primary Waste	Primary Recycling Method
Wastewater treatment sludge	Cement material
Paint sludge	Reducing agent for iron
Waste plastic	RPF (solid fuel), etc.
Paper waste	Recycled paper, RPF, etc.

VOC Reduction

The amount of volatile organic compounds (VOCs) emitted from the automobile coating process was 48.1g/m^2 in FY2016, down 47.4% from FY2000 levels.

We continue to decrease the use of cleaning thinners and increase the recovery of used thinner, as well as (partially) converting to 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 properly store polychlorinated biphenyl (PCB) waste materials in accordance with the law.
In FY2016, appropriate treatment of trace PCB wastes (transformer and condenser) from the Utsunomiya Manufacturing Divisions was performed.

Transportation operation for trace PCB wastes

Eco Initiatives at Ebisu Subaru Building Head Office

The Ebisu Subaru Building received the CASBEE (Comprehensive Assessment System for Built Environment Efficiency) “S Rank” in February 2015. CASBEE is a system headed by the Ministry of Land, Infrastructure and Transport that comprehensively and fairly evaluates the quality of buildings, including environmental considerations such as energy conservation and use of materials and equipment that have a low impact on the environment, as well as consideration toward indoor comfort and landscape.

Introduction of Renewable Energy

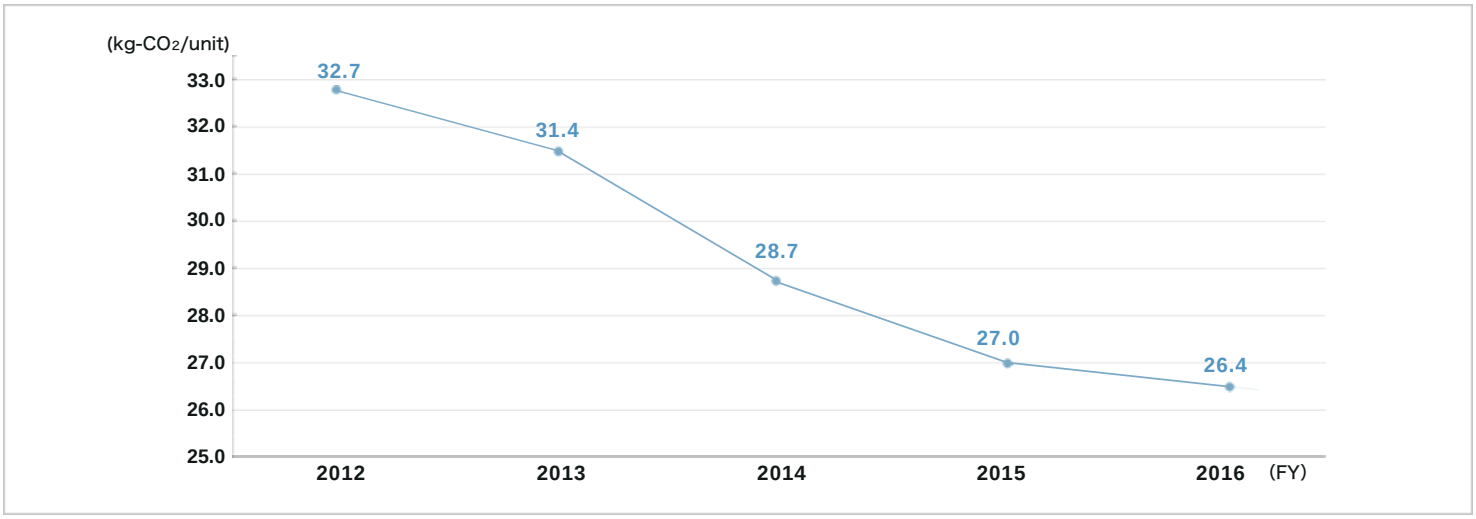
The Tokyo Office installed a solar power system with two 10 kw and one 5 kw generators on the office roof and one 2 kw generator at the gatehouse. The system generates 33,807 kwh annually to cover some of the power needs of the Tokyo Office.
Also, a 420 kw rated output (enough for about 100 homes) solar power system was installed in Kiryu, Gunma Prefecture as an electric power seller in 2014, and a business to generate and sell 427,706 kwh annually was started.

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.
In recent years, we have been able to reduce the amount of fuel use (improved fuel efficiency) and CO_2 emissions from completed vehicle transportation by effectively using the improved Tokyo metropolitan highway network.
Also, we have flexibly responded to changes in the finished car model mix and to larger model types to be transported, have reviewed and improved loading and packing, and jointly transport finished vehicles with other companies in the same industry, in order to improve loading efficiency and reduce the number of shipments.

◎ CO_2 Emissions during Transport per Subaru Vehicle



Reuse of Packing Materials

Subaru Logistics Co., Ltd., which handles packaging and transport for complete knock-down (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 FY2016 was 549.6 tons, an increase of 105% over the previous year, and the ratio of newly purchased reused packaging materials was 16.5%, a 0.3 point increase from the previous year.
As a result of this improvement in logistics, we received the “Logistics Grand Prize” at the “All Japan Logistics Case Convention 2015” sponsored by the Japan Institute of Logistics Systems.
We will continue to carry out environmental impact reduction activities by expanding the reuse of packaging materials.

Dunnage for aluminum wheels

Small part packaging

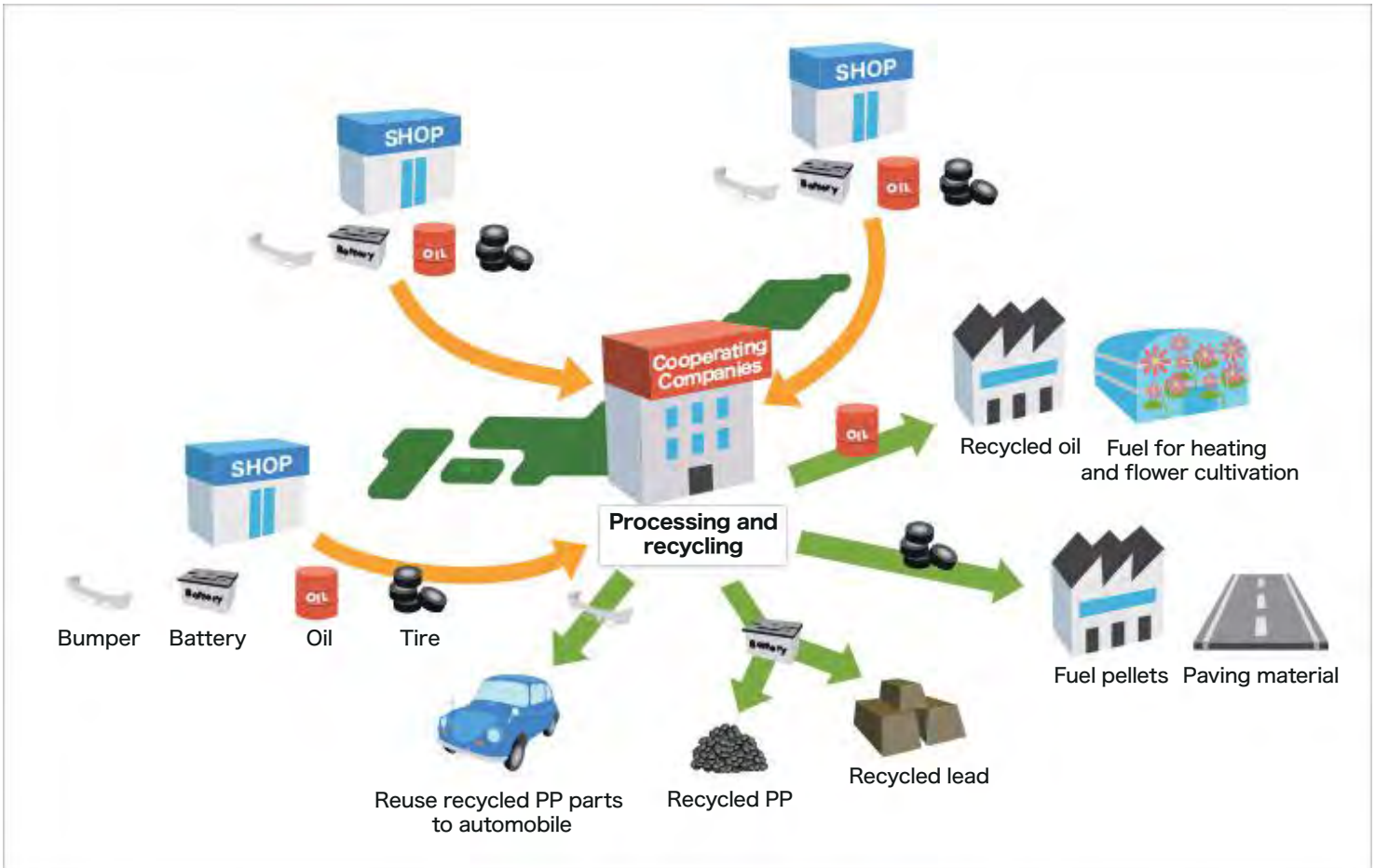
Initiatives for Sales

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 Domestic 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 FY2016 was that 1,197 tons of used lead-acid batteries, 4,944 kiloliters of used oil, and 194,191 used tires were collected and recycled.
We believe that the zero emission activities of dealers, who are closest to stakeholders, are environmental conservation activities closer to home. They are also able to provide a safe and secure environment, in addition to products, by promoting more effective use and appropriate processing through defining corporate responsibility and recycling resources.



Recycling Waste Oil

Waste oil generated at Subaru dealerships throughout Japan during oil changes is recycled as recycled fuel oil based on the zero emissions scheme created by Fuji Heavy Industries Ltd. Every year, farmers in Yamagata prefecture can grow beautiful poinsettia and cyclamen using this recycled fuel oil for heating greenhouses. These poinsettias were given to visitors to our event held on December 23, 2015, as a Christmas present.

Recycling Used Tires

Used tires changed and collected at Subaru domestic dealers are crushed and made into rubber chips, which are then reused as fuel at plants such as power plant, paper making company(pulp) and iron factory,etc. In addition to this kind of thermal recovery, we have started to reuse these chips as paving materials. The used tires made into rubber chips are mixed in asphalt, or applied as an overlay of asphalt pavement. They can be used for parking lots, children's playgrounds, athletic fields, and sidewalks of hospitals/nursery homes, with varied blending ratios of chips depending on the use. We not only recycle the outer layer of the tires, but the entire rubber parts of those tires for pavement materials by sorting each part thoroughly, such as wires, rubber components, etc. We are the first car manufacturer to recycle all the rubber parts of a tire for pavement materials.

Staff Parking

Stella Town: Animal Square

Automobile Recycling

Automobile Recycling Process

Automobile Recycling Law calls for recycling of shredder dust and airbags and treating Chlorofluorocarbons when an automobile has reached end-of-life.

The user pays a recycling fee when purchasing a car.

A car that can no longer be used is delivered to a Collection Business*.

*This is a new or used car dealer, maintenance business, etc. that is registered with local authorities.

Chlorofluorocarbons are recovered and made harmless by proper treatment.

Air bags are removed and safely recycled by being treated.

Other parts are processed appropriately (reused or recycled).

The dismantled car is crushed. The shredder dust is recycled.

Promotion of Recycling Conscious Design

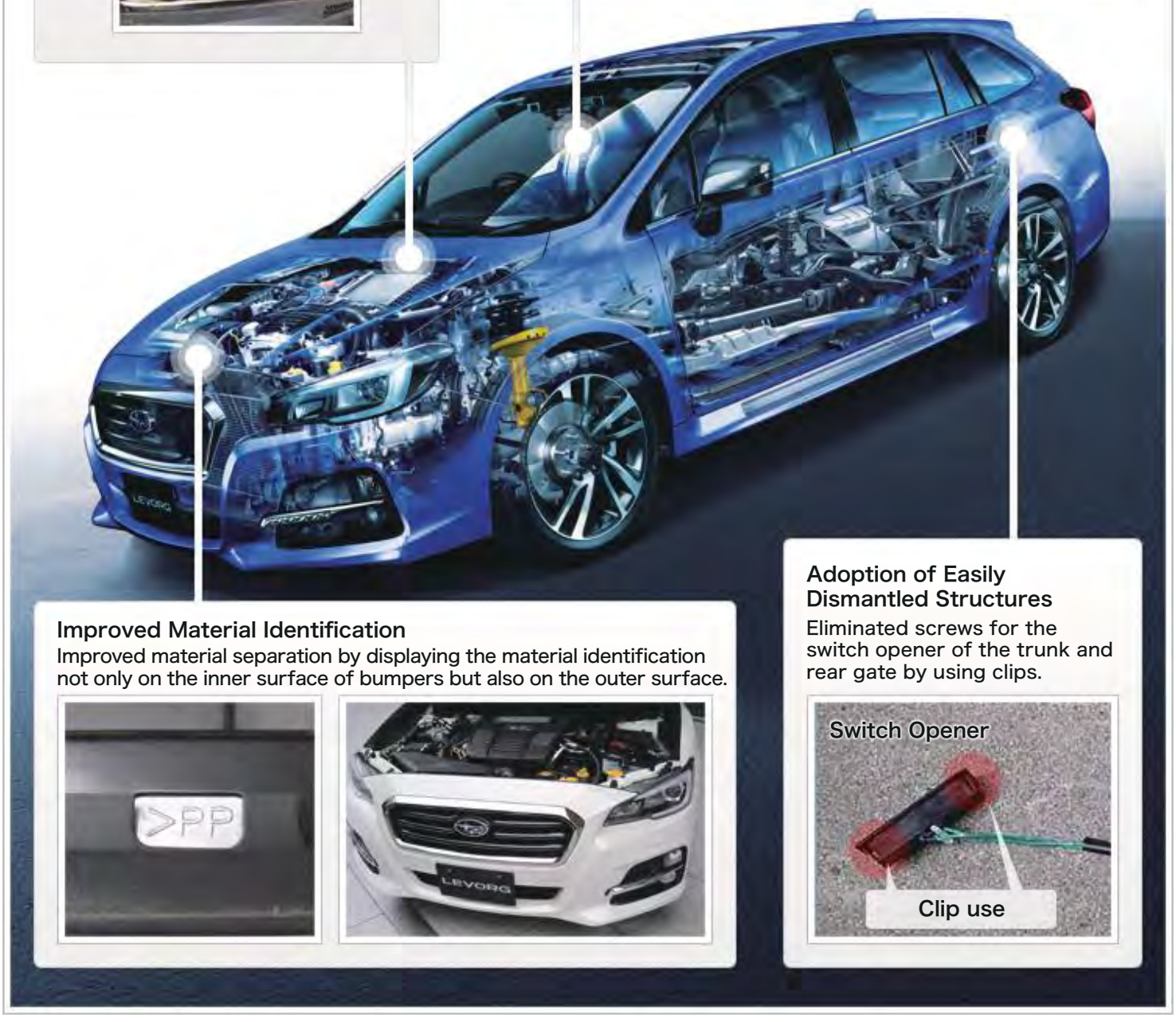
In order to use limited resources effectively, we promote recycling conscious design in automobile manufacturing.

Improvement in Wiring Harness Dismantling

Adopted a harness layout and structure than can be recovered quickly and efficiently.

Use of Easily Recycled Materials

Actively adopted olefin resins that are easily recycled to use in internal parts.



Improved Material Identification

Improved material separation by displaying the material identification not only on the inner surface of bumpers but also on the outer surface.

Adoption of Easily Dismantled Structures

Eliminated screws for the switch opener of the trunk and rear gate by using clips.

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 FY2016 was 97.5%, 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 93.3%, exceeding the legal standard of 85%. Also, the entire amount of recovered CFCs has been appropriately treated.

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.

Green Purchasing Network

Eco Product Net of the Green Purchasing Network website
We initiated to introduce our products on the "Eco Product Net" page of the Green Purchasing Network (GPN) website. The webpage is not for GPN to recommend any products, but to provide comparative environmental performance data of various products to help those that are considering purchasing them.

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 FY2016, we had 91,249 children visit the site.
The on-site Subaru Visitor's Center has a car recycling zone.
Here, elementary school children can actually view items to be recycled and the results of recycling in order to understand the recycling process.

◎Utsunomiya Manufacturing Division

We have been carrying out the environmental class visit program, where our employees visit elementary schools in Utsunomiya City and elementary/junior high schools in Handa City, in order to deepen children's understanding of environmental problems. In FY2016, 1,717 children participated in the program.

It has been said that greenhouse gases (mainly CO_2) contribute to global warming. For the environmental class visit program, we bring two flasks to the classroom, one of which we fill with CO_2 and another with air. We pretend that they are the earth and see how their temperature changes when warmed by an infrared lamp that simulates the sun. We showed that the temperature of the flask filled with CO_2 ends up higher than the flask with normal air and thus the students could see that CO_2 has the greenhouse gas effect.

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

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 2015, we began implementing “New Employee Environmental Conservation Education” for the 391 new employees of the automotive business division and the 206 new employees at the Head Office. The lecturer, the one in charge of the environment, 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 held 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, external lecturers were 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 2015”

In December 2015, we exhibited at the Eco Products Exhibition 2015, Japan's largest environmental exhibition. We introduced product features of the advanced hybrid system of the Subaru Impreza Sport Hybrid and advanced safety prevention technology such as EYESIGHT. Also, as environmental initiatives unique to Fuji Heavy Industries Ltd., a presentation and panel exhibitions introduced domestic and foreign zero emissions activities, Subaru of China's forest conservation activity initiatives, resysled paper circulation at the Head Office, and paving material created by recycling tire chips from passenger cars.

In addition, we participated in the disaster area reconstruction assistance credit scheme, offset 10.8 t-CO_2 of CO_2 emissions at exhibitions, and worked toward reducing carbon dioxide as measures against global warming.

Overseas Initiatives

Overseas Environmental Initiatives

In May 2012, Subaru of Indiana Automotive, Inc. (SIA), the US production base of 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.
The ISO 14001/50001 certifications were renewed in March 2015, three years after certification was received.

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_2 emissions through various measures.
SOA opened a parts distribution center that also has the function of a training center in Florence, New Jersey, in June 2013. This building has received the LEED certification given to environmentally conscious buildings. On its rooftop, it has a solar power generation system that generates 1 megawatt of electricity, and in 2015, it generated 1,283,000KWH, which was used for lighting and power in the building.
SIA has implemented detailed management of energy usage based on ISO 50001, and Subaru Research & Development, Inc. (SRD), which performs research and development of Subaru cars, have switched over to LED lighting.

Efforts to Reduce Waste Materials

SIA has continued zero landfill for 10 years since 2004, and taking advantage of this experience, supports the activities for other companies and organizations to achieve zero landfill.

In June 2015, SOA/SIA were cooperated with the National Park Service (NPS) celebrating 100 years, a large scale effort to cut back on waste from US national parks sent to landfills was announced. Targeted is the 45 thousand tons of waste from the 237 million US national park visitors and waste generated from lodgings and transportation.
Specifically, SIA uses its knowledge from its zero landfill program to first reduce waste bound for landfills at the Yosemite, Grand Teton, and Denali national parks.

National park officials visiting the SIA factory

SIA's thorough waste separation and management

Other Initiatives

Earth Day to Appreciate Beautiful Nature

Earth Day, April 22, is a day to act on one's concern over the environment and the Earth. On that day, SIA planted trees with children of the nursery for employees adjacent to the site, and thanked the beautiful nature.

Canadian Environment Week 2015

Subaru Canada, Inc. (SCI), which sells Subaru automobiles, carries out various environmental activities during Canadian Environment Week every June, recognizing it as a time to reinforce environmental initiatives. In FY2016, a cleaning reinforcement week was set, the use of public transportation or walking to work instead of commuting by automobile or motorcycle was promoted as CO_2 reduction activities, and unneeded electronics were collected during E-waste week.

Chemical Substances Management

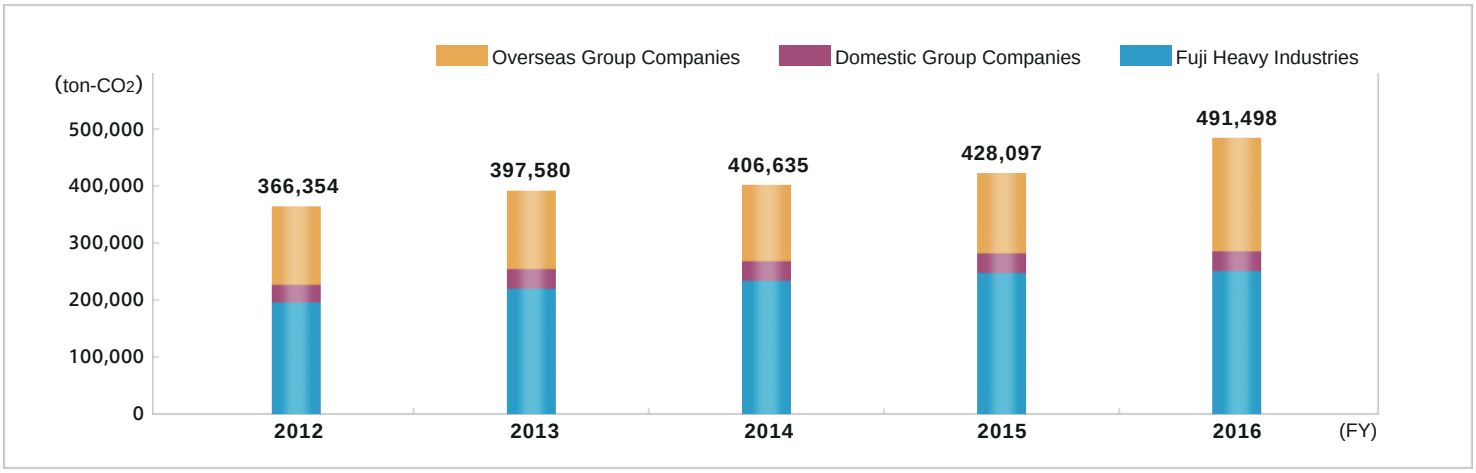
SIA manages chemical substances in compliance with the regulations of the Environmental Protection Agency (EPA) and the Indiana Department of Environmental Management. In FY2016, a total of 1,674 tons of chemical substances were handled and there were 98 tons of atmospheric emissions.

Environmental Data

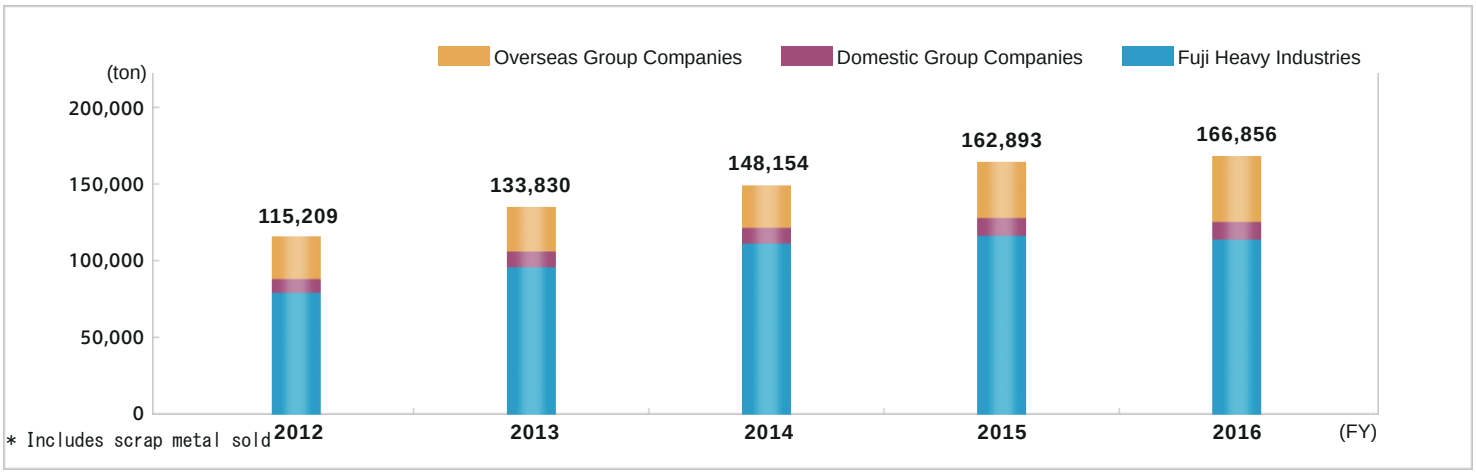
The main aspects of environmental performance of FHI* in FY2016 are shown in the following figures.
CO_2 emissions, waste generation, water usage, etc. have all increased from the previous year due to increased production volume.
Each domestic business site sets and manages voluntary standards that are 20% higher than pollution prevention laws and regulations standards. All measurements were compliant with laws and regulations and pollution prevention agreements.

Tageted companies/divisions : Fuji Heavy Industries : Gunma, Utsunomiya, Saitama and Tokyo
Domestiz Group Companies:Yusoki Kogyo K.K., Fuji Machinery Co.Ltd., Ichitan Co.,Ltd., Kiryu Industrial Co., Ltd., Subaru Logistics Co., Ltd.
Overseas Group Companies:SIA、SOA、SCI、SRD

CO_2 Emissions [Fuji Heavy Industries + Domestic Group Companies + Overseas Group Companies]

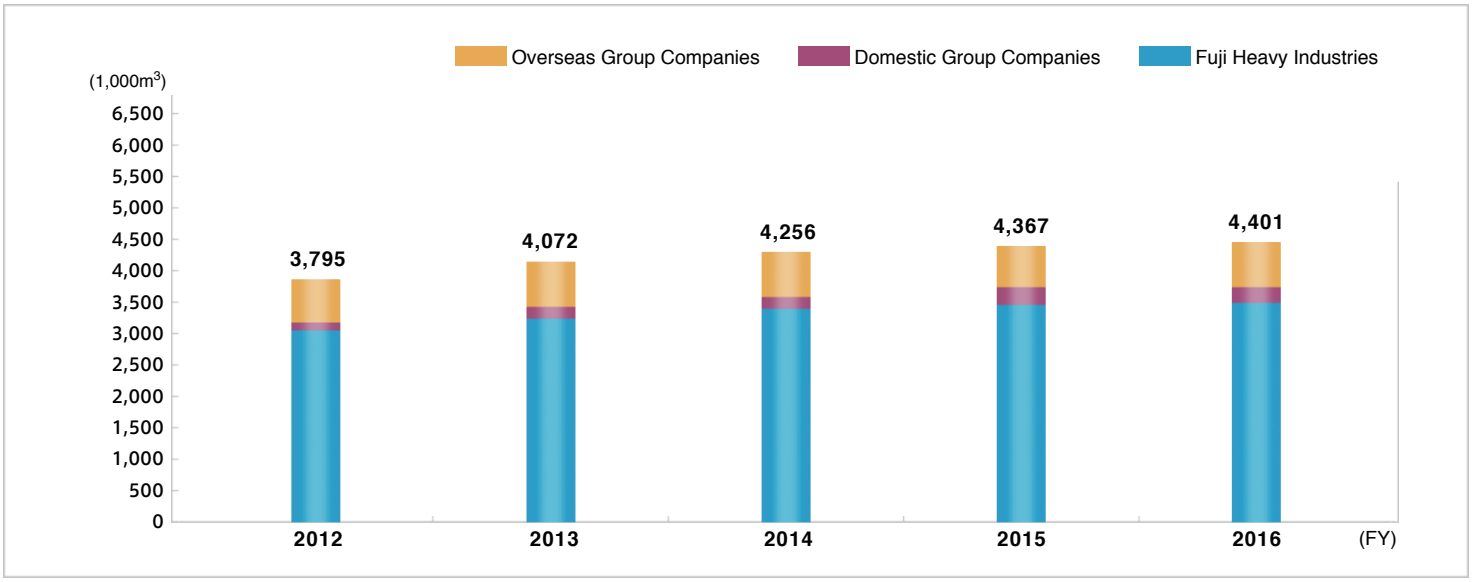


Waste Generation [Fuji Heavy Industries + Domestic Group Companies + Overseas Group Companies]

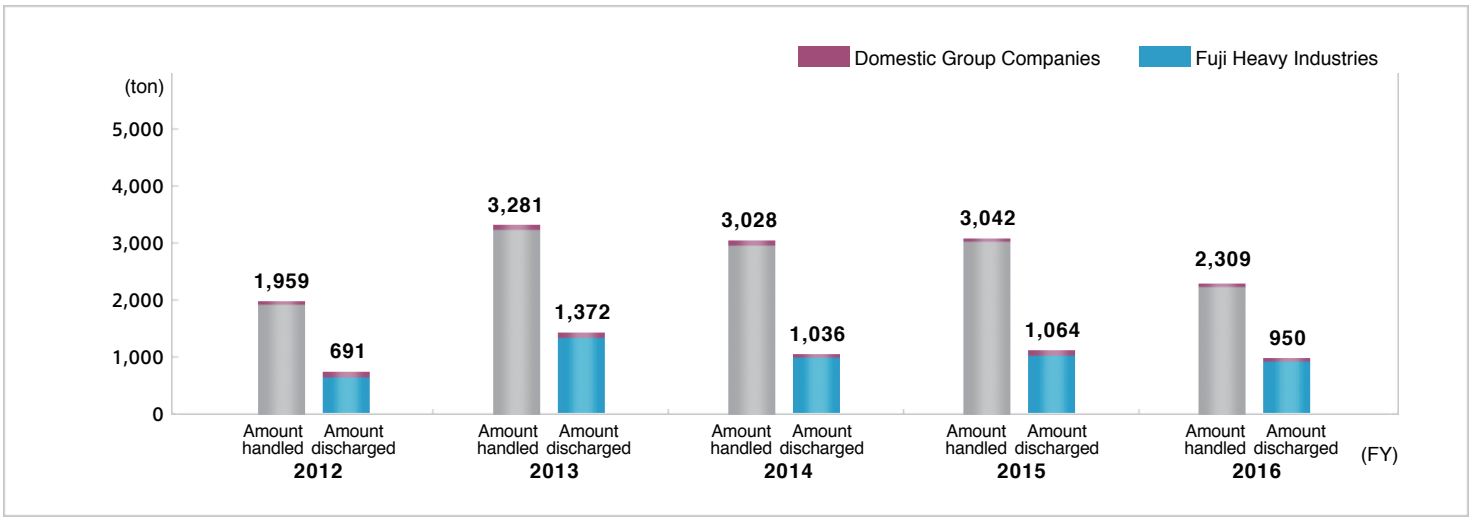


* Includes scrap metal sold

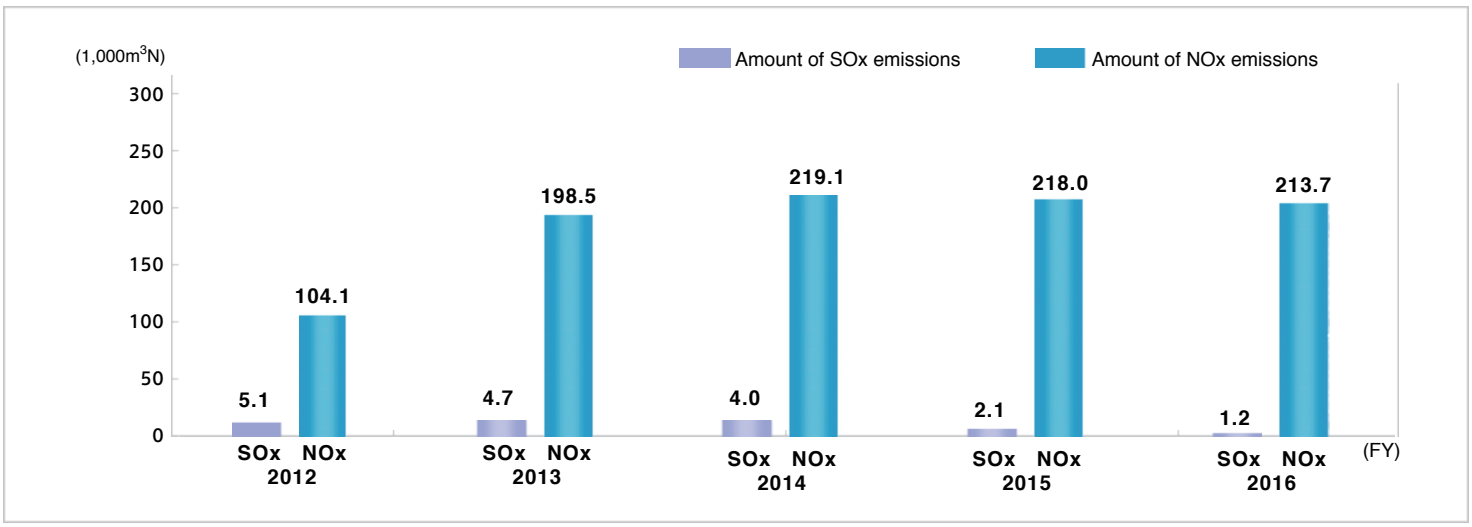
Volume of Water Used [Fuji Heavy Industries + Domestic Group Companies + Overseas Group Companies]



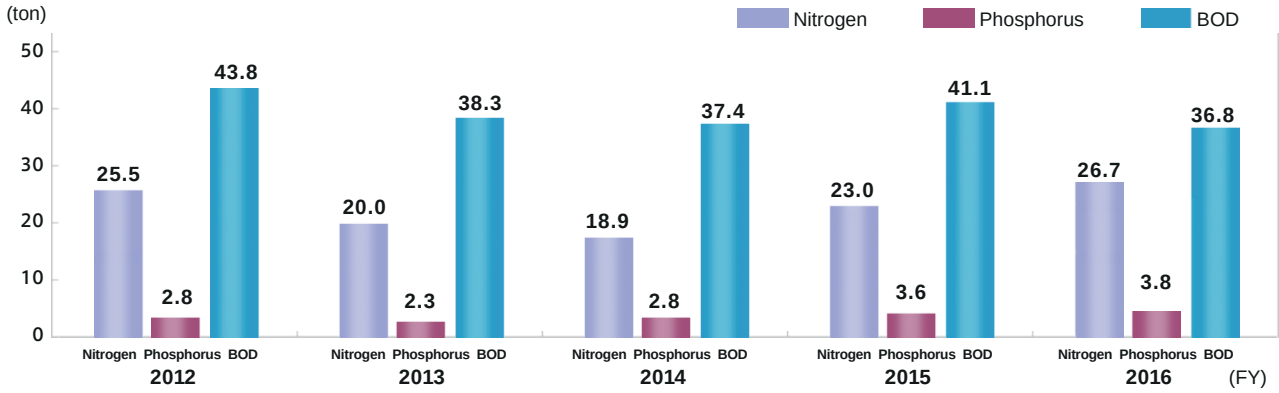
PRTR Chemical Substances Emissions [Fuji Heavy Industries + Domestic Group Companies]



NOx and SOx Emissions [Fuji Heavy Industries]



Nitrogen, Phosphorus, and BOD Emissions [Fuji Heavy Industries]



Environmental Performance by Manufacturing Division and Tokyo office

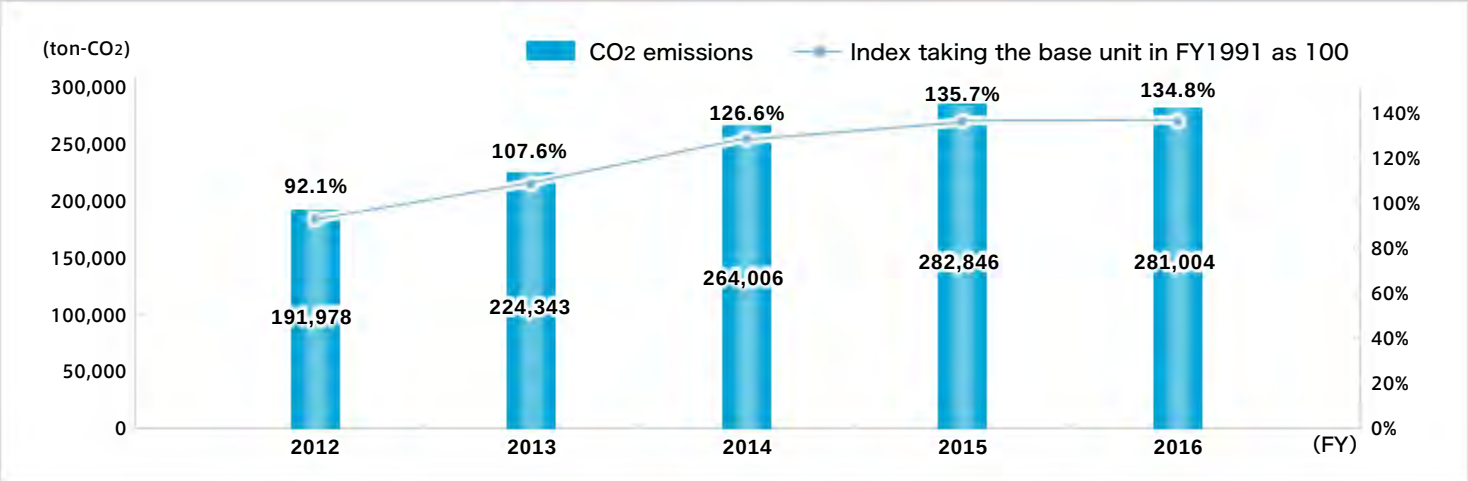
Gunma Manufacturing Division

The Gunma Manufacturing Division that manufactures Subaru cars is actively engaged in various environmental conservation activities so that “Green Subaru” can be delivered from “Green Factories.”

Initiatives for Prevention of Global Warming

CO_2 emissions in FY2016 was 281,004 tons-CO_2.
We will continue efforts in energy conservation and contributions in preventing global warming.

Changes in CO_2 Emissions

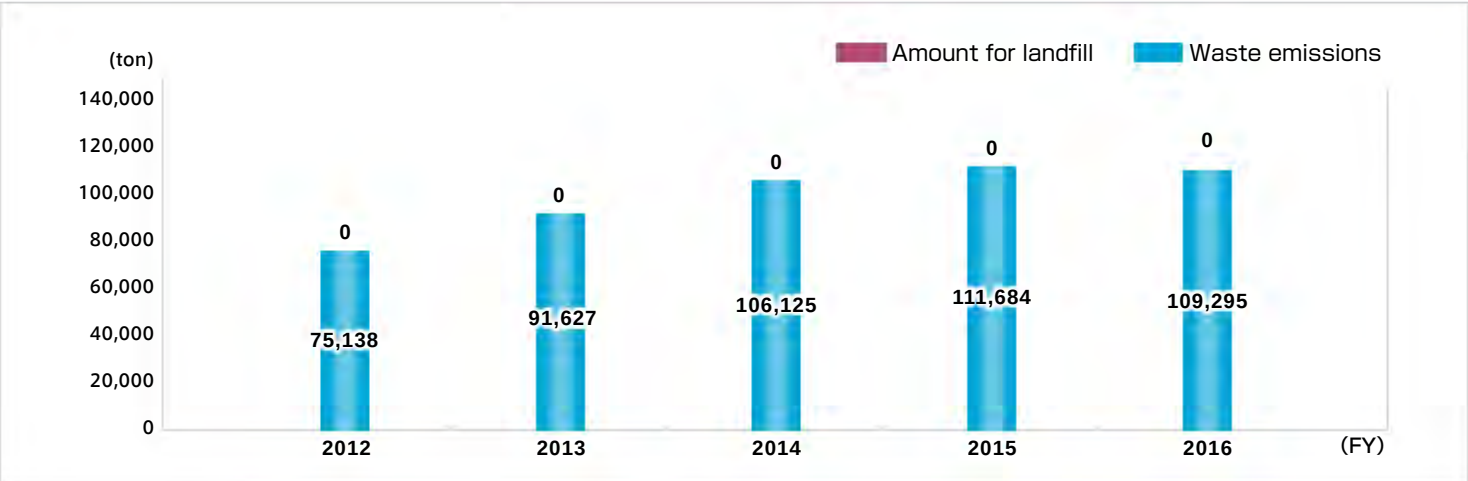


Note: After FY2016, the transitional data for CO_2 emissions is presented in the values calculated and reported based on the Act on Promotion of Global Warming Countermeasures.

Initiatives for Zero Emissions

The amount of waste emissions in FY2016 was 109,295 tons.
The amount for landfill was 0 tons, continuing zero emissions from FY2002.
We will continue to improve recycling and reduce waste emissions.

Changes in Waste Emissions and Amount for Landfill



Note: Subaru definition of zero emissions
Total volume of landfill waste (amount directly sent to landfills + amount sent to landfills after intermediate processing) is less than 0.5% of the total waste volume (industrial waste + industrial waste subject to special control + general waste from business activities) excluding metals

Initiatives for Pollution Prevention

In order to maintain harmony with the local society and the lush natural environment, we promote initiatives such as managing exhaust gas and effluent and reducing environmental risk as well as activities for preventing occurrences of environmental accidents and pollution.

◎Environment-related measurements for FY2016

Voluntary standards for air, water quality, noise, vibrations, etc. are set and are managed to be 20% higher than the legal standards.

◎Water quality measurements

All measurement results were compliant with Water Pollution Prevention Law, Gunma prefectural regulations, and Ota-Oizumi pollution prevention agreements.

Main Plant

[Unit: mg/ℓ except for pH]

Item	Regulated value (Prefectural regulations)	Voluntary standard	Maximum	Minimum	Average
Concentration of hydrogen ion (pH)	5.8～8.6	6.1～8.3	7.6	6.9	7.2
Biochemical oxygen demand (BOD)	25	20	19.4	1.0	9.0
Suspended solids (SS)	50	40	28.5	1.0	5.0
n-hexane extract content (Mineral oil content)	5	4	1.0	0.0	0.8
n-hexane extract content (Animal and plant oils and fats content)	30	24	1.0	0.0	1.0
Fluorine	8	6.4	1.2	0.0	0.7
Zinc	2	1.6	0.5	0.0	0.3
Soluble iron	10	8	0.1	0.0	0.1
Soluble manganese	10	8	0.4	0.0	0.2
Total phosphorus	16(8)	6.4	2.1	0.0	1.1
Total nitrogen	120(60)	48	6.7	0.0	4.9

[Effluent is discharged into public rivers. Values for total phosphorus and total nitrogen are daily averages.]

Yajima Plant

[Unit: mg/ℓ except for pH]

Item	Regulated value (Prefectural regulations)	Voluntary standard	Maximum	Minimum	Average
Concentration of hydrogen ion (pH)	5.8～8.6	6.1～8.3	7.5	7.1	7.2
Biochemical oxygen demand (BOD)	25	20	18.2	2.4	6.8
Suspended solids (SS)	50	40	3.2	1.0	2.1
n-hexane extract content (Mineral oil content)	5	4	2.8	1.0	1.6
n-hexane extract content (Animal and plant oils and fats content)	30	24	1.0	0.1	0.6
Fluorine	8	6.4	1.6	1.4	1.5
Zinc	5	4	0.5	0.1	0.3
Soluble iron	10	8	0.1	0.1	0.1
Soluble manganese	10	8	0.6	0.4	0.5
Total phosphorus	16(8)	6.4	0.9	0.3	0.6
Total nitrogen	120(60)	48	5.2	5.2	5.2

[Effluent is discharged into public rivers. Values for total phosphorus and total nitrogen are daily averages.]

Oizumi Plant

[Unit: mg/ℓ except for pH]

Item	Regulated value (Prefectural regulations)	Voluntary standard	Maximum	Minimum	Average
Concentration of hydrogen ion (pH)	5.8～8.6	6.1～8.3	8.2	7.1	7.4
Biochemical oxygen demand (BOD)	10	8	7.1	1.0	3.1
Suspended solids (SS)	10	8	4.6	1.6	3.9
n-hexane extract content (Mineral oil content)	3	2.4	1.0	0.0	0.8
n-hexane extract content (Animal and plant oils and fats content)	30	24	1.0	1.0	1.0
Fluorine	8	6.4	0.2	0.2	0.2
Zinc	2	1.6	0.3	0.0	0.2
Soluble iron	5	4	0.1	0.1	0.1
Soluble manganese	5	4	0.1	0.1	0.1
Total phosphorus	16(8)	6.4	0.1	0.1	0.1
Total nitrogen	120(60)	48	10.9	9.3	10.1

[Effluent is discharged into public rivers. Values for total phosphorus and total nitrogen are daily averages.]

North Plant

[Unit: mg/ℓ except for pH]

Item	Regulated value (Prefectural regulations)	Voluntary standard	Maximum	Minimum	Average
Concentration of hydrogen ion (pH)	5.8～8.6	6.1～8.3	8.0	7.2	7.7
Biochemical oxygen demand (BOD)	25	20	1.0	0.5	0.9
Suspended solids (SS)	50	40	3.6	1.0	1.8
n-hexane extract content (Mineral oil content)	5	4	1.0	0.1	0.7
n-hexane extract content (Animal and plant oils and fats content)	30	24	1.0	1.0	1.0
Fluorine	8	6.4	0.2	0.2	0.2
Zinc	5	4	0.0	0.0	0.0
Soluble iron	10	8	0.1	0.1	0.1
Soluble manganese	10	8	0.1	0.1	0.1
Total phosphorus	16(8)	6.4	0.1	0.1	0.1
Total nitrogen	120(60)	48	1.6	1.2	1.4

[Effluent is discharged into public rivers. Values for total phosphorus and total nitrogen are daily averages.]

◎ Air measurements

All measurement results were compliant with Air Pollution Control Act.

Main Plant

[Unit: ppm for NOx, and g/Nm³ for particulate matter]

Equipment/facility	Substance	Regulated value	Voluntary standard	Maximum	Average
Paint drying furnace	NOx	230	184	150	68
	Particulate matter	0.2	0.16	0.007	0.002

[Data for primary equipment/facility is presented here.]

Yajima Plant

[Unit: ppm for NOx, and g/Nm³ for particulate matter]

Equipment/facility	Substance	Regulated value	Voluntary standard	Maximum	Average
Paint drying furnace	NOx	230	184	54	31
	Particulate matter	0.2	0.16	0.004	0.002

[Data for primary equipment/facility is presented here.]

Oizumi Plant

[Unit: ppm for NOx, and g/Nm³ for particulate matter]

Equipment/facility	Substance	Regulated value	Voluntary standard	Maximum	Average
Aluminum melting furnace	NOx	180	144	57	32
	Particulate matter	0.2	0.16	0.13	0.023

[Data for primary equipment/facility is presented here.]

◎Noise and vibration measurements

All measurement results were compliant with Noise Regulation Act and Vibration Regulation Act.

Noise

Gunma prefectural regulations, and Ota-Oizumi pollution prevention agreements

[Unit: dB(A)]

Measurement Location	Regulated value (Night)	Voluntary standard	Measurement sites	Measured value
Main Plant	55	54	20	34～52
Yajima Plant	55	54	20	41～53
Oizumi Plant	50	49	13	37～49

Vibration

Gunma prefectural regulations, and Ota-Oizumi pollution prevention agreements

[Unit: dB(A)]

Measurement Location	Regulated value (Night)	Voluntary standard	Measurement sites	Measured value
Main Plant	65	64	20	12.0～39.3
Yajima Plant	65	64	20	16.1～38.2
Oizumi Plant	60	59	13	14.2～38.5

◎VOC measurements for paint equipment, etc.

All measurement results were compliant with Air Pollution Control Act.

VOC

Air Pollution Control Act

[Unit: ppm-C]

Equipment/facility		Regulated value	Maximum	Minimum
Paint booth, etc.	(Main Plant)	700	647	229
	(Yajima Plant)	700	360	74
	(Yajima Plant)	400	251	94

◎Odor measurements

All measurement results were compliant with Offensive Odor Control Act.

Measurement Location	Regulated value	Voluntary standard	Measurement sites	Measured value
Main Plant	21	20	6	Less than 10
Yajima Plant	21	20	6	Less than 10
Oizumi Plant	21	20	6	13 or less

◎ Amount of Chemical Substances Subject to PRTR Handled, Discharged, Etc.

Gunma Manufacturing Division (Main Plant, Yajima Plant, Oizumi Plant, and North Plant)

[Unit: kg/year]

Chemical substance	Amount handled	Atmospheric emissions	Water emissions (Public waters)	Amount moved (Sewage)	Amount moved	Amount consumed	Amount removed through processing	Amount recycled
Water soluble zinc compounds	48,979	0	519	0	0	36,824	0	0
Ethylbenzene	376,182	223,066	0	0	0	4,869	27,589	120,658
Xylene	537,485	340,055	0	0	0	24,370	129,183	43,878
1,2,4-Trimethylbenzene	135,659	453	6	0	0	135,052	0	0
1,3,5-Trimethylbenzene	48,103	32,590	0	0	0	1,635	6,146	7,733
Toluene	502,589	302,420	0	0	0	56,676	121,371	22,123
Naphthalene	6,641	4,851	0	0	0	0	1,790	0
Nickel compounds	10,443	0	470	0	7,885	2,089	0	0
Bis (2-ethylhexyl) phthalate	7,899	0	0	0	159	7,741	0	0
Hydrogen fluoride and its water-soluble salts	6,610	0	1,476	0	4,965	169	0	0
N-hexane	92,343	313	0	0	0	92,030	0	0
Benzene	21,839	71	0	0	0	21,768	0	0
Formaldehyde	21,590	10,579	0	0	2,591	0	5,829	2,591
2-ethoxyethyl acetate (also known as ethylene glycol monoethyl ether acetate)	1,192	63	2	0	3	660	461	3
Manganese and compounds	25,092	0	651	0	11,477	12,963	0	0
Dioxins	0	0	0	0	0	0	0	0
Total	**1,842,646**	**914,460**	**3,124**	**0**	**27,078**	**396,845**	**292,369**	**196,985**
			917,584					

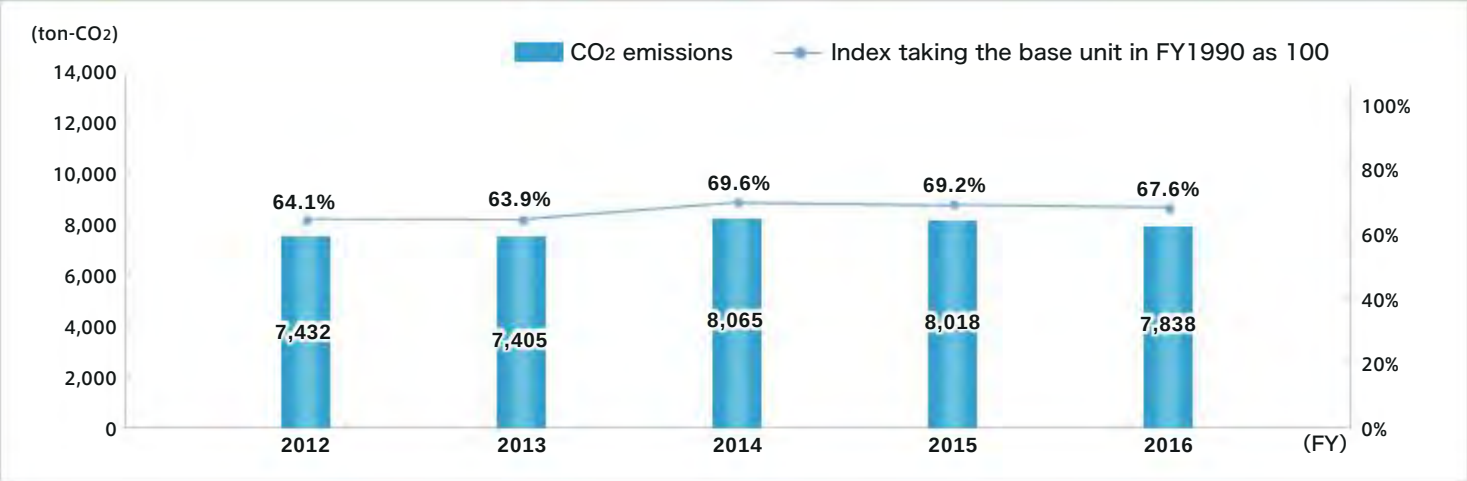
Saitama Manufacturing Division

The industrial equipment company continues to promote creating an environmental management system, including the supply chain, and reducing environmentally hazardous substances.
Creating an EMS based on certification (ISO14001, Eco Action 21, etc.) from external organizations continues toward a 100% compliant system, with 133 suppliers, including new transaction partners, becoming certified.
Efforts continue to perform various surveys and reduce environmentally hazardous substances in order to comply with various regulations such as EU directives.

Initiatives for Prevention of Global Warming

CO_2 emissions in FY2016 was 7,838 tons-CO_2.
We will continue efforts in energy conservation and contributions in preventing global warming.

◎ Changes in CO_2 Emissions

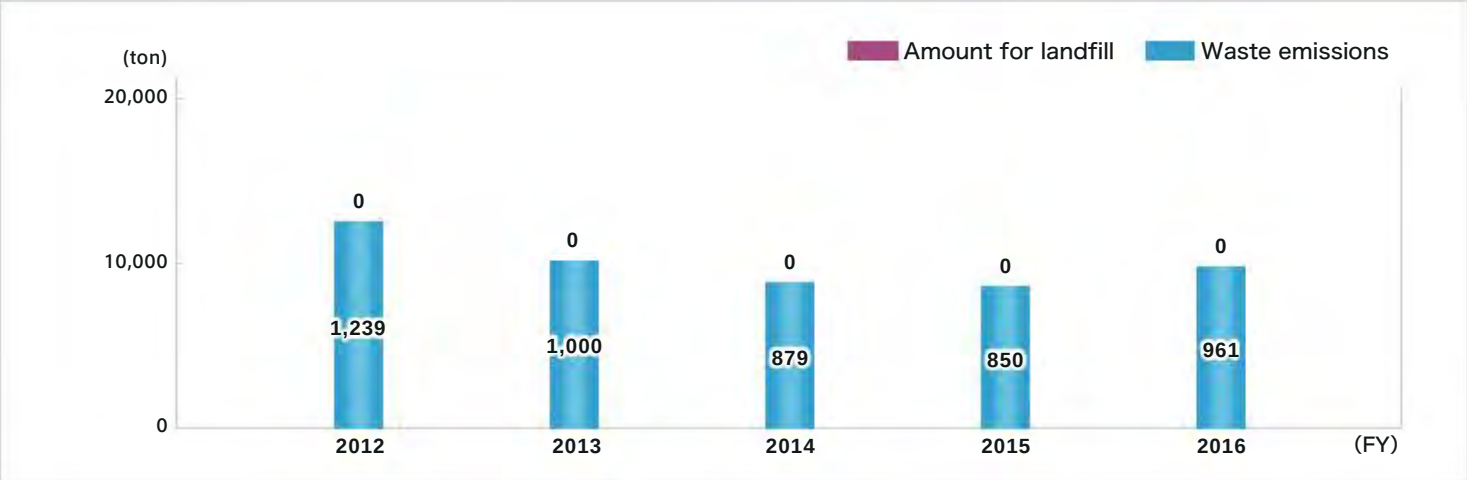


Note: After FY2016, the transitional data for CO_2 emissions is presented in the values calculated and reported based on the Act on Promotion of Global Warming Countermeasures.

Initiatives for Zero Emissions

The amount of waste emissions in FY2016 was 961 tons.
The amount for landfill was 0 tons, continuing zero emissions from FY2003.
We will continue to improve recycling and reduce waste emissions.

◎ Changes in Waste Emissions and Amount for Landfill



Note: Subaru definition of zero emissions
Total volume of landfill waste (amount directly sent to landfills + amount sent to landfills after intermediate processing) is less than 0.5% of the total waste volume (industrial waste + industrial waste subject to special control + general waste from business activities) excluding metals.

Initiatives for Pollution Prevention

In order to maintain harmony with the local society and the lush natural environment, we promote initiatives such as managing exhaust gas and effluent and reducing environmental risk as well as activities for preventing occurrences of environmental accidents and pollution.

◎Environment-related measurements for FY2016

A voluntary standard for water quality is set and is managed to be 20% higher than the legal standards.

◎Water quality measurements

All measurement results were compliant with Sewage Law and Kitamoto City sewer regulations.

[Unit: mg/ℓ except for pH]

Item	Regulated value	Voluntary standard	Maximum	Minimum	Average
Concentration of hydrogen ion (pH)	5～9	5.4～8.6	8.5	7.3	7.7
Biochemical oxygen demand (BOD)	600	480	310	100	190
Suspended solids (SS)	600	480	230	45	143
n-hexane extract content (Animal and plant oils and fats content)	30	24	17.0	4.1	10.2

[Effluent is discharged into public sewers.]

◎Noise measurements

There was one (night) case that exceeded the standards for Noise Regulation Act and Saitama prefecture living environment conservation regulations.
Equipment/facility control was reviewed as a measure for prevention.

[Unit: dB(A)]

Item	Time of day	Regulated value	Measurement sites	Measured value
Noise	Noon	55	6	47.3～50.4
	Morning and evening	50	6	40.2～49.0
	Night	45	6	31.5～52.6

◎Amount of Chemical Substances Subject to PRTR Handled, Discharged, etc.

[Unit: kg/year]

Chemical substance	Amount handled	Atmospheric emissions	Water emissions (Public waters)	Amount moved (Sewage)	Amount moved	Amount consumed	Amount removed through processing	Amount recycled
Ethylbenzene	1,155.5	8.5	0	0	0	1,147.0	0	0
Xylene	4,885.4	33.7	0	0	0	4,851.7	0	0
N, N-dicyclohexylamine	209.6	0	0	0	209.6	209.6	0	0
1,2,4-Trimethylbenzene	2,539.8	8.2	0	0	0	2,531.6	0	0
Toluene	8,338.2	87.9	0	0	0	8,250.3	0	0
N-hexane	3,225.2	10.2	0	0	0	3,215.0	0	0
Benzene	545.0	24.9	0	0	0	520.1	0	0
Total	**20,898.7**	**173.4**	**0**	**0**	**209.6**	**20,725.3**	**0**	**0**
			173.4					

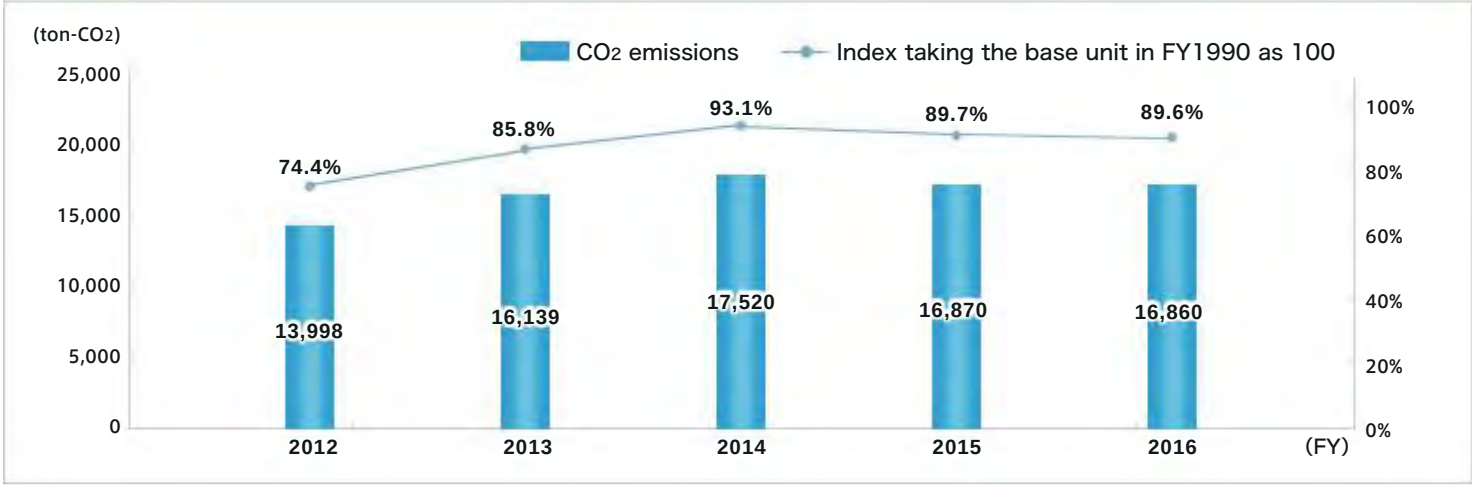
Tokyo Office

As a manufacturer of transportation equipment including automobiles, we recognize that “the response to global environmental problems is an important issue in management” and continue our environment conservation efforts.

Initiatives for Prevention of Global Warming

CO_2 emissions in FY2016 was 16,860 tons-CO_2.
We will continue efforts in energy conservation and contributions in preventing global warming.

◎ Changes in CO_2 Emissions

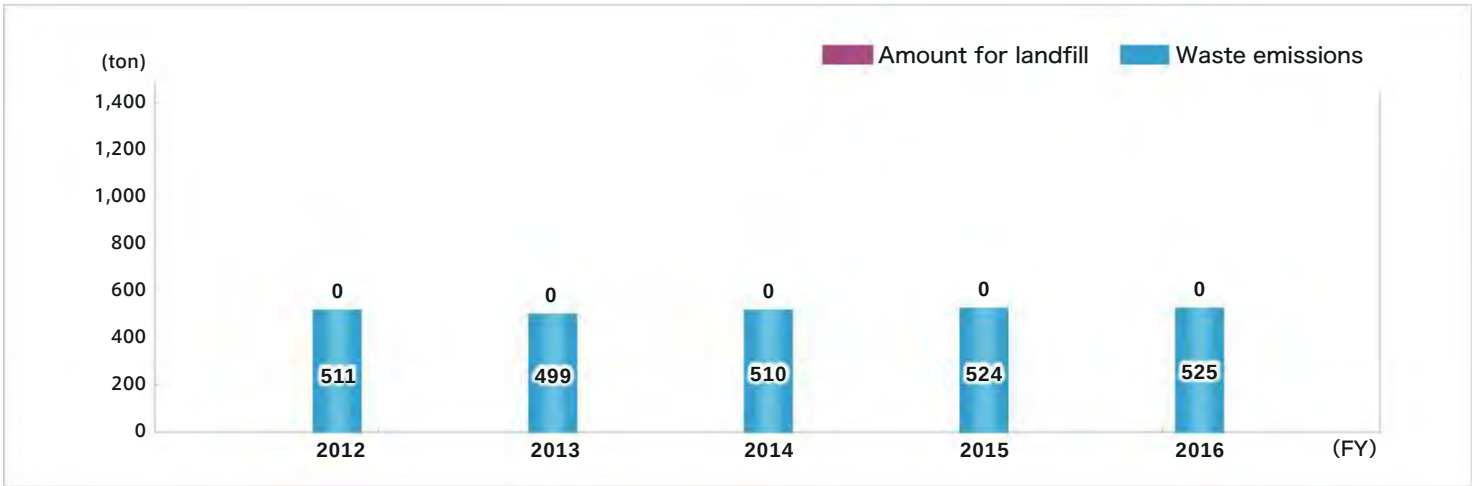


Note: After FY2016, the transitional data for CO_2 emissions is presented in the values calculated and reported based on the Act on Promotion of Global Warming Countermeasures.

Initiatives for Zero Emissions

The amount of waste emissions in FY2016 was 525 tons.
The amount for landfill was 0 tons, continuing zero emissions from FY2005.
We will continue to improve recycling and reduce waste emissions.

◎ Changes in Waste Emissions and Amount for Landfill



Note: Subaru definition of zero Emissions
Total volume of landfill waste (amount directly sent to landfills + amount sent to landfill after intermediate processing) is less than 0.5% of the total waste volume (industrial waste + industrial waste subject to special control + general waste from business activities) excluding metals

Initiatives for Pollution Prevention

In order to maintain harmony with the local society and the lush natural environment, we promote initiatives such as managing exhaust gas and effluent and reducing environmental risk as well as activities for preventing occurrences of environmental accidents and pollution.
We will continue our efforts for a target of zero that includes exceeding standards.

◎Environment-related measurements for FY2016

A voluntary standard for water quality is set and is managed to be 20% higher than the legal standards.

◎Water quality measurements

All measurement results were compliant with Water Pollution Prevention Law and Mitaka City sewer regulations.

[Unit: mg/ℓ except for pH]

Item	Regulated value	Voluntary standard	Maximum	Minimum	Average
Concentration of hydrogen ion (pH)	5.7～8.7	5.9～8.4	8.4	7.6	8.2
Biochemical oxygen demand (BOD)	300	240	210	72	125
Suspended solids (SS)	300	240	230	25	94
n-hexane extract content (Mineral oil content)	5	4	Less than 4	Less than 4	Less than 4
n-hexane extract content (Animal and plant oils and fats content)	30	24	20	Less than 4	6
Total phosphorus	16	12.8	10.0	2.6	5.9
Total nitrogen	120	96	96	21	37
Soluble manganese	10	8	0.02	0.01	0.01
Cyanide	1	0.8	Less than 0.01	Less than 0.01	Less than 0.01

[Effluent is discharged into public sewers.]

◎Amount of Chemical Substances Subject to PRTR Handled, Discharged, Etc.

[Unit: kg/year]

Chemical substance	Amount handled	Atmospheric emissions	Water emissions (Public waters)	Amount moved (Sewage)	Amount moved	Amount consumed	Amount removed through processing	Amount recycled
Ethylbenzene	16,085	0.19	0	0	0	16,085	0	0
Ethylene glycol	911	0.00	0	0	0	911	0	0
Xylene	68,019	0.72	0	0	0	68,018	0	0
1,3,5-Trimethylbenzene	12,817	0.03	0	0	0	12,817	0	0
Toluene	210,075	7.71	0	0	0	210,067	0	0
1,2,4-Trimethylbenzene	44,381	0.18	0	0	0	44,381	0	0
Benzene	6,798	0.88	0	0	0	6,797	0	0
N-hexane	24,967	5.61	0	0	0	24,961	0	0
Total	**384,052**	**15**	**0**	**0**	**0**	**384,037**	**0**	**0**
			15					

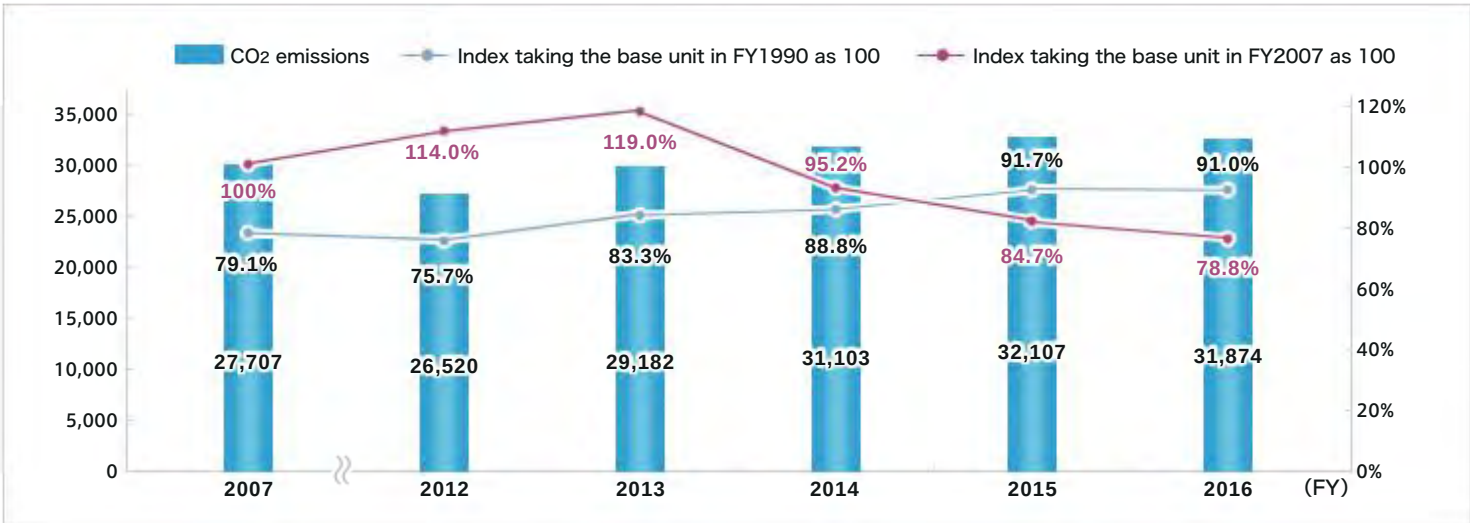
Utsunomiya Manufacturing Division

We will strive to work toward environmental issues such as global warming prevention efforts, in order to fulfill our social responsibilities as corporate citizens developing/manufacturing aircrafts, etc..

Initiatives for Prevention of Global Warming

In FY2016, energy conservation activities were promoted by managing energy use at each work site, which led to reduction in total CO_2 emissions.
Unnecessary energy use was reduced by implementing an energy conservation patrol at all factories and work sites.
For equipment/facility improvements, a switch to LED lighting and updating to energy saving air conditioners are still ongoing.
The CO_2 total emissions base unit was a 21% reduction from FY2007 levels.
We will continue further efforts in energy conservation and contributions in preventing global warming.

Changes in CO_2 Emissions

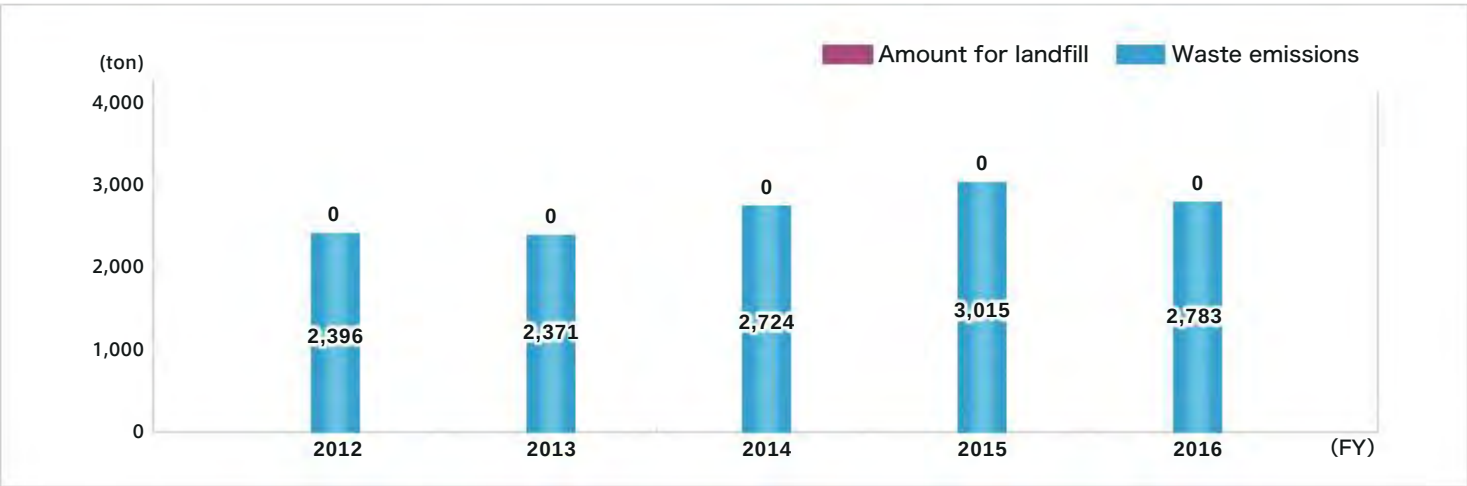


Note: After FY2016, the transitional data for CO_2 emissions is presented in the values calculated and reported based on the Act on Promotion of Global Warming Countermeasures.
Note: Definition of the base unit index
Base Unit: CO_2 emissions per production value (tons-CO_2/hundred million yen)
Base Unit Index: Index taking the base unit in FY2007 as 100

Initiatives for Zero Emissions

The amount of waste emissions in FY2016 was 2,783 tons.
The amount for landfill was 0 tons, continuing zero emissions from FY2003.
We will continue to improve recycling and strive to reduce waste emissions.

Changes in Waste Emissions and Amount for Landfill



Note: Subaru definition of zero emissions
Total volume of landfill waste (amount directly sent to landfills + amount sent to landfills after intermediate processing) is less than 0.5% of the total waste volume (industrial waste + industrial waste subject to special control + general waste from business activities) excluding metals

Initiatives for Pollution Prevention

In order to maintain harmony with the local society and the lush natural environment, we promote initiatives such as managing exhaust gas and effluent and reducing environmental risk as well as activities for preventing occurrences of environmental accidents and pollution.
Ground operation of helicopters at the South Plant have been moved to the apron as far away as possible from the site boundaries in consideration of reducing noise to the neighboring houses.
There have been no environmental accidents or environmental complaints on or off-site since 2010 due to implementation of the above initiatives.
We will continue our efforts to reach our voluntary standards and to keep environmental accidents and complaints on and off-site to zero.

◎Environment-related measurements for FY2016

All measurement results were compliant with Water Pollution Prevention Law, Utsunomiya City sewer regulations that are applied to each area and Handa environmental protection agreements, and have cleared our voluntary standards* that are 20% higher.

* We have set our voluntary standards for all measurements (air, water quality, noise and vibrations) to be 20% higher than the legal standards.

◎Water Quality Measurements

All measurement results were compliant with Water Pollution Prevention Law and Sewage Law, and have met our voluntary standards that are 20% higher.

Main Plant

[Effluent discharged into public sewers]

[Unit: mg/ℓ except for pH]

Item	Regulated value	Voluntary standard	Maximum	Minimum	Average
Concentration of hydrogen ion (pH)	5～9	5.4～8.6	7.7	6.8	7.3
Suspended solids (SS)	600	480	387	Less than 1.0	44.0
Biochemical oxygen demand (BOD)	600	480	389	Less than 0.5	55.0
N-hexane extract content (Mineral oil content)	5	4	Less than 1.0	Less than 1.0	Less than 1.0
N-hexane extract content (Animal and plant oils and fats content)	30	24	16.0	1.3	5.2
Fluorine compounds	8	6.4	1.6	Less than 0.2	0.3
Cyanide	1	0.8	Less than 0.1	Less than 0.1	Less than 0.1
Cadmium	0.1	0.08	0.021	Less than 0.005	0.003
Total chromium	2	1.6	0.19	Less than 0.01	0.03
Hexavalent chromium	0.1	0.08	0.02	Less than 0.02	0.02

[Effluent discharged into public rivers]

[Unit: mg/ℓ except for pH]

Item	Regulated value	Voluntary standard	Maximum	Minimum	Average
Concentration of hydrogen ion (pH)	5.8～8.6	6.0～8.3	7.9	7.0	7.6
Suspended solids (SS)	50	40	1.2	Less than 1.0	1.1
Biochemical oxygen demand (BOD)	30	24	4.4	Less than 0.5	1.3
N-hexane extract content (Mineral oil content)	5	4	Less than 1.0	Less than 1.0	Less than 1.0
N-hexane extract content (Animal and plant oils and fats content)	30	24	Less than 1.0	Less than 1.0	Less than 1.0
Cyanide	1	0.8	Less than 0.1	Less than 0.1	Less than 0.1
Cadmium	0.1	0.08	Less than 0.005	Less than 0.005	Less than 0.005
Total chromium	2	1.6	Less than 0.01	Less than 0.01	Less than 0.01
Hexavalent chromium	0.5	0.4	Less than 0.02	Less than 0.02	Less than 0.02

South Plant

[Effluent discharged into public sewers]

[Unit: mg/ℓ except for pH]

Item	Regulated value	Voluntary standard	Maximum	Minimum	Average
Concentration of hydrogen ion (pH)	5～9	5.4～8.6	8.3	6.8	7.4
Suspended solids (SS)	600	480	253	4.4	63.9
Biochemical oxygen demand (BOD)	600	480	215	3.8	86.6
N-hexane extract content (Mineral oil content)	5	4	Less than 1.0	Less than 1.0	Less than 1.0
N-hexane extract content (Animal and plant oils and fats content)	30	24	9.5	Less than 1.0	2.8
Cyanide	1	0.8	Less than 0.1	Less than 0.1	Less than 0.1
Cadmium	0.1	0.08	Less than 0.005	Less than 0.005	Less than 0.005
Total chromium	2	1.6	0.03	Less than 0.01	0.02
Hexavalent chromium	0.1	0.08	Less than 0.02	Less than 0.02	Less than 0.02

[Effluent discharged into public rivers]

[Unit: mg/ℓ except for pH]

Item	Regulated value	Voluntary standard	Maximum	Minimum	Average
Concentration of hydrogen ion (pH)	5.8～8.6	6.0～8.3	7.9	7	7.3
Suspended solids (SS)	50	40	3.6	Less than 1.0	2.5
Biochemical oxygen demand (BOD)	30	24	11.5	Less than 0.5	2.2
N-hexane extract content (Animal and plant oils and fats content)	5	4	Less than 1.0	Less than 1.0	Less than 1.0
Cyanide	1	0.8	Less than 0.1	Less than 0.1	Less than 0.1
Cadmium	0.1	0.08	Less than 0.005	Less than 0.005	Less than 0.005
Total chromium	2	1.6	Less than 0.01	Less than 0.01	Less than 0.01
Hexavalent chromium	0.5	0.4	Less than 0.02	Less than 0.02	Less than 0.02

2nd South Plant

[Effluent discharged into public sewers]

[Unit: mg/ℓ except for pH]

Item	Regulated value	Voluntary standard	Maximum	Minimum	Average
Concentration of hydrogen ion (pH)	5～9	5.4～8.6	7.9	6.8	7.4
Suspended solids (SS)	600	480	298	1.6	55.6
Biochemical oxygen demand (BOD)	600	480	250	1.1	57.7
N-hexane extract content (Mineral oil content)	5	4	Less than 1.0	Less than 1.0	Less than 1.0
N-hexane extract content (Animal and plant oils and fats content)	30	24	11.6	Less than 1.0	1.9
Fluorine compounds	8	6.4	1.2	Less than 0.2	0.3
Cyanide	1	0.8	Less than 0.1	Less than 0.1	Less than 0.1
Cadmium	0.1	0.08	Less than 0.005	Less than 0.005	Less than 0.005
Total chromium	2	1.6	0.76	Less than 0.01	0.05
Hexavalent chromium	0.1	0.08	Less than 0.02	Less than 0.02	Less than 0.02

[Effluent discharged into public rivers]

[Unit: mg/ℓ except for pH]

Item	Regulated value	Voluntary standard	Maximum	Minimum	Average
Concentration of hydrogen ion (pH)	5.8～8.6	6.0～8.3	7.4	6.8	7.1
Suspended solids (SS)	50	40	3.2	Less than 1.0	2.1
Biochemical oxygen demand (BOD)	30	24	0.9	Less than 0.5	1.7
N-hexane extract content (Mineral oil content)	5	4	Less than 1.0	Less than 1.0	Less than 1.0
Cyanide	1	0.8	Less than 0.1	Less than 0.1	Less than 0.1
Cadmium	0.1	0.08	Less than 0.005	Less than 0.005	Less than 0.005
Total chromium	2	1.6	Less than 0.01	Less than 0.01	Less than 0.01
Hexavalent chromium	0.5	0.4	Less than 0.02	Less than 0.02	Less than 0.02

Handa Plant

[Unit: mg/ℓ except for pH]

Item	Regulated value	Voluntary standard	Maximum	Minimum	Average
Concentration of hydrogen ion (pH)	6～8	6.2～7.8	7.8	7.0	7.6
Suspended solids (SS)	25	20	8.0	Less than 1.0	2.1
Biochemical oxygen demand (BOD)	25	20	7.7	0.7	2.7
Chemical oxygen demand (COD)	25	20	20.0	0.8	5.1
N-hexane extract content (Mineral oil content)	5	4	Less than 0.5	Less than 0.5	Less than 0.5
Cyanide	1	0.8	Less than 0.1	Less than 0.1	Less than 0.1
Cadmium	0.1	0.08	Less than 0.005	Less than 0.005	Less than 0.005
Total chromium	2	1.6	Less than 0.04	Less than 0.04	Less than 0.04
Hexavalent chromium	0.5	0.4	Less than 0.04	Less than 0.04	Less than 0.04

Handa West Plant

[Unit: mg/ℓ except for pH]

Item	Regulated value	Voluntary standard	Maximum	Minimum	Average
Concentration of hydrogen ion (pH)	6～8	6.2～7.8	7.8	7.3	7.5
Suspended solids (SS)	15	12	10.0	2.0	4.1
Biochemical oxygen demand (BOD)	15	12	9.4	2.9	5.5
Chemical oxygen demand (COD)	15	12	9.7	3.6	7.2
N-hexane extract content (Mineral oil content)	2	1.6	Less than 0.5	Less than 0.5	Less than 0.5
Cyanide	0.5	0.4	Less than 0.1	Less than 0.1	Less than 0.1
Cadmium	0.05	0.04	Less than 0.005	Less than 0.005	Less than 0.005
Total chromium	0.2	0.16	Less than 0.04	Less than 0.04	Less than 0.04
Hexavalent chromium	0.3	0.24	Less than 0.04	Less than 0.04	Less than 0.04

◎ Air measurements

All measurement results were compliant with Air Pollution Control Act and have met our voluntary standards that are 20% higher.

Main Plant

[Unit: ppm for NOx, and g/Nm³ for particulate matter]

Equipment/facility	Substance	Regulated value	Voluntary standard	Maximum	Average
Cogeneration	NOx	600	480	165	122
Drying furnace	NOx	230	184	Less than 100	Less than 100
	Particulate matter	0.2	0.16	Less than 0.001	Less than 0.001

Among the 9 regulation specified equipment/facilities, cogeneration and drying furnace data are shown above.
Measured values for the other specified equipment/facilities not presented here have also met the voluntary standards.

South Plant and 2nd South Plant

No equipment/facility to be regulated.

Handa Plant

Regulated by Air Pollution Control Act.

[Unit: ppm for NOx, and g/Nm³ for particulate matter]

Equipment/facility	Substance	Regulated value	Voluntary standard	Maximum	Average
2 ton boiler	SOx	1.5	1.2	0.008	Less than 0.002
	NOx	180	144	37	21
	Particulate matter	0.1	0.08	Less than 0.002	Less than 0.002

Among the 6 regulation specified equipment/facility, boiler data is shown above. Measured values for the other specified facilities not presented here have also met the voluntary standards.

Handa West Plant

Regulated by the Air Pollution Control Act

[Unit: ppm for NOx, and g/Nm³ for particulate matter]

Equipment/facility	Substance	Regulated value	Voluntary standard	Maximum	Average
2 ton boiler	SOx	1.5	1.2	Less than 0.002	Less than 0.002
	NOx	180	144	31	21
	Particulate matter	0.1	0.08	Less than 0.002	Less than 0.002

Among the 5 regulation specified equipment/facility, boiler data is shown above. Measured values for the other specified facilities not presented here have also met the voluntary standards.

◎Noise and vibration measurements

All measurement results are compliant with Noise Regulation Act and Vibration Regulation Act and have met our voluntary standards.

Noise: Noise Regulation Act

[Unit: dB(A)]

Measurement Location	Regulated value (Night)	Voluntary standard	Number of measurements	Maximum
Main Plant	60	58	8	57
South Plant	50	48	3	33
2nd South Plant	50	48	3	43
Handa Plant	65	63	3	61
Handa West Plant	65	63	6	62

Vibration: Vibration Regulation Act

[Unit: dB(Z)]

Measurement Location	Regulated value (Night)	Voluntary standard	Number of measurements	Maximum
Main Plant	65	63	8	32
South Plant	60	58	2	Less than 30
2nd South Plant	60	58	3	Less than 30
Handa Plant	70	68	3	Less than 30
Handa West Plant	70	68	5	Less than 30

◎Amount of Chemical Substances Subject to PRTR Handled, Discharged, Etc.

Aerospace Company

[Unit: kg/year; for dioxins only: mg-TEQ/year]

Chemical substance	Amount handled	Atmospheric emissions	Water emissions (Public waters)	Amount moved (Sewage)	Amount moved	Amount consumed	Removed Amount processed	Recycled Volume
Bisphenol-A	1,367	0	0	0	1,243	124	0	0
Xylene	9,041	5,723	0	0	1,926	1,392	0	0
Hexavalent chromium compounds	2,375	0	0	0	1,674	218	483	0
Toluene	24,539	19,027	0	0	5,477	35	0	0
Manganese and its compounds	1,170	0	0	0	468	702	0	0
1,3-dioxolane	7,840	6,115	0	0	1,725	0	0	0
Total	**46,332**	**30,865**	**0**	**0**	**12,513**	**2,471**	**483**	**0**

Signing of the Environmental Protection Agreement with Handa City

We previously had a pollution prevention agreement focusing on conventional pollution prevention with Handa City. On February 22, 2011, based on a request by the city, we signed an environmental protection agreement that expanded our activities to focus further on the environment such as energy conservation and waste.