

Development of Environmentally Friendly Vehicles

The FORESTER was partially revamped in October 2010 in pursuit for the best balance of environment, drivability and roominess as a SUV by mounting a new generation boxer engine on its 2.0-liter NA model^{*1} for enhanced environmental performance, advancing the chassis performance for better control stability and riding comfort, and upgrading the quality feel of both exterior and interior.

^{*1} NA model: Model with a naturally aspirated engine (non-turbo engine)

Improving Fuel Economy

Thought toward Improving Fuel Economy

Automobiles emit carbon dioxide (CO₂) proportional to the amount of fuel consumed. By improving fuel economy, CO₂ will be reduced resulting in the better conservation of limited energy resources and the prevention of global warming.

SUBARU, while utilizing the advantages of Symmetrical AWD and high power engines, has been working to improve fuel economy by developing technologies that make engines more fuel efficient, reduce transfer loss in the drivetrain and reduce vehicle weight and running resistance, and we are in the process of introducing vehicles which meet the Japanese FY2010 Fuel Economy Standards well over the target for gasoline vehicles.

Target of Improving Fuel Economy

Expand the scope of vehicles which meet the FY2010 Fuel Economy Standards plus 15%

Current Status in Meeting FY2010 Fuel Economy Standards

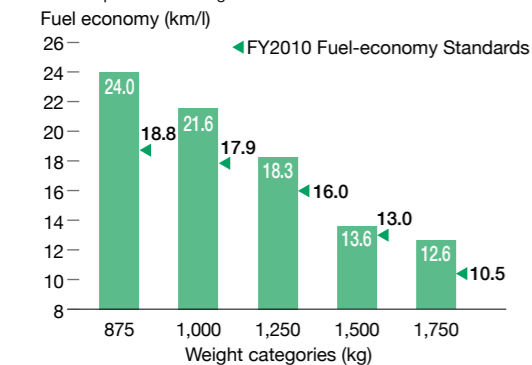
Gasoline-powered passenger cars meeting the FY2010 Fuel Economy Standards accounted for 92% of the total production, clearing the FY2010 Fuel Economy Standards in all the weight categories.

Gasoline-powered mini trucks met the Standards in all weight categories in FY2001. All models met the Standards in FY2002 and thereafter.

The number of automobiles which meet the FY2010 Fuel Economy Standard for Eco-car Tax Break System has accounted for 71.5% of the total, an increase of 11.7 points compared with FY2008.

We are going to promote eco-friendly cars.

■ Status of SUBARU's Compliance with the FY2010 Fuel Economy Standards for Gasoline-powered Passenger Cars



Improving the Engine

A new-generation boxer engine was mounted on the FORESTER launched in October 2010. This new generation boxer engine was wholly revamped for the first time in 21 years. Its structure was thoroughly re-examined before platform parameters were optimized. A longer bore stroke and more compact combustion chamber contributed to higher overall performance.

As a result, we succeeded in boosting environmental and driving performance. For example, fuel efficiency improved by about 10% and acceleration is smoother over the entire range due to increased torque at the important mid-low speed zone. The FORESTER balances environmental and driving performance at a high level. There are two types of 4-cylinder engines available: 2,000cc and 2,500cc in displacement and they will be gradually introduced to other model series as the main power source in years to come.

Major Features of the New-generation SUBARU Boxer engine

- The bore and stroke, the basic structure of this engine, have been reviewed to achieve a compact combustion chamber as well as a long stroke, which was difficult previously due to chassis mounting conditions in boxer gasoline engines. This allows high combustion efficiency, and generates a sufficient mid-low speed torque with improved fuel efficiency and practicality.
- Improved fuel efficiency has been achieved through optimization of intake port configuration and the addition of partitions inside ports, the use of TGV (Tumble Generated Valve), and the use of an EGR (Exhaust Gas Recirculation) cooler.
- AVCS (Active Valve Control System) is used on both intake and exhaust valves. For the intake side in particular, an intermediate lock system allows valve timing to be advanced or delayed for precise control over intake and exhaust valve timing, allowing maximum engine performance in output, fuel efficiency, and exhaust emission.
- The use of lightweight primary moving parts, such as pistons and connecting rods, and a highly efficient and compact oil pump provides an approximately 30% reduction in friction loss and improves fuel efficiency and revolution response.
- Cooling has been optimized by using separate engine cooling circuitry for the block and the head, resulting in improvements in fuel efficiency and output characteristics.



The new-generation SUBARU Boxer engine

Major Changes^{*2} and Results

Items	Output	Efficiency	Exhaust emissions
Longer stroke	○	○	○
Compact combustion chamber	○	○	○
Lighter parts in moving parts	○	○	
Cooled EGR system		○	
Intake/Exhaust AVCS	○	○	○
TGV		○	○
Highly efficient oil pump	○	○	

^{*2} Items changed for domestic vehicles.

Enhancing Practical Fuel Economy

We are also working hard to improve fuel economy under practical use by customers. For instance, in order to have both pleasant drive and interior environment, the characteristics of the engine and transmission were improved and the engine load was lessened through optimal control of the air conditioner for fuel saving.

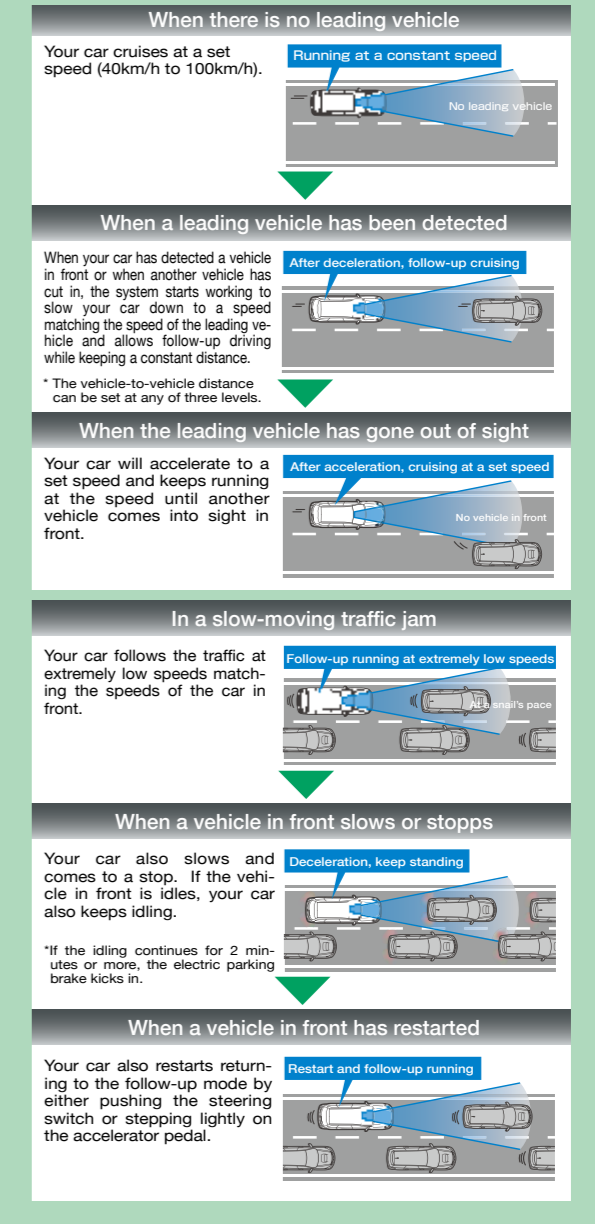
The NEW LEGACY adopted the Full Speed Range Adaptive Cruise Control that allows both pleasant driving assist and low fuel consumption as one of the functions of the advanced preventative safety system, EyeSight (ver.2).

This system realized improved fuel consumption through reducing engine loads by moderating follow-up controls in response to abrupt acceleration and deceleration by the vehicle in front.

We will keep working to better practical fuel economy, taking due care of the environment.

Stop Image of the Full Speed Range Adaptive Cruise Control

The Full Speed Range Adaptive Cruise Control is a drive assist system to properly control vehicle speed and the distance to a leading vehicle ahead for more comfortable drives on expressways and freeways.



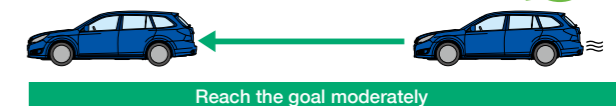
Stop Image of the EyeSight (ver.2) cruise control and SI Drive system

As compared with the Sport (S) and Sport Sharp (S#) modes, the Intelligent (I) mode controls driving conditions to moderate the process of reaching the a target vehicle-to-vehicle distance for improvement of practical fuel consumption.

- Sport, Sport Sharp Mode



- Intelligent Mode



Approaches to Assisting Eco-drive

Communication among Driver, Car and Environment

SUBARU is also positively engaged in developing eco-drive assist devices as an interface to promote communication between a driver and his or her car. We are popularizing Eco driving assist equipment, the Eco Gauge and Shift-up Indicator (for MT-equipped vehicles) first released on the Legacy marketed in 2006. The New LEGACY, released in 2008, also has the Eco Gauge (for all models) and Shift up Shift-up Indicator (except North American models).

The FORESTER, which has a new engine, also has the Eco Gauge (also available on some other models). The further improvements are planned for Eco driving assist equipments.

Eco Gauge

The Eco Gauge needle indicates fuel efficient driving. Drivers can expect to improve fuel economy by about 5% (in-house testing) by consciously controlling the accelerator to keep the needle in the “+” direction.



Eco Gauge for FORESTER

Shift-up Indicator

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



Shift-up Indicator for LEGACY

Low Exhaust Emissions

Basic Concept of Low Exhaust Emissions

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

Target of Low Exhaust Emissions

With further technical developments, we are working to expand low emission models which outperform the FY2005 emission standards by 75% reduction.

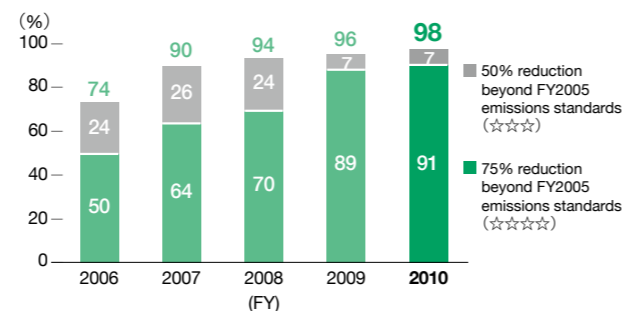
Advancing the Dissemination of Low Emission Vehicles

All models which have the SUBARU NA engine^{*1} are certified as low-emission vehicles which meet the FY2005 Standards by the Ministry of Land, Infrastructure, Transport and Tourism with at least 75% meeting the Standards (☆☆☆☆), while 91% of these production models achieved the Standards with at least 75% reduction (☆☆☆☆). Thus, low emission certified vehicles totaled 98% of our entire non-mini production.

SUBARU will keep advancing for the dissemination of low emission vehicles.

*1 NA engine: Natural intake engine (Non-turbo engine)

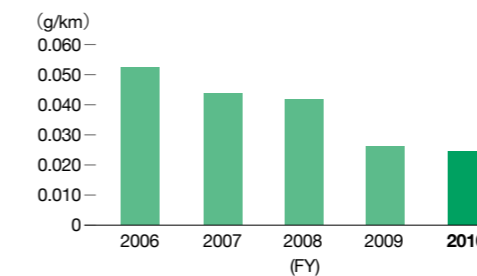
Percentage of Low Emission Gasoline-powered Passenger Cars



NOx Emission Reduction by SUBARU Vehicles Every Year

By launching low emission vehicles which meet the standards represented by the low emission vehicle certification standard into the market, SUBARU has been able to reduce the average amount of NOx emitted by SUBARU vehicles every year as shown in the chart below.

Average NOx Emissions of SUBARU Vehicles



* Calculated from the values meeting corresponding regulation (10.15 + JC08 mode) at the time of shipment.
 • The current mode means the combined mode of the 10.15 mode and the JC08 mode.

Trends in Sales Numbers of Vehicles authorized as Low Fuel Economy in FY2010 (The Sales number of Vehicles authorized as Low Economy and Low Emission Gasoline-powered^{*2})

		Passenger vehicle		Truck		Total of Vehicle (rate)
		Standard-sized car Small-sized car	Mini car	Standard-sized car Small-sized car	Mini car	
Low-emission car	Electric vehicle	0	21	0	0	21 (0.0%)
Vehicles authorized as Low Economy and Low Emission Gasoline-powered	75% reduction beyond FY2005 emissions standards☆☆☆☆	62,531	35,978	0	1,517	100,026 (61.8%)
	50% reduction beyond 2005 emissions standards☆☆☆☆	933	1,628	0	403	2,964 (1.8%)
Total		63,464	37,627	0	1,920	103,011 (63.7%)
Total of Sales						161,771 (100%)

*2 Vehicles which achieved in advance the 2010 fuel economy standard based on the Energy Saving Act and were certified as low emission vehicles according to the low-emission vehicle certification procedure.

Noise Reduction

Reducing Noise and Vibration with the New Boxer Engine

Another area in which SUBARU is actively involved is effectively reducing vehicle noise from such prime sources as tires, engines and intake and exhaust systems.

The NEW FORESTER launched in October 2010

has realized lower traffic noise levels during actual city driving together with excellent fuel economy and improved acceleration performance, all due to the practical torque characteristics of its next-generation BOXER engine.

Use of Clean Energy

Electric vehicle

About 200 “Plug-in STELLA” electric vehicles have already been leased to corporate users. Production of the electric vehicle was halted at the end of March 2011. However, the verification experiments currently being conducted jointly with local municipalities will be continued.

We will keep proceeding with electric vehicle R&D, conscious of the future need for expertise in electric vehicles.

Adaptation to Bio Fuels

Fossil fuels are limited yet currently serve as the main source of power for automobiles. This makes adaptation to alternative fuels, including bio fuels and recyclable energy, a priority.

SUBARU has already completed the adaptation to E10 and B7 fuels, maintaining function and reliability, on all gasoline- and diesel-powered vehicles sold throughout the world.

SUBARU will keep promoting adaptation to the diversification of fuels towards the realization of a sustainable mobility society.

Making Effective Use of Limited Resources

SUBARU gives importance to automobile recycling and is involved in reducing environmental burdens associated with used vehicles. Development of easier-to-recycle vehicles has also been actively pushed forward.

Efforts in the Design Stage

Promotion of Recycling Conscious Design

SUBARU has established the Automotive Recycle System of SUBARU (ARSS) as part of active efforts to recycle and properly dispose of End-of-Life Vehicles (ELVs), according to the Japanese End-of-Life Vehicles Recycling Law^{*1} (hereinafter referred to as the ELVs Recycling Law). The recycling ratio of automobile shredder residue (ASR) in FY2010 was 84.0%, satisfying the Japanese legal standard required for FY2015, an ASR recycling ratio of 70% or higher.

The effective recycling ratio reached 97.3%, clearing the 95% targeted for FY2015. Recycle-conscious design will be promoted to further improve our effective recycling ratio.

Recycling Market Research

The Recycling Design Project Team members continuously visit dismantlers, shredding companies, and waste disposers in various parts of Japan to exchange views on the current and future market trends for actual ELV treatment. The results are used to determine the principles for designing automobiles with due consideration for recycling and extract specific subjects for future research.

Efforts to Improve Recyclability

Advances in Wire Harness Dismantling

Because a large amount of copper is used in a wire harness, if the wire harnesses can be removed before the ELVs are shredded, the collection and separation of iron and copper will be enhanced and their value in terms of resource recycling will increase. SUBARU is conducting studies for a harness layout and automobile structure that make it possible to effectively collect more copper and in a shorter time. The achievement of this investigation is benefitting the New LEGACY.

Material Identification Improvement

It is most important that the material of each part can be recognized easily when we recycle. SUBARU started to identify the type of material on plastic parts in 1973 even before guidelines for the industry were established.

Since in the past, the material identifications were shown on hard-to-see inner surfaces, the material could not be checked unless disassembled. Now, the identification location has been changed so that parts can be sorted without disassembly before recycling for efficient operations. SUBARU has changed the identification positions on all car models, including the

LEGACY, the IMPREZA, the FORESTER and the EXIGA since 2001.

Easily Recycled Material

We are using Olefin Resin which is extremely easy to recycle, as the resin material for the interiors and exteriors of most new and remodeled vehicles. For bumpers, we are using integrated materials dedicated for use with bumpers. For interior parts, we are using integrated materials dedicated for use with interiors.



Advances in wire harness dismantling

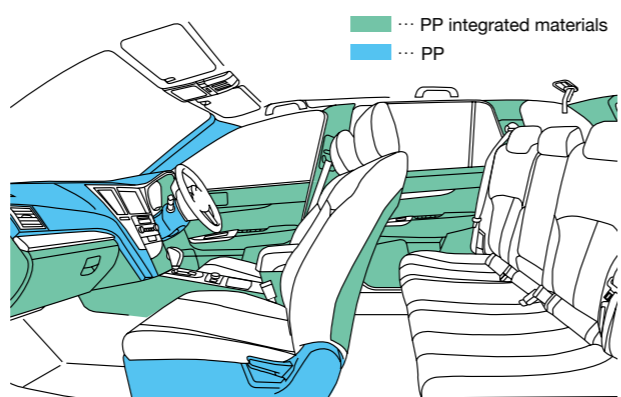
The material type can be determined without dismantling the bumpers.



An example of the material indication: "PP" means polypropylene



Using Integrated Materials for Interior Parts: Olefin Resin in the New LEGACY



*1 the Japanese End-of-Life Vehicles Recycling Law to recycle and properly dispose of end-of-life vehicles (Enforced in January 1, 2005)

Efforts to Improve Proper Disposal

Particularly, since proper processing of CFC (air conditioner refrigerant) and airbags is regulated by the Act on Recycling, etc. of End-of-Life Vehicles (the Automotive Recycling Law), we are aware that processing them in easier ways is indispensable.

Reduction of Fluorocarbons Used in Air Conditioners

SUBARU uses a substitute fluorocarbon, HFC134a, for refrigerants in air conditioners, which does no harm to the ozone layer, but which is still believed to accelerate global warming. We are conducting active countermeasures to reduce the amount of HFC134a and the leakage while using air conditioners and also research into substitute refrigerants other than fluorocarbons.

Advances in Airbag Disposal

Airbags and pretensioner seatbelts contribute significantly to reducing the shock to drivers and passengers in automobile accidents. On the other hand, the vast majority of automobiles are put out of service with unused airbags. Because automobile manufacturers are asked to dispose of airbags and similar products under the ELVs Recycling Law, we are conducting research into the optimal structure for airbags, including related components, that will make it safer and easier to activate them in automobiles and subsequently dispose of them.

Reduction of Substances of Environmental Concern

Based on the Japan Automobile Manufacturers Association's voluntary action programs, we have been working to reduce four substances of environmental concern (lead, mercury, cadmium and hexavalent chromium) and are partially moving ahead of schedule.

Furthermore, lead-free soldering has been promoted, mainly focusing on such electric and electronic parts as switches and relays, for further reduction of use.

Reduction Targets and JAMA's Voluntary Action Program for New Models

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

Reducing VOCs^{*2} in Vehicle Interiors

In order to reduce the use of VOCs such as formaldehyde and toluene, which can cause nose and throat irritation, we are revising whether to make changes to the components and adhesive agents used in vehicle interiors.

In the LEGACY, IMPREZA, FORESTER, EXIGA, we achieved the goals set by JAMA^{*3} by reducing the concentration of the 13 substances defined by the Ministry of Wealth, Labor and Welfare. And in the future, we will continue our efforts to reduce the levels of VOC and such substances to make the environment in vehicle interiors more comfortable.

*2 VOC (Volatile Organic Compounds) Volatile Organic Compounds means the Organic Compounds easy to volatilize in natural temperature, like formaldehyde and toluene. They are recently supposed to be one of primary factors of the Sick house syndrome which causes the stimulation on eyes, noses, throats when enter new houses or buildings.

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

Close UP Master of Managing Chemical Substances of European REACH



Environment and Safety Information Department
From left side: Rie Kameda, Emi Yamamoto, Kyoko Imayasu

In 2007, the REACH Rules^{*4} were made public in Europe. Only particular substances were required to be managed before, but with the promulgation, the time has changed as all used chemical substances are now required to be managed and disclosed. "All" is simply said, but it is quite a job to control and manage chemical substances used in automotive parts that total several thousands in number.

Now, this is exactly where we can show our stuff. We check the data of constituent materials of parts together with our suppliers using the world standard IMDS (International Material Data System) and accumulate them, based on which we manage substances. We are keeping vigilant and close watch to ensure SUBARU vehicles are gentle to the environment.

*4 REACH Rules

This is one of the approaches at the EU regional level to assess systematically the risks posed by a number of chemical substances to the health and the environment and to control and manage these substances properly.

Processing of End of Life Vehicles (ELV)

Approaches to "Total Recycling of Resources"

SUBARU has formulated the "Information on Removal of Copper Containing Parts in End of Life Vehicles" to further bolster the recycling rate of ELV. This information is made public through the website of ART¹(Japanese only). Currently, a method called "Total Recycling of Resources" is employed as a means to improve the recycle rate without generating ASR in recycling cars.

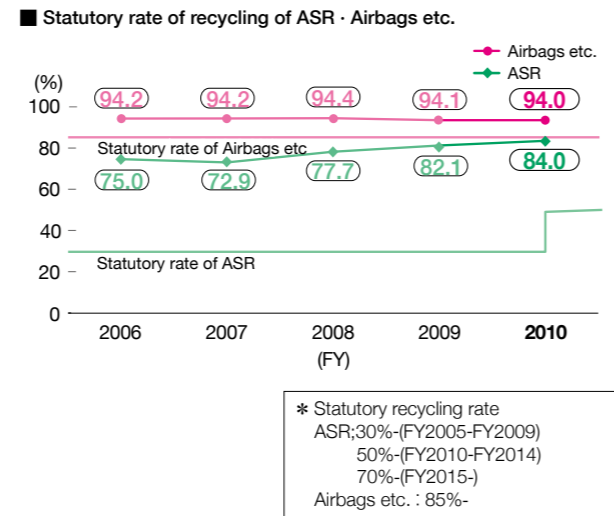
This involves throwing stripped end of life vehicles into electric furnaces or the like to melt iron content for re-commercialization as construction and other materials. Parts, usually a source of ASR, are burned in furnaces and used as a heat source (thermal recycling), eliminating the landfill process. Before implementing this "Total Recycling of Resources," it is essential to minimize the copper content of the stripped vehicle scraps to maintain quality in the resulting steel products. Thus, a key point becomes how to best remove copper containing parts efficiently and thoroughly.

The "Information on Removal of Copper Containing Parts in End of Life Vehicles" focuses on the disclosure of important information, such as where major copper parts are located in the wiring harness of past production vehicles, which currently constitute the largest part of the ELV population.

Formulating the information on the LEGACY domestically sold in 1994 and the VIVIO domestically sold in 1993 was released for public review in May, 2008. In December 2008, the information related to the FORESTER (launched in Japan in 1997) and the IMPREZA (launched in Japan in 1992) was disclosed, to the public, thus covering many of SUBARU vehicles to be scrapped as ELV.

The recycling ratio of ASR in FY2010 was 84.0%, satisfying the Japanese legal standard required for FY2015 (An ASR recycling ratio of 70% or higher). The effective recycling ratio reached 97.3%, clearing 95%

targeted for FY2015. Recycling-conscious design will be promoted for further improvement of the effective recycling ratio.



*1 ART (Automobile shredder residue Recycling promotion Team)
 There are actually 2 related teams. The ART team is operated by Nissan, Mazda, Mitsubishi, Fuji Heavy Industries, and 12 other companies. The TH team is operated by Toyota, Honda, Daihatsu and others.

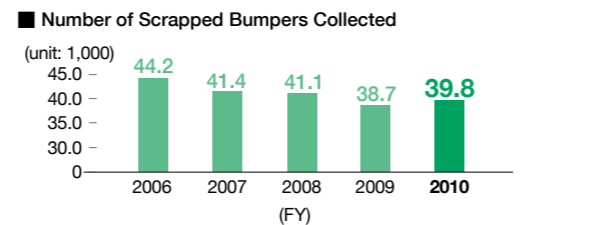
Recycling Batteries

We sold the electric vehicle, "Plug-in STELLA," with a lithium ion battery. We have already set up a system to collect used lithium ion batteries. Discarded Plug-in STELLAs are collected at auto dismantlers, and their used batteries are removed from the vehicles, and then these batteries are sent to disposal facilities. In this way, used lithium ion batteries can be safely, securely and properly processed.

Collection of Used Bumpers

Recycling Used Bumpers for Other Parts

SUBARU established an in-house system in 1973 to identify the materials used in plastic parts, ahead of the timetable for industry guidelines for the establishment of such systems. This system is very helpful when the company collects used bumpers which are replaced during for repairs to recycle for use in other parts of vehicles. In FY2010, we collected 39,802 used bumpers from all over Japan, which is a 2.8% increase over last year (38,733). The used bumpers were recycled for use in other parts of SUBARU as shown in the graph to the right.



Car Models	Parts
LEGACY	Trunk trim
FORESTER	Under floor cover
IMPREZA	Trunk trim
SAMBAR	Engine cover, Air guide, Splash board

Promote Environment Conscious Production

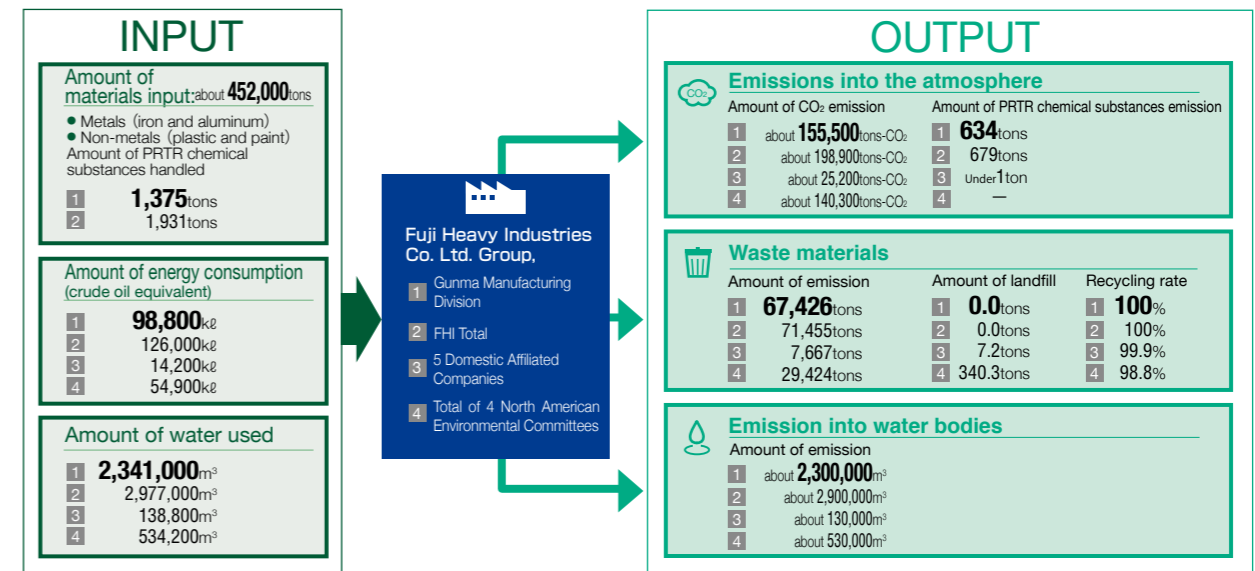
SUBARU has proactively addressed energy conservation while cutting costs by eliminating waste and losses for protection of the environment. Additionally, in terms of landfill waste, all of Fuji Heavy Industries Ltd.'s manufacturing plants have maintained zero emissions since FY2004.

Efforts in the Production Stage

Amount of Resources Input and Total Emissions at Automobile Production (Gunma Manufacturing Division)

This figure shows the amount of resources used and emissions in FY2010 at Gunma Manufacturing Division, SUBARU's main automobile production plant.

Amount of Resources Input and Emissions



*The scope of the PRTR substances to be reported differs from that for FY2009, due to law revisions changing the substances for inclusion.
 *The discharge of PRTR substances to water bodies was removed from the list of the substances to be reported due to the reduced amount in FY2010.

Approaches to Global Warming Prevention

Activities to Reduce CO₂ Emissions and Save Energy

We have been engaged in various activities to reduce CO₂ emissions and energy use by such energy saving measures as the introduction of a natural gas cogeneration system, changeover from heavy oil to gas for boilers, reduction of standby electricity and making energy intensive processes more efficient. Although the total emission volume varies from year to year due to changes in production volume, a total of about 198,900 tons of CO₂ was emitted in FY2010. This was 27% lower than the level of FY1990. We challenged ourselves aggressively, achieving a CO₂ reduction of 22% against FY1990, while the 4th Voluntary Plan for the Environment set 15% reduction for the total CO₂ emission volume as the target for FY2010 against FY1990.

Reduction of Substitute CFC (HFC134a) Emitted to the Air

To reduce atmospheric emissions of HFC134a used as a coolant from the vehicle manufacturing line at Gunma Manufacturing Division, we have continued efforts to minimize leakage while pumping and recovering gas in air conditioners. As a result, we have succeeded in reducing emissions by over 95% compared to FY1996 levels since FY2003. Since FY2006, we have kept this reduction at 97%.

Energy Saving Activity in Gunma Manufacturing Division
 Gunma Manufacturing Division, which produces automobiles, is promoting manufacturing energy saving activities in a program named "Eco-Eco Campaign." Under the slogan "Make Rules, Stop, Repair and Reduce," all the members of each department are taking part in energy saving patrols and improvements.

Campaign information on the internal web site

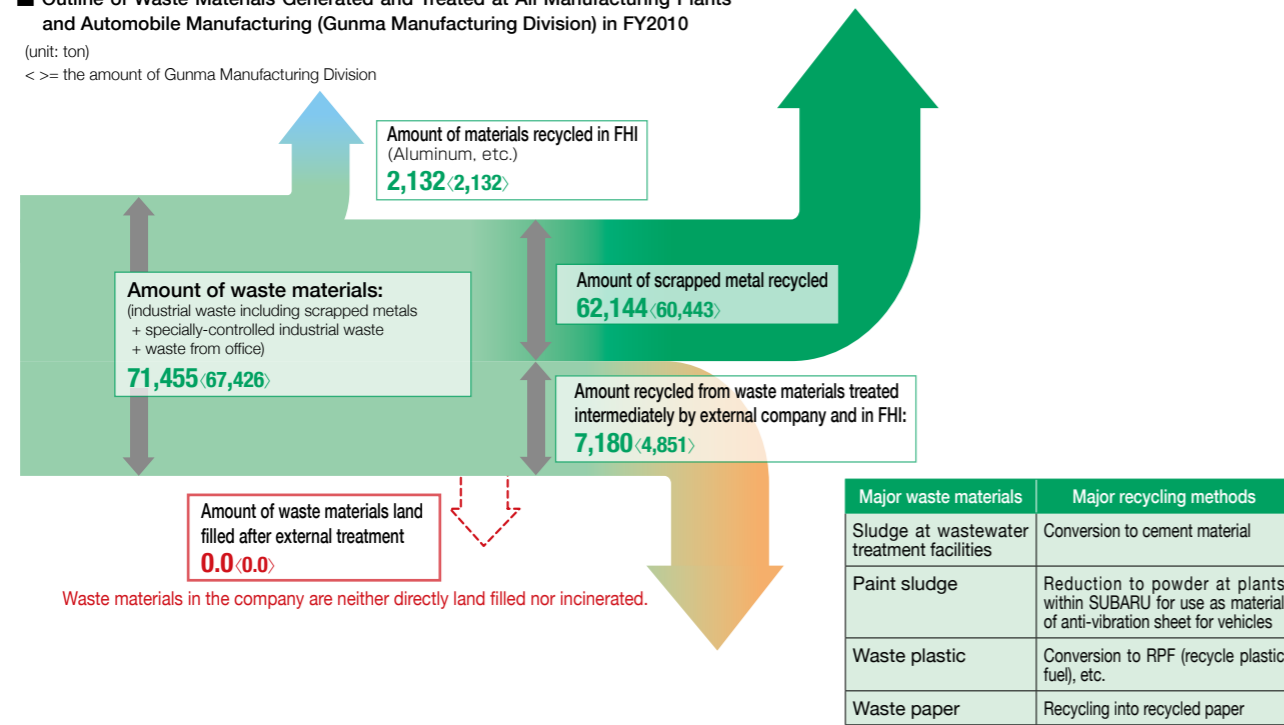
Waste Reduction

Maintaining Zero Emissions for Waste Materials at All Manufacturing Plants

All manufacturing plants have maintained zero emissions for waste materials since 2004. Outline of waste materials generated and treated in FY2010 is as follows.

Outline of Waste Materials Generated and Treated at All Manufacturing Plants and Automobile Manufacturing (Gunma Manufacturing Division) in FY2010

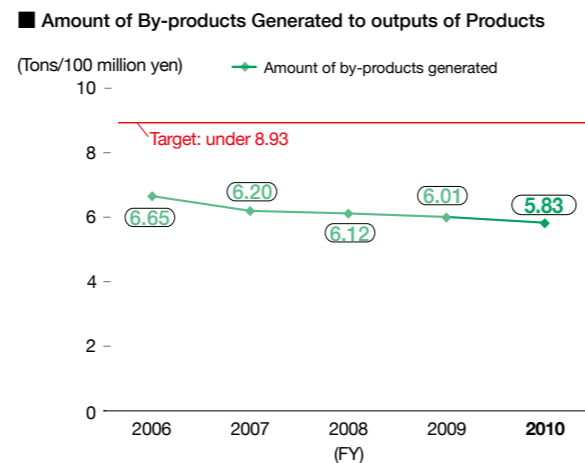
(unit: ton)
< >= the amount of Gunma Manufacturing Division



Efforts to Reduce Waste Materials

Since we consider that the generation of waste materials itself is a "waste," we have been making a continuous effort to achieve "zero emissions" and to curb the generation of waste materials. We have been striving to effectively utilize resources by improving the yield ratio of raw materials used in the production stages^{*1} and enhancing coating efficiency at paint factories. The right graph shows the indexes obtained by dividing the ratio of the amount of by-products (scrap metal and non-ferrous scrap metals such as aluminum) generated by the automotive division by the value of shipped products. In FY2010, we got the best result ever: 5.83. Also, we have achieved at the target levels (of the amount by-products should be reduced, as determined by the Laws for the Promotion of the Effective Utilization of Resources) for a series of 8 years since FY2003.

*1 Reduce the incidence ratio of defective products



Efforts to Reduce Consumption of Water Resources

Water resources protection activity

Total water consumption was about 2,977,000m³ at all our manufacturing plants in FY2010 and this is an increase of 4.9% compared with the previous year.

This is due to increased production at each manufacturing division. Compared with the bench-

mark year of FY1999, 52.1% less water was used, showing that the amount used was less than half of the benchmark level.

► For more data on water consumption, please refer to page 50 in this report.

Approach the Reduction of Environment-unfriendly Substances

Management of Chemical Substances (the PRTR Law)

Due to the revision of the applicable law, our PRTR substances have changed. The handling volume in FY2010 was much less than the last year due to the removal of ethylene glycol that amounted 1,532 tons as a subject substance.

The discharge totaled 679 tons with all manufacturing divisions combined, showing an increase of 14 tons against the year before. The main factor for this is the expanded scope of substances to be reported because of the addition of such substances as naphthalene under the revised law.

► For more data on substances subject to the PRTR Law, please refer page 50 in this report.

Air Pollutants

The total amounts of Nitrogen Oxides (NOx) and Sulfur Oxides (SOx) emitted from specific facilities such as boilers at all manufacturing plants are as shown in the graph of page 50. The results of periodic measurement of both NOx and SOx in FY2010 show that our voluntary standards are satisfactory at all locations monitors.

Water Pollutants

The amounts of nitrogen, phosphorous and BOD discharged into water at all our manufacturing plants are shown in the graph of page 50.

VOC (Volatile Organic Compounds) Generated in Paint Process at Gunma Manufacturing Division

The amount of VOC emissions per unit paint area in FY2010 was 50.8g/m², 44.5% less than that in FY2000, reaching the target in the 4th Voluntary Plan for Environment^{*1} ahead of schedule. This is mainly due to the switch to water-base paint in the new paint shop and the higher thinner collection rate. We will keep working for further reduction.

*1 The Goal of the 4th Voluntary Plan for Environment is to reduce VOC emissions per unit by 30% less than that in FY2000 by the end of FY2010. (Refer to the page 45.)

Preventing Soil and Underground Water Pollution

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

Storage of Equipment Containing PCB

We store PCB appropriately and, each year, make proper notification to authorities in accordance with the laws and regulations related to PCB. In March 2006, we applied and registered for the disposal of equipment (such as transformers and condensers we currently store) containing high concentrations of PCB. The disposal process will commence in FY2011.

► For more detailed information on manufacturing, please refer our Site Report on pages 65 to 90.

