## Fuji Heavy Industries Ltd. 2012 CSR Site Report **Gunma Manufacturing Division**

#### As of March 31, 2012



Location	1-1-1, Izumi, Oizumi-machi, Ora-gun,Gunma Prefecture 370-0531
Site Area	316,177m <sup>2</sup>
Building Area	228,570m <sup>2</sup>
Number of Employees	1,789
Main Products Manufactured	Automotive engines and transmissions

#### **Ota North Plant**

cation	27-1, Kanayama-cho, Ota City,Gunma Prefecture 373-0027
e Area	43,750m <sup>2</sup>
ilding Area	26,841m <sup>2</sup>



Location	1-1, Subaru-cho, Ota City Gunma Prefecture 373-8555
Site Area	585,521m <sup>2</sup>
Building Area	312,747m <sup>2</sup>
Number of Employees	3,255
Main Products Manufactured	BRZ and TOYOTA 86 models



#### Yajima Plant

Location	1-1, Shoya-machi, Ota City,Gunma Prefecture
	373-0822
Site Area	549,845m <sup>2</sup>
Building Area	255,027m <sup>2</sup>
Number of Employees	2,514
Main Products Manufactured	LEGACY, EXIGA, IMPREZA, and FORESTER models



#### Isesaki Plant

Location

Site Area Building Area

100. Suehiro-cho. Isesaki City, Gunma Prefecture 372-8508 177 422m<sup>2</sup> 56,332m<sup>2</sup>

## **Top Message**



Chief General Manager Gunma Manufacturing Division Corporate Senior Vice President Masahiro Kasai

Gunma Manufacturing Division has now ceased production of mini cars, which had continued for 54 years since 1958, and started production of a completely new type of vehicle-FRlayout cars. We aim not only to contribute economically to the local community through car manufacturing, but also to culturally invigorate the community by our active involvement in sports and local events. We would like to continue our business activities in this community, aiming to be a company with the power to make people smile. SUBARU very much appreciates the continuing support from the people in the local community.

## **Relationship with Local Society**

#### Communication with the Local Community

In order to contribute to creating a prosperous society in coexistence with local communities, the Gunma Manufacturing Division has been working with local residents, offering friendship and community exchange events, accepting plant tours, and participating in cleanup activities.



#### April: Support for Disaster-Affected Ishinomaki City

In cooperation with Ota City, FHI offered a loan of 10 light trucks and Ota City offered 20 patrol cars, all at no charge, along with delivering support goods to Ishinomaki City in Miyagi Prefecture, which had been severely affected by the Great East Japan Earthquake.



#### June: Lecture by Toshihiro Arai, a Rally Driver

Mr. Toshihiro Arai, a Japanese professional rally driver, presented a lecture in a comprehensive study hour for the grade six pupils of Ikushina Elementary School in Ota City. The pupils listened intently to Mr. Arai's story about his life and career, sending out his message that "the path will naturally open in front of you if you always believe in your power." We believe that the children must have taken his advice deeply into their hearts.



## August: Baseball Lesson by SUBARU Baseball Team

We sponsor the local youth baseball championship organized by Ota City. As a part of the reward for winning the championship, our baseball team offers a baseball lesson to the winning children to support their development.



#### May: SUBARU Track Athletes Competed in the 53rd East Japan Industrial Track and Field Championship

One of our new athletes, Mr. Kobayashi, significantly overhauled his own record and won a prize in the 1,500 meter race along with Mr. Yamazaki. Another new athlete, Mr. Namera came third in the 3,000 meter race, the first time that the SUBARU Track and Field Team got into the top three. Mr. Hasegawa also competed well against other exceptional athletes in his 1,000 meter race and fulfilled his responsibilities as the new team captain.



#### July: Participating in Ota Festival

We joined a parade with our SUBARU cars, including the SUBARU 360 and R-2. A large audience enjoyed the festivities—the adults were excited to see our classic models, while the children looked into the cars curiously. We also gave away fans during the parade and people appreciated cooling themselves with them.



September: The 52nd SUBARU Friendship Concert

A concert called "An Evening with a Flute Duo" was organized by the SUBARU Community Exchange Association at Airys Hall, a cultural theater in Ota City. The flutists were Yasuko Mukaida, a resident of Kiyru City, and Shinji Hamakawa, from Tokyo. The pianist was Yoko Mashimo, who lives in Midori City. The concert was enjoyed by an audience of 650, relaxing to the soft tones of the flutes on an autumn evening.



#### **October: SUBARU Appreciation Festival**

The SUBARU Appreciation Festival is held regularly to thank people in our local community. This year we welcomed 23,000 visitors who took the plant tour and enthusiastically studied some of the rarely seen production and development lines. Also, a trial ride of the EyeSightequipped vehicle and hands-on work experience for children were enjoyed by many. We hope that the visitors left feeling much closer to SUBARU than before their visit.



November: Participating in the Oizumi Industrial Festival We participated in the festival together with the Fuji SUBARU Oizumi Store. Our display tent welcomed a number of visitors to whom we distributed product brochures and conducted questionnaires, as well as entertaining them with displays of our vehicles.



December: Goods Donation through Ota City Council of Social Welfare At every event held by the SUBARU Community Exchange Association, we ask the visitors to donate their unused towels and soap. These towels and soaps are then passed to the welfare facilities in the area. We received a number of thank you letters from these facilities.



January: Participating in the New Year Long-Distance Relay Race The SUBARU Track and Field Team made their best record ever—ranked 12th—in the New Year Long-Distance Relay Race held on January 1. We really appreciate your roadside support! The race was celebrated in good weather and we enjoyed cheerful support for our athletes from onlookers waving SUBARU flags. Mr. Kojima, who ran section 6, and Mr. Shiokawa in section 7, gained ranking 6 in their running, helping to raise our overall ranking.



February: Spreading Flowers through the SUBARU Community Exchange Association

Working together with local flower distributors, the SUBARU Community Exchange Association offers sales of flowers in season at a discount price to association member companies four times a year. This is our effort to fill the area with flowers!



March: Talk by a Rakugo Master, Danshiro Tatekawa

The SUBARU Community Exchange Association for the first time invited Mr. Danshiro Tatekawa, a Rakugo artist born in Gunma to give us a show. In the first half of the show Mr. Tatekawa gave us a general talk, and then presented his Rakugo (humorous talk). The visitors so enjoyed the show that we have decided to make it an annual event.

# **Approaches to Environmental Preservation**

Gunma Manufacturing Division, as an automobile manufacturer, works actively for environmental protection activities to realize a "Greener SUBARU" through its "Clean Factories."

## **Curbing Global Warming Activities**

CO<sub>2</sub> emissions have been remained steady over the last 5 years.

This is the outcome of our efforts to cut energy usage to the level of the previous year—even though manufacturing volume increased due to business expansion.

The "Scrimpy Energy Saving Program," started last year, was renamed as the "Eco-Eco Energy Saving Program" in FY2011. Through these programs, we have promoted energy saving activities by implementing indepth studies on ways to cut energy use with patrols across the organization under the slogan "Set Rules, Stop, Fix, and Lower."

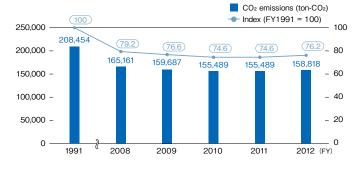
## Approach to Zero-Emissions

Gunma Manufacturing Division achieved Zero-Emissions in March 2001, a trailblazing first for Fuji Heavy Industries Ltd.

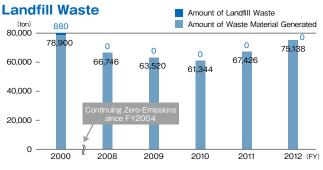
We will continue to improve recycling and further reduce waste.

We will continue tackling energy saving with activities that help prevent global warming.

**CO2 emissions** 



#### Amount of Waste Material Generated and



## Preventing Environmental Pollution

To live together with local communities and to maintain a verdant natural environment, we manage exhaust emissions as well as wastewater discharge to reduce environmental risks, promoting activities to prevent environmental accidents and public hazards. We will not merely strive to ensure we do not exceed the standard limits, but rather aim to achieve our "zero" targets.

#### FY2012 Environmental Data

#### Water Quality Data

The measured results all comply with the Water Quality Pollution Control Act, the Gunma Prefectural Ordinance, the Pollution Prevention Agreement with Ota-Oizumi, and the Isesaki-City Sewerage Ordinance. They also meet our voluntary standards which are 20% stricter than the levels under the agreement and ordinances.\*1

\*1 FHI established the voluntary standards (for air, water, and vibration), which are 20% stricter than environmental laws and regulations.

#### Main Plant: Water Pollution Control Law, **Gunma Prefectural Ordinances**

Substance	Regulated Values (prefectural)	Voluntary Standard	Maximum Values	Minimum Values	Average Values
рН	5.8~8.6	6.1~8.3	7.5	7.2	7.3
BOD	25.0	20.0	10.4	0.1	3.0
SS	50.0	40.0	9.2	0.8	3.9
n-Hexane Extracts (inorganic)	5.0	4.0	1.1	0.1	0.3
Fluorine	8.0	6.4	1.1	0.3	0.7
n-Hexane Extracts (organic)	30.0	24.0	Under1.0	Under1.0	Under1.0
Zinc	2.0	1.6	Under0.1	Under0.1	Under0.1
Soluble Iron	10.0	8.0	Under0.1	Under0.1	Under0.1
Soluble Manganese	10.0	8.0	Under0.1	Under0.1	Under0.1
Total Phosphorus	16.0(8.0)	6.4	1.9	0.6	1.3
Total Nitrogen	120(60)	48	18.7	2.6	5.3

#### Oizumi Plant: Water Pollution Control Law, **Pollution Control Agreement with Oizumi City**

Substance	Regulated Values (prefectural)	Voluntary Standard	Maximum Values	Minimum Values	Average Values
РH	5.8~8.6	6.1~8.3	7.5	7.1	7.2
BOD	10.0	8.0	4.8	1.2	2.5
SS	10.0	8.0	6.7	2.5	4.3
n-Hexane Extracts (inorganic)	3.0	2.4	0.6	0.1	0.3
Fluorine	8.0	6.4	0.3	0.2	0.3
n-Hexane Extracts (organic)	30.0	24.0	Under0.1	Under0.1	Under0.1
Zinc	2.0	1.0	Under0.1	Under0.1	Under0.1
Soluble Iron	5.0	4.0	Under0.1	Under0.1	Under0.1
Soluble Manganese	5.0	4.0	Under0.1	Under0.1	Under0.1
Total Phosphorus	16.0(8.0)	6.4	0.4	0.2	0.3
Total Nitrogen	120(60)	48	7.2	4.8	6.0

#### Isesaki Plant: Isesaki City Sewerage Law

Substance	Regulated Values (prefectural)	Voluntary Standard	Maximum Values	Minimum Values	Average Values
рН	5.7~8.7	6~8.4	8	7.2	7.6
BOD	300.0	240.0	172.0	1.0	49.0
SS	300.0	240.0	26.4	1.6	13.4
n-Hexane Extracts (inorganic)	5.0	4.0	Under0.1	Under0.1	Under0.1
Fluorine	10.0	6.4	1.6	0.2	0.8
n-Hexane Extracts (organic)	30.0	24.0	5.7	Under1.0	2.2
Zinc	2.0	2.0	1.5	Under0.1	0.5
Soluble Iron	10.0	8.0	Under0.1	Under0.1	Under0.1
Soluble Manganese	10.0	8.0	2.8	0.1	0.9
Total Phosphorus	20.0	16.0	1.8	0.1	0.8
Total Nitrogen	10.0	10.0	13.9	1.4	5.2

## Yajima Plant: Water Pollution Control Law, **Gunma Prefectural Ordinances**

Substance	Regulated Values (prefectural)	Voluntary Standard	Maximum Values	Minimum Values	Average Values
На	5.8~8.6	6.1~8.3	7.5	7.1	7.3
BOD	25.0	20.0	10.3	1.3	5.3
SS	50.0	40.0	4.8	0.8	3.0
n-Hexane Extracts (inorganic)	5.0	4.0	2.9	0.1	1.3
Fluorine	8.0	6.4	1.7	1.3	1.5
n-Hexane Extracts (organic)	30.0	24.0	Under1.0	Under1.0	Under1.0
Zinc	5.0	4.0	0.2	0.2	0.2
Soluble Iron	10.0	8.0	Under0.1	Under0.1	Under0.1
Soluble Manganese	10.0	8.0	0.4	0.3	0.4
Total Phosphorus	16.0(8.0)	6.4	0.4	0.4	0.4
Total Nitrogen	120(60)	48	6.8	4.4	5.6

#### North Plant: Water Pollution Control Law, **Gunma Prefectural Ordinances**

Substance	Regulated Values (prefectural)	Voluntary Standard	Maximum Values	Minimum Values	Average Values
рH	5.8~8.6	6.1~8.3	7.9	7.3	7.6
BOD	25.0	20.0	11.3	0.1	1.6
SS	50.0	40.0	7.8	1.1	2.9
n-Hexane Extracts (inorganic)	5.0	4.0	Under1.0	Under1.0	Under1.0
Fluorine	8.0	6.4	Under0.2	Under0.2	Under0.2
n-Hexane Extracts (organic)	30.0	24.0	Under1.0	Under1.0	Under1.0
Zinc	5.0	4.0	Under0.1	Under0.1	Under0.1
Soluble Iron	10.0	8.0	0.5	0.1	0.1
Soluble Manganese	10.0	8.0	0.2	0.1	0.2
Total Phosphorus	16.0(8.0)	6.4	5.5	4.9	5.2
Total Nitrogen	120(60)	48	1.3	0.1	0.1

SS: Concentration of suspended solids in water (diameter: 2 mm or smaller) [Units]-Bacillus coli= number/ml, all others except pH: mg/L Regulated values for

#### Total Phosphorus and Total Nitrogen are daily average value.

## Air Pollution Data

The measured results all comply with the Air Pollution Control Act, and they were also less than our voluntary standards, which is 20% stricter than Law.

#### Main Plant: Air Pollution Data (Air Pollution Control Law)

Facilities	Substances	Regulated Values	Voluntary Standard	Maximum Values	Average Values
Boilers (No. 5 & No. 6)	NOx	150	120	95	77
	SOx	60.3	48.2	0.22	0.20
	PM	0.25	0.20	0.01	0.00
Dry-off Furnace (Electro coat, 2nd & final coat)	NOx	230	184	95	55
	PM	0.2、0.3	0.16、0.24	0.01	0.00

[Unit] NOx: ppm, SOx: g/m<sup>3</sup>N/h, PM: g/m<sup>3</sup>N

Among the 33 facilities specified by Law, we present here data of big boilers and dry-off furnaces. Also at the specified facilities not indicated here, measured values were in the range of values specified by Law.

#### Yajima Plant: Air Pollution Data (Air Pollution Control Law)

Facilities	Substances	Regulated Values	Voluntary Standard	Maximum Values	Average Values
Boilers (No. 5 & No. 6)	NOx	230	184	140	78
	SOx	62	50	0.7	0.3
	PM	0.25	0.20	0.01	0.00
Dry-off Furnace (Electro coat, 2nd & final coat)	NOx	230	184	140	78
	PM	0.2、0.35	0.16、0.28	0.01	0.00

[Unit] NOx: ppm, SOx: g/m<sup>3</sup>N/h, PM: g/m<sup>3</sup>N

Among the 20 facilities specified by Law, we present here data of big boilers and dry-off furnaces. Also at the specified facilities not indicated here, measured values were in the range of values specified by Law.

#### Oizumi Plant: Air Pollution Data (Air Pollution Control Law)

Facilities	Substances	Regulated Values	Voluntary Standard	Maximum Values	Average Values
Co-generation System	NOx	600	480	268	123
(Gas engine No.1 & 2)	SOx	0.05	0.04	0.003	0.001
Aluminum Molting Europeo	NOx	180	144	140	78
Aluminum Melting Furnace	PM	0.20	0.16	0.04	0.02

[Unit] NOx: ppm, PM: g/m<sup>3</sup>N

Among the 12 facilities specified by Law, we present here data of melting furnace and co-generation system. Also at the specified facilities not indicated here, measured values were in the range of values specified by Law.

## Measurement Result of Noise and Vibration

The measured results all comply with the Noise and Vibration Act, and they were also less than our voluntary standards, which is 20% stricter than Law.

	se	[L	Jnit: dB(A)]	
Measurement Area	Regulated Values (night)	Voluntary Standard	Number of Measurements	Actual Values
Main Plant	55	54	2	34~49
Yajima Plant	55	54	2	41~53
Oizumi Plant	50	49	2	36~49
North Plant	50	49	2	33~49

Vibration [Unit: dB(Z						
Measurement Area			Number of Measurements	Actual Values		
Main Plant	65	64	2	18~37		
Yajima Plant	65	64	2	24~36		
Oizumi Plant	60	59	2	23~30		
North Plant	65	64	2	16~31		

About others, the measured values of three heaters at North Plant and two compact boilers at Isesaki Plant observe the voluntary standard.

#### **VOC Measurement Result of Paint Facilities**

We took measurements at all 12 facilities. All the measured results were less than our voluntary standards.

#### VOC Measurement Result [Unit: ppm-C]

Facility	Regulated Values	Maximum Values	Average Values		
	700	655	307		
Paint Facilities, etc	400	320	265		
	600	590	323		

## Measurement Result of Odor

We took measurements at 7 boundary locations at Main Plant, 7 locations at Yajima Plant, 4 locations at Oizumi Plant, 4 locations at North Plant and 3 locations at Isesaki Plant for a total of 25 boundary locations. All the measured results were less than 10 for odor concentration and odor index, meeting 21 requirements.

#### Amount of PRTR chemical materials and emission etc.

## Gunma Manufacturing Division

#### (Main Plant, Yajima Plant, Oizumi Plant, North Plant and Isesaki Plant)

(Main Plant, Yajima Plant, Oizumi Plant, North Plant and Isesaki Plant)												
Class I Specified Chemical Substance	Code	CAS No	Chemical Substances	Amount Handled	Air Release	Water Emissions (public)	Transfer (sewer)	Transfer	Consumption	Solvent Wiping Removal	Recycle	Amount of Landfill in the Company
	1	13598-37-3	Zinc Hydrogen Phosphate	3,194		35		604	2,555			
	40	100-41-4	Ethyl Benzene	253,155	129,113				29,912	21,378	72,752	
	63	1330-20-7	Xylene	468,195	238,120				128,419	43,243	58,413	
	224	108-67-8	1,3,5-Trimethybenzene	33,797	21,679				3,061	4,201	4,856	
	227	108-88-3	Toluene	571,405	225,635				270,040	46,065	29,665	
	232	13138-45-9	Nickel (II) Nitrate (anhydrous)	579		26		437	116			
	272	117-81-7	2-Ethylhexyl	16,062	8,031			450	7,581			
0	299	71-43-2	Benzene	30,460	15,230				15,182			
	310	50-00-0	Formaldehyde	16,864	16,073					317	474	
		NONE	Manganese and its Compounds	2,488		18		441	2,029			
				1 000 100	653,881	127	0	1,932	458.895	115.204	166.160	0
10		Tota		1,396,199	654	,008		1,932	400,090	115,204	100,100	0

#### **Division History**

December 1917	The Research Aircraft Laboratory moved to Ota-Town, Gunma Prefecture
November 1934	New Ota Plant completed and old Ota Plant renamed as Donryu Plant
August 1945	Nakajima Aircraft Company renamed Fuji Sangyo Company, Ltd.
July 1953	Fuji Heavy Industries Ltd. established
April 1955	Ota North Plant and Isesaki Plant opened
March 1958	The SUBARU 360, 4-wheeled mini car, announced
October 1960	Gunma Main Plant opened
November 1964	Test track at Gunma Main Plant completed
February 1969	Yajima Plant started operation
February 1983	Oizumi Plant opened and started full-fledged operation

May 1987	SUBARU Test & Development Center conducted
March 1999	Gunma Manufacturing Division acquired ISO 14001 certification
March 2001	Gunma Manufacturing Division achieved zero emissions
January 2010	Fuji Heavy Industries Ltd. acquired integrated ISO 14001 certification

#### Contact

General Affairs Sec. General Administration Dept.

**Gunma Manufacturing Division** 

TEL: 0276-26-2011 [Domestic] +81-276-26-2001 [International] FAX: 0276-26-3020 [Domestic] +81-276-26-3020 [International]