

# Gunma Manufacturing Division

As of March 31, 2014

## Main Plant



Location	1-1, Subaru-cho, Ota City, Gunma Prefecture 373-8555
Site Area	585,521 m <sup>2</sup>
Building Area	319,011 m <sup>2</sup>
Number of Employees	3,744
Main Products Manufactured	BRZ, IMPREZA models

## Oizumi Plant



Location	1-1-1, Izumi, Oizumi-machi, Ora-gun, Gunma Prefecture 370-0531
Site Area	308,850 m <sup>2</sup>
Building Area	228,749 m <sup>2</sup>
Number of Employees	2,087
Main Products Manufactured	Automotive engines and transmissions

## Yajima Plant



Location	1-1, Shoya-machi, Ota City, Gunma Prefecture 373-0822
Site Area	549,845 m <sup>2</sup>
Building Area	256,908 m <sup>2</sup>
Number of Employees	2,815
Main Products Manufactured	LEGACY, EXIGA, IMPREZA, and FORESTER models

## Ota North Plant



Location	27-1, Kanayama-cho, Ota City, Gunma Prefecture 373-0027
Site Area	43,750 m <sup>2</sup>
Building Area	25,521 m <sup>2</sup>

## Message from the Chief General Manager



Masaki Okawara

Chief General Manager  
Gunma Manufacturing Division  
Corporate Senior Vice President

Subaru began production at its then Iseaki Plant in 1958 with the Subaru 360, and the cumulative total number of Subaru vehicles produced in Japan reached 20 million units in January 2014. I believe this is testimony to the support we have received from so many. At the Gunma Manufacturing Division, we do not only produce cars that promote "Enjoyment and Peace of Mind," but we have also built positive relationships with the local community through participation in sports activities and local events. Going forward, we will continue our activities to become an appealing company with a strong market presence based on our Customer Comes First policy. SUBARU would like to call on your continued support for the future.

# 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: Ota Shibazakura (Moss Phlox) Festival

Subaru Community Exchange Association held a tent event, April 20–21 2013 (the 21st was cancelled due to rain), at the Shibazakura (moss phlox) Festival, which took place at Ota City North Sports Park. This was combined with active welfare fund-raising, and a sum 26,046 yen was received in donations. The collected funds were contributed to the city's welfare facilities through the Ota City Social Welfare Conference.



### May: Kanayama Cleanup

Subaru Community Exchange Association sponsored a Kanayama Cleanup, which was held on Saturday, May 26, 2013. A total of 800 volunteers took part in mowing, rubbish collection and other cleanup activities in Kanayama, a symbol of Ota City. After the cleanup, participants were given flower seedlings to take home as souvenirs.



### June: Karakuri Innovation Fair

The 6th Gunma Prefecture Karakuri Innovation Fair was held in the Kenmin Hall on the 1st floor of Gunma Prefectural Office on Saturday, June 29 and Sunday, June 30. The event was held to publicize eco-friendly Karakuri Kaizen activities containing the beauty of craftsmanship within the prefecture and communicate the fun of craftsmanship to children who are the next generation. The Gunma Manufacturing Division and the Industrial Products Company collaborated to exhibit a "Karakuri Idea Device" produced by the Industrial Products Company. The exhibit attracted attention from many of the visitors to the fair from children to adults.



### July: Participation in the Ota and Oizumi Matsuri Festivals

The Ota Matsuri Festival was held on Saturday, July 13 and Sunday, July 14, and the Oizumi Matsuri Festival was held on Saturday, July 27 and Sunday, July 28. About 1000 employees from the Ota area and 500 from the Oizumi area took part in carrying the adult mikoshi portable shrine, succeeding in bringing a really festive atmosphere to the mikoshi togyo procession. The spectators along the way really felt the excitement of the procession as well as getting a look at these valiant figures of SUBARU.



### September: Flower Distribution (three times a year)

This is a flower activity undertaken by Subaru Community Exchange Association. In its efforts to fill the community with seasonal flowers, Subaru Community Exchange Associations at each of the companies buy flower seedlings in partnership with local businesses and fill the areas around the companies with flowers. In addition, flowerbed competitions have been held at 22 elementary schools in Ota City with 200 seedlings distributed to each school. The children experience the importance of life and a sense of unity with their peers by caring for the flowers.



### October: 11th Subaru Gunma Prefecture Schoolchildren's Rubber Ball Baseball Championship

Between October 12 and November 2, the junior baseball teams in each area of Gunma Prefecture formed teams of 6th grade students from each local club branch to hold the Subaru Gunma Prefecture Schoolchildren's Rubber Ball Baseball Championship sponsored by FHI. It has become one of the leading championships in the prefecture, and the play off attracted many spectators despite being a night game as the stadium brimmed with excitement. Subaru also fosters the development of young baseball players.



**November: SUBARU Appreciation Festival**

The SUBARU Appreciation Festival was held at the Yajima Plant of Gunma Manufacturing Division on Sunday, November 3, 2013. The day was lucky with the weather, and the event attracted around 27,000 visitors, including family members of our staff, local area residents, associated companies, fans of Subaru and more. This year's festival also staged various events, which included refreshment stands run by each workplace, booths offering mechanics for kids, a plant tour and a trial ride in an EyeSight equipped vehicle. Excited visitors were treated to events on the main stage that included an orchestra performance, a dance performance, a song show and a big lottery. We give a big thank you to everyone who helped out.



**November: Runner up in National Championship of Japan Amateur Baseball Association**

The National Championship of the Japan Amateur Baseball Association, which determines the number one adult amateur baseball players in Japan, was held at Kyocera Dome in Osaka for 11 days from October 28. FHI's hardball baseball club shutout three of five games with its impregnable relay of pitchers, converting rare opportunities into points with its characteristically workmanlike play, emerging as runner up in the closely-contested play off. We give a really big thank you for all the enthusiastic cheering from everyone.



**December: Friendship Concert**

The 57th Friendship Concert (Christmas Family Concert) sponsored by the Subaru Community Exchange Association was held in the Large Hall at Oizumi-machi Bunkamura on Sunday, December 8. Around 600 people attended the concert, which was enjoyed by everyone from young to old. In addition, we also collected ten large cardboard boxes of donations that included towels, soap and similar items brought in by those attending the concert as well as 26,882 yen in welfare donations. The donated goods and money were given to welfare and other facilities via the social welfare council. We are very grateful that so many people attended the concert.



**January: New Year Long Distance Relay Race**

The SUBARU Track and Field Team ranked 9th (5 hr 00 min 10 sec) in the New Year Long Distance Relay Race held on January 1, 2014, gaining their second best result since the Team was established in 1998. We would like to thank spectators for your great support, both roadside and those who viewed the event on television.



**March: SUBARU Athletes Meet and Greet Workshop**

The SUBARU Athletes Meet and Greet Workshop sponsored by the Gunma Prefectural Agency for Child Health and Development was held at the Gunma Children's Museum on Sunday March 23. FHI's hardball baseball club and athletics club took part as instructors. Around 170 elementary and junior high school children participated in the day, which was an opportunity for them to learn about the enjoyment and fundamentals of sport from top athletes active on the national stage.



**March: Talk by Rakugo Master, Danshiro Tatekawa**

The SUBARU Community Exchange Association for the second time invited Mr. Danshiro Tatekawa, a Rakugo artist born in Gunma to put on a show on Sunday March 2. The show was divided into two parts with a talk and a presentation of Rakugo, and the audience listened attentively to Mr. Tatekawa's stories of hardships and inside stories from the world of Rakugo. We were also able to collect a lot of soap and towels that the people attending no longer needed at home, which we donated to a welfare facility in Oizumi through the Oizumi Social Welfare Council.

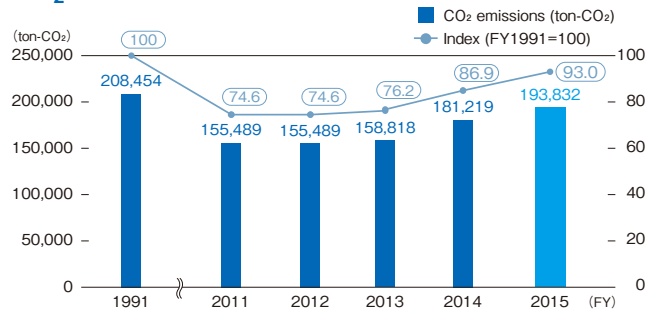
# Approaches to Environmental Preservation

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

## Approach to Prevention of Global Warming

In FY2014, our CO<sub>2</sub> emissions volume was 193,832 ton-CO<sub>2</sub>; 93.0% compared to FY1991. We shall continue our efforts to save energy and contribute to the prevention of global warming.

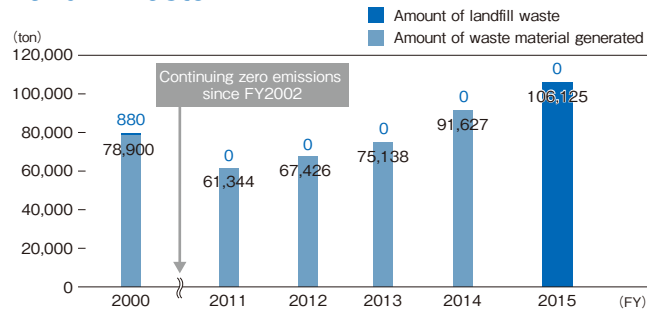
### CO<sub>2</sub> Emissions



## Approach to Zero Emissions

The waste emissions volume of Gunma Manufacturing Division in FY2014 was 106,125 ton. Our record of zero ton landfill waste has continued uninterrupted since FY2002. We shall continue with our efforts to improve recycling and further reduce waste.

### Amount of Waste Material Generated and Landfill Waste



## Approach to Pollution Prevention

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, and promote activities to prevent environmental accidents and public hazards. We will strive, not only to ensure that we do not exceed the standard limits, but rather with the aim of attaining our own "zero" targets.

### FY2014 Environmental Data

#### Water Quality Data

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

\*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
pH	5.8-8.6	6.1-8.3	8.0	6.7	7.3
BOD	25	20	13.3	0.1	2.9
SS	50	40	10.4	1.0	4.5
n-Hexane Extracts (inorganic)	5	4	1.0	0.0	0.4
n-Hexane Extracts (organic)	30	24	1.0	0.0	1.0
Fluorine	8	6.4	2.3	0.0	1.1
Zinc	2	1.6	0.3	0.0	0.2
Soluble Iron	10	8	0.1	0.0	0.1
Soluble Manganese	10	8	0.1	0.0	0.1
Total Phosphorus	16(8)	6.4	1.8	0.0	0.9
Total Nitrogen	120(60)	48	3.4	0.0	2.8

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

Substance	Regulated Values (prefectural)	Voluntary Standard	Maximum Values	Minimum Values	Average Values
pH	5.8-8.6	6.1-8.3	7.6	7.1	7.3
BOD	25	20	11.4	1.8	6.7
SS	50	40	5.2	1.2	3.5
n-Hexane Extracts (inorganic)	5	4	3.5	0.4	1.5
n-Hexane Extracts (organic)	30	24	1.0	1.0	1.0
Fluorine	8	6.4	2.0	1.9	2.0
Zinc	5	4	0.6	0.2	0.4
Soluble Iron	10	8	0.4	0.1	0.3
Soluble Manganese	10	8	0.8	0.2	0.5
Total Phosphorus	16(8)	6.4	0.6	0.4	0.5
Total Nitrogen	120(60)	48	6.6	4.9	5.8

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

Substance	Regulated Values (prefectural)	Voluntary Standard	Maximum Values	Minimum Values	Average Values
pH	5.8-8.6	6.1-8.3	8.1	6.9	7.4
BOD	10	8	7.4	1.3	3.1
SS	10	8	7.7	1.6	5.7
n-Hexane Extracts (inorganic)	3	2.4	1.0	0.0	0.2
n-Hexane Extracts (organic)	30	24	1.0	1.0	1.0
Fluorine	8	6.4	0.2	0.2	0.2
Zinc	2	1.6	0.1	0.1	0.1
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	4.7	3.8	4.3

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

Substance	Regulated Values (prefectural)	Voluntary Standard	Maximum Values	Minimum Values	Average Values
pH	5.8-8.6	6.1-8.3	8.1	7.7	7.8
BOD	25	20	2.0	0.1	0.7
SS	50	40	4.6	1.0	2.4
n-Hexane Extracts (inorganic)	5	4	1.0	0.0	0.3
n-Hexane Extracts (organic)	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	1.5	1.5	1.5

[Notations] pH: Hydrogen-ion concentration, BOD: Biochemical oxygen demand, 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	Substance	Regulated Values	Voluntary Standard	Maximum Values	Average Values
Boilers (No. 5 & No. 6)	NOx	150	120	84	42
	SOx	60.3	48.2	0.22	0.01
	PM	0.25	0.2	0.007	0.002
Co-generation System (Gas Engine No.1)	NOx	600	480	198	189
	PM	0.05	0.04	0.004	0.003
Dry-off Furnace (Electro Coat, 2nd & Final Coat)	NOx	230	184	86	49
	PM	0.2, 0.3	0.16, 0.24	0.007	0.003

[Unit] NOx: ppm, SOx: m<sup>3</sup>/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	Substance	Regulated Values	Voluntary Standard	Maximum Values	Average Values
Boiler (No. 2)	NOx	230	180	86	49
	SOx	62	50	0.22	0.02
	PM	0.25	0.2	0.007	0.003
Co-generation System (Gas Engine No.1 & 2)	NOx	600	480	398	178
	PM	0.05	0.04	0.002	0.002
Dry-off Furnace (Electro Coat, 2nd & Final Coat, PP)	NOx	230	184	48	47
	PM	0.2, 0.35	0.16, 0.28	0.003	0.005

[Unit] NOx: ppm, SOx: m<sup>3</sup>/h, PM: g/m<sup>3</sup>N  
Among the 20 facilities specified by Law, we present here data of big boilers, co-generation system 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	Substance	Regulated Values	Voluntary Standard	Maximum Values	Average Values
Co-generation System (Gas Engine No.1 & 2)	NOx	600	480	350	275
	PM	0.05	0.04	0.002	0.002
Aluminum Melting Furnace	NOx	180	144	57	36
	PM	0.2	0.16	0.063	0.026

[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.

About others, the measured values observe the voluntary standard.

## 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.

### Noise

Gunma Prefectural Ordinances, Pollution Control Agreement with Oizumi City

[Unit: dB(A)]

Measurement Area	Regulated Values (night)	Voluntary Standard	Number of Measurements	Actual Values
Main Plant	55	54	20	38-52
Yajima Plant	55	54	20	42-54
Oizumi Plant	50	49	13	41-49

### Vibration

Gunma Prefectural Ordinances, Pollution Control Agreement with Oizumi City

[Unit: dB(Z)]

Measurement Area	Regulated Values (night)	Voluntary Standard	Number of Measurements	Actual Values
Main Plant	65	64	20	14.2-39.9
Yajima Plant	65	64	20	14.5-39.9
Oizumi Plant	60	59	13	24.3-33.2

## 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

Air Pollution Control Law

[Unit: ppm-C]

Facilities		Regulated Values	Maximum Values	Average Values
Paint Facilities, etc	Main Plant	700	545	52
	Yajima Plant	700	693	127
	Oizumi Plant	400	278	34

Data shows weighted average values.

## Measurement Result of Odor

We took measurements at 6 boundary locations at Main Plant, 6 locations at Yajima Plant and 5 locations at Oizumi Plant for a total of 17 boundary locations. All the measured results were less than 10 for odor concentration and odor index, meeting 21 requirements.

### Main Plant, Yajima Plant, Oizumi Plant: Offensive Odor Control Law

[Unit: ppm]

Measurement Area	Regulated Values	Voluntary Standard	Number of Measurements	Actual Values
Main Plant	21	20	6	under 10
Yajima Plant	21	20	6	under 10
Oizumi Plant	21	20	5	under 10

## Amount of PRTR Chemical Substances Handled and Emitted

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

[Unit: kg/year]

Chemical Substances	Amount Handled	Air Release	Water Emissions (public)	Transfer (sewer)	Transfer	Consumption	Solvent Wiping Removal	Recycle
Ethyl Benzene	418,650	228,235	0	0	0	36,423	29,947	124,044
Xylene	772,684	395,646	0	0	0	179,455	141,718	55,866
2-Ethoxyethyl acetate	1,011	47	2	0	0	562	393	3
1,3,5-Trimethylbenzene	45,476	28,901	0	0	0	3,736	5,813	7,024
Toluene	990,037	336,859	0	0	0	492,727	131,337	28,954
2-Ethylhexyl	8,343	0	0	0	534	7,809	0	0
1,2,4-Trimethylbenzene	121,249	408	4	0	0	120,838	0	0
Benzene	18,737	59	0	0	0	18,676	0	0
Naphthalene	6,414	5,067	0	0	0	0	1,347	0
Formaldehyde	32,599	15,981	0	0	3,886	0	8,846	3,886
n-hexane	78,910	268	0	0	0	78,641	0	0
Zinc compounds (water-soluble)	42,557	0	399	0	15,746	26,112	0	0
Nickel compounds	3,378	0	147	0	2,467	654	0	0
Hydrogen fluoride and its water-soluble salts	4,088	0	1,227	0	2,862	0	0	0
Manganese and its compounds	7,950	0	169	0	3,086	4,755	0	0
Dioxin	0	0	0	0	0	0	0	0
Total	2,552,083	1,011,471	1,948	0	28,581	970,388	319,401	219,777
		1,013,419						

## 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

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