# Fuji Heavy Industries Ltd. 2015 CSR Site Report

# Gunma Manufacturing Division

#### As of March 31, 2015

#### Main Plant



1-1, Subaru-cho, Ota City, Gunma Prefecture 373-8555 585,521 m<sup>2</sup>

315,874 m<sup>2</sup>

4,026

BRZ, IMPREZA, XV, Levorg, and WRX models

#### **Oizumi Plant**



 1-1-1, Izumi, Oizumi-machi, Ora-gun, Gunma Prefecture 370-0531

 rea
 304,027 m²

 228,699 m²

 er of yees
 2,290

 xts
 Automotive engines and transmissions

#### Yajima Plant



1-1, Shoya-machi, Ota City, Gunma Prefecture 373-0822 549,845 m<sup>2</sup>

256,864 m<sup>\*</sup>

of 2,929

LEGACY, Crossover 7, IMPREZA, FORESTER, XV, and XV HYBRID models

#### **Ota North Plant**



27-1, Kanayamacho, Ota City, Gunma Prefecture 373-0027 43,750 m<sup>2</sup> 25,521 m<sup>2</sup>

#### Message from the Chief General Manager



Masaki Okawara Chief General Manager Gunma Manufacturing Division Corporate Senior Vice President In the 49 years the first horizontally-opposed engine was installed in the Subaru 1000 in 1966, the cumulative total number of boxer engines produced by Subaru has reached 15 million units.

I believe the fact that so many horizontally-opposed engines, which is arguably a symbol of Subaru's originality, have been produced is testament to the support that Subaru's attitude to technology and vehicle manufacturing has received from so many. At the Gunma Manufacturing Division, we do not only promote the development of the regional economy through the manufacturing of Subaru vehicles, but we have also built up positive relationships with the local community through active participation in sports activities and local events. As one of these topics, the cumulative number of visitors to the Subaru Visitor Center, opened in 2003, reached one million in September 2014. Going forward, we will continue to offer customers "Enjoyment and Peace of Mind" through reliable vehicle manufacturing with the aim of achieving a unique Subaru market presence based on our Customer Comes First policy.

Coexisting with the local community, Subaru would like to call on your continued support in 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.



#### Saturday, April 19 and Sunday, April 20, 2014: Ota Shibazakura (Moss Phlox) Festival

The Subaru Community Exchange Association conducted public relations activities at the Ota Shibazakura (Moss Phlox) Festival held in Ota City. There were games for children and vehicle displays. Funds collected were donated to the city's welfare facilities through the Ota City Social Welfare Conference.



#### Saturday, May 17 and Sunday, May 18, 2014: Gunma Prefecture Karakuri Innovation Fair

The 7th Gunma Prefecture Karakuri Innovation Fair was held at the Gunma Prefectural Office. A Karakuri Improvement Device manufactured by the Industrial Products Company at Fuji Heavy Industries was exhibited and demonstrated. The exhibit attracted attention from many of the visitors to the fair from children to adults.



Sunday, August 31, 2014:

Subaru Community Exchange Association 20th Anniversary Event The Subaru Community Exchange Association celebrated its 20th anniversary. To mark the anniversary, a commemoration ceremony and a concert were held at AIRYS HALL, Nitta Bunka Kaikan, Ota City.



Saturday, May 31, 2014: Kanayama Cleanup

Subaru Community Exchange Association sponsored the 20th Kanayama Cleanup. A total of 750 volunteers from Ota City and the city's junior high school pupils took part in weeding the azalea area around Kanayama Waterside Park and a cleanup in the area with cooperation from members of Subaru Community Exchange Association.



### 12 days from Friday, July 18, 2014: 85th Intercity Baseball Tournament

At the 85th Intercity Baseball Tournament, the baseball club advanced to the final for the first time in 45 years, and took out a superb second place. The final, which was watched by the Emperor and Empress, ended in a frustrating 0-2 defeat watched by a large crowd of more than 10,000 supporters. We would like to thant not only the baseball club that provided us with courage, energy and excitement, but also everyone who came to Tokyo Dome over the five days to give their support.



Monday, September 8, 2014: Number of Subaru Visitor Center Visitors Reached One Million The cumulative number of visitors to the Subaru Visitor Center, which is the Yajima Plant visitor facility, reached one million since opening on July 15, 2003, and a commemoration ceremony was held.



#### Wednesday, September 10, 2014: Flower Distribution

The Subaru Community Exchange Association at each of the companies buys flower seedlings to promote beautification of areas around them. In addition, flowerbed competitions have been held at 22 elementary schools in Ota City. The children experience the importance of life and a sense of unity with their peers by caring for the flowers.



#### Saturday, October 4 to Saturday, October 25, 2014: 11th Subaru Gunma Prefecture Schoolchildren's Rubber Ball Baseball Championship

We held the Subaru Prefecture Schoolchildren's Rubber Ball Baseball Championship in which junior baseball teams in each area of Gunma Prefecture participated. Many people visited to cheer on the games during the championship, which brimmed with excitement.



Monday, November 3 and Wednesday, February 11, 2014: Subaru Community Exchange Association Plant Tours The Subaru Community Exchange Association held a Traffic Safety Lecture and Plant Tour for local people at the Subaru Visitor Center. 215 people attended and were shown round the Yajima Plant and the visitor center after a traffic safety lecture by Ota Police Department.



#### Saturday, October 25 and Sunday, October 26, 2014: Ota City Sports and Recreation Festival

We sponsored an exhibition game by the baseball club and the Subaru Marathon. We also ran games for children and vehicle exhibits through the local community exchange associations.



#### Sunday, November 2, 2014: SUBARU Appreciation Festival

The SUBARU Appreciation Festival 2014 was held at the Yajima Plant of Gunma Manufacturing Division. The event attracted around 27,000 visitors, including family members of our staff, local area residents, associated companies and more. The festival staged various events, which included refreshment stands run by each workplace, a plant tour, and EyeSight experiences.



#### 2015 New Year's Day Long Distance Relay Race

We held the New Year Long Distance Relay Race with 37 teams from across Japan taking part. Our track and field club ranked 15th overall, achieving their goal. We would like to thank spectators for your warm support in waving Subaru flags roadside on the day.



#### Sunday, March 22, 2015: Athletes Meet and Greet Workshop

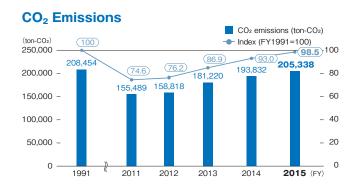
The Athletes Meet and Greet Workshop sponsored by the Gunma Prefectural Agency for Child Health and Development was held at the Gunma Children's Museum. FHI's hardball baseball club and athletics club took part as instructors. Around 150 elementary and junior high school children participated in the day, which was an opportunity for them to learn about the enjoyment and fundamentals of sport from athletes of both the clubs.

# **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 FY2015, our CO<sub>2</sub> emissions volume was 205,338 ton-CO<sub>2</sub>. We shall continue our efforts to save energy and contribute to the prevention of global warming



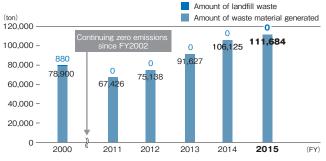
#### Approach to Zero Emissions

The waste emissions volume of Gunma Manufacturing Division in FY2015 was 111,684 ton. Our record of zero ton landfill waste has continued uninterrupted. We shall continue with our efforts to improve recycling and further reduce waste.

\*FHI's definition of zero emissions

Total amount of landfill waste (direct landfill + landfill following intermediate treatment) is less than 0.5% of the total amount of waste (industrial waste + specified industrial waste + general waste from offices) excluding scrap metal

## 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.

#### FY2015 Environmental Data

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

#### 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.

## 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	7.6	6.8	7.3
BOD	25	20	17.4	0.1	3.6
SS	50	40	13.4	0.2	3.7
n-Hexane Extracts (inorganic)	5	4	1.0	0.0	0.5
n-Hexane Extracts (organic)	30	24	1.0	1.0	1.0
Fluorine	8	6.4	2.4	0.2	1.1
Zinc	2	1.6	0.3	0.2	0.3
Soluble Iron	10	8	0.3	0.1	0.2
Soluble Manganese	10	8	0.1	0.1	0.1
Total Phosphorus	16(8)	6.4	2.7	1.0	1.7
Total Nitrogen	120(60)	48	17.0	4.2	7.8

# Oizumi Plant: Water Pollution Control Law,

Pollution Control Agreement with Orzumi City									
Substance	Regulated Values (prefectural)	Voluntary Standard	Maximum Values	Minimum Values	Average Values				
рН	5.8-8.6	6.1-8.3	8.3	6.9	7.4				
BOD	10	8	5.3	0.9	2.3				
SS	10	8	8.8	0.4	4.0				
n-Hexane Extracts (inorganic)	3	2.4	1.0	1.0	1.0				
n-Hexane Extracts (organic)	30	24	2.0	0.0	0.5				
Fluorine	8	6.4	0.2	0.2	0.2				
Zinc	2	1.6	0.2	0.0	0.0				
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	11.8	6.3	9.1				

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

Substance	Regulated Values (prefectural)	Voluntary Standard	Maximum Values	Minimum Values	Average Values
pН	5.8-8.6	6.1-8.3	7.6	7.0	7.2
BOD	25	20	11.0	4.1	6.8
SS	50	40	5.1	0.8	2.3
n-Hexane Extracts (inorganic)	5	4	3.3	0.1	1.4
n-Hexane Extracts (organic)	30	24	1.0	1.0	1.0
Fluorine	8	6.4	3.0	0.8	1.9
Zinc	5	4	0.5	0.2	0.3
Soluble Iron	10	8	0.1	0.1	0.1
Soluble Manganese	10	8	0.8	0.4	0.6
Total Phosphorus	16(8)	6.4	0.7	0.6	0.7
Total Nitrogen	120(60)	48	5.5	4.6	5.1

## North 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	7.9	7.3	7.7
BOD	25	20	1.2	0.1	0.5
SS	50	40	3.7	0.8	2.2
n-Hexane Extracts (inorganic)	5	4	1.2	0.0	0.6
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	0.2	0.1	0.2
Soluble Manganese	10	8	0.2	0.1	0.2
Total Phosphorus	16(8)	6.4	0.1	0.1	0.1
Total Nitrogen	120(60)	48	1.8	1.3	1.6

[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.

#### Main Plant

Facilities	Substance	Regulated Values	Voluntary Standard	Maximum Values	Average Values
Paint Drying Furnace	NOx	230	184	38	19
Paint Drying Furnace	PM	0.2	0.16	0.038	0.016

Data from principal facilities shown. [Unit] NOx: ppm, PM: g/m<sup>3</sup>N

#### Oizumi Plant

Facilities	Substance	Regulated Values	Voluntary Standard	Maximum Values	Average Values
Aluminum Melting Furnace	NOx	180	144	65	32
Aluminum Melting Furnace	PM	0.2	0.16	0.06	0.02

Data from principal facilities shown. [Unit] NOx: ppm, PM: g/m<sup>3</sup>N

#### Yajima Plant

Facilities	Substance	Regulated Values	Voluntary Standard	Maximum Values	Average Values
	NOx	230	184	62	38
Paint Drying Furnace	PM	0.2	0.16	0.002	0.00

Data from principal facilities shown. [Unit] NOx: ppm, PM: g/m<sup>3</sup>N

#### Measurement Result of Noise and Vibration

The measured results all comply with the Noise and Vibration Act.

#### Noise

Gunma Prefectural Ordinances, Pollution Control Agreement with Ota City and Oizumi City [Unit: dB(A)]

Measur- ement Area	Regulated Values (night)	Voluntary Standard	Number of Measur- ements	Actual Values
Main Plant	55	54	20	34-53
Yajima Plant	55	54	20	41-54
Oizumi Plant	50	49	13	40-48

#### Vibration

**Gunma Prefectural Ordinances,** Pollution Control Agreement with Ota **City and Oizumi City** [Lipit: dP(7)]

				[0111. 00(2)]
Measur- ement Area	Regulated Values (night)	Voluntary Standard	Number of Measur- ements	Actual Values
Main Plant	65	64	20	11.8-36.3
Yajima Plant	65	64	20	17.7-34.8
Oizumi Plant	60	59	13	15.9-36.8

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

All measurement results complied with the Air Pollution Control Act.

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#### **Air Pollution Control Law**

				[Unit: ppm-C]
Facilities		Regulated Values	Maximum Values	Average Values
Paint	Main Plant	700	647	229
Facilities.	Yajima Plant	700	360	74
etc	Oizumi Plant	400	251	94

#### Measurement Result of Odor

All measurement results complied with the Offensive Odor Control Act.

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

Measurement Area	Regulated Values	Voluntary Standard	Number of Measurements	Actual Values
Main Plant	21	20	6	under10
Yajima Plant	21	20	6	under10
Oizumi Plant	21	20	6	13 and under

#### Amount of PRTR Chemical Substances Handled and Emitted

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

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	462,826	248,862	0	0	0	47,259	33,256	133,449
Xylene	802,213	395,406	0	0	0	216,574	136,640	53,592
2-Ethoxyethyl acetate	1,279	58	19	0	37	611	552	3
1,3,5-Trimethybenzene	53,934	34,968	0	0	0	4,051	6,607	8,308
Toluene	835,727	320,218	0	0	0	368,102	122,807	24,600
2-Ethylhexyl	8,101	2	0	0	162	7,937	0	0
1,2,4-Trimethybenzene	171,446	575	7	0	0	170,864	0	0
Benzene	24,386	76	0	0	0	24,310	0	0
Naphthalene	6,231	4,374	0	0	0	0	1,858	0
Formaldehyde	24,231	11,874	0	0	2,908	0	6,542	2,908
n-hexane	103,880	353	0	0	0	103,527	0	0
Zinc compounds (water-soluble)	49,170	0	476	0	16,647	32,047	0	0
Nickel compounds	6,788	0	305	0	5,126	1,358	0	0
Hydrogen fluoride and its water-soluble salts	5,741	0	1,432	0	4,212	97	0	0
Manganese and its compounds	15,279	0	381	0	6,753	8,145	0	0
Dioxin	0	0	0	0	0	0	0	0
Total	2,571,232	1,016,766	2,620	0	35,844	984,882	308,262	222,860
Total	2,071,232	1,0	19,386	0	35,044	904,682	300,262	222,060

#### **Division History**

December 1917	The Research Aircraft Laboratory moved to Ota-Town, Gunma Prefecture	Noven
November 1934	New Ota Plant completed and old Ota Plant renamed as Donryu Plant	Febru
August 1945	Nakajima Aircraft Company renamed Fuji Sangyo Company, Ltd.	Febru
July 1953	Fuji Heavy Industries Ltd. established	May 1
April 1955	Ota North Plant and Isesaki Plant opened	March
March 1958	The SUBARU 360, 4-wheeled mini car, announced	March
October 1960	Gunma Main Plant opened	Janua

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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