# **Fuji Heavy Industries Ltd.** 2010 CSR Report

Site Report

# **Gunma Manufacturing Division**

# Main Plant

Location	1-1, Subaru-cho, Ota City, Gunma Prefecture ZIP : 373-8555
Site Area	585,521m <sup>2</sup>
Building Area	312,313m <sup>2</sup>
Number of Employees	3,071
Main Products Manufactured	STELLA and SAMBER models



# Yajima Plant

ajina i	iant
ocation	1-1, Shoya-machi, Ota City,
	Gunma Prefecture
	ZIP : 373-0822
ite Area	549,845m <sup>2</sup>
uilding Area	255,466m <sup>2</sup>
mber of Employees	2,748
in Products Manufactured	LEGACY, EXIGA, IMPREZA,
	and
and the second second	FORESTER



# Ota North Plant

Location	27-1, Kanayama-cho,
	Ota City, Gunma Prefecture
	ZIP : 373-0027
Site Area	43,750m <sup>2</sup>
Building Area	26,841m <sup>2</sup>
Number of Employees	63
Main Products Manufactured	Automotive parts
ALL DESIGN	20
Contractory of	
all and a start of	



ion	1-1-1, Izumi, Oizumi-machi,
	Ora-gun, Gunma Prefecture
	ZIP : 370-0531
rea	316,176m <sup>2</sup>
ıg Area	227,823m <sup>2</sup>
of Employees	1,623
ucts Manufactured	Automotive engines and transmis



# Isesaki Plant

on	100, Suehiro-cho, Isesaki City, Gunma Prefecture
	ZIP : 372-8508
rea	177,422m <sup>2</sup>
g Area	58,866m <sup>2</sup>
of Employees	84
cts Manufactured	Automotive parts



# SUBARU Test & Development Center

Location Site Area Building Area

Sano City, Tochigi Prefecture ZIP : 327-0512 1,080,832m<sup>2</sup> 24,378m<sup>2</sup>



# Top Message



The Gunma Manufacturing Division is determined to provide "Greener SUBARU" from "Clean Plants" in its desire to create environmentally friendly automobiles to ensure preservation of our rich natural environment for generations to come.

We are well aware of the importance to live and prosper together with the communities around the site of Gunma Manufacturing Division and the society as a whole. We have been actively involved in setting exchange meetings for mutual understanding, cooperating for fund raisings and joining in environment-related events. Let us count on your continued support to SUBARU.

Corporate Senior Vice President Gunma Manufacturing Division Chief General Manager

# Masahiro Kasai

# Relationship with Local Society

# **Communication with 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.

# SUBARU Delivery Class on Environment





From June through December, Our employees visited all the elementary school (28 school altogether) in the Ota-City and Oizumi Town areas to deepen children's understanding of the environmental issues by explaining the reasons for global warming and its countermeasures with a bits of experiments under the theme "Let's Protect Irreplaceable Planet Earth."

The event started in 2004, marking its 6th anniversary this year, will be continued in years ahead.

Kanayama by the SUBARU Community Exchange Association Clean



In July, FUJI SUBARU CO., LTD. held Automobile Plant Tour for chil-dren. FUJI SUBARU CO., LTD. invited about 200 children and their parents to Yajima Plant and SUBARU Visitor Center



In May, Gunma Manufac-turing Division carries out grass cutting and cleaning in the red pine forest of Mt. Kanayama together with people from companies and local communities. Beverages, towels and flower saplings were distributed to about 600 people who took part in this Campaign.

SUBARU Championship for Gunma Little Leagues



In July, about 580 SUBARU employees par-580 ticipated in "Ota Summer Festival" Additionally, participated in "Oizumi Summer Fes-tival", "Isesaki Summer Festival" and so on.



October, SUBARU In Championship for Little Leagues was held in Gunma Prefecture. 20 Little Leagues (about 400 kids) in Gunma participated in this Championship.

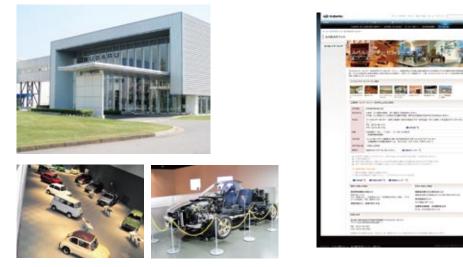




In November, we took part in the Ota City Industry's Environmental Festival held at Nitta Culture Hall in Ota City. On that day, we exhibited an electric car, the Plug-in STELLA and responded to many questions from a multitude of people.

# Gunma Manufacturing Division | Site Report

# SUBARU Visitor Center and Plant Tour



#### round. In FY2009, 87,813 elementary school students (from 1,074 schools) and 10,256 people, total 98,069 people visited our Visitor Center and Plant Tour. \*About Plant Tour application and detailed in-

We held Visitor Center and Plant Tour a year-

formation of SUBARU Visitor Center, please refer FHI HP. [Japanese only]

http://www.subaru.jp/about/ showroom/vc/index.html

# Education and Enlightenment Activities

In Gunma Manufacturing Division, in addition to education and training by type and skill level of work, employees are offered with various educational programs for various types of issues including traffic safety and environmental protection. Not limited to employees of the division, some education is provided as part of assisting affiliated companies and suppliers. We also are often invited to local schools for lectures as guest speakers.

# Environmental Education to new employees of Affiliated Companies



In April, education on enprotection vironmental was offered to new em 100 plovees (about people) of affiliated companies. They studied a wide range of topics from protection of global environment and our environmental manage ment system.

# Lecture at Training for Vice-principals



In January, Mr. Kozuka, Senior General Manager of Gunma Manufacturing Division was invited to the 2nd training course specially designed to support vice-principals in the east block elementary and junior high schools. He made a speech on the educational system of Fuji Heavy Industries Ltd. to the audience of about 130 vice-principals.

# Approaches for Environmental Protection

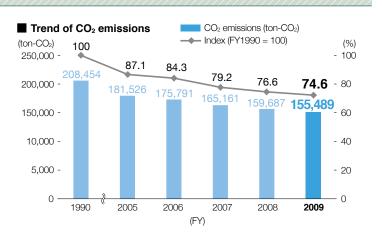
Gunma Manufacturing Division as an automobile manufacturing work actively for environmental protection activities to provide "Greener SUBARU" from "Clean Plants".

# **Curbing Global Warming Activities**

 $CO_2$  emission shows a declining trend over the last 5 years. 25.4 % reduction was achieved against actual performance in 1990.

In FY2009, Gunma Manufacturing Division had a program to pick up items for improvement every month by each production section under the name of "Energy-pinch Campaign" and practice routine energy saving patrolling. Under the slogan of "Decide, Stop, Fix and Turn Down", all members are falling in line to push for energy saving.

We are committed to engaging in energy saving activities to curb global warming.



# Approach to Zero-Emissions

Gunma Manufacturing Division achieved Zero-Emissions in March, 2001 as advanced activity in Fuji Heavy Industries Ltd..

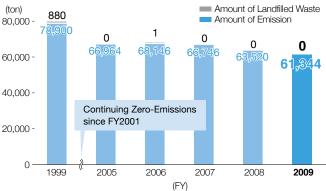
We will continue to improve recycling and reduce amount of wastes furthermore.

# **Response to Electronic Manifest**

We initiated preparations for Electronic Manifest System on a trial basis.

The system was introduced in August, 2009, toward its full implementation, and as of March, 2010, more than 80 % was changed to electric manifests.

Trends in Amount of Waste Emission and Landfilled Waste



# **Preventing Environmental Pollution**

To live together with local communities and to maintain verdant natural environment, we are engaged with management of emission gases as well as discharged water to reduce environmental risks, promoting activities to prevent environmental accidents and public hazards.

In FY2009, however, we received 2 complaints about odor from residents who live near Main Plant in addition to an environmental accident of heavy oil flow-out into a water channel on the plant site. Please refer to page 45 of the 2010 CSR Report for some more detailed information and remedial actions taken.

We will strive not merely to prevent exceeding standard limits, but rather to achieve "zero" targets.

# FY2009 Environmental 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 low or regulation.

# Water Quality Data

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	7.7	7	7.3		
BOD	25	20	6.1	0.4	2.7		
SS	50	40	9.6	0.9	2.6		
Oil Content (inorganic)	5	4	2.5	0.1	0.6		
Fluorine	8	6.4	0.8	0.2	0.4		
Zinc	5	4	0.3	0.0	0.2		
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	1.8	0.1	0.7		
Total Nitrogen	120(60)	48	8.5	1.9	4.7		
Bacillus Coli	3,000	2,400	440	0	145		

Oizumi Plant : Water Pollution Control Law.

Pollution Control Agreement with Ota City							
substance	Regulated values (prefectural)	Voluntary Standard	Maximum values	Minimum Values	Average values		
рН	5.8~8.6	6.1~8.3	8.0	7.1	7.4		
BOD	10	8	7.7	0.5	3.1		
SS	10	8	7.4	0.9	4.1		
Oil Content (inorganic)	3	2.4	1.8	0	0.5		
Fluorine	8	6.4	0.2	0.2	0.2		
Zinc	2	1	0.3	0.1	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	0.5	0.2	0.4		
Total Nitrogen	120(60)	48	7.5	2.1	4.8		
Bacillus Coli	1,000	800	16	0	8		

[Notations] --- pH : Hydrogen-ion concentration, BOD : Biochemical oxygen demand SS : Concentration of suspended solids in water (diameter : 2mm 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.

Yajima 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	20	5.6	2.3	3.9
SS	50	40	4.8	0.9	2.3
Oil Content (inorganic)	5	4	2.8	0.2	1.4
Fluorine	8	6.4	1.2	0.5	0.9
Zinc	5	4	0.4	0.1	0.2
Soluble Iron	10	8	0.5	0.1	0.3
Soluble Manganese	10	8	0.6	0.1	0.35
Total Phosphorus	16(8)	6.4	0.4	0.2	0.3
Total Nitrogen	120(60)	48	5.7	2.5	4.1
Bacillus Coli	3,000	2,400	360	90	225

#### 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	7.5	7.7
BOD	25	20	4.8	0.1	1.0
SS	50	40	7.2	0.9	2.9
Oil Content (inorganic)	5	4	1.4	0	0.4
Fluorine	8	6.4	0.2	0.2	0.2
Zinc	5	4	0.02	0.02	0.02
Soluble Iron	10	8	0.5	0.2	0.4
Soluble Manganese	10	8	0.1	0.1	0.1
Total Phosphorus	16(8)	6.4	4.9	1.8	3.4
Total Nitrogen	120(60)	48	1.5	1.4	1.5
Bacillus Coli	3,000	2,400	0	0	0

# Isesaki Plant : Isesaki City Sewerage Law

substance	Regulated values (sewerage)	Voluntary Standard	Maximum values	Minimum Values	Average values
рН	5.7~8.7	6~8.4	7.9	7.4	7.6
BOD	300	240	150	3.7	59.1
SS	300	240	43.4	4	21.5
Oil Content (inorganic)	5	4	1.0	1.0	1.0
Fluorine	8	6.4	1.9	0.2	0.9
Zinc	5	4	1.3	0.0	0.4
Soluble Iron	10	8	0.1	0.1	0.1
Soluble Manganese	10	8	2.2	0.1	0.8
Total Phosphorus	20	16	1.7	0.2	0.9
Total Nitrogen	150	120	13	4	6

[Notations] ••• pH : Hydrogen-ion concentration, BOD : Biochemical oxygen demand SS : Concentration of suspended solids in water (diameter : 2mm 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
Boiler (No. 5 & No.6)	NOx	150	120	93	68
	SOx	60.3	48.2	0.22	0.18
	PM	0.25	0.2	0.005	0.003
Dry-off furnace (electro coat, 2nd &	NOx	230	184	44	27
(electro coat, 2nd & final coat)	PM	0.2, 0.3	0.16, 0.24	0.003	0.002

[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
Boiler (No. 2)	NOx	230	184	78	78
	SOx	62	50	0.5	0.5
	PM	0.25	0.2	0.004	0.004
Dry-off furnace (Electro coat, 2nd & final coat)	NOx	230	184	49	22
	PM	0.2, 0.35	0.16, 0.28	0.002	0.001

[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 furmaces. 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.

Noise [Uni								
Measurement area	Regulated values (night)	Voluntary Standard	Number of measurement	Actual values				
Main Plant	55	54	40	32~46				
Yajima Plant	55	54	32	43~54				
Oizumi Plant	50	49	25	37~49				
North Plant	50	49	30	32~41				

Vibration [Unit : dB								
Measurement area	Regulated values (night)	Voluntary Standard	Number of measurement	Actual values				
Main Plant	65	64	40	0~21				
Yajima Plant	65	64	28	13~22				
Oizumi Plant	60	59	25	12~26				
North Plant	60	59	31	5~20				

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

Orzumi Flant . All Foliution Data (All Foliution Control Law)									
Facilities	Substances	Regulated values	Voluntary standard	Maximum values	Average Values				
Co-generation	NOx	600	480	229	219				
System (Gas engine No.1 &2)	PM	0.05	0.04	0.001	0.0				
Aluminum	NOx	180	144	75	65				
melting furnace	PM	0.2	0.16	0.012	0.007				

[Unit] NOx : ppm, PM : g/m³N 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.

Other Also at the specified facilities such as 3 heaters in North plant and 2 small boilers in Isesaki plant measured values were in the range of values specified by Law.

# Measurement Result of Paint Facilities

We took measurement at 15 all facilities.

All the measured results were less than our voluntary standards.

[Units] ppm-C								
Facility	Regulated values	Maximum values	Average values					
Paint Facilities, etc	700	399	276					
	400	160	96					

# Amount of PRTR chemical materials and emission etc.

# 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 requirements 21.

Gunma Manufacturing Division (Main Plant, Yajima Plant, Oizumi Plant and North Plant) [Unit : kg/year										
Code	CAS No.	Chemical Substances	Amount Handled	Air Release	Water Emissions	Transfer	Consumption	Solvent wiping Removal	Recycle	
1	none	Zinc water-soluble compound	5,345		58	1,156	4,131			
16	141-43-5	2- Amino ethanol	1,043		84	318		642	0	
30	25068-38-6	Polycondensation with 4,4'-isopropylidenediphenol and 1-chrolo-2,3-epoxypropane	19,679			1,604	18,004	71		
40	100-41-4	Ethyl benzene	269,126	131,602			42,403	21,820	73,301	
43	107-21-1	Ethylene glycol	1,532,427				1,532,427			
63	1330-20-7	Xylene	550,640	251,487			192,366	45,304	61,483	
224	108-67-8	1,3,5-Trimethylbenzene	27,554	19,561			146	3,602	4,245	
227	108-88-3	Toluene	521,015	221,288			228,232	41,674	29,821	
232	none	Compounds of nickel	1,238		56	935	248			
272	117-81-7	2-Ethylhexyl	8,774			243	8,531			
299	71-43-2	Benzene	14,916	51			14,866			
311	none	Manganese and its compounds	4,276		71	1,337	2,868			
		Total	2,956,034	623,990	268	5,594	2,044,221	113,112	168,850	

Gunma Ma	anufacturing Divis	ion [Isesaki Plant]						[U	nit : kg/year]
Code	CAS No.	Chemical Substances	Amount Handled	Air Release	Water Emissions	Transfer	Consumption	Solvent wiping Removal	Recycle
1	none	Zinc water-soluble compound	5,345		58	1,156	4,131		
63	1330-20-7	Xylene	2,138	60			2,078		
227	108-88-3	Toluene	2,485	6			2,480		
232	none	Compounds of nickel	1,238		56	935	248		
272	117-81-7	2-Ethylhexyl	2,216			111	2,106		
311	none	Manganese and its compounds	4,276		71	1,337	2,868		
		Total	17,699	66	184	3,539	13,910	0	0

SUBARU	Test & Developme	nt Center (Sano City, Tochigi Prefecture)						[U	lnit : kg/year]
Code	CAS No.	Chemical Substances	Amount Handled	Air Release	Water Emissions	Transfer	Consumption	Solvent wiping Removal	Recycle
63	1330-20-7	Xylene	25,144	34			25,110		
224	108-67-8	1,3,5-Trimethylbenzene	2,532	3			2,530		
227	108-88-3	Toluene	54,449	83			54,366		
299	71-43-2	Benzene	1,658	2			1,656		
		Total	83,784	122	0	0	83,662	0	0

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# **Division history**

		The Research Aircraft Laboratory moved to Ota-Town, Gunma Prefecture
		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 emission.
March	2010	Fuji Heavy Industries Ltd. acquired ISO14001 Corporate Integrated Certification

# Contact:

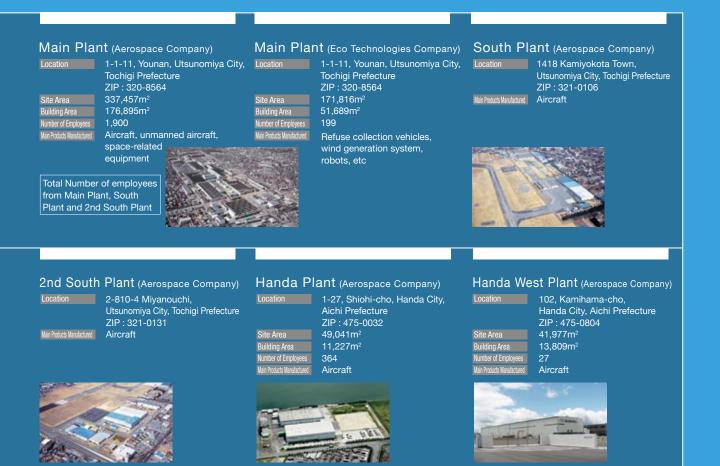
Gunma Manufacturing Division General Administration Dept. General Affairs Sec. TEL: 0276-26-2011 [Domestic] +81-276-26-2001 [International]

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# **Fuji Heavy Industries Ltd.** 2010 CSR Report

Site Report

# **Utsunomiya Manufacturing Division**



# Top Message



Utsunomiya Manufacturing Division Chief General Manager

# Eiji Umehara

We advocate "A Company Fulfilling its Social Responsibilities" as one of management visions. This is the basic point to realize our long-term vision "A compelling Company with Strong Market Presence". Under the basic policy of "Everything for Customers", we will strive for contributing to sustainable social development and enhancing the corporate value by proactively committing ourselves to serving to the society and boosting compliance while caring for the environment to become a trusted company.

To materialize these, Utsunomiya Manufacturing Division will press forward with not only intensifying our approaches to the environmental issues including global warming, but also focusing on thoroughgoing compliance, stepping up traffic manners and sincerely addressing complaints because of our proximity to residential areas under the slogan "Company Endeared in the Community". We will continue a program to make children deepen their understanding of science and environmental activities, leveraging our strength as a manufacturer.

Utsunomiya Manufacturing Division | Site Report

# Relationship with Local Society

# **Communication with Local Community**

We at Utsunomiya Manufacturing Division recognize the importance of coexisting with local communities as responsible members of society, and equally the importance of maintaining a prosperous society. Especially, we have been involved in supporting school education such as science or environmental protection activities for a long time.

# SUBARU Delivery Class on Environment



FHI employees visit elementary schools in Utsunomiya city, and explain the mechanisms of global warming with experiment to deeply understand the environmental problems. In FY2009, 756 students in 5th grade from 26 classes took this lecture. (Accumulating total : 3,362 students from 112 classes)

# Supported "Science Experience Event" by Teikyo University



In September, we joined a prep experience event held at the Utsunomiya campus of Teikyo University. We demonstrated experiment to show to children the mechanism for an airplane to fly by blowing wind to model wings to lift itself. They also experienced the lightness of aircraft materials by exhibits. About 650 children visited the campus to enjoy the event showing interest in science.

# Co-sponsored Cycle Load Race JAPAN CUP



We have been cosponsoring the Asia's top cycling race "the JAPAN CUP" since FY1990 which is hosted by Utsunomiya City in October every year, assisting to appeal Utsunomiya as the city of bicycles and cycling both to home and abroad. In FY2009, about 67,000 people, the highest number ever, came from both inside and outside the prefecture to enjoy the race.

# Interactive Hands-on Plant Tour



In March, an interactive hands-on plant tour was offered to students at Utsunomiya Manufacturing Division in agreement with a program planned by Utsunomiya City to expose them to the fun of making things for their reference in choosing their future career path. In FY2009, 33 high school and university students took part in the program and came to realize how light aircraft materials were through the tour to the sites of development and manufacturing of aircraft.

# Plant Tour for Public



In August, we invited 92 people from nearby residents' associations for a plant tour to make them understand what kinds of products are made and what kinds of operations are performed inside the premise. Voices of surprise came from the participants when they were explained that our parts are used in many of aircraft flying all over the world.

# Baseball Class for Children



In January, our rubber-ball baseball club opened a baseball class to coach children of local baseball teams to improve their skills. The class, being the 8th of this kind, has deeply taken root in the community and people can see the gleaming eyes of children in the ground every winter.

# Approach for Traffic Safety, Environmental Protection Education, and Enlightening Activities, etc

At Utsunomiya Manufacturing Division, taking various opportunities for promotion of CSR activities, we have been vigorously providing educational and edifying programs for promoting traffic safety and environmental protection to employees.

Traffic Safety Education (Night School)



We offered an education on night-time driving mainly to young people in March. There were motivated to be more conscious of traffic safety by leaning danger involved in driving at night through hand-on experience using actual cars to see the difference of how people and other vehicles look between at daytime and at night.

# Environmental Fact Presentation



In October, an operation area was staged to report cases of environmental activities with the aim to understand the impact of our worksites on the environment and reduce environmental burdens through our line of duties for eventual contribution to profits. In this workshop, six working groups presented their cases to deepen understanding of the meaning of such activities.

# Modal Shift Business Won the Director-General of the Marine Bureau of Ministry of Land, Infrastructure, Transport and Tourism Award





In November, out of consideration to environmental issues, the transportation method of "Fuji-mighty" was changed from self-running on the land to sea transport for promotion of modal shifting. This modal shift was credited with the Director-General of the Marine Bureau of Ministry of Land, Infrastructure, Transport and Tourism Award.

Right: Subaru Logistics Co., Led. President Mr. Okazaki (At that time) Left: Eco Technologies Company President Mr. Arai (At that time) Crossing Guard for Local Community



We have provided crossing guard services at cross roads in the neighborhood of the division at commuting times to schools and offices, which also serves to make our employees be more conscious of traffic manners. Since there are many routes to schools in the vicinity of the division, we offered such services on 2 occasions in April when new pupils begin to attend and in September when they are likely to get too loosened after long summer holidays.

#### Clean Campaign (Environmental Month Event)



In June, our 440 employees cooperated as volunteers in separate collection of garbage in the vicinity of the division. Through such work, we helped to develop a hands-on environment of community roads we use casually for commuting to work, taking environmental activities as things close to us.

## Annual "Green Fund" Donation Campaign



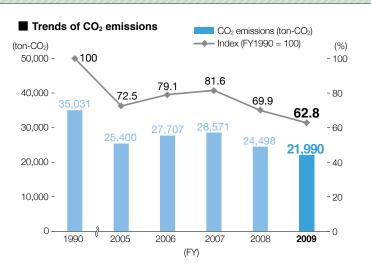
In September, the money collected by all the employees of the division was donated to the Forestry Promotion Committees of Tochigi and Aichi Prefectures. This campaign started in FY2000 and this is the 10th occasion. The interest of people in division has become increasingly seated as we went through campaigns. (The amount donated in FY2009: about 330,000 yen)

# Approaches for Environmental Protection

As a comprehensive manufacturer of transportation devices with automobiles as core products, we promote environmental protection recognizing "addressing global environmental problems is a critical issue in management."

# **Curbing Global Warming Activities**

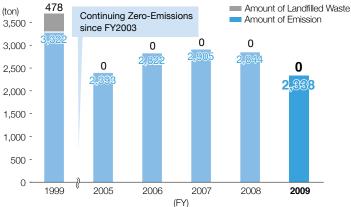
The  $CO_2$  emissions have been reducing for recent 3 years. It was accomplished 37.2% of  $CO_2$  emission reduction compare with actual performance in FY1990. We are committed to engaging in energy saving activities to curb global warming.



# Approach to Zero-Emissions

Utsunomiya Manufacturing Division achieved Zero-Emissions in FY2003. We will continue to improve recycling and reduce amount of wastes furthermore.

Trends in Amount of Waste Emission and Landfilled Waste



# **Preventing Environmental Pollution**

To live together with local communities and to maintain verdant natural environment, we are engaged with management of emission gases as well as discharged water to reduce environmental risks, promoting activities to prevent environmental accidents and public hazards.

In FY2009, however, we received 2 complaints about noise from residents who live near the Plant in addition to 2 internal environmental accidents of waste fluid flow-out into a water channel on the plant site. Please refer to page 45 of the 2010 CSR Report for some more detailed information and remedial actions taken.

We will strive not merely to prevent exceeding standard limits, but rather to achieve "zero" targets.

# FY2009 Environmental Data

The measured results all comply with the Water Quality Pollution Control Act, and the Utsunomiya Sewerage Ordinance the Handa Pollution Prevention Agreement. They also meet our voluntary standards which are 20% stricter than the levels under the agreement and ordinances.<sup>\*1</sup>

\* 1 FHI established the voluntary standards (for air, water, noise and vibration) which are 20% stricter than environmental low or regulation

# Water Quality Data

# Main Plant : Utsunomiya City Public Sewerage Law

Substance	Regulated values (sewerage)	Voluntary Standard	Maximum values	Minimum Values	Average values
рН	5~9	5.4~8.6	7.7	6.1	7.2
BOD	600	480	281	0.5	48.0
SS	600	480	246	under 1	under 36.5
Oil Content (inorganic)	5	4	3.5	under 1	under 1.5
Fluorine	8	6.4	1.5	under 0.2	under 0.4
Cadmium	0.1	0.08	0.01	under 0.01	under 0.01
Syanide	1	0.8	0.1	under 0.1	under 0.1
Total chromium	2	1.6	0.5	under 0.01	under 0.05
Hexavalent chromium	0.1	0.08	0.02	under 0.02	under 0.02

## South Plant : Utsunomiya City Public Sewerage Law

Substance	Regulated values (sewerage)	Voluntary Standard	Maximum values	Minimum Values	Average values					
рН	5~9	5.4~8.6	8	6.8	7.3					
BOD	600	480	92.9	7.6	31.9					
SS	600	480	162	5.2	33.2					
Oil Content (inorganic)	5	4	1.4	under 1	under 1					
Fluorine	8	6.4	under 0.2	under 0.2	under 0.2					
Cadmium	0.1	0.08	under 0.005	under 0.005	under 0.005					
Syanide	1	0.8	under 0.01	under 0.01	under 0.01					
Total chromium	2	1.6	0.03	under 0.01	under 0.01					
Hexavalent chromium	0.1	0.08	0.02	under 0.02	under 0.02					

# 2nd South Plant : Utsunomiya City Public Sewerage Law

Substance	Regulated values (sewerage)	Voluntary Standard	Maximum values	Minimum Values	Average values
рН	5~9	5.4~8.6	8	6.9	7.3
BOD	600	480	94.9	0.9	21.6
SS	600	480	126	1	23.6
Oil Content (inorganic)	5	4	under 1	under 1	under 1
Fluorine	8	6.4	2	under 0.2	under 0.3
Cadmium	0.1	0.08	under 0.005	under 0.005	under 0.005
Syanide	1	0.8	under 0.01	under 0.01	under 0.01
Total chromium	2	1.6	0.27	under 0.01	under 0.07
Hexavalent chromium	0.1	0.08	0.02	under 0.02	under 0.02

# 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)	
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Facilities	Substances	Regulated values	Voluntary standard	Maximum values	Average Values
Co-generation system	NOx	600	480	157	156
Dry-off furnace	NOx	230	184	60	56
	PM	0.2	0.16	0.001	0.001

[Unit] NOx : ppm, PM : g/m<sup>3</sup>N Among the 9 facilities specified by Law, we present here data of 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.

# Handa West Plant : Air Pollution Data (Aichi Prefectural Ordinances)

Facilities	Substances	Regulated values	Voluntary standard	Maximum values	Average Values	
	SOx	1.5	1.2	0.01	0.01	
2ton boiler	NOx	180	144	38	35	
	PM	0.1	0.08	0.002	0.002	

[Unit] SOx : g/m<sup>3</sup>N/h, NOx : ppm, PM : g/m<sup>3</sup>N Among the 5 facilities specified by Law, we present here data of big boilers. Also at the specified facilities not indicated here, measured values were in the range of values specified by Law.

#### Handa Plant : Water Pollution Control Law, Aichi Prefectural Ordinances

Substance	Regulated values (prefectural)	Voluntary Standard	Maximum values	Minimum Values	Average values
рН	6~8	6.2~7.8	7.8	6.6	7.4
BOD	25	20	11	0.5	8.3
SS	25	20	21	1	5.1
Oil Content (inorganic)	5	4	under 0.5	under 0.5	under 0.5
COD	25	20	11	2.2	5.8
Bacillus Coli	3,000	2,400	240	30	86.6

#### Handa West Plant : Water Pollution Control Law, Pollution Control Agreement with Handa City

Substance	Regulated values (agreement)	Voluntary Standard	Maximum values	Minimum Values	Average values
рН	6~8	6.2~7.8	7.8	6.9	7.5
BOD	15	12	4.1	1	2.6
SS	15	12	8	1	4.3
Oil Content (inorganic)	2	1.6	under 0.5	under 0.5	under 0.5
Fluorine	5	4	under 0.02	under 0.02	under 0.02
cyanogens	0.5	0.4	under 0.02	under 0.02	under 0.02
Total chromium	0.2	0.16	under 0.04	under 0.04	under 0.04
Hexavalent chromium	0.3	0.24	under 0.04	under 0.04	under 0.04

[Notations] ••• pH : Hydrogen-ion concentration, BOD : Biochemical oxygen demand SS : Concentration of suspended solids in water (diameter : 2mm or smaller) [Units] ••••• Bacillucs coli= number/ml, all others except pH : mg/L Regulated values for Total Phosphorus and Total Nitrogen are draite over or water. daily average value.

# Handa Plant · Air Pollution Data (Aichi Prefectural Ordinances)

rianda riant. 7 m ronation Data (Nichi ricicetara orainanees)						
Facilities	Substances	Regulated values	Voluntary standard	Maximum values	Average Values	
	SOx	1.5	1.2	0.05	0.05	
2ton boiler	NOx	180	144	39	36	
	PM	0.1	0.08	0.002	0.002	

[Unit] SOx : g/m³N/h, NOx : ppm, PM : g/m³N Among the 6 facilities specified by Law, we present here data of big boilers. 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.

Noise			[[	Jnit : dB(A)]	Vibration			[[	Jnit : dB(Z)]
Measurement area	Regulated values (night)	Voluntary Standard	Number of measurement	Actual values	Measurement area	Regulated values (night)	Voluntary Standard	Number of measurement	Actual values
Main Plant	60	58	8	57	Main Plant	65	63	8	32
South Plant	50	48	3	39	South Plant	60	58	2	<30
2nd South Plant	50	48	3	47	2nd South Plant	60	58	3	<30
Handa Plant	65	63	3	44	Handa Plant	70	68	3	37
Handa West Plant	65	63	6	60	Handa West Plant	70	68	5	<30

# Amount of PRTR chemical materials and emission etc.

Utsunomiya Manufacturing Division [Aerospace Company] (Main Plant, South Plant, 2nd South Plant) [Unit : kg/year] Solvent wiping Amount Handled Water Recycle Code CAS No. Chemical Substances Air Release Transfer Consumption Polycondensation with 4,4'-isopropylidenediphenol 30 25068-38-6 2,033 813 and 1-chrolo-2,3-epoxypropane 100-41-4 Ethyl benzene 531 79 22 430 40 4,882 1330-20-7 Xylene 1,835 647 2,400 63 108-88-3 Toluene 22,368 14,551 227 4,055 3,762 Compounds of Hexavalent chromium 976 2,010 647 384 69 none З Manganese and its compounds 550 825 311 none 1,375 9,284 Total 33,199 16,465 7,063 384 0 3

\*In FY2009, the amount of chemical substance subject to PRTR handled at Handa Plant and Handa West Plant was less than 1 ton/year.

# Utsunomiva Manufacturing Division [Eco Technologies Compav]

Utsunomiy	a Manufacturing	Division [Eco Technologies Compay]						[U	lnit : kg/year]
Code	CAS No.	Chemical Substances	Amount Handled	Air Release	Water Emissions	Transfer	Consumption	Solvent wiping Removal	Recycle
40	100-41-4	Ethyl benzene	7,897	4,847			1,919		1,131
63	1330-20-7	Xylene	22,433	13,922			5,451		3,060
227	108-88-3	Toluene	7,709	4,986			1,873		850
		Total	38,039	23,755	0	0	9,243	0	5,041

# **Division history**

July January March August August	1953 1958 1962 1963 1965	T-1 intermediated trainer aircraft succeeded in First Flight
	1978 1984 1988	T-3 primary trainer aircraft delivered to the Defense Agency AH-1S anti-tank helicopters delivered to the Defense Agency T-5 primary trainer aircraft delivered to the Defense Agency
December	1992 1993	Assembly plant of Boeing 777 (Handa Plant) started operations UH-1 J Helicopters delivered to the Defense Agency
July	1999	Utsunomiya Manufacturing Division acquired ISO14001 certification
November	2000	Fuji-mighty Type LP0 went on sale
March	2002	Utsunomiya Manufacturing Division achieved zero emission.
June		Company system introduced
		Aerospace Company and Eco Technologies Company established
July		T-7 new primary trainer aircraft succeeded in maiden flight
		and delivered to the Defense Agency
September	r 2005	Main wings of Transport Aircraft X and fixed-wing patrol aircraft delivered to the Defense Agency
December		Pilot large-scale wind power generation unit built in Kamisu
		City, Ibaraki Prefecture
March	2006	AH-64D helicopters succeeded in maiden flight and
		delivered to the Defense Agency
January	2007	First delivery of Boeing 787, Main Wing
March	2010	Fuji Heavy Industries Ltd,. acquired ISO14001 Corporate
		Integrated Certification

# Contact:

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