

# **Environmental Activity Report**

FY 2010

(For the period from April 1, 2010 to March 31, 2011)

November 2, 2011

Institute for Global Environmental Strategies (IGES)

## Table of Contents

1. Summary of the Organization.....	3
2. Scope of Report.....	9
3. Environmental Policy.....	10
4. FY 2010 Organizational Chart of Eco-Action 21.....	11
5. FY 2010 Environmental Activity Plan (10 Items).....	12
6. Environmental Targets and Level of Attainment.....	13
7. Results and Evaluation of Actions under FY 2010 Environmental Activity Plan.....	20
8. Results of Representative's Overall Assessment and Review.....	24
9. FY 2011 Environmental Targets and Actions.....	26
10. Confirmation and Evaluation of Compliance with Related Legislation and any Violations, Litigation, etc.....	37
11. External Communications.....	40

## 1. Summary of the Organization

### (1) Name

Institute for Global Environmental Strategies

### (2) Locations

- Headquarters:

2108-11 Kamiyamaguchi, Hayama, Miura-gun, Kanagawa 240-0115

- Tokyo Office:

Nippon Press Center Bldg. 6F, 2-2-1 Uchisaiwai-cho, Chiyoda-ku, Tokyo 100-0011

- Kansai Research Centre:

East Building 5th Floor, Disaster Reduction and Human Renovation Institution, 1-5-2 Kaigan-dori, Waki-no-hama, Chuo-ku, Kobe, Hyogo 651-0073 (relocated in May 2011)

- Kitakyushu Urban Centre:

International Village Center 2F, 1-1-1 Hirano, Yahata-Higashi-ku, Kitakyushu City, Fukuoka 805-0062

- Beijing Office (IGES Sino-Japan Cooperation Project Office):

Sino-Japan Friendship Center for Environmental Protection, Room #508, No. 1 Yuhuinanlu, Chao Yang District, Beijing, 100029 China

- IGES Regional Centre in Bangkok:

604 SG Tower 6F, 161/1 Soi Mahadlek Luang 3, Rajdamri Road, Patumwan, Bangkok 10330, Thailand

- Japanese Center for International Studies in Ecology (JISE):

Yokohama Nishi Godochosha 3F, 2-12-20 Okano, Nishi-ku, Yokohama, Kanagawa 220-0073

- Asia-Pacific Network for Global Change Research (APN Centre):

East Building 4F, Disaster Reduction and Human Renovation Institution, 1-5-2 Wakinohama Kaigan-dori, Chuo-ku, Kobe, Hyogo 651-0073

### (3) Staffing (as of April 1, 2010)

Total staff members of IGES: 145

Staff members of IGES Hayama Headquarters in FY 2010 (subject of this report): 101

(4) Name of officer responsible for environmental management

Kuniaki Makiya, Secretary General, Institute for Global Environmental Strategies

(5) Contact person information

Isao Sato, Head of Administrative Section, Eco-Action 21 Office, Institute for Global Environmental Strategies, Tel. +81-46-855-3712

(6) Budget

FY 2010 budget of IGES: 3,150,074,000 yen

FY 2010 budget of Hayama Headquarters (subject of this report): 2,111,888,000 yen

(7) Business summary

The Institute for Global Environmental Strategies (IGES), established under an initiative of the Japanese government in 1998, is an international research institute conducting practical and innovative policy research for the realization of sustainable development in the Asia Pacific region. While population growth and urbanization are advancing along with rapid economic development, poverty reduction remains an important issue in the Asia Pacific region. There are efforts to promote regional economic integration and to provide new opportunities for further economic development and poverty reduction; but at the same time as these trends, there is a risk of acceleration of the growing burden on natural resources and the environment due to the loss of forests, pollution of air and rivers, and growing volumes of waste. With regard to the pressing world problem of global warming, the Asia Pacific region is a major emitter of greenhouse gases, and it is feared that the greatest impact will be on the region's economy, society, and people's lives. The mission of IGES is to establish strategies and recommend effective policies for the realization of sustainable development in the Asia Pacific region while confronting these varied challenges, looking 50 or 100 years ahead into the future. There are rising expectations and demands concerning the role that the Asia Pacific region should play in the future in international efforts toward the resolution of global warming and other environmental problems. The Asia Pacific region is rich in diversity in terms of economics, politics, culture, and natural environments, and it is very important to provide appropriate policy recommendations in light of local circumstances. Through further expansion of cooperative

relationships with various entities including national governments, regional government organizations, NGOs, businesses, citizens' groups, and experts, the Institute for Global Environmental Strategies performs strategic policy research from the standpoint of the Asia-Pacific and broadly disseminates the results of such research to the world in order to contribute to the realization of a sustainable society.

(8) Summary of FY 2010 research projects

[1] Programme Management Office (PMO)

From a comprehensive and strategic perspective the PMO performs planning as well as both internal and external coordination concerning the research activities of IGES, and conducts research and investigative studies concerning emerging issues that relate to multiple fields. It works to effectively promote various activities for the realization of sustainable development, primarily aimed at the Asia-Pacific, through close cooperation and collaboration with related research institutions, governments, international organizations, NGOs, industries, and major international networks, etc. In addition, by participating in important international policy processes, it identifies major policy trends and needs for policy research, and disseminates IGES research results and policy recommendations in a timely manner, in order to support the international promotion of sustainability-related policy formulation and implementation.

[2] Climate Change Project (CC)

The Asia-Pacific is a major emitter of greenhouse gases. Additionally, it is feared that this region will suffer the worst effects of global warming. Therefore, addressing issues of climate change is an urgent task in the Asia-Pacific. The Climate Change Project proposes climate change policies to contribute to sustainable development of the Asia-Pacific in an international framework.

[3] Market Mechanism Project (MM)

The Market Mechanism Project provides the business community with clear explanations of the market mechanism system in order to support the effective introduction and implementation of the market mechanism, and also conveys the standpoint of businesses affected by this system to policymakers in order to contribute to effective policymaking.

[4] Natural Resources Management Group / Climate Change Adaptation Team (AD)

The vulnerability of the Asia Pacific region to climate change has frequently stemmed from inadequacies in long-term risk reduction strategies, which have also undermined sustainable development. A robust approach for building adaptive capacity is needed in all sectors and in the Asia Pacific region as a whole, and the increasing availability of financial and other types of support for adaptive measures provides an important opportunity for developing countries. At the same time, there is a growing need for objective assessment and reporting concerning the progress of adaptation. The aim of this group is to promote the mainstreaming of adaptive measures at the sectoral and national levels in the developing Asia Pacific through the identification and operation of methods to assess the progress of adaptation. It is involved in assessing the effects of adaptive measures and progress in the mainstreaming of adaptation, facilitating the formation of integrated adaptive policy decision frameworks to enable policy-makers to effectively develop adaptation policies at the national level, and building networks of various stakeholders in order to connect needs with opportunities for adaptation in the Asia Pacific region.

[5] Natural Resources Management Group / Forest Conservation Project (FC)

To maintain the wellbeing of present and future generations, this group develops and recommends policy instruments for the sustainable management and use of forest resources through strategic research, capacity building, and outreach activities.

[6] Natural Resources Management Group / Freshwater Project (FW)

The aim of this group is to create, gather, and apply the necessary knowledge for the implementation of forward-looking water governance strategies for the productive and sustainable use of water in the Asia Pacific region.

[7] Sustainable Consumption and Production (SCP)

The aim of this group is to contribute to sustainable patterns of consumption and production in the Asia Pacific region, focusing in particular on the consumption of physical resources, the flows of physical resources in society, and the environmental impacts of such uses of resources.

[8] Economy and Environment (EE)

In the promotion of sustainable development, it is necessary to reduce poverty while preserving the environmental and ecological systems which form the basis for human survival. In addition, for more effective policy recommendations, it is essential to evaluate the economic costs of policy implementation. The Economy and Environment Group uses a variety of economic analysis

techniques in its policy analyses to ensure that these viewpoints are reflected in the policy recommendations of all IGES research projects. This group uses economic analyses and other methods to study international trade in order to address the relationship between trade and the environment, an increasingly important theme in measures for regional economic integration in the Asia Pacific region.

[9] Governance and Capacity (GC)

This group analyses issues on different levels, including the local, national, regional, and global levels, and makes policy recommendations to improve governance and capacity for addressing issues of sustainable development and the environment in the Asia Pacific region.

[10] Kansai Research Centre (KRC)

This centre studies the relationship between business and the environment by researching actions by businesses and other private sector entities to promote environmental protection and energy conservation. In collaboration with national and local governments, it conducts research on environmental activities by businesses and identifies factors that encourage or hinder sustainable business in Asia through projects on co-benefit technologies as well as the application of low-carbon technologies in developing countries with attention to businesses' environmental and energy-saving technologies in order to formulate specific strategies.

[11] Kitakyushu Urban Centre (KUC)

This centre conducts research in a variety of fields on sustainable urban development and deals with important issues related to waste management, public health, pollution control, transportation, etc. It works closely with Kitakyushu City and the Kitakyushu International Techno-cooperative Association (KITA) in managing the Kitakyushu Initiative Urban Network and promoting the expansion and dissemination of positive urban environmental practices in Asia. Its capabilities for research on urban development are enhanced by strong ties with local and central governments, ASEAN, and other organizations.

[12] Beijing Office

China plays a role of increasingly strategic importance in environmental policy in the Asia Pacific region including measures to prevent climate change. The Beijing Office aims to provide a base for a variety of surveys and research activities involving

bilateral cooperation between China and Japan as well as multinational cooperation, in close collaboration with the Sino-Japan Friendship Centre for Environmental Protection.

[13] IGES Regional Centre in Bangkok (IRC)

The IGES Regional Centre in Bangkok was established in June 2011 as a means of promoting stronger collaboration with diverse stakeholders and related institutions of the Asia Pacific region. This centre collaborates with international institutions in providing support services for the operation of networks and the like as well as coordination services for cooperative research activities with international institutions.

[14] IPCC Technical Support Unit (TSU)

This unit provides technical support for the activities of the Task Force on National Greenhouse Gas Inventories (TFI), operated by the Intergovernmental Panel on Climate Change (IPCC). Established within IGES in 1999, it handles the practical operations of TFI, including development, publication, and dissemination of guidelines concerning methods for the calculation and reporting of greenhouse gas emissions and greenhouse gas absorption.

(9) Other Activities

[1] Asia-Pacific Network for Global Change Research (APN)

APN is an intergovernmental network (21 member countries) whose goal is to promote research on the environment and climate change in the Asia Pacific region, encourage the participation of developing countries in such research, and strengthen collaboration with academia and policymakers. The decision-making body of APN is its Inter-Governmental Meeting. The secretariat of APN came under the administrative umbrella of IGES in April 2004.

[2] Japanese Center for International Studies in Ecology (JISE)

To promote sustainability mainly in terms of plant ecology, JISE conducts practical surveys and research for environmental recovery, restoration, and creation from the regional to the global level. It also provides training related to environmental and ecological studies, and gathers and supplies related information. JISE was integrated into IGES in April 2007.

## 2. Scope of Report

Certification under Eco-Action 21 is being pursued by the Hayama Headquarters of the Institute for Global Environmental Strategies. Of the projects described in part (2) (Summary of FY 2009 research projects), those projects implemented by the Hayama Headquarters are PMO, CC, MM, NRM-AD, NRM-FC, NRM-FW, SCP, EE, GC, and TSU. The Administrative Section, Accounting Section, Research Support Section, and Information Centre are also involved. Other offices (the Tokyo Office, Japanese Centre for International Studies in Ecology, Kansai Research Centre, and Kitakyushu Urban Centre) began related measures in April 2011 and will pursue certification in FY 2012.

Office	Time measures began	Certification target	Total floor area	Number of staff members	Location
Hayama Headquarters	Oct. 2008 (subject of this report)	FY 2011	7,408 m <sup>2</sup>	110	Hayama-machi, Kanagawa Prefecture
Tokyo Office	FY 2011 (planned)	FY 2012 (planned)	108 m <sup>2</sup>	3	Uchisaiwai-cho, Chiyoda-ku
Japanese Centre for International Studies in Ecology	FY 2011 (planned)	FY 2012 (planned)	383 m <sup>2</sup>	9	Nishi-ku, Yokohama
APN Centre	FY 2011 (planned)	FY 2012 (planned)	196 m <sup>2</sup>	8	Chuo-ku, Kobe
Kansai Research Centre	FY 2011 (planned)	FY 2012 (planned)	246 m <sup>2</sup>	12	Chuo-ku, Kobe
Kitakyushu Urban Centre	FY 2011 (planned)	FY 2012 (planned)	125.4 m <sup>2</sup>	6	Yahata-Higashi-ku, Kitakyushu City

(Numbers of staff members are as of June 30, 2010).

### 3. Environmental Policy

We, as members of the research institute “IGES” that conducts pragmatic and innovative strategic policy research on sustainable development, commit to this Environmental Policy while managing our daily operations, obeying the relevant environmental law and the agreement and achieving our research objectives.

#### 1. Sustainability

Recognising the happiness and well-being of future generations, we contribute to realizing sustainable development through changing resource intensive lifestyles and value systems.

#### 2. Our actions

We demonstrate our principles and research outcomes by promoting environmentally sustainable, socially acceptable, and economically feasible practices. Further, we endeavour to reduce the environmental footprint incurred in carrying out our mission.

#### 3. Culture

We aim to advocate the principles of sustainable development by utilising local wisdom and tradition, respecting gender balance and cultural diversity.

#### 4. Local engagement

We promote and participate in local actions with communities and youth, encouraging sustainability and a learning society.

#### 5. International collaboration

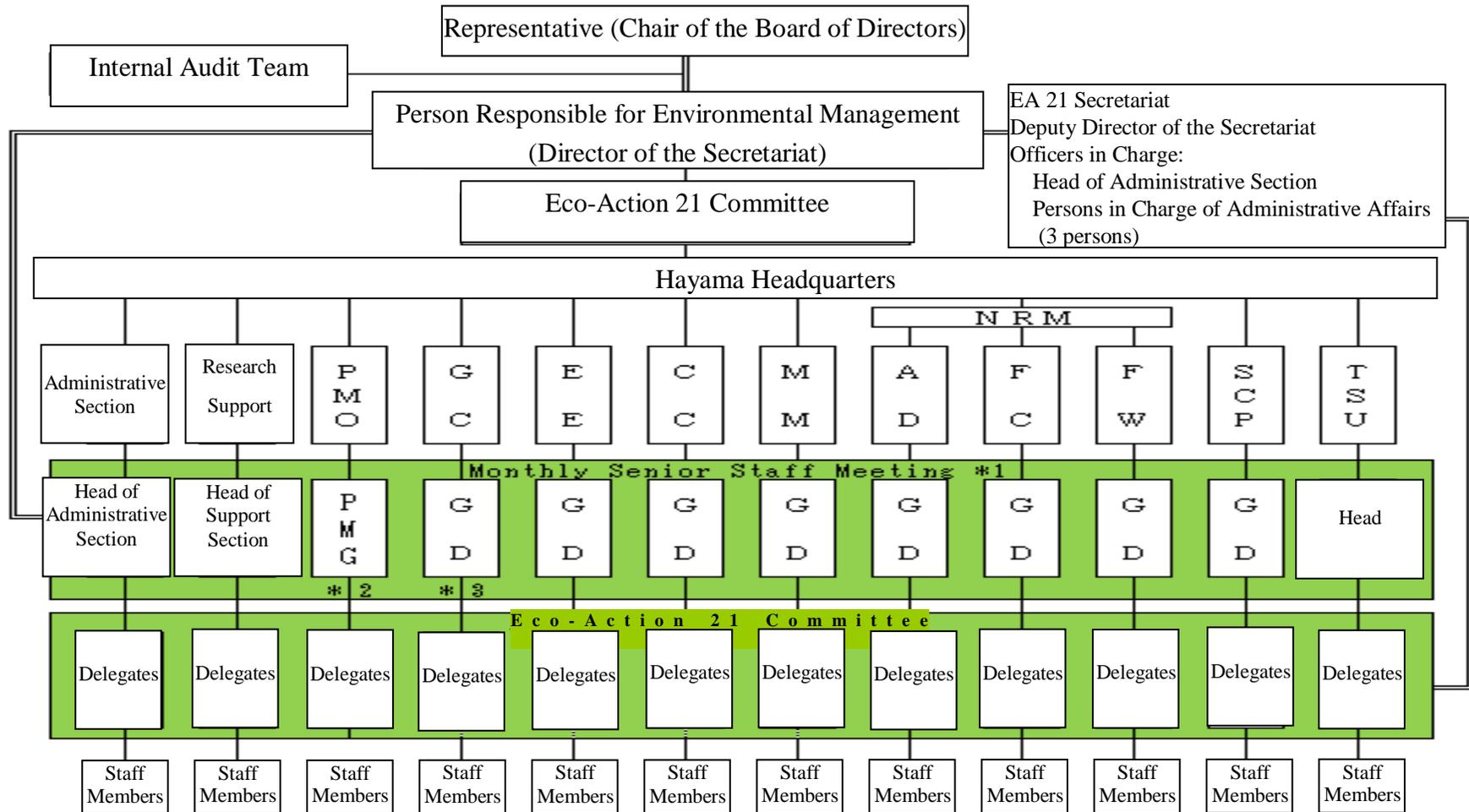
Through trans-boundary collaboration, we work to create international communities of practice by sharing ideas and expertise towards sustainable development.

Prof. Hironori Hamanaka, Chair of the Board of Directors

Institute for Global Environmental Strategies

October 1, 2008

#### 4. FY 2010 Organizational Chart of Eco-Action 21



\*1 Monthly reporting meeting for the research and administration departments of IGES (MSS meeting)

\*2 Programme Managing Group Director

\*3 Group Director

## 5. FY 2010 Environmental Activity Plan (10 Principles)

1. In our business operations, each and every staff member will maintain an attitude of considering the environment.
2. We will abide by optimised temperature settings for air conditioning (28°C) and heating (20°C).
3. We will use air conditioning and heating only when and where it is needed.
4. As a general rule, we will not use elevators.
5. We will turn out the lights in workplaces when no staff members are present, such as lunchtimes.
6. We will shut down personal computers when they will be not be used for a long period of time.
7. We will purchase environmentally friendly items (items with eco-marks, etc.).
8. We will use paper effectively by making copies on both sides and reusing blank sides.
9. We will properly separate waste paper for recycling and avoid generating miscellaneous waste paper.
10. We will minimise water use and take care to conserve water.

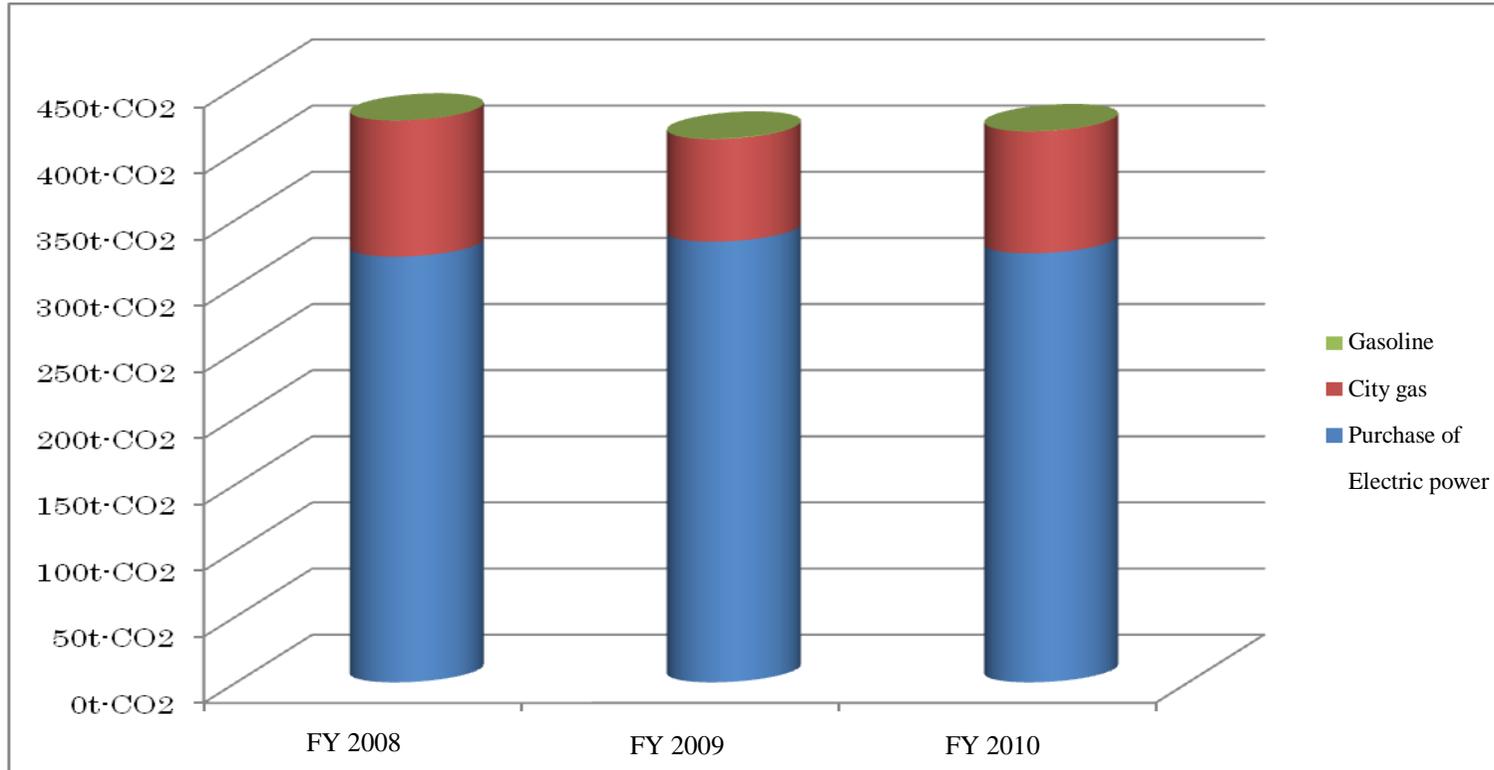
## 6. Environmental Targets and Level of Attainment

Item	Unit	Reference year (FY)	FY 2009				FY 2010				FY 2011		
		FY 2007 ①	Target		Actual		Target		Actual		Target		
			Reduction rate②	Target value ①×②	Actual value ⑤	Reduction rate ※1	Reduction rate ③	Target value ① ③	Actual value ⑥	Reduction rate ※1	Reduction rate ④	Target value ⑦=①×④	
CO <sub>2</sub> emissions	t -CO <sub>2</sub>	531.5	2%	520.9	411.2	22.6%	24.0%	403.9	416.8	21.6%	24.9%	399.1	
	Electricity kWh	906,445	2%	888,316	784,182	13.5%	15.0%	770,478	763,468	15.8%	16.6%	755,834	
	City gas m <sup>3</sup>	69,394	2%	68,006	36,826	46.9%	48.0%	36,085	43,670	37.1%	46.9%	36,826	
Water service usage	m <sup>3</sup>	5,706	2%	5,592	2,972	47.9%	48.0%	2,967	3,146	44.9%	46.0%	3,083	
Waste	Burnable Waste	kg	4,777	2%	4,681	3,300	30.9%	31.5%	3,272	3,407	28.7%	31.5%	3,272
	Non-burnable waste	kg	515	2%	505	921	▲78.8%	12.7%	676	1,339	New reference year ※2	2.0%	1,312
	Recyclable waste	kg	Glass bottles 194 PET bottles 126 Cans 184	2% 2% 2%	190 123 180	Glass bottles 192 PET bottles 165 Cans 246	1.0% ▲31.0% ▲33.7%	Glass bottles 2.0% PET bottles▲15.0% Cans ▲15.0%	190.1 144.9 211.6	Glass bottles 185 PET bottles 135 Cans 363	4.6% ▲7.1% ▲97.3%	Glass bottles 5.6% PET bottles ▲6.1% Cans ▲77.6%	183.1kg 133.6kg 326.7kg
Copy paper purchasing	Sheets	919,500	2%	901,110	874,000	4.9%	11.0%	818,355	665,000	27.7%	30.0%	643,650	
Green purchasing	%	54.09%	—	65.0%	84.24%	—	—	88.0%	90.0%	—	—	90.0%	

Notes: \*1 Actual reduction rates are based on comparison with FY 2007 as the standard fiscal year.

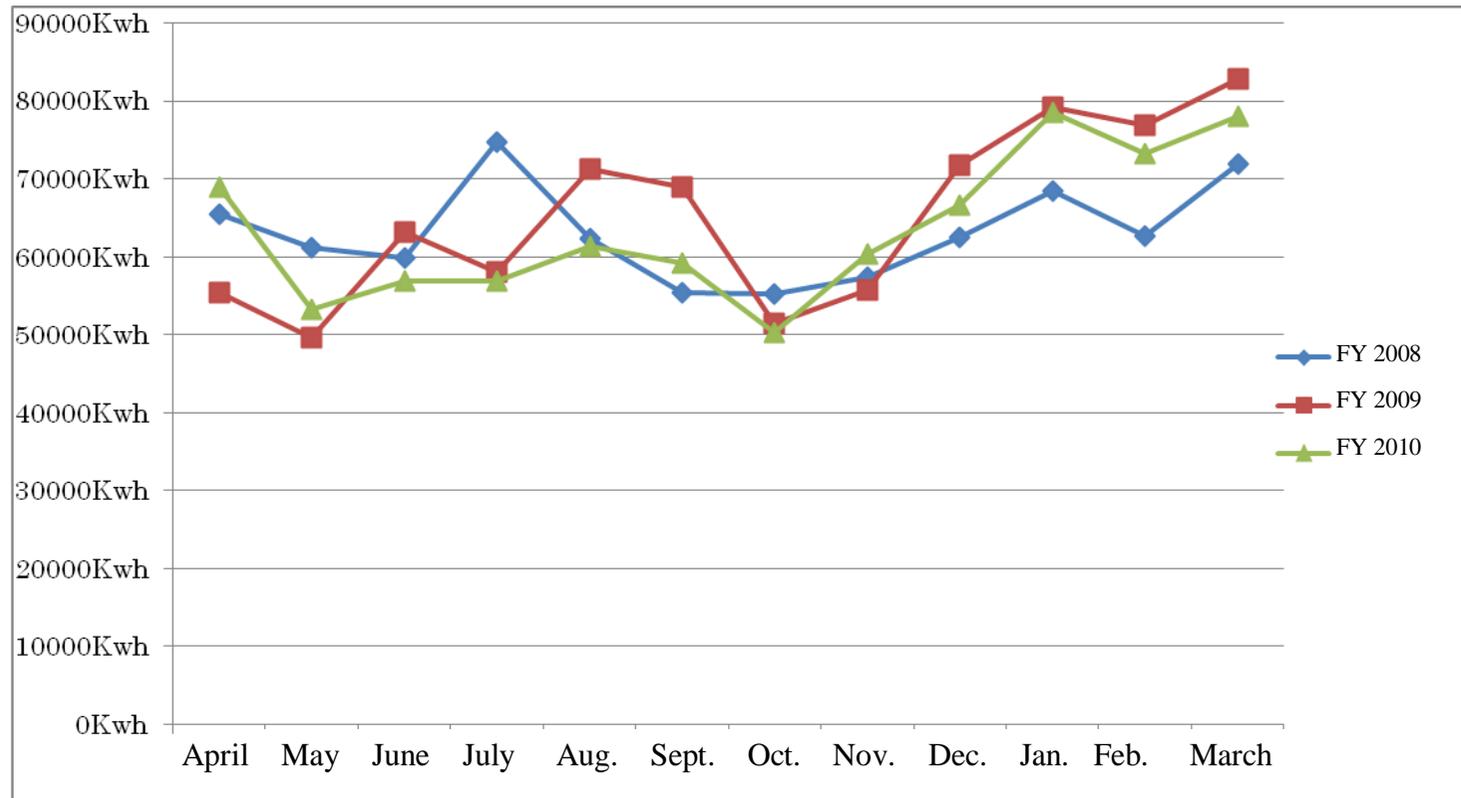
\*2 Recyclable plastic waste from the cafeteria began to be collected as non-burnable waste in FY 2010, so FY 2010 will be used as the standard fiscal year for non-burnable waste.

## Carbon dioxide emissions



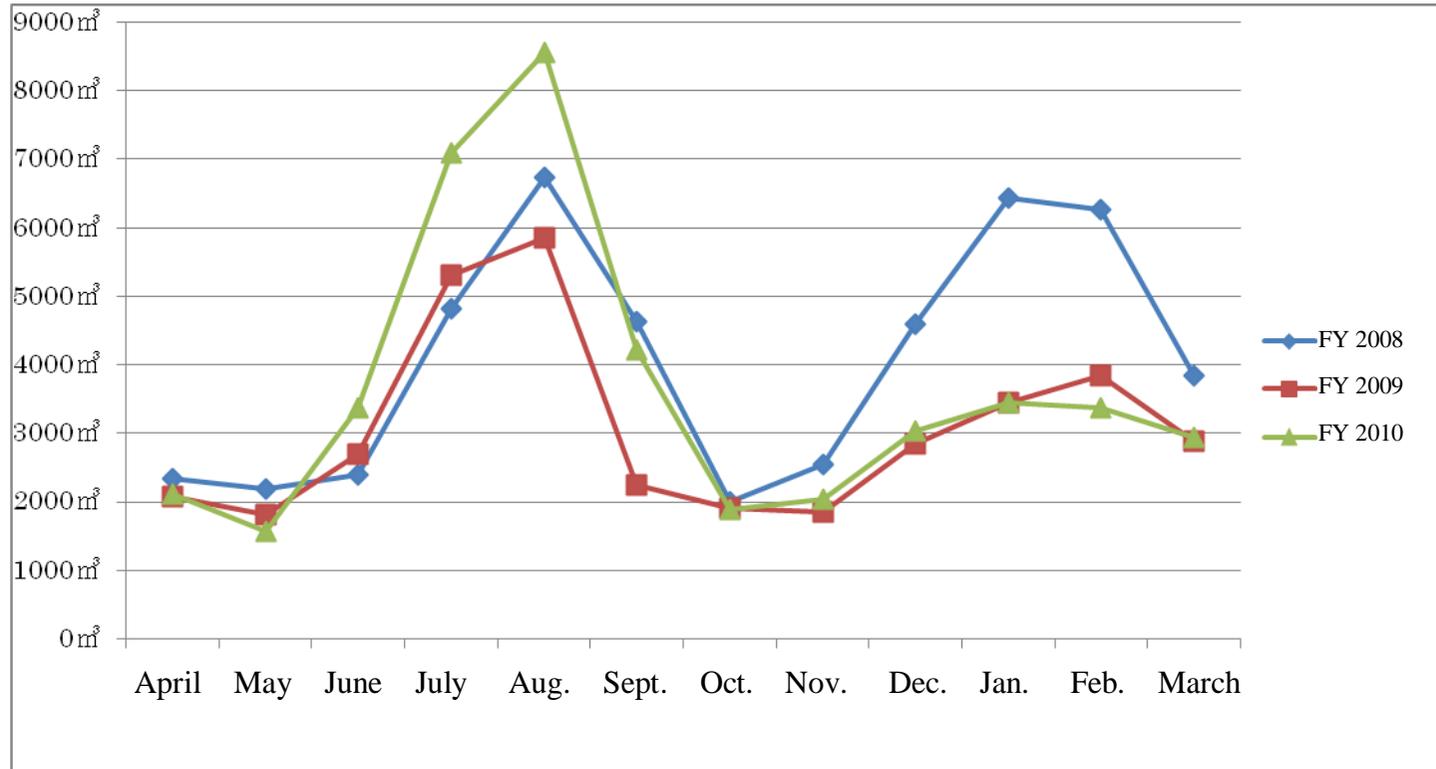
	Purchase of Electric power	City gas	Gasoline	Total	Reduction rate
FY 2007	385.2	146.3		531.5	100.0%
FY 2008	321.9	102.9	0.1	424.9	20.1%
FY 2009	333.2	77.6	0.4	411.2	22.6%
FY 2010	324.4	92.2	0.2	416.8	21.6%

## Electric power usage



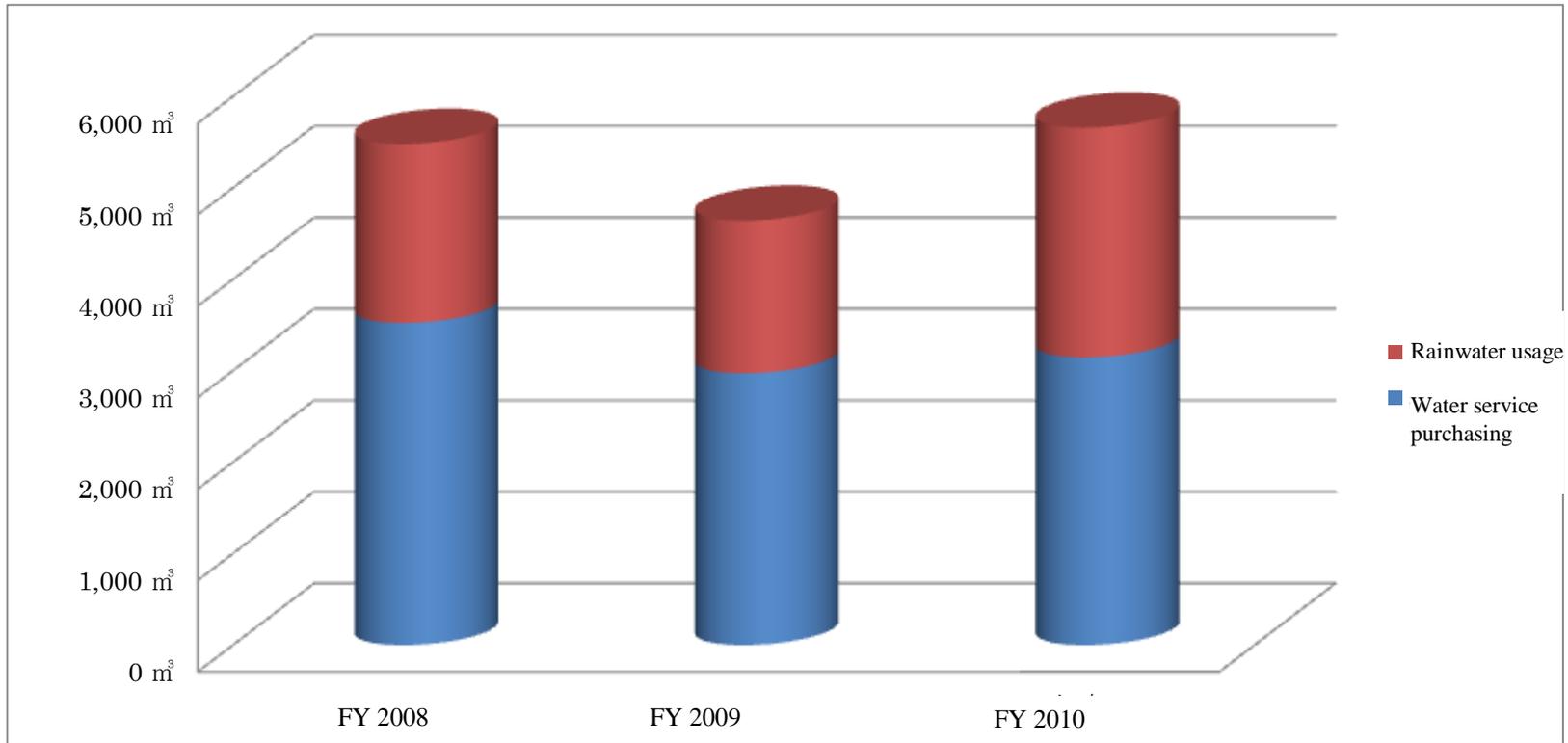
	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	Total	Reduction rate
FY 2007	74,381	64,595	71,581	70,088	89,884	78,776	65,623	68,938	76,495	84,604	84,875	76,605	906,445	100.00%
FY 2008	65,534	61,203	59,908	74,688	62,363	55,466	55,202	57,434	62,569	68,487	62,591	71,933	757,378	16.4%
FY 2009	55,357	49,614	63,202	58,109	71,223	68,895	51,460	55,666	71,739	79,127	76,925	82,865	784,182	13.5%
FY 2010	68,982	53,258	56,841	56,886	61,267	59,140	50,337	60,345	66,559	78,586	73,242	78,025	763,468	15.8%

## Gas usage



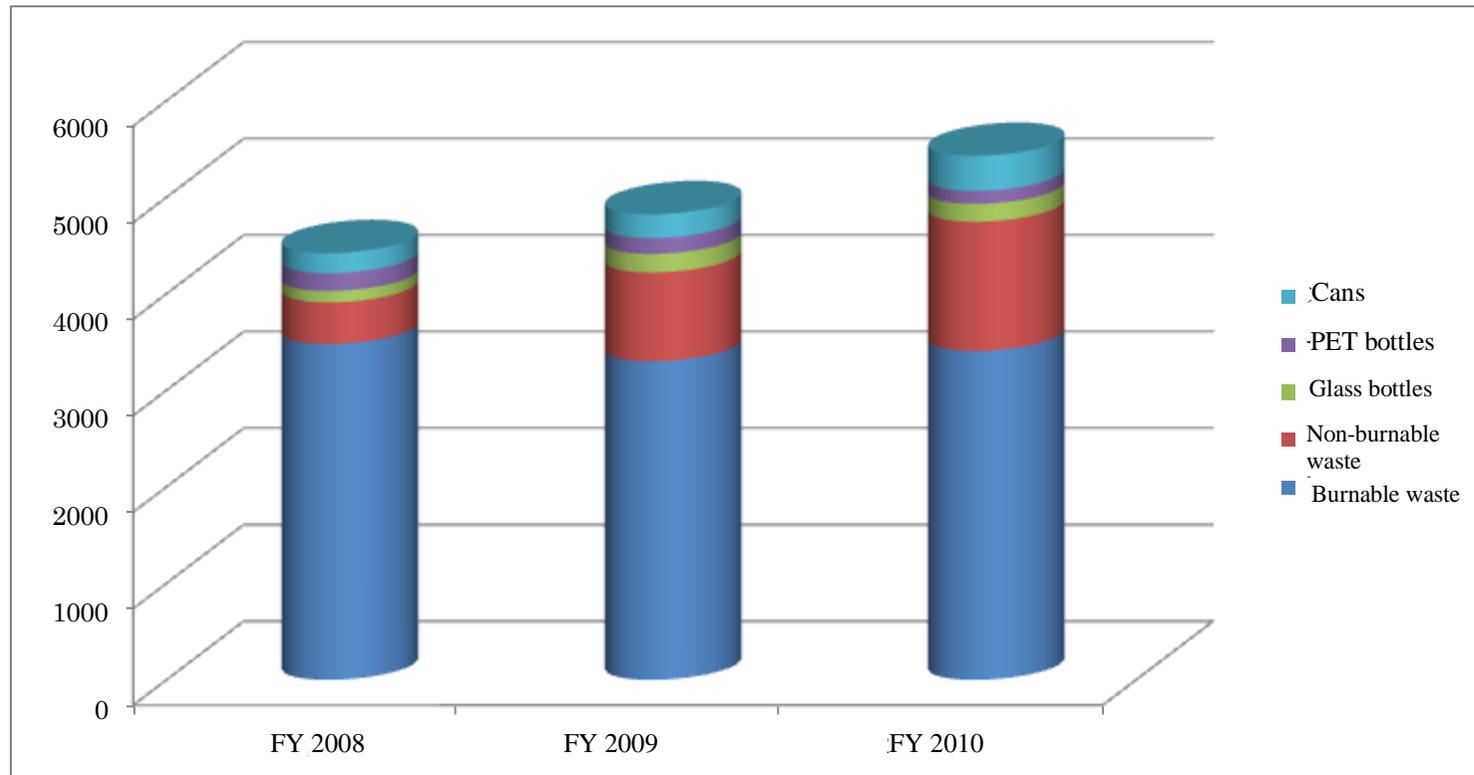
	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	Total	Reduction rate
FY 2007	4,205	3,840	4,322	5,720	10,140	5,892	4,323	5,106	6,727	6,891	8,207	4,021	69,394	100.0%
FY 2008	2,338	2,191	2,398	4,811	6,735	4,626	1,997	2,546	4,587	6,439	6,276	3,847	48,791	29.7%
FY 2009	2,078	1,807	2,705	5,313	5,860	2,237	1,914	1,852	2,855	3,449	3,846	2,883	36,799	47.0%
FY 2010	2,122	1,573	3,377	7,094	8,551	4,228	1,883	2,043	3,044	3,440	3,366	2,949	43,670	37.1%

## Water usage



	Water purchasing (m <sup>3</sup> )	Reduction rate (compared to reference year FY 2007)	Rainwater usage (m <sup>3</sup> )	Rainfall (mm)	Total wastewater	Reduction rate (compared to reference year FY 2007)
FY 2007	5863		2497	1461	7920	
FY 2008	3,524	61.76%	1,959	1,818	5,032	64.82%
FY 2009	2,972	52.09%	1,671	1,715	4,332	55.80%
FY 2010	3,146	55.14%	2,514	1,586	5,026	64.74%

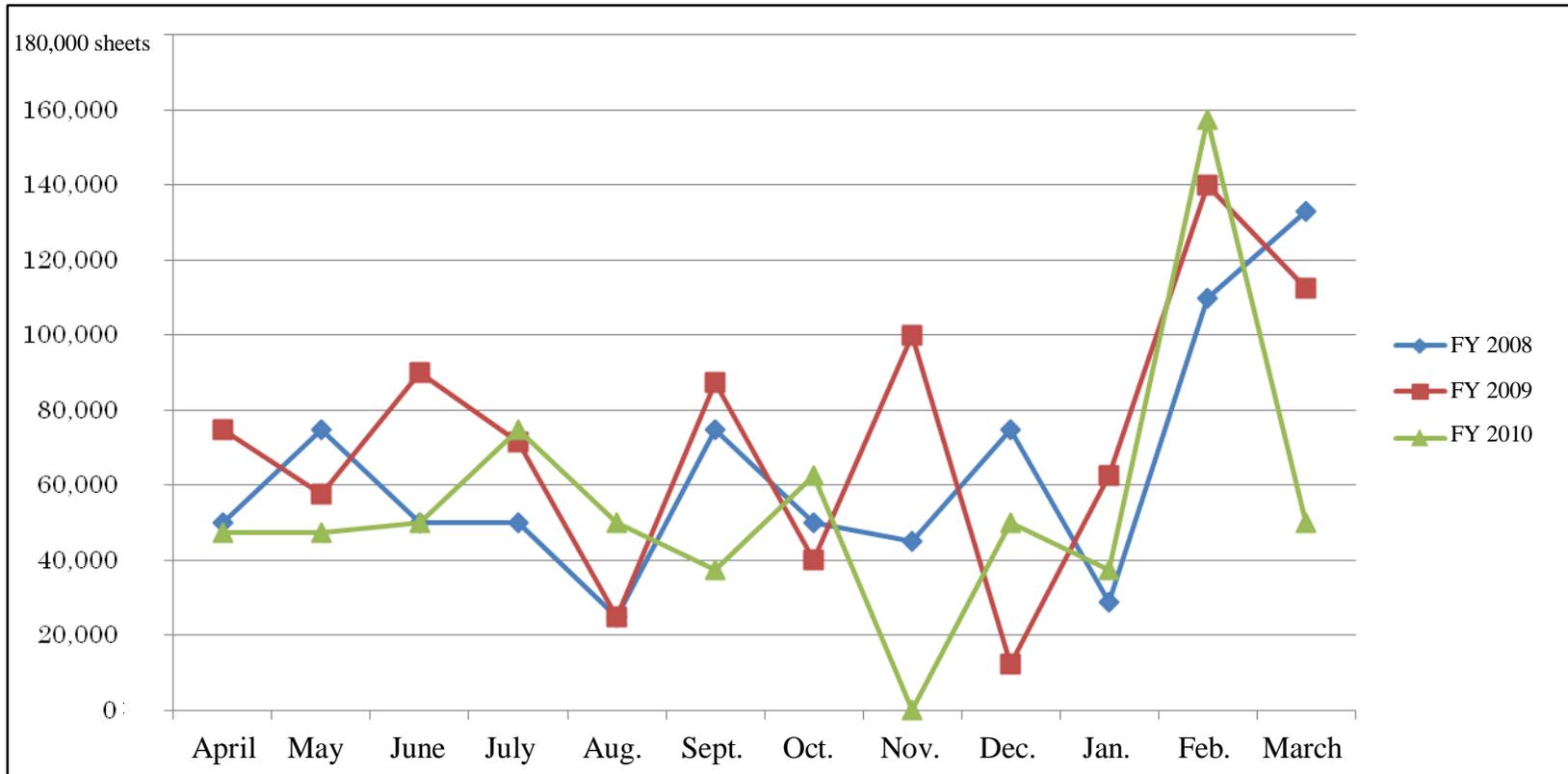
## Waste generated



	Burnable waste		Non-burnable waste		Glass bottles		PET bottles		Cans	
	(kg)	Reduction rate (compared to reference year FY 2007)	(kg)	Reduction rate (compared to reference year FY 2007)	(kg)	Reduction rate (compared to reference year FY 2007)	(kg)	Reduction rate (compared to reference year FY 2007)	(kg)	Reduction rate (compared to reference year FY 2007)
FY 2007	4,777		515		194		126		184	
FY 2008	3,479	27.2%	431	16.3%	119	38.7%	185	-46.8%	207	-12.5%
FY 2009	3,300	30.9%	921	-78.8%	192	1.0%	165	-31.0%	246	-33.7%
FY 2010	3,407	28.7%	1,339	New reference year FY	185	4.6%	135	-7.1%	363	-97.3%

Note: We use a recycling company and do not perform recycling internally. Copy paper is also recycled.

## Copy paper purchasing



	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	Total	Reduction rate (compared to reference year)
FY 2007	50,000	56,000	87,500	50,000	87,500	62,500	78,500	75,000	75,000	82,500	100,000	115,000	919,500	
FY 2008	50,000	75,000	50,000	50,000	25,000	75,000	50,000	45,000	75,000	28,750	110,000	133,000	766,750	16.61%
FY 2009	75,000	57,500	90,000	71,500	25,000	87,500	40,000	100,000	12,500	62,500	140,000	112,500	874,000	4.95%
FY 2010	47,500	47,500	50,000	75,000	50,000	37,500	62,500	0	50,000	37,500	157,500	50,000	665,000	27.68%

## 7. Results and Evaluation of Actions under FY 2010 Environmental Activity Plan

Item for reduction	Evaluation *	Attainment status	Reasons, results, etc.
CO <sub>2</sub> emissions	X	<p>Compared to reference year (FY 2007): Down by 21.6%</p> <p>Compared to previous year (FY 2009): Up by 1.4%</p> <p>Compared to FY 2010 target: 3.2% higher</p>	<p>[Result] CO<sub>2</sub> emissions were 3.2% higher than the target for FY 2010, failing to meet the target.</p> <p>[Reasons] In the Hayama Headquarters' Eco-Action at present, CO<sub>2</sub> emissions are calculated from electric power purchasing, gas usage, and gasoline usage in official vehicles. Electric power and gas account for the vast majority, with only a very small amount of CO<sub>2</sub> emissions from official vehicles. Therefore, any reduction in CO<sub>2</sub> emissions is highly dependent on reducing electric power and gas usage. Since gas usage was higher in FY 2010 than the previous year (see subsequent note concerning electricity and gas), CO<sub>2</sub> emissions also increased.</p>
Electricity	○	<p>Compared to reference year (FY 2007): Down by 15.8%</p> <p>Compared to previous year (FY 2009): Down by 2.6%</p> <p>Compared to FY 2010 target: About 0.9% lower</p>	<p>[Reasons] The following measures contributed to target attainment.</p> <ul style="list-style-type: none"> <li>• Eco-Tap was distributed to all staff members.</li> <li>• A manual on how to use Eco-Tap (How to use the eco-tap.pdf) was prepared.</li> <li>• A checklist on the use of Eco-Tap (monitoring list) was prepared.</li> <li>• Discussions on ways to reduce electric power consumption were held in EA 21 committee meetings.</li> <li>• Each group carefully turned off unnecessary lighting by using easily implemented approaches.</li> </ul>
Gas	X	<p>Compared to reference year (FY 2007): Down by 37.1%</p> <p>Compared to previous year (FY 2009): Up by 18.6%</p> <p>Compared to FY 2010 target: 21.0% higher</p>	<p>[Result] Gas usage was 21.0% higher than the target for FY 2010, failing to meet the target.</p> <p>[Reasons] During the three-month period from July to September 2010, average temperatures were 2°C warmer than the previous year (with record high temperatures throughout Japan). Hayama Headquarters uses gas-based absorption refrigeration air conditioning, and the operating rate increased with higher air temperatures, leading to higher gas usage.</p>

			<p>[Reference] Average temperatures from July to September (Miura)</p> <table border="1"> <tr> <td rowspan="2">July</td> <td>2010</td> <td>26.2°C</td> </tr> <tr> <td>2009</td> <td>24.2°C</td> </tr> <tr> <td rowspan="2">Aug.</td> <td>2010</td> <td>27.9°C</td> </tr> <tr> <td>2009</td> <td>25.8°C</td> </tr> <tr> <td rowspan="2">Sept.</td> <td>2010</td> <td>24.5°C</td> </tr> <tr> <td>2009</td> <td>22.5°C</td> </tr> </table>	July	2010	26.2°C	2009	24.2°C	Aug.	2010	27.9°C	2009	25.8°C	Sept.	2010	24.5°C	2009	22.5°C
July	2010	26.2°C																
	2009	24.2°C																
Aug.	2010	27.9°C																
	2009	25.8°C																
Sept.	2010	24.5°C																
	2009	22.5°C																
Water Supply	X	<p>Compared to reference year (FY 2007): Down by 44.9%  Compared to previous year (FY 2009): Up by 5.9%  Compared to FY 2010 target: 6.0% higher</p>	<p>[Result] Water service usage was 44.9% lower than the standard fiscal year, but failed to meet the target for FY 2010.  [Reasons] Hayama Headquarters uses gas-based absorption refrigeration air conditioning, so service water is used as coolant during air conditioner operation. Therefore, usage is controlled by climate, the same as gas usage. We will consider ways to reduce usage for the next year's activities.</p>															
Burnable waste	X	<p>Compared to reference year (FY 2007): Down by 28.7%  Compared to previous year (FY 2009): Up by 3.2%  Compared to FY 2010 target: 4.1% higher</p>	<p>[Result] Burnable waste generation was 28.7% lower than the standard fiscal year, but failed to meet the target for FY 2010. No particular changes were seen in the results of burnable waste measurement, and this is thought to be an increase in everyday use.  [Reasons] Increased number of staff members and inadequate explanations concerning waste disposal procedures. At an Eco-Action committee meeting, some stated that more waste containers are needed. We will review the numbers and types of waste containers in order to reduce waste for the next year.</p>															
Non-burnable waste	X	<p>Compared to reference year (FY 2007): Up by 160%  Compared to previous year (FY 2009): Up by 45.4%  Compared to FY 2010 target: 98.1% higher</p> <p>Note: Recyclable plastic waste from the cafeteria began to be collected as non-burnable waste in FY 2010, so FY 2010 will be used as the standard fiscal year for non-burnable waste from now on.</p>	<p>[Result] Non-burnable waste is on a rising trend, and the annual reduction target could not be met.  [Reasons]</p> <ul style="list-style-type: none"> <li>• A detailed check of waste generated from the Hayama Headquarters showed that starting in FY 2010, waste discarded by staff members and waste from the cafeteria are being weighed together.</li> <li>• During April 2010, many items were discarded due to reassignments of research staff at the transition from the fourth to the fifth period.</li> </ul>															

			<ul style="list-style-type: none"> <li>• Non-burnable waste from the tree planting event and board meetings was lower in volume than waste from staff transfers and reassignments, but was still a major factor in waste generation.</li> </ul> <p>[Reference]</p> <ul style="list-style-type: none"> <li>• The tree planting event in May generated 25 kg in waste including straws, but the same event last year generated 80 kg in waste.</li> <li>• Prepared lunches for the board meeting in June (32 kg)</li> <li>• Waste generated in lodgings of short-term (2-3 months) interns (20 kg)</li> </ul>
Recyclable waste (glass bottles, cans and PET bottles)	○	<p>[1] Glass bottles</p> <p>Compared to reference year (FY 2007): Down by 4.6%</p> <p>Compared to previous year (FY 2009): Down by 3.6%</p>	<p>[Result] We had been counting glass bottles, cans, PET bottles, cardboard, newspaper, magazines, etc. as recyclable waste since 2007, but starting in 2010, we are excluding newspapers and cardboard since staff members are not individually involved with these items. We have established respective targets for cans, PET bottles, and glass bottles.</p> <p>Discarded cans and PET bottles had been increasing since 2007 along with the increasing number of staff members, but in FY 2010, we established reduction targets per staff member and encouraged efforts to reduce overall waste. As a result, we were able to meet the target for glass bottles and PET bottles.</p> <p>[Reasons]</p> <ul style="list-style-type: none"> <li>• Staff members were encouraged to use their own cups and mugs, to avoid buying cans and PET bottles, and to take such waste home with them if purchased.</li> <li>• Discarded cans have been increasing year by year. We investigated the reason and learned that the cafeteria is using many canned products as meal ingredients. Since the cans are recycled, no changes have been made in ingredient purchasing methods.</li> </ul> <p>[Reference] The cafeteria purchases about 20 types of ingredients in cans, including frying oil, soy sauce, corn, and fruit such as mandarin oranges and others.</p>
	○	<p>[2] PET bottles</p> <p>Compared to reference year (FY 2007): Up by 7.1%</p> <p>Compared to previous year (FY 2009): Down by 18.2%</p>	
	X	<p>[3] Cans</p> <p>Compared to reference year (FY 2007): Up by 97.3%</p> <p>Compared to previous year (FY 2009): Up by 47.6%</p>	

Copy paper purchasing	○	<p>Compared to reference year (FY 2007): Down by 27.7%          Compared to previous year (FY 2009): Down by 23.9%          Compared to FY 2010 target: 18.7% lower</p>	<p>[Reasons] The following measures contributed to target attainment.          Staff members are reusing blank sides of copy paper, and more than half of the groups are pursuing paperless operations (according to an internal audit).</p> <p>The volume of copy paper purchasing is declining overall, but was higher in February 2010 than the same month in the two preceding years. (See the graph of copy paper purchasing.) A board meeting was held in February, but fewer copies of board meeting materials were printed than in the previous year. Starting in FY 2010, informal meetings are held as subcommittee meetings, and no data was available on materials copied for those meetings. This seems to have contributed to the increase in copy paper purchasing in February. This depends on the content of board meetings, so efforts will be made to reflect feasible items in time, including numbers of copies printed and amounts of replacement materials.</p> <p>[Reference] Materials used at board meetings          There are no records prior to February 2009, but there was a decrease in the number of copies printed from the February 2009 board meeting until the next February meeting.          February 2009: 88,391 sheets          February 2010: 56,648 sheets          (Size A4, about 13 boxes, costing 19,370 yen)</p>
Green purchasing	○	<p>Purchasing rate in reference year (FY 2007): 54.1%          Purchasing rate in previous year (FY 2009): 84.2%          Purchasing rate this year (FY 2010): 90.0%          Green purchasing target rate for FY 2010: 88.0%</p>	<p>[Reasons] The following measures contributed to target attainment.</p> <ul style="list-style-type: none"> <li>● Getting into the habit of green purchasing</li> <li>● Increasing availability of green products</li> </ul> <p>[Reference] The number of green products available from Kaunet has increased from 12,000 to 13,000 items.</p>

\* ○: Target was attained.  
 X: Target was not attained.

## 8. Results of Overall Assessment and Review by Representative (Chair of the Board of Directors)

The representative (Chair of the Board of Directors) has made the following comments concerning efforts in FY 2011 based on the results of external and internal audits for FY 2010.

### Comments by the Administrator of Environmental Management (Chair of the Board of Directors) on EA 21 Actions in FY 2011

It can be concluded that improvements were made in familiarity with environmental targets, policies, and plans and in the Eco-Action measures taken by the Hayama Headquarters of IGES in FY 2010, based on the results of external and internal audits. In the future, the following four points will be studied by the Eco-Action Secretariat and the Eco-Action Committee for the sake of more effective actions.

#### (1) Determining and reducing CO<sub>2</sub> emissions

The first point relates to determining and reducing CO<sub>2</sub> emissions. In our EA 21 endeavours thus far, IGES has set environmental targets and measured performance in CO<sub>2</sub> emissions due to use of the Hayama Headquarters building. However, the activities of IGES are, of course, not confined to Hayama Headquarters, but extend beyond the borders of Japan. Therefore, in order to determine emissions from our business activities over as broad a scope as possible, while continuing our efforts to determine and reduce emissions related to the Hayama Headquarters building (air conditioning, heating, electricity, etc.) which we are already addressing, we also need to look at other areas such as transportation (commuting, business trips, etc.) which we have not yet addressed, and study approaches to determine and reduce such emissions (such as using airline tickets with carbon offsets).

#### (2) Expanding green purchasing

The second point relates to expanding green purchasing. Under the Law on Promoting Green Purchasing, IGES needs to "endeavour to select environmentally friendly goods and services to the extent possible whenever purchasing or renting goods or obtaining services." Therefore, we need to consider methods and procedures to ensure thorough and widespread understanding of and compliance with the spirit of the Law on Promoting Green Purchasing.

#### (3) Promoting understanding of Eco-Action

The third point relates to promoting understanding of Eco-Action. We need to consider ways to work with staff members in order to promote understanding of Eco-Action and encourage them to take action in accordance with its principles.

##### ➤ To improve understanding among managers:

There are large differences among departments in Eco-Action involvement. We need to consider whether there may be room for

improvement in the ways that managers share and convey information to the members of each department and encourage them to take action.

➤ To improve understanding and promote action among individuals:

In addition to indicating numerical targets, we need to consider presenting a menu of specific actions along with quantitative results in order to improve understanding and promote action among individuals.

(4) Promoting Home Eco Diagnosis

The last point relates to promoting Home Eco Diagnosis. In order to effectively reduce our environmental footprint, it is important to heighten awareness of individual actions. Home Eco Diagnosis is a useful tool for that purpose. We need to consider having this programme introduced by diagnostic experts through the Centers for Promotion of Activities to Cope With Global Warming of related prefectures in order to encourage individuals to take this step in their own homes. We could also consider further developing the concept of Home Eco Diagnosis and preparing an edition for small and medium-size businesses, including application to the business activities of IGES.

I would like to ask the Eco-Action Secretariat and the Eco-Action Committee to consider ways to apply the above to future activities in order to obtain more desirable results.

## 9. FY 2011 Environmental Targets and Actions

The following is a summary of the main actions to be taken in FY 2011 and the environmental activities that will be continued from last year, based on section 8 (Results of Overall Assessment and Review by Representative (Chair of the Board of Directors)), etc.

### 1. Determining and reducing carbon dioxide emissions

#### ◆ Carbon dioxide reduction target for FY 2011

	Compared to reference year (FY 2007)	Compared to FY 2010
Carbon dioxide emissions	24.9% reduction	4.2% reduction

(The CO<sub>2</sub> emission coefficient used for electric power is the value for Tokyo Electric Power Company in the reference year (FY 2007), or 0.425 kg-CO<sub>2</sub>/kWh.)

- In addition to actions related to electricity and gas which will be described below, we will use electric cars and other means to reduce facility-related CO<sub>2</sub> emissions at Hayama Headquarters, which have been measured since FY 2007. For the specifics, see section 1-1 (Electricity) and section 1-2 (Gas).
- We will study ways to determine transportation-related emissions (commuting, business trips, etc.) through the EA 21 Committee, Secretariat, and EA 21 Secretariat; and means for determining CO<sub>2</sub> emissions will be studied and implemented in FY 2011. We would like to prepare a proposal for CO<sub>2</sub> emissions determination methods and implement them on a test basis by the end of FY 2011.
- Carbon footprint and carbon offsets  
Carbon footprint and carbon offsets exist as ways to determine and reduce carbon dioxide emissions. Long-term measures are needed in order to reduce CO<sub>2</sub> emissions, so as part of our studies in FY 2011, we will begin surveys, studies, coordination, and implementation of measures that will be suitable for IGES from FY 2011 to FY 2012 and beyond.

1-1. Electricity

◆ Electric power usage reduction target for FY 2011

	Compared to reference year (FY 2007)	Compared to FY 2010
Electric power	16.6% reduction	1.0% reduction

To eliminate 1.0% of our 2010 electric power consumption (763,468 kWh) throughout the year (representing a 24.9% reduction compared to the reference year), we will mainly focus on facility-based reductions in electric power usage, while efforts by individual staff members will continue as an environmental activity of IGES.

◆ Daily electric power reduction target \*1

Usage in FY 2010	Reduction target (1.0%)
763,468 kWh	7,635 kWh

◆ Measures to reduce electric power usage and reduction amounts (estimated)

Subject of implementation	Measure	Reduction amount
Hayama Headquarters overall (facilities)	Thinning out fluorescent lights	Approximately 3,581 kWh
	Reducing air conditioning/heating operating time (1 hour) <ul style="list-style-type: none"> <li>• Summer: July-September</li> <li>• Winter: December-March</li> </ul>	Approximately 5,110 kWh
Staff members	<ul style="list-style-type: none"> <li>• Setting PCs to standby mode (at lunchtime and when away from one's desk for long periods)</li> <li>• Using Eco-Tap when leaving for home</li> <li>• Carefully turning off unused lighting (copy room, conference rooms, etc.)</li> <li>• Leaving promptly for home on days without overtime</li> </ul>	Approximately 24.7 kWh
Total		Approximately 8,715 kWh

## 1.2 Gas and water service

### ◆ Gas and water service reduction targets for FY 2011

	Compared to reference year (FY 2007)	Compared to FY 2010
City gas	46.9% reduction	15.7% reduction
Water service	46.0% reduction	2.0% reduction

Since we will use basically the same measures regarding use of air conditioning equipment to reduce both water service and gas usage, these are described together. Usage is controlled by the weather to some extent, but we will reduce the operating time of air conditioning equipment as a facility-based measure in order to reduce gas and water service usage. Efforts by individual staff members will be conducted as an environmental activity of IGES, the same as electric power.

### ◆ Daily gas and water service reduction targets

	Usage in FY 2010	Reduction target
Gas	43,670 m <sup>3</sup>	6,844 m <sup>3</sup>
Water service	3,146 m <sup>3</sup>	63 m <sup>3</sup> (63 t) *1

### ◆ Measures to reduce gas and water service usage and reduction amounts (estimated)

Subject of implementation	Measure	Reduction amount
Hayama Headquarters overall (facilities)	Reducing air conditioning/heating operating time (1 hour) <ul style="list-style-type: none"> <li>• Summer: July-September</li> <li>• Winter: December-March</li> <li>• Reducing hot water temperature setting at sinks</li> </ul>	Gas: Approximately 1,752 m <sup>3</sup> Water service: Approximately 31.5 m <sup>3</sup>
	Using fixed temperature settings for air conditioning and heating (28°C in summertime, 20°C in wintertime)	Weather-dependent *2
Staff members	Saving water	—

\*1 Water is used as a coolant during air conditioning operation (for circulation), so reducing the operating time of summertime air conditioning will result in lower water usage (July to September).

\*2 Air conditioning/heating operation uses electricity, gas, and water. The equipment specifications are such that gas operation will be automatically shut off with a fixed temperature setting. When outside temperatures are high and indoor temperatures change frequently, gas usage varies in the same way. To achieve an overall reduction in gas usage, we will reduce air conditioning/heating operating time and use fixed temperature settings.

- The following reference tables indicate the numerical basis used in the content of measures for reduction of electric power usage and the estimated reduction amounts.

[Reference 1] Thinning out fluorescent lights (proposed)

(Note: The second floor is not subject to thinning out of fluorescent lights, since most lighting is from desk lamps.)

Location		Watts	Bulbs	Hours used	Electric power usage
Ground (1 <sup>st</sup> floor)	Corridors	25	10	4	1,000
	Secretariat and copy room	32	15	12	5,760
	Chairman's office	32	1	1	32
	North side restrooms	13	6	2	156
	In front of north side restrooms	18	11	2	396
	South side restrooms	18	6	2	216
Stairwells	North side landing	27	2	2	108
	South side landing	27	2	2	108
Basement	Dormitory corridor	27	9	12	2,916
	Corridor indirect lighting	32	30	4	3,840
Total daily usage		392	201		14.5 kWh
Total annual usage		247 operating days			3,581 kWh

[Reference 2] Reducing air conditioning/heating operating time

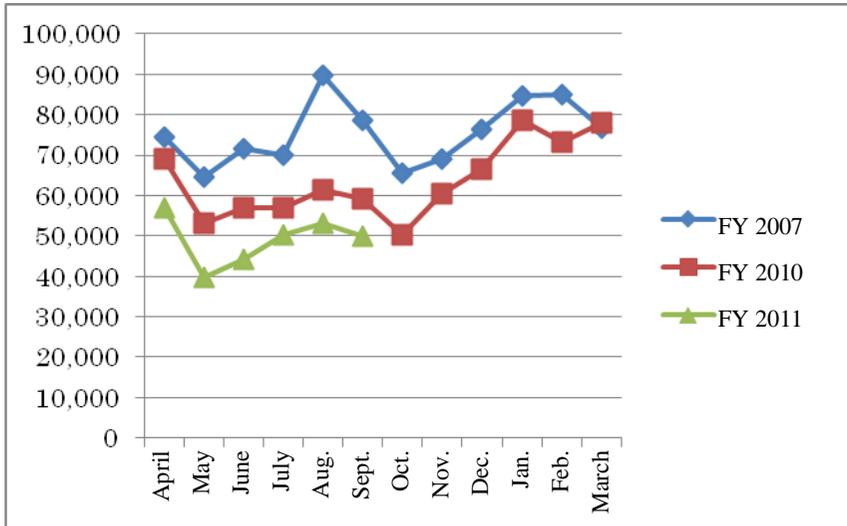
Time period	Operating hours	Usage
<p>Summer: July-September</p> <p>Winter: December-March</p> <p>(Seven months, 146 operating days)</p>	<p>Prior to change: 7 AM – 9 PM</p> <p>After change: 7 AM – 8 PM</p>	<p><u>Electricity</u> Average electric power usage per hour of air conditioning/heating: Approximately 35 kWh Reduction during seven-month period: 5,110 kWh</p> <p><u>Gas</u> Average gas usage per hour of air conditioning/heating: Approximately 12 m<sup>3</sup> Reduction during seven-month period: 1,752 m<sup>3</sup></p> <p><u>Water</u> Average water usage per hour of air conditioning: Approximately 0.5 m<sup>3</sup> (July to September, 63 operating days) Reduction during three-month period: 31.5 m<sup>3</sup></p>

■ Special note on electric power and gas: Changes in electric power and gas after the Great East Japan Earthquake of March 11, 2011

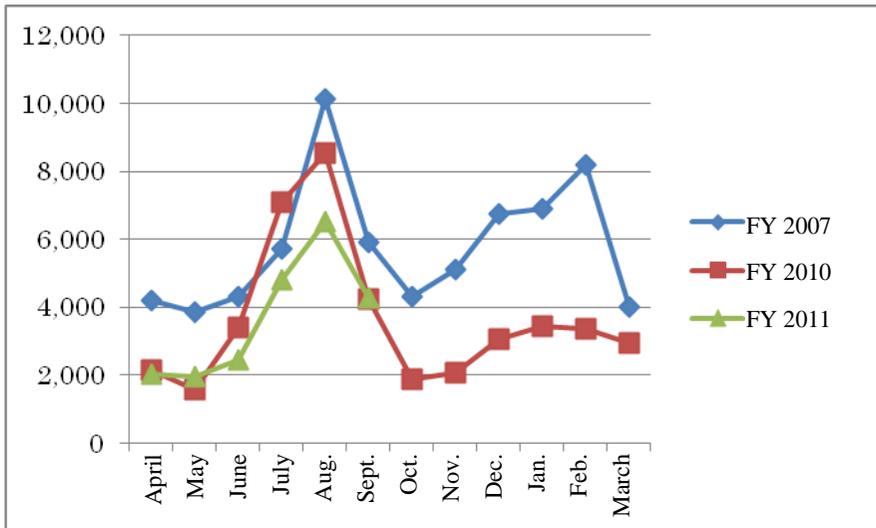
Electric power conservation was implemented during peak hours (9 AM – 8 PM) from July to September 2011 due to the accident at Fukushima Daiichi Nuclear Power Plant caused by the Great East Japan Earthquake of March 11, 2011. The usage volumes and reduction rates of electric power and gas as of September 2011 are included for reference in analysis of the attainment status of FY 2011 Eco-Action targets as well as environmental target setting in the next year.

As of September, electric power consumption was 62,270 kW lower than the previous year (34.5% lower than the reference year, 17.5% lower than the previous year), and gas was 4,955 m<sup>3</sup> lower than the previous year (35.5% lower than the reference year, 18.4% lower than the previous year).

[Reference] Electric power usage in 2011 (Compared to reference year and previous year)



[Reference] Gas usage in 2011 (Compared to reference year and previous year)



## 2. Expanding green purchasing

In FY 2010, green purchasing performance exceeded the target. However, some expressions of concern were heard during the internal audit as to whether it is acceptable to purchase green products, since they are somewhat more expensive than other products. We have prepared a Basic Policy on Green Purchasing at Hayama Headquarters, based on section 5, FY 2010 Environmental Activity Plan (10 Principles) and section 8, Results of Overall Assessment and Review by Representative (Chair of the Board of Directors) as well as exchanges of views with the purchasing and accounting sections of the Ministry of the Environment and Kanagawa Prefecture, and will promote widespread understanding of this policy.

### [Basic Policy on Green Purchasing at Hayama Headquarters]

In general, the principles of green purchasing should be applied to all purchasing of goods and services, with consideration for the selection of green goods and services that meet all applicable quality and safety standards and are not too much more higher in price than similar goods and services. However, this does not apply to goods and services where green purchasing is not considered feasible. For items such as consumables costing up to 20,000 yen, purchasing should be conducted with reference to Eco-Mark and Green Purchasing Network (GPN) products, labelling under the Green Purchasing Law, etc.

#### ◆ Target attainment for green purchasing in FY 2011

Green purchasing	90% attainment
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#### ◆ Endeavours related to green purchasing

Subject of implementation	Measure
Hayama Headquarters overall (facilities)	Preparing the basic policy and familiarising staff members with its content (appeal from the EA 21 Secretariat)
Staff members	Green purchasing of consumables

[Reference 1]

The Ministry of the Environment and Kanagawa Prefecture handle procurement of goods according to the following two policies:

- Basic Policy for the Promotion of Procurement of Eco-Friendly Goods and Services <sup>\*1</sup>
- Kanagawa Prefecture Basic Policy on Green Purchasing <sup>\*2</sup>

However, the procurement of consumables by Hayama Headquarters is somewhat different from these policies. Therefore, we have developed our own Basic Policy on Green Purchasing at Hayama Headquarters with reference to the policies of the Ministry of the Environment and Kanagawa Prefecture.

<sup>\*1</sup> Available on the website of the Ministry of the Environment

<sup>\*2</sup> Available on the website of Kanagawa Prefectural Government

[Reference 2]

Discussion with the accounting section

It was agreed that a notation concerning "environmentally friendly products" will be made on purchasing specifications and that green purchasing (Eco-Mark and Green Purchasing Network (GPN) products; Green Purchasing Law) will be pursued for stationery and other consumables costing no more than 20,000 yen. This report will be used to familiarise staff members with the policy, and it will not be added to the regulations or bylaws.

### 3. Promoting understanding of Eco-Action

To deepen understanding of Eco-Action among staff members at Hayama Headquarters, when presenting the results of environmental activities in FY 2010 and indicating what kinds of actions will be taken for each item next year, the 2010 Environmental Activity Report handles this information separately for:

- Hayama Headquarters overall (facilities)
- Staff members

In the future, the details of measures by staff members and measures of the overall facility will be listed from this report and used to prepare simple posters and the like as a way of encouraging further efforts.

### 4. Promoting Home Eco Diagnosis

In order to effectively reduce our environmental footprint, it is important to heighten awareness of individual actions. Home Eco Diagnosis will be used as a tool for that purpose.

◆ Endeavours for Home Eco Diagnosis

Subject of implementation	Measure
Hayama Headquarters (EA 21 Secretariat)	<ul style="list-style-type: none"> <li>• Developing familiarity with the tool of Home Eco Diagnosis</li> <li>• Having several individuals undergo the diagnosis as monitors</li> <li>• Studying operational management, etc.</li> </ul>
Staff members	<ul style="list-style-type: none"> <li>• Developing familiarity with the tool of Home Eco Diagnosis</li> </ul>

This is a tool that was developed by IGES, so it is important for us to begin by developing familiarity and interest with regard to Home Eco Diagnosis as a starting point. This will lead to good opportunities for learning about our own individual CO<sub>2</sub> emissions.

5. Ongoing environmental activities

5-1. Waste (burnable, recyclable, and non-burnable)

From the reference year until FY 2010, business waste from the cafeteria, etc. was not separated from waste generated by staff members. Starting in FY 2011, the amount of waste generated by IGES staff members is being determined by subtracting the amount of cafeteria waste in each category from the amount of total waste. Therefore, FY 2011 will be used as the new reference year in establishing annual waste targets for FY 2012.

◆ Waste reduction targets for FY 2011

FY 2011 targets			
		Compared to reference year (FY 2007)	Compared to FY 2010
Type of waste	Burnable	31.5% reduction	4.0% reduction
	Non-burnable	2.0% reduction	—
	Recyclable	Glass bottles: 5.6% reduction PET bottles: 6.1% reduction Cans: 77.6% reduction	—

◆ Endeavours for waste reduction

Subject of implementation	Measure
Hayama Headquarters overall (facilities)	<ul style="list-style-type: none"> <li>• Separate waste more accurately. Cafeteria → Business waste Staff members → Consumer waste</li> <li>• Give more attention to food and drink containers and waste bins, etc. used during board meetings and events.</li> </ul> <p>Reference: For the board meetings in June 2010 and February 2011, we selected caterers who use containers that can be collected and reused, rather than disposable containers.</p>
Staff members	<ul style="list-style-type: none"> <li>• Use separate recycling bins and waste bins correctly (ongoing item).</li> <li>• Become reacquainted with the waste disposal procedures of Hayama-machi, and separate and dispose of waste accordingly.</li> <li>• Consider ways to measure the amounts of waste generated by each group, so that targets can be set by each group.</li> </ul>

[Reference] Rate of increase in number of staff members

FY 2007	FY 2011
75.08 persons	131.5 persons
100%	75.1% increase

5-2. Reducing copy paper purchasing

We will consider the number of copies to be printed, amount of replacement materials, etc. in order to reduce copy paper purchasing, although this is somewhat dependent on the content of board meetings, events, and workshops.

◆ Waste reduction target for FY 2011

	Compared to reference year (FY 2007)	Compared to FY 2010
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Copy paper	30% reduction	3.2% reduction
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◆ Daily target for reduction of paper use

Amount used in FY 2010	Reduction target	Daily use (247 operating days)
665,000 sheets	21,350 sheets (size A4, 9 boxes)	Approximately 86 sheets

◆ Endeavours for reduction of copy paper use

Subject of implementation	Measure
Hayama Headquarters overall (facilities)	Appeal for cooperation in reducing the printing of informational materials for meetings and presentations and reducing replacement materials as much as possible (appeal from EA 21 Secretariat).
Staff members	<ul style="list-style-type: none"> <li>• Before copying 1-2 sheets per day, consider whether it is necessary.</li> <li>• Use both sides of paper, and use paperless documents for discussions, etc. (ongoing item).</li> </ul>

## 10. Confirmation and Evaluation of Compliance with Related Legislation and any Violations, Litigation, etc.

The status of compliance with environment-related laws and regulations was checked as of October 1, 2009, with the following results.

There are no legal violation, litigation and environment-related-complains.

Legal violations                      None  
 Litigation                              None  
 Environment-related complaints    None

Legislation	Requirements	Clause	Scope	Responsible department	Evaluation of compliance	
					Compliance status	Judgement
Basic Environmental Law	Regulates duties of various types of businesses. In particular, businesses are responsible for disposal of waste generated from their business activities.	Article 8	* Following requirements under the Waste Disposal Law	EA 21 Secretariat	* Following requirements under the Waste Disposal Law	Compliant
Act on Promotion of Global Warming Countermeasures	Efforts to control greenhouse gas emissions.	Article 20, Paragraph 5	Turning off indoor lights, adjusting air conditioning/heating temperature settings, turning off electrical appliances when not in use		Use of various methods for reduction	Compliant
Waste Disposal and Public Cleansing Law	Efforts to dispose of waste appropriately and improve living environment hygiene.	Article 3	Types of waste bins located at garbage/waste disposal locations in the company		Efforts to reduce and manage general waste	Compliant
Green Purchasing Law	Efforts to select eco-products, etc. in procurement of goods.	Article 3	Purchasing of consumables		Selection of eco-products from a catalogue; use of copy paper recommended by Ministry of the Environment	Compliant
	Better understanding concerning the procurement of eco-products, etc.	Article 4				Compliant
Law on Recycling	Promotes the recycling of	Article 4	Food waste from cafeteria	Management	Use of kitchen garbage	Compliant

Food Wastes	food waste.			contractor	disposal	
Home Appliance Recycling Law	Long-term use of household appliances.	Article 6	Use and disposal of electrical appliances at company and in company housing* <sup>1</sup>	Facility manager	Checking for proper disposal of appliances in company housing, etc. upon discontinuation of long-term use	Compliant
	Proper disposal upon discontinuation of use.	Article 6		Facility manager	Proper disposal	Compliant
Fire Service Law	Conducting regular inspections, and preparing and retaining records.	–	In-house fire hydrants, fire extinguishers, and fire service managers	Secretariat	Annual reporting to Hayama Fire Station concerning light oil tanks of no more than the specified maximum quantity; fire prevention and evacuation training, etc.	Compliant
Fluorocarbons Recovery and Destruction Law	Recovery and destruction of CFCs from air conditioning, etc. at places of business.		Recovery and destruction of CFCs upon repair or disposal of air conditioning units	Secretariat	Not applicable this year	–
Basic environmental ordinance of Hayama-machi	Taking the necessary measures to reduce environmental impact and protect the environment.	Article 5	Compliance with the Act on Promotion of Global Warming Countermeasures and Waste Disposal Law	All staff members	Compliance with the Act on Promotion of Global Warming Countermeasures and Waste Disposal Law	Compliant
Beautification promotion ordinance of Hayama-machi	Educating employees to prevent littering of cans, cigarette butts, etc. and holding cleanup activities.	Article 4	Compliance with the Waste Disposal Law	All staff members	Compliance with the Waste Disposal Law	Compliant
Kanagawa Prefecture Ordinance on Promotion of Global Warming Countermeasures	Active efforts to control greenhouse gas emissions.	Article 4	Compliance with the Act on Promotion of Global Warming Countermeasures	All staff members	Compliance with the Act on Promotion of Global Warming Countermeasures	Compliant
Building Standards Law	Regular survey reports on special buildings.	Article 12, Paragraph 1	Site, building, and equipment	Administrative Section		Compliant

\*1 Electrical appliances in company housing: IGES company housing is a building leased by IGES for foreign researchers who come from other countries. Considering the situation of rental housing in Japan, it is very difficult for foreigners who do not speak Japanese to find housing and obtain a lease immediately upon coming to Japan from a foreign country. IGES company housing provides the

necessary minimum of household appliances to allow foreigners to live there immediately upon arrival in Japan (refrigerator, air conditioner, etc.). IGES has leased 13 units since 2002. Since eight years have elapsed, many of the refrigerators and washing machines are beginning to break down (beyond repair).

## 11. External Communications

The business content of IGES and its international forums and seminars are closely related to environmental issues, and the information we convey has an impact on society with regard to environmental issues. The following is a description of the international forums and seminars that we conducted in FY 2010 as external communication. Information is also included on activities other than forums and seminars, including facility tours, as well as any complaints or other feedback.

### 1. 2010 International Forum for Sustainable Asia and the Pacific (ISAP 2010)

#### (1) Purpose

The purpose of this forum is to provide a venue for experts and representatives of businesses, governments, international agencies, and NGOs to meet together every year in the Asia Pacific region, which plays a role of increasing importance in promoting sustainable development, and engage in wide-ranging debate concerning sustainable development.

#### (2) Theme for FY 2010

Sustainable and Low-Carbon Development: Innovative Pathways for the Asia-Pacific

#### (3) Conference summary

Dates: July 12-13, 2010

Location: Pacifico Yokohama

Participants: 780 persons (total)

- The forum was focused on important issues such as climate change and sustainable consumption and production, and included lively exchanges of views concerning pathways and measures for low-carbon development.
- IGES released its third White Paper, a compilation of the research outcomes of IGES concerning sustainable consumption and production, and introduced its original enquiries and analyses from a variety of angles.
- The important points of discussion and key messages presented at each session of ISAP 2010 were collected and issued in the form of a summary report providing policy recommendations for low-carbon development in the Asia Pacific.

### 2. IGES Global Environment Seminars

(1) Purpose

These seminars provide understandable explanations of global environmental issues and information on the latest trends in Japan and abroad for supporting members and the general public.

(2) Summary of 2010 seminars

	Date	Theme	Location	Participants
First seminar	October 4, 2010	Urgent seminar just before COP: What will be decided at COP10 and what will be the economic impacts?	Tokyo	190 persons
Second seminar	December 21, 2010	Report on COP16 results and future outlook	Yokohama	216 persons

Note: Third and fourth seminars had been planned for March 2011, but were cancelled because of the Great East Japan Earthquake.

3. Local community activities

(1) IGES tree planting ceremony: Looking forward to the future forest, two years after planting 3,000 trees

1) Activity summary:

Two years after IGES planted 3,000 trees (in 2008) to celebrate the tenth anniversary of its founding, an activity was held under the leadership of Akira Miyawaki, director of the Japanese Center for International Studies in Ecology, who is involved in forest creation worldwide, to pull weeds around the saplings and apply compost prepared at IGES.

2) Date: May 3, 2010

3) Participants: Approximately 110 persons (including participants in the 2008 tree planting event)

(2) Shonan International Village Academia

1) Activity summary:

A lecture called "Shonan International Village Academia" is held jointly with Kanagawa International Foundation every year for local residents, using the network of research institutions of Shonan International Village at IGES Headquarters.

2) FY 2010 lecturer and theme

Jusen Asuka, Director of the IGES Climate Change Group

"Front Line of Global Warming: Current Situation and Issues in Natural Science and Political Economy"

3) Date and location: January 22, 2011 (IGES Headquarters)

4) Participants: 46 persons

#### 4. IGES White Paper

An IGES White Paper is published once every two years, focusing on important policy agenda items in the Asia Pacific region. With rapid economic development and population increases in the Asia Pacific region, sustainable consumption and production (SCP) has become a pressing issue. The fourth IGES White Paper deals with SCP from various angles, based on continuing research findings from IGES. It sets out detailed discussions concerning the roles of the main stakeholders (consumers, local community, government, businesses, NGOs, etc.) and sectors (agriculture, forestry, water resources, and energy) as well as their relationships with issues facing Asia that cut across multiple fields (climate change and regional integration), and presents ways to promote SCP in the Asia Pacific region.

#### 5. Tours of Hayama Headquarters in FY 2010

Tour date	Tour held for	Purpose	Participants
Sept. 3, 2010	Kyonggi University (Korea)		8 persons
Sept. 7, 2010	JICA trainees		7 persons
Sept. 17, 2010	Waseda University graduate students	Renewable energy related	18 persons
Sept. 22, 2010	Nikken Sekkei	New employee training	12 persons
Sept. 22, 2010	Diet members, Democratic Party of Japan	Inspection for recategorisation	5 persons
Oct. 2010	From the Government of Taiwan: <ul style="list-style-type: none"> <li>• Director and Section Chief, Inspection Office of the Council of Labor Affairs, Executive Yuan</li> <li>• Section Chief, National Fire Agency, Ministry of the Interior</li> <li>• Senior Technical Official, Ministry of Economic Affairs</li> <li>• Technical Official, Environmental Protection Administration, Executive Yuan</li> </ul>	Waste management related	5 persons
Dec. 14, 2010	Architects and housing manufacturers, Hozen Industries Co., Ltd.	Environmentally friendly building tour	21 persons

Total	76 persons
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6. Complaints concerning IGES forums and seminars or business activities of Hayama Headquarters

- There were no complaints concerning international forums, seminars, or facility tours.
- There were no complaints from government offices or the surrounding area concerning business activities of Hayama Headquarters.