

Environmental Activity Report

FY2012

(For the period from 1 April 2012 to 31 March 2013)

30 August 2013

Institute for Global Environmental Strategies

Environmental Activity Report FY2012

Table of Contents

1. Summary of the Organisation	2
2. Scope of Report for EcoAction 21	8
3. Environmental Policy	9
4. FY2012 Organisational Chart for Eco-Action 21	10
5. [10 Environmental Actions] to achieve Environmental Targets	11
6. Results of Actions in FY2012 (Hayama Headquarters)	12
7. All-IGES Environmental Targets and Action Plan for FY2013	21
8. Environmental Goals and Activity Plan for FY2013 (Hayama HQ Building)	22
9. Results of Actions in FY2012 and Environmental Targets for FY2013 (satellite offices in Japan, apart from Hayama HQ)	29
10. Results of Overall Assessment and Review by Representative (President)	47
11. Mid-Term Plan (CO ₂ emissions, non-burnable waste, energy)	48
12. Confirmation and Evaluation of Compliance with Related Legislation and Violations/Litigation (where noted)	52
13. Outreach	58
14. Reference Material	61

1. Summary of the Organisation

(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, 5F, Disaster Reduction and Human Renovation Institution, 1-5-2 Kaigan-dori, Waki-no-hama, Chuo-ku, Kobe, Hyogo 651-0073

- Kitakyushu Urban Centre:

International Village Centre, 2F, 1-1-1 Hirano, Yahatahigashi-ku, Kitakyushu City, Fukuoka 805-0062

- IGES Regional Centre in Bangkok:

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

- Beijing Office:

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

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

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

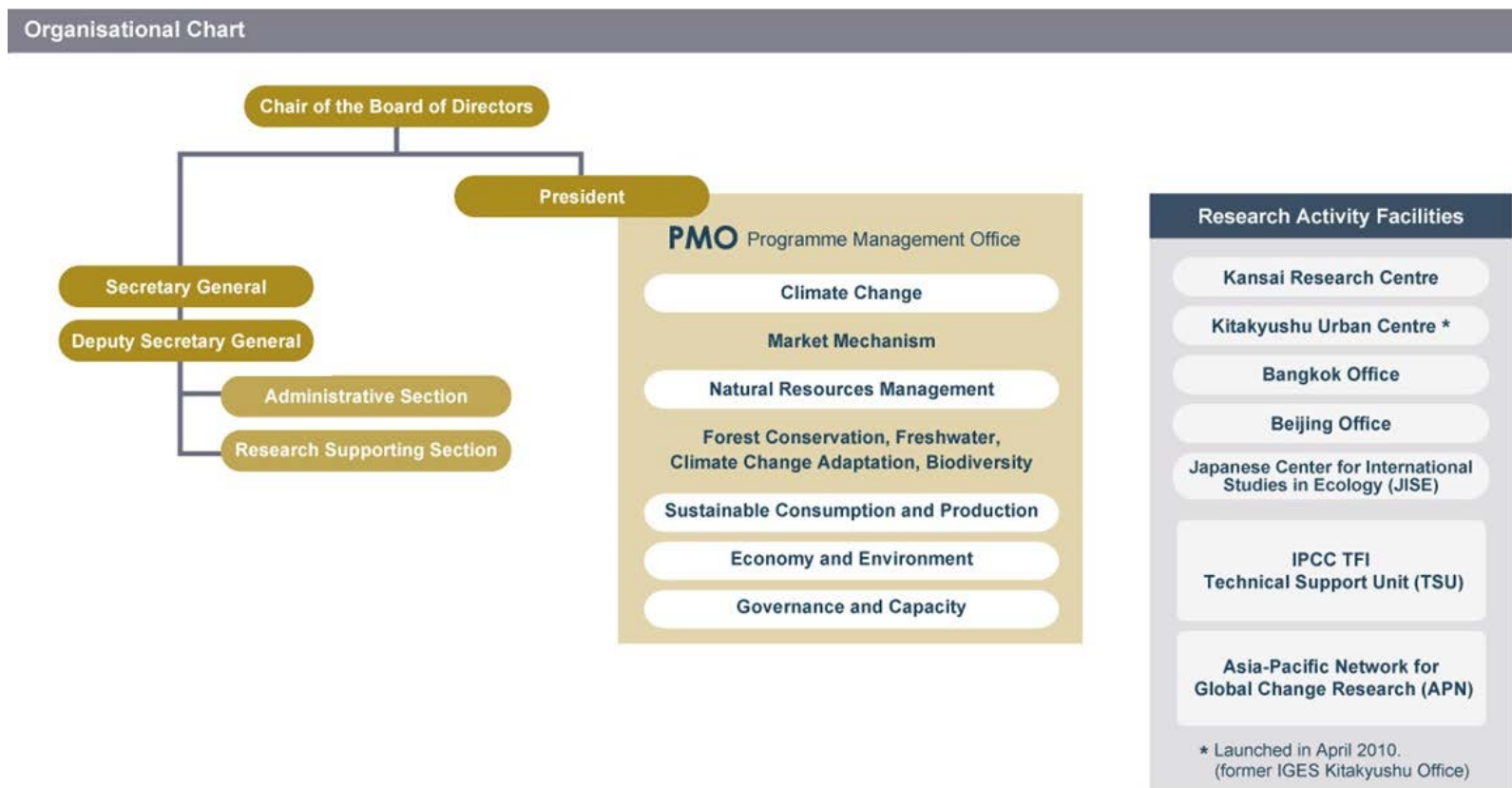
- APN Centre:

East Building, 4F, Disaster Reduction and Human Renovation Institution, 1-5-2 Waki-no-hama, Chuo-ku, Kobe, Hyogo 651-0073

(3) Staffing

Total number of staff: 175 (as of 31 March 2013)

(4) FY2011 Organisational Chart



(5) Officer responsible for environmental management

Mr. Hirotaka Tachikawa, Secretary General, Institute for Global Environmental Strategies
(from 1 April 2013, Mr. Tsutomu Sakagawa)

Tokyo Office operates as a satellite office but does not carry out any additional research activities

(6) Contact information

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

(7) Budget

JPY 2,890,896,000 (FY2012 budget)

(8) Outline of IGES

The Institute for Global Environmental Strategies (IGES) was established in 1998 under an initiative of the Japanese government and with the support of Kanagawa Prefecture. Since April 2012, IGES has been conducting practical and innovative research as a public interest incorporated foundation, aiming to realise sustainable development in the Asia-Pacific region.

This region is seeing rapid economic development, and with that comes urbanisation, lifestyle changes, and a rapid transformation of land-use from forests to land for other purposes. There is also an accompanying upsurge in resource consumption. Various environmental problems are emerging, such as depletion of natural resources including air, water and forests that support people's lives, and an increase in waste products, as well as burgeoning GHG emissions. Another huge issue facing this region is on-going poverty. To overcome these problems and realise a sustainable society, what we need is a model that differs from existing development patterns. It is essential that we develop low-carbon, low-consumption strategies for this new model, based on new values.

IGES marks its 15th anniversary in fiscal 2013 and this is also the year we launch the Integrative Strategic Research Programme for the Sixth Phase. As we forge greater links with national governments, local authorities, international organisations, research institutes, businesses, NGOs and local communities, we are moving forward with problem-solving research on a low-carbon, low-consumption and sustainable Asia-Pacific. At the same time, we continue to make effective policy proposals through being proactively involved in relevant policy-making processes for international society, and at national and local levels. In this way, we hope to work as a “change agent”, facilitating the transition to a sustainable society and improving the well-being of people in the region.

(9) Outline of research groups

① Programme Management Office (PMO)

The PMO conducts research activity planning and coordination from a panoramic, strategic perspective on IGES research activities, and at the same time, carries out research and studies on cross-cutting and emerging issues. With the Asia-Pacific positioned as a core target area, the PMO works to effectively promote activities to achieve sustainable development through close cooperation and linkages with other research institutes, governments,

international organisations, NGOs, the business sector and major international networks. In addition, by participating in important international policy processes, the PMO gains an understanding of crucial policy trends and research needs, and disseminates IGES research output and policy recommendations in a timely manner, thereby giving international-level promotion and support to policy formation and implementation related to sustainable development.

② Climate Change Group (CC)

The Asia-Pacific is a major source of greenhouse gas. With worries about the influence of global warming, measures to address climate change issues are an extremely urgent issue. The Climate Change Project aims to make recommendations for climate change policies for sustainable development in the Asia-Pacific region under an international framework.

③ Market Mechanism Project (MM)

The Market Mechanism Project supports the effective introduction and implementation of market mechanisms by providing straightforward and useful information to the business community on market mechanism systems, and will contribute to practical policy design by conveying the viewpoints of affected businesses to policymakers.

④ Natural Resources Management Group / Forest Conservation (FC)

The Forest Conservation Group develops and promotes policy instruments for sustainable forest management and use of forest resources through strategic research, capacity building and outreach to enhance the wellbeing of present and future generations.

⑤ Natural Resources Management Group / Freshwater (FW)

The Freshwater Group aims at the creation, storage and use of the knowledge required to promote water governance strategies that are predictable in order to guarantee productive and sustainable use of water in the Asia-Pacific region.

⑥ Natural Resources Management Group/Climate Change Adaptation Team (AD)

This group aims to carry out assessments for measuring the effectiveness of climate change adaptation actions and progress in mainstreaming adaptation. It also facilitates the formation of integrated adaptation decision frameworks that enable policymakers to effectively develop and implement national level adaptation plans and policies, and networks with various stakeholders to bridge needs with opportunities for adaptation in the Asia-Pacific region.

⑦ Natural Resources Management Group / Biodiversity and Ecosystem Services (BE)

Biodiversity and Ecosystem Services (BE) aims at conserving biodiversity and developing innovative funding mechanisms for payment of ecosystem services

⑧ Sustainable Consumption and Production (SCP)

The goal of the SCP Group is to contribute to the development of sustainable patterns of consumption and production in the Asia-Pacific region. Special attention is given to the use of raw materials, the flow of materials through society, and the environmental impacts associated with those flows.

⑨ Economy and Environment (EE)

The Economy and Environment Group carries out policy analysis based on various economic analysis methods to reflect these aspects in the policy recommendations of IGES research groups. In addition, the theme of “trade and environment” is becoming even more important in the Asia-Pacific region where the process of regional economic integration is accelerating. The group conducts research on this theme using trade analysis techniques.

⑩ Governance and Capacity (GC)

The objective of this research is to analyse issues and make policy recommendations to improve governance and capacity to address sustainable development and environmental issues in the Asia-Pacific region at the global, regional, national and local level.

⑪ Kansai Research Centre (KRC)

The private sector, which has promoted environmental and energy saving actions, is the focus of research for the IGES Kansai Research Centre under the theme of “business and the environment.” In addition to promoting research on the environmental activities of companies in cooperation with national and local governments, impediments and promotional factors in sustainable business in Asia shall be specified and specific strategies formulated through the promotion of low-carbon technology to developing countries where the focus has been on environmental and energy saving within the private sector, as well as a co-benefit technology project.

⑫ Kitakyushu Urban Centre (KUC)

The Kitakyushu Urban Centre carries out cross-cutting research on sustainable urban development, and addresses important issues, such as waste management, public health, pollution control and transportation. The Centre has been involved in the management of the Kitakyushu Initiative Network and strives to expand and spread good practices on the urban environment to the Asian region, in cooperation with the City of Kitakyushu and the Kitakyushu International Techno-cooperative Association (KITA). Research capacity of the Centre has improved on urban development through strong linkages with local and national governments, and ASEAN.

⑬ Beijing Office

There has been an increase in the strategic importance of China in environmental policies in the Asia-Pacific region, such as those to prevent global warming. The Beijing office serves as an axis point to develop various surveys and research work in cooperation both bilaterally with China, and also multilaterally, based on close cooperation with the Sino-Japan Friendship Center for Environmental Protection.

⑭ IGES Regional Centre (IRC) in Bangkok

IRC in Bangkok was newly established in June 2011 to strengthen cooperation with various stakeholders and related organisations in the Asia-Pacific region. The Centre provides assistance for the effective operation of networks as well as coordinating collaborative research with international organisations.

⑮ IPCC Technical Support Unit (TSU)

TSU is a technical support unit which supports the activities of the Intergovernmental Panel on Climate Change (IPCC) Task Force on National Greenhouse Gas Inventories (TFI). Established within IGES in 1999, the unit provides substantial management for TFI and develops, publishes and promotes guidelines for the calculation and reporting of national greenhouse gas emissions and removals.

⑯ Japanese Center for International Studies in Ecology (JISE)

Aiming for a sustainable society from the plant ecology perspective, JISE carries out practical field surveys and research for the restoration and creation of ecosystems at the regional and global level. It also promotes trainings in environmental and ecological studies as well as the collection and dissemination of related information. JISE was integrated into IGES in April 2007.

⑰ Asia-Pacific Network for Global Change Research (APN)

The APN is an intergovernmental network of 21 member countries whose mission is to foster global change research in the Asia-Pacific region, increase developing country participation in that research and strengthen interactions between the science community and policymakers. The APN's policy and decision-making body is its Inter-Governmental Meeting. The APN Secretariat was transferred to IGES in April 2004.

In addition, there is also the Tokyo Office which serves as a liaison type office, but does not constitute as a separate research group.

2. Scope of Report for EcoAction 21

The scope was widened to include the five domestic satellite offices (Kansai Research Centre/Kobe, Kitakyushu Urban Centre/Kitakyushu, APN Secretariat/Kobe, JISE/Yokohama, Tokyo Office/Chiyoda) besides the headquarters that was the target for 2012 and a mid-term review was carried out in March 2013.

The office area and number of staff are listed below.

Offices	Total office area	Number of Staff	Location
Hayama Headquarters	7,408m ²	125	Hayama-machi, Kanagawa Prefecture
Tokyo Office	108m ²	2	Uchisaiwa-cho, Chiyoda-ku, Tokyo
Kansai Research Centre	246m ²	12	Chuo-ku, Kobe, Hyogo Prefecture
Kitakyushu Urban Centre	125m ²	9	Yahatahigashi-ku, Kitakyushu City, Fukuoka Prefecture
JISE	383m ²	10	Nishi-ku, Yokohama, Kanagawa Prefecture
APN Centre	196m ²	8	Chuo-ku, Kobe, Hyogo Prefecture
Total	8,466m ²	166	

(Staff numbers are as of 31 March 2013)

* : As can be seen in 1. Summary of the Organisation, IGES has two offices overseas (in Bangkok and Beijing). Although these offices are outside the scope of the EA21 reviews, to the extent possible, they carry out the same type of actions, using the headquarters and satellite offices in Japan as reference to reduce their environmental burden. A system is planned to keep track of what actions are possible, how to tabulate the results and how to reflect the results.

3. Environmental Policy

Environmental Policy for the Institute for Global Environmental Strategies (IGES)

We, as members of the Institute for Global Environmental Strategies (IGES) that conducts pragmatic and innovative strategic policy research on sustainable development, commit to this Environmental Policy in our daily operations, obeying the relevant environmental laws and agreements, as we achieve our research objectives.

1. Sustainability

Recognising that the happiness and well-being of future generations rests on our actions today, we will contribute to the aim of realising sustainable development by changing our resource-intensive lifestyles and value systems.

2. Our actions

We will demonstrate the principles of sustainable development and our research outcomes by promoting environmentally sustainable, socially acceptable, and economically feasible practices. We will further 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, and 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

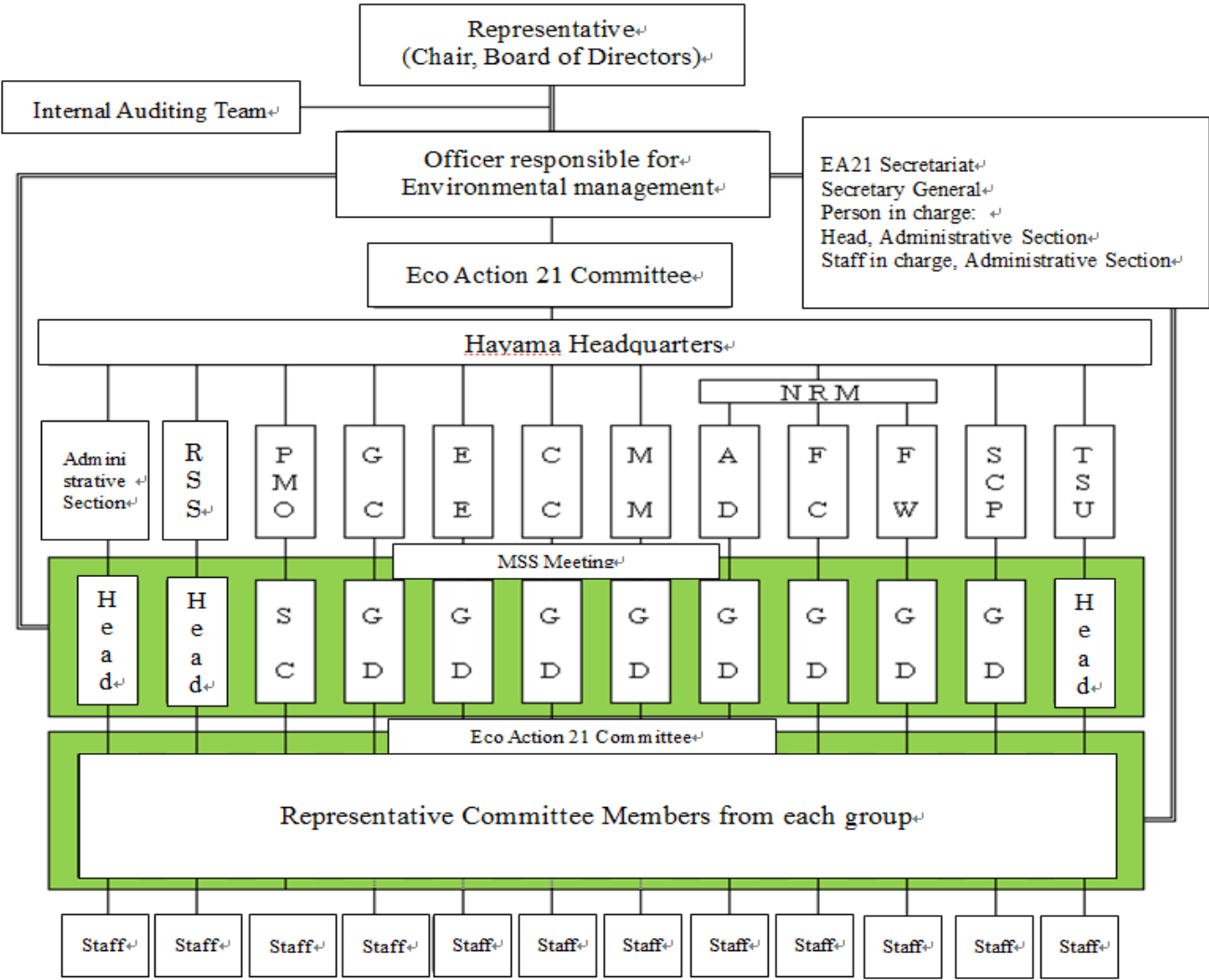
Through transboundary collaboration, we work to create international communities of practice by sharing ideas and expertise towards sustainable development.

Prof. Hironori Hamanaka, Chair of the Board of Directors

Institute for Global Environmental Strategies

1 October 2008

4. FY2012 Organisational Chart for Eco-Action 21



※Administrative Section includes Accounting Section.

5. [10 Environmental Actions] to achieve Environmental Targets

Ten environmental actions are set as basic environmental activities to build an energy-saving, resource recycling society. IGES aims to achieve its environmental targets by carrying out the following ten environmental actions.

1. In our business operations, each and every staff member will maintain an eco-conscious attitude.
2. We will abide by optimised temperature settings for air conditioning (28°C) and heating (20°C).
3. We periodically check condition of EA21 initiatives and compliance with environmental laws and then correct them if there is a problem.
4. We will regularly educate our staff as necessary in order to implement EA21 actions.
5. We will turn off the lights in workspaces when no staff are present, such as lunchtime.
6. We will put personal computers in sleep mode or shut them down when they will not be used for a long period of time.
7. We will purchase environmentally-friendly goods and services (Green Purchasing Law, items with eco-marks, etc.)
8. We will promote a “paperless” office and use paper effectively by making double-sided copies and reusing scrap paper.
9. We will properly separate waste and promote recycling.
10. We will minimise water use and use caution to conserve water.

6. Results of Actions in FY2012 (Hayama Headquarters)

(1) Categories to reduce (CO2 emission, Total drainage, Waste, Amount of purchased copy paper)

Category	Unit	Goal		Actual Results		Factor
		Goal value	Reduction percentage for reference year	Actual value	Achievement	
CO2 emission	t・CO2*1	411.9	22.5%	398.1	○	Successfully achieved with a 3.4% reduction and no problems.
	Electricity	kWh	16.7%	666,354		<ul style="list-style-type: none"> The winter model of using an electric chiller was supposed to be mainly operated, but in fact the gas absorption air conditioner was mainly used.
		CO2 calculation (t・CO2)		283.2		<ul style="list-style-type: none"> It was discovered that the supplemental air conditioner, electric hot water heat exchanger had broken down in November so it was not used during the winter.
	Gas	m ³	38.0%	54,495		<ul style="list-style-type: none"> In winter, for heating the gas absorption air conditioner was mainly used.
		CO2 calculation (t・CO2)		114.9		
Drainage	m ³	4,277	29.3%	5,603	×	<ul style="list-style-type: none"> In October, there was a leak inside the electric chiller (air conditioner) machine. Repair work was done at the end of January. Just after that repair work the bulb inside of the electric chiller machine got broken and there was another leak. So those two leaks meant that the amount of water used from October

							to April doubled.
Waste	Burnable waste	kg	2,504	31.8%	IGES : 2,909 厨房: 348 合計: 3,257	×	<ul style="list-style-type: none"> • We successfully reduced more than in FY2008, FY2009, FY2010, even though the number of employees has been increasing. • In FY2011 the amount of burnable waste was unusually small, it is because after the Great East Japan disaster there were some absences (temporary going back to home country, taking leave) and working days and hours were decreased. Therefore burnable waste also decreased.
	Unburnable	kg	-	Determine FY2012 reference year	IGES: 517 Kitchen: 491 Total: 1,008	—	<ul style="list-style-type: none"> • We started measuring unburnable waste and recyclable plastic separately and we were able to determine the actual amounts of each. So we decided to use FY2012 as the reference year.
Amount of purchased copy paper		sheet	638,100	30.6%	686,000	×	<ul style="list-style-type: none"> • The effect of the paper reduction measures have been seen since FY2009 and there are good results from FY2010 to FY2012. • It rose 6% compared to the previous year. This rise is the same level as the increase in employee numbers.

*1 . . . Emission coefficients, the year of 2007 are used. (Tokyo Electric Power Company: 0.425(kg-CO₂/kWh), Tokyo Gas: 2.11(kg-CO₂/MJ))

*2 . . . For transitions over time, refer to “14. Reference Material” on p.61~ 66

(2) Category to monitor amount of waste discharged

Measures to detect unusual values.

Category		Unit	Actual value	Reduction percentage for previous year	Factor
Recycle resources	Bottles	kg	IGES: 143 Kitchen: 13 Total: 156	Reduced 37.3%	<ul style="list-style-type: none"> • The actual value of FY2011 was unusual. • Comparing FY2009 and FY2010, it is also reduced.
	Plastic bottles	kg	IGES: 182 Kitchen: 13 Total: 195	Increased 25.8%	<p>Although it is very hard to analyze factors, two factors are suggested.</p> <ul style="list-style-type: none"> • Caused by increasing employee numbers. • There was an irregular amount of water discharged, 10kg. <p>This 10kg was caused by expiring stock water bottle for emergencies. Those were consumed in kitchen and also given out to staff members.</p>
	Cans	kg	IGES: 167 Kitchen: 48 Total: 215	Reduced 7.3%	Difficult to analyse factors.

(3) Category that increases recycle percentage

Since April 2012, we calculated the separate weight of unburnable waste and recyclable plastic and found out the actual weight. Then we started a new action to increase the percentage of recyclable plastic within the total amount of unburnable waste and recyclable plastic.

Recyclable plastic	Unit		Recyclable plastic percentage for total amount of unburnable waste and recyclable plastic	Determine FY2012 as reference year	
	Discharge amount of recyclable plastic	Percentage		Discharge amount of recyclable plastic	Percentage
	kg	%	$\frac{\text{Discharge amount of recyclable plastic}}{\text{Discharge amount of recyclable plastic} + \text{Discharge amount of unburnable waste}}$	IGES: 258 Kitchen: 0 Total: 258	$\frac{258}{258 + 1008} = 20.4$

(4) Ratio of Green purchase

One of green purchase activity, we try to raise the ratio of green products in purchasing office and daily supplies.

Green purchase	Category	Unit	FY2011		FY2012		
			Goal value	Actual value	Goal value	Actual value	Achievement
	The ratio of green products in purchasing supplies	%	90%	94.2%	94.2%	96.6%	○

The ratio of green purchase = (Numbers of purchased Eco supplies) ÷ (Numbers of total purchase)

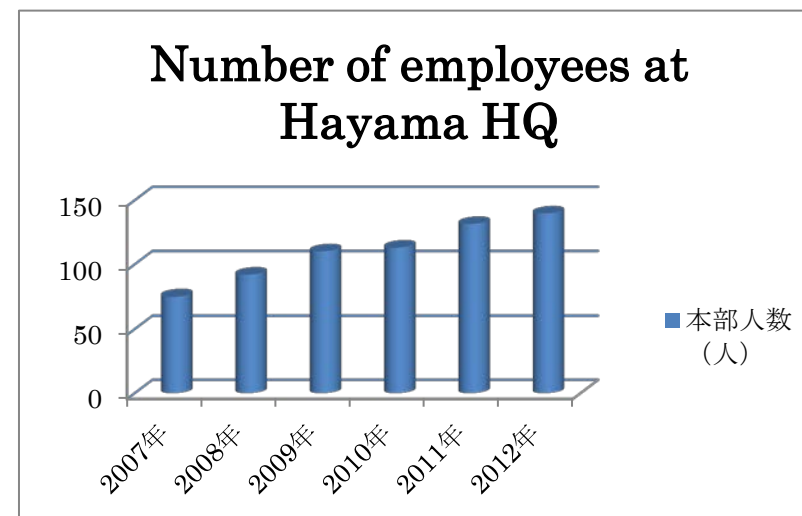
*Any product that does not have green version of the product is not included in “Numbers of total purchase”.

*Products are only office and daily supplies.

For your information

- On 31 March 2013, the neighbouring supermarket, Motomachi Union, closed down and the automatic vending machines were removed. This situation did not affected the actions and results for FY2012
- There was an increase in the number of employees at Hayama headquarters.

	Numbers of employees at HQ	Rate of increase compared to reference year
FY2007	75.08	100%
FY2008	91.93	122.4%
FY2009	110.14	146.7%
FY2010	113.06	150.6%
FY2011	131.5	175.1%
FY2012	139.7	186.1%



(5) Findings of and responses to the “mid-term inspection”

The mid-term inspection by the external inspector (Mr. Yoji Kuronagi, certification registration number 81039) was received on the 17 ~ 18 April 2013. The findings that were received at that time and the response to those findings are shown in the table below.

		Findings of the mid-term inspection (17~18.4.2013)	Result (30.8.2013~present)
Mid-term inspection report	C Judgement: Matters in need of improvement	Under the waste disposal law, when a company that emits waste products is entrusted with collection, transportation and disposal, it is required to have a written contract with each subcontractor. At IGES headquarters for the year 2012, there were a total of two cases where waste plastics, glass, concrete and ceramics were disposed of as industrial waste. Asahi Resources (ltd.) were selected to be the collection and transportation company, and Kadokura Shoten (ltd.) was selected as the disposal company. However a written contract had not been concluded with these companies. In addition, it has been confirmed that there are two cases where sheets A, B2, D and E of the manifest are complete.	We concluded contracts with the two companies

	Evaluation criteria comments table	B-1	12. For Eco action 21 it is required that “we regularly confirm and evaluate the situation regarding the accomplishment of the environmental aims, the enforcement of the environmental action plan and the management of the environmental management system”. The progress for the financial year was verified against the established aims of Japanese Center for International Studies in Ecology (JISE) and the Kansai Research Centre (KRC). However the evaluation of the mid-term has not been put into effect. (JISE, KRC)	In the EA21 committee meetings (10/5, 8/8) it was decided to carry out a mid-term inspection at JISE and KRC in October.
		B-2	12. The findings of the internal inspection are divided into four ranks; at the next inspection it is supposed to be checked whether the B items (items in need of improvement) have been corrected. At the JISE, KRC and APN there is no awareness of the need to correct the B items as a result of the inspection. There was no correction plan. (JISE, KRC, APN)	By a specified date the JISE, KRC and APN will formulate a correction plan and submit it to headquarters.
		A-1	3. The “Self evaluation check for environmental matters” was prepared on 27 February 2012, but while there was awareness of the necessary documents at the time of registration, no revisions were made thereafter. Evaluation was carried out regularly based on the operating situation, and it is recommended to clarify the state of revisions and future items to work on. (Environmental management supervisor/Secretariat)	At the EA21 committee meetings (10 May, 8 August), it was decided to carry out the “Self evaluation check for environmental matters” in January.
		A-2	4. At Hayama HQ, a Fire Prevention Plan was prepared and submitted to the Fire Dept. In this, the Voluntary Inspection Check sheet was not completed, and the Self-defense fire-practice	This was requested for Area committee members at the EA21 meeting on 10 May, and following that, it began in all areas.

			<p>enforcement result sheet was recorded under a separate form. It is recommended to implement this based on the content of the submitted Fire Prevention Plan.</p> <p>(Environmental management supervisor/Secretariat)</p>	
		A-3	<p>5. KRC set environmental targets for Promotion of Green Procurement, but a decision was not made on the procedure and standards etc. when making green purchases. IGES has a green purchasing policy and it is recommended to decide on procedure and standards based on this (KRC, Environmental management supervisor/Secretariat)</p>	<p>The FY2012 Environmental Activity Report 8. (4) (p.28) states the Basic Policy on Green Purchasing at Hayama Headquarters. With further additional revisions, IGES will establish a procedure and standards for green purchasing by December.</p>
				<p>KRC began measuring the green purchase rate in FY2013, and will decide on a standard value.</p>
		A-4	<p>8. The environmental targets for the whole HQ are processed into table and graphs of the monthly figures, and stored in a shared file. In interviews with staff, not many employees could respond on the achievements of FY2012 targets and did not know where the storage file was. It is recommended measure the achievement rates of targets and inform staff on a regular basis. (Environmental management supervisor/Secretariat)</p>	<p>In October, we are planning to let staff know where the file is kept and inform staff about the situation on achievement rates of targets for the 6 months between April and September.</p>
		A-5	<p>12. Good evaluation was given to the Natural Resources Management Group prepared and filled in a check list to see whether the last person to leave turned the lights off. On the other hand, Because the activity became established, it was noted several times since August. It is recommended to replace a fixed activity with one that you want to establish in the future.</p>	<p>We would like to introduce this effort by the Natural Resources Management Group at work training sessions.</p>

			(Natural Resources Management Group)	
		A-6	12. Good evaluation of monthly evaluation on whether or not improvements are made according to the Environmental Activity Monitoring Sheet for each department, and noting of comments from Directors/Department Heads once every 3 months to evaluate the rate of progress. On the other hand, we have seen cases where the column of the receipt document is not filled in. It is recommended to fill in the form correctly to ascertain the reasons for good achievement and when there are problems.	The FY2012 Environmental Activity Report 10. Results of Overall Assessment and Review by Representative (Chair of the Board of Directors) states that PDCS checks are not systematic, and requests once again for training for all staff in September and October.

7. All-IGES Environmental Targets and Action Plan for FY2013

(1) All-IGES Environmental Targets

1. Try to reduce Greenhouse gas emissions.
2. Try to reduce waste emissions.
3. Promote resource saving, in particular by setting numerical targets for the purchasing of copying paper and trying for reductions.
4. Try to promote green purchasing (all domestic offices should refer to “Hayama Headquarter’s basic policy for green purchasing”).
5. Try to improve the level of understanding of eco-action.

(2) All-IGES Environmental Action Plan

① Conduct training

Conduct training for all IGES staff (scheduled for September and October).

② Conduct interim evaluation

In Hayama Headquarters, and each domestic satellite office, conduct an interim evaluation to assess the efforts in the first half of the year (scheduled for October).

③ Conduct an internal auditing

Elect internal auditors in Hayama Headquarters to conduct an internal auditing (scheduled for November).

④ Implement self-evaluations

In Hayama Headquarters and each domestic satellite office, perform self-evaluations in relation to environmental efforts and the impact on the environment (scheduled for January).

⑤ Verify compliance with environmental laws and regulations

In Hayama Headquarters and each domestic satellite office, check the latest version of laws related to the environment and whether they are being observed (scheduled for January).

8. Environmental Goals and Activity Plan for FY2013 (Hayama HQ Building)

(1) Categories to reduce (CO2 emission, Total drainage, Waste, Amount of purchased copy paper)

Category	Unit	FY2013		
		Policy and action for FY2013	Goal value	Reduction percentage for reference year
CO2 emission	t・CO2*1	Continuously aiming to achieve the same level as FY2012	411.9	22.5%
Electricity	kWh	<ul style="list-style-type: none"> • The past records for summer air conditioner usage were only for the gas absorption air conditioners. So we are trying to alternate air conditioners, alternating between electricity and gas, week by week in August. Then we will try to gather data on whether electricity or gas caused fewer CO2 emissions. • The room temperature is continuously set at 28 degrees. • For the winter heating, we will mainly use the electric chiller. The room temperature will be set at 22 degrees. <p>(Reason)</p> <ol style="list-style-type: none"> 1. According to past data for winter, it is suggested that using electricity chiller causes fewer CO2 emissions. 2. Generally the gas demand in winter is high and if we consume more gas during winter, the gas price per unit next year would be higher. 	755,834	16.7%

	Category	Unit	Policy and action for FY2013	Goal value	Reduction percentage for reference year
	Gas	m ³	<ul style="list-style-type: none"> The past records for summer air conditioner usage were only for the gas absorption air conditioners. So we are trying to alternate air conditioners, alternating between electricity and gas, week by week in August. Then we will try to gather data on whether electricity or gas caused fewer CO2 emissions. The room temperature is continuously set at 28 degrees. For winter heating, we will mainly use the electric chiller and try to reduce gas use as much as we can. The room temperature will be set at 22 degrees. <p>(Reason)</p> <ol style="list-style-type: none"> According to past winter data, it is suggested that using the electricity chiller has fewer CO2 emissions. Generally the gas demand in winter is high and if we consume more gas during winter, the gas price per unit next year would be higher. <ul style="list-style-type: none"> The operating hours are 13 hours, the same as in FY2012. <p>(Normally from 07:00 to 20:00 and on Wednesdays, from 07:00 to 19:00.)</p>	43,000	38.0%

Category		Unit	FY2013		
			Policy and action for FY2013	Goal value	Reduction percentage for reference year
Drainage		m3	<ul style="list-style-type: none"> • It took a long time to repair because of belated detection. So we put in place the following countermeasures to detect a leak: <ul style="list-style-type: none"> * Implementing daily visual check and reading of the meter then put meter value into a table and put in place a system to detect unusual meter values. * In the monthly meeting between IGES and the building management service company, we will confirm whether or not there are any unusual situations when comparing the value from the previous month and the same month in the previous year. 	4,277	46.0%
Category		Unit	FY2013		
			Policy and action for FY2013	Goal value	Reduction percentage for reference year
Waste	Burnable waste	kg	<ul style="list-style-type: none"> • For the amount of burnable waste, we will keep the same level as FY2012. • In the monthly meeting we will confirm whether or not there are any unusual situations when comparing the value from the previous month and the same month in the previous year. 	3,257	31.8%

	Unburnable	kg	<ul style="list-style-type: none"> • In the monthly meeting we will confirm whether or not there are any unusual situations when comparing the value from the previous month and the same month in the previous year. • In the regular monthly meeting check whether there are any problems in waste emissions (on a month-to-month and year-on-year basis) • Exercise restraint in purchasing through reasonable inventory management for equipment and expendable supplies. • Choosing recyclable items. • Continue to perform proper separation of waste. 	1,008	0%
Amount of purchased copy paper		sheet	<p>We continuously implement the following measures:</p> <ul style="list-style-type: none"> • Printing the appropriate number of handouts for meeting documents and presentation documents. • Try to reduce changing documents due to revisions • Using double print and use of the back of paper for printing. • Paperless meetings 	686,000	30.6%

*1 . . . Emission coefficients, the year of 2007 are used. (Tokyo Electric Power Company: 0.425(kg-CO₂/kWh), Tokyo Gas: 2.11(kg-CO₂/MJ))

(2) Category to monitor amount of discharge

Measures to detect unusual value.

Category		Unit kg	FY2013
			Policy and action for FY2013
Recycle resources	Bottles	kg	<ul style="list-style-type: none"> • Implement proper waste separation for recycling. • Discharged amount is at the same level at FY2012 • Create system that analyses factors when unusual value is detected. <ul style="list-style-type: none"> *Acknowledge discharged amount in every month *Acknowledge discharged amount of previous month and same month in previous year. • If there was a constant increase other than for temporary reasons, then the cause should be investigated and reductions made
	Plastic bottles	kg	
	Cans	kg	

(3) Category to raise the percentage of recyclables

Since April 2012, we started weighing unburnable waste and recycle plastic separately to know their actual weight. Then we start a new action to raise the percentage of recyclable plastic in the total amount of unburnable waste and recyclable plastic.

Recycled plastic	Unit		Recyclable plastic percentage for total amount of unburnable waste and recyclable plastic	Determine FY2012 as reference year		FY2013	
	Discharge amount of recyclable plastic	Percentage		Discharge amount of recyclsble plastic	Percentage	Policy	Goal value
	kg	%	<div>Discharge amount of recyclable plastic</div> <hr/> <div>Discharge amount of recyclable plastic + Discharge amount of unburnable waste</div>	IGES: 258 Kitchen: 0 Total: 258	$\frac{258}{258 + 1008} = 20.4\%$	• Promote proper waste separation and raise the percentage.	25%

(4) Ratio of Green purchase

For one green purchase activity, we try to raise the ratio of green products in purchasing office and daily supplies.

【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 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 JPY20,000, purchasing should be conducted with reference to Eco-Mark and Green Purchasing Network (GPN) products, labelling under the Green Purchasing Law, etc.”

	Category	Unit	FY2011		FY2012			FY2013	
			Goal value	Actual value	Goal value	Actual value	Achievement	Policy	Goal value
Green purchase	The ratio of green products in purchasing supplies	%	90%	94.2%	94.2%	96.6%	○	<ul style="list-style-type: none"> • Goal value is same level as FY2012 • Instruction for the person in charge of purchasing in EA21 training session or assistant training session. • Be aware by periodical implementation of monitoring sheet. 	96.6%

The ratio of green purchase = (Numbers of purchased Eco supplies) ÷ (Numbers of total purchase)

*The product that does not have green product is not included “Numbers of total purchase”.

*This covers only office and daily supplies.

9. Results of Actions in FY2012 and Environmental Targets for FY2013 (satellite offices in Japan, apart from Hayama HQ)

(1) Measures undertaken by the Kansai Research Centre (KRC)

KRC decided the following environmental aims, environmental activity plans etc. and began EA21 measures from FY2012. In general the measures were undertaken properly, however because there was not a sufficient record and periodical checks these points will be improved and the measures will be pushed forward in FY2013. The environmental aims, environmental action plans etc. for FY2013 have the same content as FY2012, however we will promote the established measure of “the goal to reduce the quantity of copying paper that is purchased” with a “2% reduction from FY2012 (the quantity of copying paper that was purchased in FY2012 was: A4 90,000 sheets and A3 3,000 sheets)” as a quantitative goal.

Environmental goal	Environmental action plan	Concrete action	Quantitative targeted value
Reduction of greenhouse gas emissions	Endeavour to reduce the consumption of fuel, electricity etc. that is used in the facilities.	<ul style="list-style-type: none"> ● When staff are absent from the workplace, such as during the lunch break, the lights are properly turned off. ● Lights are partially turned off during the day, for overtime work lights are partially turned on. ● At times such as lunch break and when one is away from one's desk for a long period of time, turn the computer to standby mode. ● When operating the air conditioning it is set to an appropriate temperature (28°C or more for cooling²⁹ and 20 °C or less for heating). ● Do not use the elevator to go to nearby 	

		<p>floors, use the stairs.</p> <ul style="list-style-type: none"> ● In Summer: during the “eco style campaign” try to wear light clothing instead of a jacket and tie. In Winter: try to practice “winter eco style” by doing things such as dressing in layers. 	
Reduce waste emissions (combustible waste, non-combustible waste)	Try to promote the 3Rs.	<ul style="list-style-type: none"> ● Separate the collection of resource waste and recycle properly. ● Try to reuse office supplies and equipment. ● Install a collection box for collecting unnecessary paper and promote recycling. 	
Promotion of resource conservation	Try to reduce the quantity of copying paper purchased and water consumption.	<ul style="list-style-type: none"> ● Do double-sided photocopying and only photocopy what is needed. ● Use paper that has already been used on one side. ● Control the printing of things such as information from the internet. ● Try to conserve water. 	Set the “Target to reduce purchase of copy paper” at “2% reduction of FY2012 amount” (amount of copy paper purchased in FY2012 was 90,000 sheets of A4, 3,000 sheets of A3)
Promotion of green procurement	Attempt to promote things such as purchasing of environmentally-friendly products.	<ul style="list-style-type: none"> ● Use and purchase articles in consideration of the environment. 	When measuring the rate of green purchasing in the future, the standard values for FY2013 should be applied

(2) Measures undertaken by the Kitakyushu Urban Centre (KUC)

① Basic concept/way of thinking

Regarding the IGES environment policy of “regional participation” KUC wants to more actively promote eco action, particularly from the point of view of regional contribution.

Kitakyushu City, where KUC is located, is recognised worldwide, by organisations such as the United Nations and the OECD, as a city that overcame industrial pollution, at the same time it is an environmental demonstration city/environmental city of the future where there are various opportunities to learn about sustainable urban development through community participation. By participating actively in these opportunities in ways that involve KUC business, starting from eco action at the KUC staff level, as a research institute that represents Japan in the fields of global warming and climate change, KUC makes a visible contribution to local communities.

② Target setting and status of efforts last year

Environmental goal	Actions and achievements (FY2012)	Concrete actions (FY2013)	Standard value (FY2011)	FY2012		FY2013
				Target value	Actual value	Target value
Reduction of CO2 emissions	<ul style="list-style-type: none"> Regarding electricity consumption, in correspondence to large scale savings within the jurisdiction of Kyushu we 	<ul style="list-style-type: none"> We will continue to work to try and reduce electricity consumption. Enact measures to reduce the amount of electricity used by turning off lights in the communal lobby when it is not in use, as well as putting computers 	(Difficult to obtain the data regarding energy consumption)			

	<p>worked towards saving energy in the whole building.</p> <ul style="list-style-type: none"> • By introducing a circulator we tried to improve the efficiency of the air conditioning. • For commuting and short distance business trips, walking, public transport and bicycle use was enforced. 	<p>on standby mode and turning off desk lights when people are away from their desks for a long time.</p>				
Reducing waste emissions	<p>(1) <u>Paper waste</u></p> <ul style="list-style-type: none"> • Regarding the quantity of 	<ul style="list-style-type: none"> • With an increase in staff it is expected that there will be an expansion in 	Quantity of copying paper	Percentage compared with the	5000 sheets×15 boxes	6,250

	<p>copying paper purchased, we were not able to achieve the target value. For things such as training materials there are cases where it is too late to make an outside order for printing so the materials are printed in the office.</p> <ul style="list-style-type: none"> Near the photocopier we posted the KUC eco action plan and raised 	<p>the quantity of business, therefore it is difficult to simply reduce the amount of copying paper that is purchased. Try to maintain a standard level.</p> <ul style="list-style-type: none"> Reuse the reverse side of copying paper, or attempt to do both side/multiple page copying. Because Wifi has finally been installed in the office environment, try to reduce the number of prints made of meeting documents. In the workplace, every month, share the actual number of sheets (monochrome/colour) copied and the amount of money spent on photocopying. 	<p>purchased 6,250 sheets/person</p>	<p>previous year 2 %▲ (6,125 sheets / person)</p>	<p>= JPY49,350 = 75,000 sheets/10 people (<u>7,500 sheets/person</u>)</p>	<p>sheets/person</p>
--	--	---	--------------------------------------	--	--	----------------------

	awareness in this way as well as establishing a box for using recycled paper.					
	<u>(2) Recyclable waste</u> • Because there was no actual data, the waste from last August up to July this year was measured.	• For waste paper, whilst waste continues to be measured, we will investigate whether it is possible to establish effective targets from the point of view of cost-effectiveness. • Continue to practice using one's own cup/water bottle and separate collection.	【There is no measurement data】		【measurement results】 Waste paper 67 kg 【14 kg were book disposal】 69 PET bottles 69 【approx. 2.6 kg】 13 cans、5 bottles	【 For waste paper, continue to measure the amount of waste】
Promotion of green purchasing	• We were able to achieve results that exceeded the goals for green purchasing.	• Regarding the procurement of expendable supplies, in order for there not to be any non-essential and non-urgent purchases	Green purchases for 45% of expendable supply	50%	JPY117,000/ JPY192,000 = 61 % <input type="checkbox"/>	Percentage last year 10%+ 67%

		<p>regularise the number of orders that are made (once a month as a general rule).</p> <ul style="list-style-type: none"> • Share the actual results (amount of money) every month, in the office. • The percentage of green purchasing is assumed to be a 10% increase from the last financial year. 	purchases			
Contribution to the local environment/ beautification activities.	<ul style="list-style-type: none"> • As representatives of IGES, members of staff cooperated and participated actively in regional environmental/ beautification activities. <p>1) Wakamatsu</p>	<ul style="list-style-type: none"> • Based on the results achieved last year, set the target values that all regular staff are to participate in. • Go one step from contributions at the individual level, promote contributions to the local environment through business. 	<p>Participation in environmental/ beautification activities carried out in the area/</p> <p>2 people/time</p>	4 people/time	8 people/time ○	<p>All full-time staff</p> <p>9 people/time</p>

	<p>district beach cleanup (Business cooperation with Kitakyushu City)</p> <p>3 people (1 researcher, 1 office worker, 1 intern)</p> <p>2) Kitakyushu Eco life exhibition (same as above)</p> <p>3 people (1 researcher, 2 office workers)</p> <p>3) District cleanup activities 2 people (2 researchers)</p>					
--	--	--	--	--	--	--

(3) Efforts of the International Ecology Study Centre (JISE)

1) Environmental activity plan for FY2013

2013 Environmental Action Plan

- 1 Each member of staff carries out their duties with conscious consideration of the environment.**
- 2 As a general rule do not use the elevator.**
- 3 When staff are absent from the workplace, such as during the lunch break, turn the lights off properly.**
- 4 When preparing to print things, figure out exactly the number of copies that will be needed so that waste does not occur.**
- 5 Turn off your computer during lunch break and when you leave your desk for a long period of time.**
- 6 Purchase environmentally-friendly items (such as goods with an Eco Mark).**
- 7 To promote efficient use of paper, photocopy onto the back of paper, print on both sides of paper and do 2 in 1 printing.**
- 8 Separate paper waste and promote reductions in the quantity of miscellaneous paper used.**
- 9 Minimise the use of water and keep water-saving in mind.**
- 10 Improve JISE business training so that there are opportunities for citizens to specifically consider environmental actions, such as energy saving and resource saving.**

ii) Results and evaluation of FY2012 and the environmental aims and the contents of actions for FY2013

- ① With regard to monitoring and reduction of CO₂ emissions.
- ※ For electricity, gas and water usage, the consumption of the whole building was calculated proportionately, by area and the number of people. We set the consumption of JISE as a reduction target, however because there were only requests for the amount of money from FY2012 it became difficult to understand the level of use/consumption. For the actual results for FY2012 we compared it with the money that was paid.
- ① -1 electricity
- ◆Reduction targets and situation in terms of efforts for electricity usage in FY2012.

	FY2012 (FY2011 ratio)			FY2012 evaluation		Aim for FY2013 (against base year)
	Aim	Achievement		Factors	FY2013 policy	
		Reduction rate	Status of achievement			
Electricity	2% reduction	1% reduction	△	<ul style="list-style-type: none">• Efforts to actively conserve power in the whole building include initiatives such as stopping the elevators and stopping hot water supplies in the summer.• Change the lighting in the building to LED lighting.• Each member of staff turned off the light every time.• The efforts in winter were not enough when compared with those in the summer.• Because air conditioning is controlled for the whole building it is difficult to achieve large reductions.	<ul style="list-style-type: none">• Turn off lights in non-essential areas.• Promptly turn off lights at lunch break and when leaving the office.• equipment such as the shredder and printers that are not frequently used should be unplugged.	2% reduction

※ Although we cannot accurately understand the amount of usage, when we compare this with the amount of money there was a price increase of about 10% with annual payment increases remaining at about 8%.

① -2 Gas and water supply

◆Reduction targets and situation in terms of efforts for gas, water and sewage usage in FY2012.

	FY2012 (FY2011 ratio)			FY2012 evaluation		Aim for FY2013 (against base year)
	Aim	Achievement		Factors	FY2013 policy	
		Reduction rate	Status of achievement			
City gas	2% reduction	1% reduction	△	<ul style="list-style-type: none">Because things were managed in the building as a whole it was difficult to achieve big reductions, however efforts were made such as stopping the supply of hot water in the summer, but we were not able to control the city gas for things such as heating use in the winter.	<ul style="list-style-type: none">At non-essential times turn off the water heater.	2% reduction
Water and sewage				<ul style="list-style-type: none">Always be mindful of saving water.		

※ Regarding water use, the air conditioning system also uses water and the building is managed as a whole in terms of the time of operation and temperature setting for the air conditioning.

② Expansion of Green purchasing

Promote the purchase of Green products based on “Hayama Headquarters’ basic policy on green purchasing”.

◆ Green purchasing goals and objectives for FY2012 (limited to expendable supplies for office use)

	FY2012 (FY2011 ratio)			FY2012 evaluation		Aim for FY2013 (against base year)
	Aim	Achievemen t		Factors	FY2013 policy	
		Achievement	Status of Achievement			
Green procurement	85%	85%	○	<ul style="list-style-type: none">• Promote green purchasing of expendable office supplies, just like IGES headquarters.• Consider the purchasing of products so that there is no waste.	<ul style="list-style-type: none">• Promote Green purchasing• For copying paper buy recycled paper.• Check the amount that you need and then make an order for the amount necessary.	90%

③ Better understanding of eco-action in the workplace.

In order to deepen the understanding of eco-action in the workplace, members of staff have attended training at IGES headquarters and received emails about the “environmental action plan”, “environmental targets” and the “contents of the initiatives”. As a result of this, little by little these ideas have been taken on board by staff.

In order to continue to deepen staff understanding, members of staff will be kept posted about information on eco-action . To improve the common knowledge of staff members we will continue to post the “environmental action plan” near the photocopiers and light switches.

④ Plan to improve training, sponsored by JISE

As for FY2013, we plan to improve the “personnel training project” (training) as a JISE project. Up until now, because the major objective of the Centre for International Ecology is to “regenerate and create a global environment from local environmental restoration” we have been doing training for the general public. However, we will make every efforts to expand the training project so that there can be opportunities for more citizens to think specifically about their approach to things such as energy-saving and resource saving.

⑤ Continuing environmental actions

⑤ - 1 Regarding waste

Because the consignment of waste is disposed of as a whole Government building, it is difficult to calculate the exact amount. However, we can check the amount that is brought to the collection point from the office and try to reduce this amount of waste. We will continue to work on reducing waste materials in FY2013.

		FY2012 (FY2011 ratio)		FY2012 evaluation		Aim for FY2013 (against base year)	
		Aim	Achievement		Factors		FY2013 policy
			Achievement	Status of Achievement			
Waste material	Paper waste	314kg 3.0%	307kg 5.0%	○	・ It was possible to reduce the amount of waste paper produced due to there being thorough use of the reverse	・ Check the contents before output to reduce misprints. ・ When buying consumable items, consider whether there is a	6.0%
	Plastics	79kg	76.6kg				6.0%

		3.0%	5.4%		side of paper. • The amount of waste could be reduced due to the purchase of recyclable goods.	recyclable option and then make the purchase. • Check the quantity necessary and then place an order; try to exercise restraint when purchasing.	
--	--	------	------	--	---	---	--

⑥ - 2 Reducing the quantity of copying paper that is purchased

Because the reduction was very effective in FY2012, for FY2013 the reduction will be influenced by the contents of the project. However, by keeping a close check on the quantity of materials to be replaced and the number of copies to be printed, it is hoped that reductions will be made.

	FY2012 (FY2011 ratio)			FY2012 evaluation		Aim for FY2013 (against base year)
	Aim	Achievement		Factors	FY2013 policy	
		Achievement	Status of achievement			

Copy paper	5% reduction	9% reduction	○	<ul style="list-style-type: none"> • There was thorough use of double-sided printing and printing on the reverse side of paper. • When sending documents, attach a PDF so that each person can work on reducing paper waste. 	<ul style="list-style-type: none"> • Thoroughly use the reverse side of paper and plan to become paperless in meetings. • Do double sided and 2 in 1 printing (collectively) and work on reductions. • Do not print things that can be accommodated by a PDF attachment on an email. 	10.0%
------------	--------------	--------------	---	--	---	-------

(4) Actions of the Asia-Pacific Network for Global Change Research (APN)

APN set environmental aims and action plans and carried them out as follows. By reducing the amount of electricity used, promoting the 3Rs, reducing the amount of copying paper and water use, promoting the purchasing of environmentally-friendly products, they were able to put into effect all of these items as scheduled. Furthermore, regarding the target for reducing the amount of copying paper purchased, the target was set as a 2% reduction in FY2012 on the amount purchased in FY2011 (100,000 sheets). The actual result was that APN exceeded the target and were able to achieve a reduction of 8% with 92,000 sheets purchased.

FY2012		FY2013
Details of actions/Aims	Achievement	Details of actions/Aims
Reduction of electricity usage etc.		On-going details of actions/Aims from FY2012
<input type="checkbox"/> When staff are absent from the workplace turn the lights off properly.	○	
<input type="checkbox"/> Diligently turn off the lights in rooms that are not being used.	○	
<input type="checkbox"/> At night and during holidays, turn off the main power supply for things such as computers and printers in order to reduce the power that is used when electrical items are left on standby. <input type="checkbox"/>	○	

<input type="checkbox"/> When operating the air conditioning set it to an appropriate temperature (28°C or more for cooling and 20°C or less for heating)	○	
<input type="checkbox"/> Do not use the elevator for floors that are nearby, use the stairs.	○	
<input type="checkbox"/> Try to practice eco-style in Summer and Winter.	○	
Promotion of 3R		
<input type="checkbox"/> Separate rubbish and recycle thoroughly.	○	
<input type="checkbox"/> Establish a recovery system for printer toner cartridges and work on recycling.	○	
<input type="checkbox"/> Install collection boxes for unnecessary paper and promote recycling.	○	
<input type="checkbox"/> Try to reuse office supplies and equipment.	○	
Reduce the amount of paper and water usage	○	
<input type="checkbox"/> When copying, print on the reverse side of paper and do double-sided printing, reduce wasteful printing and try to use paper efficiently.	○	
<input type="checkbox"/> When washing your hands or doing the washing up be mindful of saving water.	○	
Promotion of the purchasing of environmentally friendly products		Target values will be set.
<input type="checkbox"/> Endeavour to preferentially purchase eco-friendly goods.	○	Measuring will take place in FY2013 for this purpose
Reduction target for the amount of copying paper to be purchased	○	On-going details of actions/Aims from FY2012
2% reduction on the FY2011 ratio (FY2011 amount of copying paper purchased : 100,000 sheets)	FY2012 amount purchased: 92,000 sheets Reduction of 8% from the FY2011 ratio	

(5) Actions of the Tokyo office

i) Introduction

The Tokyo office is like other satellite offices, it moved into the building along with other companies, which makes it difficult to achieve a significant reduction in the amount of electricity and water use etc. In addition, for waste separation and recycling the office follows the instructions of the building owner (the contractors). Furthermore, one of the characteristics of this office is that it is not in charge of an individual/separate project. The capacity of this office is two people, however IGES staff (researchers) use it for interviews and meetings that include other people as well as for the output of materials from meetings which it is everyone's duty to participate in. It is also not rare for more than 20 members of staff to work in a situation where it is jam-packed and there is no room. Because of this, within those things that occur inside the office, the object of this report is only those things that can be measured.

ii) Efforts so far/Situation regarding past actions

① Efforts related to power-saving and energy-saving

Regarding the division of the working and management of the building, because the lighting facilities have come to be managed by the tenants, in order for it to be possible to light the building effectively and in accordance with the actual staff members, it was decided that a wiring and switch system would be devised and operated. An appropriate request has been made to the building management regarding gaining meticulous control of the operation of the air-conditioning equipment.

② Efforts to reduce water use.

Water-saving toilets and water facilities, there are no shower facilities.

③ Regarding the reduction of waste and promotion of recycling

Waste is checked and managed in order to avoid confusion; this is done in accordance with the division of waste as decided by the building management. Regarding paper waste in particular, reductions are made through enforcing double-sided printing and printing on the reverse side of paper as well as raising awareness of the need to reduce unnecessary copying.

④Use of copy paper

If you look at the results for the past two years the extent of consumption was about 220,000 sheets a year (monthly average of 18,000). Thinking of the output usage of staff members visiting offices, nearly all of the use is due to requests for things such as meeting preparation and well-known announcements. It is difficult to make any radical reductions in these areas. As above, we are still asking staff to make reductions.

⑤Promotion of green purchasing

Strictly observe the purchasing of eco-friendly products.

⑥Environmental communication and the contribution to society

As an establishment that seeks to set an example regarding environmental consideration, meetings were held regularly with building owners where cooperation was requested regarding facilities and building management.

iii) Regarding future environmental action

We continue to try to consider the environment and at the same time, as an establishment, attempt to increase the pressure on the building owners. In addition, in coordination with the person in charge of eco-action at headquarters, it was decided to call for the staff of the Hayama Headquarters etc. to act in an environmentally friendly way when they are outside of headquarters.

10. 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 FY2013 based on the results of external and internal inspections in FY2012.

Comment by the Administrator of Environmental Management (Chair of the Board of Directors) on the EA21 actions in FY2012 and future policies

In FY2012, the activities of EA21 were expanded to every domestic office. At the mid-term auditing (17-18 April 2013) IGES, as a whole, was able to get certification. However there were some points at issue. We had received a good evaluation from the internal auditing team for the auditing in November 2012, but at the mid-term auditing by the external auditor in April 2013, several issues were pointed out. There was some doubt as to the full function of checks for the PDCA cycle. It goes without saying that these issues must be corrected but also, please be sure a daily check system by the managerial staff likely the area leaders and the section heads so that the PDCA cycle can run smoothly.

IGES has dealt with EA21 work mainly by “reducing the environmental burden as a facility” but the institute may have to change direction to the following steps. In FY2013, IGES has begun the Integrative Strategic Research Programme for the Sixth Phase (a three year phase) and will position itself as a “Change Agent” to provide impact to the policy making process and promote the transition to a sustainable society on a global scale. As part of this, the function of the PMO (Programme Management Office) was strengthened. PMO can use dissemination of research results (impact generation) so it might be a good idea to consider new EA21 work on how to measure these results. In addition, consider incorporating the activities of EA21 into the staff capacity building programme through the Capacity Development department in the PMO. In this way, please make efforts so that the EA21 Secretariat and PMO work hand in hand with each other.

11. Mid-Term Plan (CO₂ emissions, non-burnable waste, energy)

In FY2011, IGES established a mid-term reduction plan (FY2012~2014) covering CO₂ emissions, non-burnable waste, energy (electricity, gas, waste water) and implementation of the plan began in FY2012. Work in FY2012 went according to plan and thus important points were laid out to ensure that the plan continued to be implemented smoothly from FY2013 onwards.

(1) Mid-term plan for reduction of CO₂ emissions

1 st year		2 nd year	3 rd year
Examination of direction (FY2012)	FY2012 results		Examination of methods (FY2013)
<p>IGES will explore the scope of activities it can carry out from Eco-Action's perspective of "people, things and money."</p> <p>Experts (MM and CC experts) and staff dealing with the budget (Accounting Section) will attend EA21 committee meetings, which will be a place for discussion on related issues, such as proposals and budgets coming from EA21 representatives (information exchange).</p> <p>Target: Opinions of experts in emissions reduction and committee opinions will be clarified with secretariat expectations, to explore the direction of reduction targets.</p>	×	<p>We were able to obtain data on less than half the amount of CO₂ emitted from missions and commuting by staff. Because accurate measurements could not be obtained, there could be no discussions on future off-setting. A calculation method that is simpler to perform should be developed and all staff informed.</p>	<p>IGES will consider what methods are best based on the direction derived from information exchange.</p> <p>Target: Establishment of methods and numerical targets</p>
			<p>Cost issues are also considered and a method that can be used each year will be established. Specific numerical targets are set.</p> <p>Target: Creation of system which can be extended systematically</p>
<p>On-going issues: Gaining an understanding of CO₂ emissions. Continue with electricity and gas conservation, and green purchasing when buying consumables, as well as maintain efforts to keep CO₂ emissions under control.</p>			

(2) Mid-term plan for reduction of non-burnable waste

The results of studies on non-burnable waste and other issues have determined that a major issue is insufficient separation. Reduction targets and activities are set out as follows. Numerical reduction targets for 2013-2015 were planned for FY2012 but these were not achieved.

Contents of actions taken in FY2012		Results for FY2012	
Secretariat (General Affairs Section)	Provide a regular meeting once a month to maintain close contact with Yamato Life Next.	○	This was done so that we could understand whether there were any abnormalities with regards to the amount of rubbish or the method for throwing rubbish away.
	Re-inform people about the rubbish separation method	○	Posters were created that were easy to understand for non-Japanese speaking employees
	Call for people to “refrain from producing rubbish (control waste generation)”	○	Calculation on the amount of rubbish produced were converted to present how much waste was being discharged for one person.
EA21 Secretariat	Periodically held meetings of the EA21 committee. Recorded data accurately on things such as the amount of waste disposed of every month.	△	<ul style="list-style-type: none"> • Committee meetings were held irregularly but there were 3 meetings held. • In both the 24th committee meeting (held on 30 July) and the 25th committee meeting (held on 26 September) instructions were given about how to identify recyclable plastic and the method for classification.

Staff	Separate disposal of non-burnable waste and recyclable plastic. Information sharing within the group (EA21 committee representative ⇔ Director, member).	○	Opportunities arise every month for discussions among half of the staff of each group, about the efforts to separate rubbish and reduce it.
-------	---	---	---

(3) Mid-term plan to reduce energy

As a result of efforts since 2007 to achieve reduction targets on electricity, gas and waste water, the following actions will be focused on from FY2012.

- On-going energy saving
- Ascertain expected use of energy
- Dealing with uncertainties

Details and targets implemented from FY2012~2015			Actual achievements for FY2012	
Target*1	On-going target value for FY2012	Electricity used : 755,834kWh	○	Gas was used mainly as it warms better than electricity. There was a water leak and the target was not achieved.
		Gas used : 36,826 m ³	×	
		Waste water generated : 4,277 m ³	×	

On-going energy saving	<ul style="list-style-type: none"> • Work from FY2011 was continued • Monthly data collection and checks were carried out → Linked to quick discovery of problems • Inform regularly about energy use using recorded data → Good knowledge gained about energy use 	Electricity, gas and water used at the Institute, is regularly reported by the building manager and Secretariat so that expected levels of energy use can be ascertained and any irregular events can be dealt with flexibly.	△	Regular meeting were held with the building manager. It was ascertained that gas use increased in winter but gas warms better than electricity, so gas was used mainly. Water saving was carried out but it took some time to work out that an increase in water use was caused by a leak.
Ascertain expected use of energy	Ascertain scheduled consumption of energy through regular cleaning or repair work and parts installation.	Scheduled cleaning of water storage tank in May, June 2014	○	There were no plans for deliberate energy use for cleaning in FY2012. It was realised that changes in amounts of usage could be due to trouble with equipment
Dealing with uncertainties	If energy use varied due to abnormal summer or winter temperatures, other weather or natural disasters, then this shall be dealt with flexibly.	The target and special measures shall be recorded and then operations shall be returned to normal after a certain amount of time	—	There were no extraordinary natural occurrences (abnormal summer or winter temperatures, other weather or natural disasters)

12. Confirmation and Evaluation of Compliance with Related Legislation and Violations/Litigation (where noted)

Compliance with environmentally-related laws and regulations were inspected in March 2013 with the following results.

There were no legal violations, lawsuits or other environment-related complaints.

Confirmation staff : Akio Saito

Date of Confirmation : 27 March 2013

Legal violations	None
Lawsuits	None
Environment-related complaints	None

(Note) In the mid-term inspection that took place on 17 and 18 April 2013, it was pointed out that IGES did not have a contract with the company at the time industrial waste was collected and disposed of. Such a contract is required under the Waste Disposal Law so IGES concluded a retroactive contract with said company. This situation meant that no discovery was made when the check was carried out for whether or not there were violations of the law, on 27 March 2013. Therefore, there needs to be a review on the method of confirmation for compliance status in the future.

Legislation	Requirements	Clause	Scope	Responsible department	Evaluation of compliance	
					Compliance status	Evaluation
Basic Environment 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	EA21 Secretariat	※Following requirements under the Waste Disposal Law	Compliant
Act on Promotion of Environmental Education		Article 4	Environmental conservation activity, increase of the will of the environmental conservation, implementation and cooperation for environmental education,		Making appropriate efforts	Compliant
Law concerning the Promotion of Business Activities with Environmental Consideration		Article 4	Provision of Environmental Information on Business Activities		Making appropriate efforts	Compliant

Act on Promotion of Global Warming Countermeasures	Working to control greenhouse gas emissions	Article 4 Article 20, paragraph 5	Turn off lights in building, set the air conditioner, switch off electric appliances not in use	EA21 Secretariat	Making efforts to control emissions by various means	Compliant
The Basic Act for Establishing a Sound Material Cycle Society	Control of Waste materials	Article 11	Control of Waste materials		Making appropriate efforts	Compliant
Waste Disposal and Public Cleansing Law	Aims at the preservation of the living environment and public health by controlling the emission of waste, and the proper separation, storage, collection, transport, reuse and management (such as disposal) of waste, as well as cleaning up the living environment.	Article 3	Appropriate waste disposal methods: Treatment place for waste generated at IGES (garbage) Reduction of waste materials		Working to reduce and manage general waste material	Compliant
	Deliver a waste management sheet. Confirmation of report production on management sheet and treatment of industrial waste to be disposed.	Article 12, -paragraph 3 Article 12, Paragraph 7	In cases where the transport or disposal of industrial waste is commissioned, the disposal of said industrial waste must be checked, and necessary measures must be taken to ensure that waste has been treated properly from generation to final disposal.		When treating industrial waste, a manifest must be checked up to final disposal. The manifest is stored and maintained until the day of final disposal can be confirmed.	Compliant
Green Purchasing Law	Efforts to select eco-products when purchasing goods and services	Article 5	Purchasing of consumables/office supplies		Selection of eco-products from a catalogue; use of copy paper recommended by the Ministry of the Environment.	Compliant
Law on Recycling Food Wastes	Promotes the recycling of food waste	Article 4	Food waste from cafeteria	Management contractor	Processed with food waste processing machine	Compliant
Home Appliance Recycling Law	Long-term use of household appliances	Article 6	Use and disposal of electrical appliances at organisation and in company housing ※1	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
Law for the Promotion of Effective Utilities of Resources	Collection and recycling of personal computers (PC) and small rechargeable batteries	Article 4, paragraph 2	Recycling of PCs for business use	Facility manager	Proper disposal	Compliant
Containers and Packaging Recycling Law		Article 4	Controlling waste generated by containers and packaging	Secretariat	Proper disposal	Compliant
Act on Recycling etc. of End-of-Life Vehicles		Article 5	Collection of End-of-Life Vehicles	Secretariat	Not applicable this year	Compliant
Fire Service Law	Conducting regular inspections, and preparing and maintaining 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.	Article 4, Article 19	Recovery and destruction of CFCs upon repair or disposal of air conditioning units.	Secretariat	Not applicable this year	Compliant
Building Standards Law	Compliance with regular survey reports on special buildings.	Article 12, Paragraph 1	Site, building and equipment	General Affairs Section	Compliance with law, making appropriate efforts	Compliant

Electricity Business Act ※2	Maintenance of private electricity facilities/conformity to technical standards.	Article 39	Private power generator for emergencies	• Kanagawa Prefectural Housing Supply Corporation • Kanto Electrical Safety Inspection Association	Must be maintained to conform with technical standards established by METI ordinance	Compliant
	Establishment of security regulations, notifications, compliance	Article 42		(As above)	Secure safety related to construction, maintenance and operation of business electricity facilities	Compliant
	Selection and notification of chief engineer (licensed engineer), notification	Article 43			Chief engineer must be assigned from among those that are licensed.	Compliant
Kanagawa Prefecture Basic Environment Ordinance		Article 5	Reduction of environmental burden	Secretariat	Making appropriate efforts	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	Compliance with the Act on Promotion of Global Warming Countermeasures	Compliant
Kanagawa Prefecture Ordinance on Conservation of Living Environment		Article 37	Reducing burden on environment	All staff	Making appropriate efforts	Compliant

Basic environmental ordinance of Hayama Town	Taking the necessary measures to reduce environmental impacts and protect the environment.	Article 5	Compliance with the Act on Promotion of Global Warming Countermeasures and Waste Disposal Law	All staff	Compliance with the Act on Promotion of Global Warming Countermeasures and Waste Disposal Law	Compliant
Beautification promotion ordinance of Hayama Town	Educating employees to prevent littering of cans, cigarette butts, etc., and holding clean-up activities	Article 4	Compliance with Waste Disposal Act	All staff	Compliance with Waste Disposal Act	Compliant
Agreement with International Village	Compliance with emission standards related to joint purification of wastewater.	Article 2	Wastewater from area of business	General Affairs Section	Compliance with Agreement, making appropriate efforts	Compliant

※1 Company housing appliances: IGES company housing is a building that is leased by IGES for foreign researchers. A minimum number of household appliances have been arranged to allow researchers arriving from overseas to set up their households as soon as they arrive in Japan (refrigerators, air-conditioners, etc.). Since 2002, 13 rooms have been rented and currently a number of refrigerators and washing machines have broken down (unable to be repaired) as eight years have passed since purchase.

※2 Electricity Business Act: The Kanagawa Prefectural Housing Supply Corporation, which is the owner of the building that houses IGES, has installed a private power generator for emergencies, and has commissioned the Kanto Electrical Safety Inspection Association as the electric licensed engineer.

13.Outreach

There have been no environmental-related complaints, such as environmental pollution.

IGES is an organisation that carries out research on environmental issues. Its main activities include the conduct of research to contribute to policy formation in order to create a sustainable society.

The following is a partial description of events and seminars that have been organised as part of these research activities.

- 2012 International Forum for Sustainable Asia and the Pacific (ISAP 2012)

【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 an increasingly important role in promoting sustainable development, and engage in a wide-ranging debate on sustainable development.

【Themes for FY2012】

Steering Towards a Resilient and Sustainable Future

Date: 24-25 July 2012

Venue: Pacifico Yokohama

Participants: 1100 (total number)

【Outline of conference】

The 4th ISAP2012, under the umbrella theme of "**Steering towards a sustainable and resilient future**", convened focusing on four timely issues - follow-up to Rio+20 held in June in Brazil, looking at climate change, resilience, and green economy.

- IGES Global Environment Seminars

【Purpose】

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

【Outline of FY2012 seminars】

	Dates	Theme	Location	Participants
1 st seminar	1 Oct 2012	IGES Global Environment Seminar on Environmental Business in China	Yokohama	100
2 nd seminar	19 Dec 2012	Post- COP18 debriefing and prospects	Yokohama	~250
3 rd seminar	18 Feb 2013	Beyond Global Warming: World trends and Japan's policies on Low-carbon societies	Yokohama	135

- Local community activities

(1) Shonan Village Festival 2012 – IGES building tour (due to rain, the walking tour of Koyasu no Sato was cancelled)

1) Activity summary

Participants who braved the stormy conditions to attend the building tour were enthusiastic, asking plenty of questions about IGES' research and activities, its environmentally-friendly building and facilities, and other points of interest

2) Date and location: 3 May 2012 (Thursday) (IGES Headquarters)

3) Participants: 16 persons

(2) Global Environmental Event: Agenda Day 2012: Kanagawa Prefecture

1) Outline of activities

Agenda Day is an event to publicise “New Agenda 21 Kanagawa” and is organised jointly with Kanagawa Environment Conservation Promotion Committee. In the year ahead of Rio+20, the event aimed to strengthen the opportunities for global environmental conservation and continued to promote use of energy saving actions and lifestyle changes. IGES introduced a project that has been successful for over 10 years implemented by Kitakyushu and local government in Subaya city, Indonesia “Joint Policy – Project for Composting and Community Waste Reduction Model”. A video of the project can be viewed on the internet free of charge.

- 2) Date and location: 2-3 June 2012 (Saturday-Sunday) Nihon Odori (Nihon Odori, Chuo-ku, Yokohama City)
- 3) Attendees: ~135,000

(3) 12th Hayama Town Development Expo

1) Outline of activities

Groups that carry out town development activities present display panels and images of the contents and results of daily activities. IGES introduced the project in Kitakyushu of composting. On the first day, an explanation was given to 90 first-year students from Nango Junior High School using a panel on “Joint Policy – Project for Composting and Community Waste Reduction Model”.

- 2) Date and venue: 29 June-1 July 2011 (Fri-Sun) (Hayama Welfare Culture Hall)
- 3) Attendees: Total ~ 850

(4) Shonan International Village Academia

1) Purpose

A lecture called the "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) Activity Summary

This year, we chose a theme on important research that has been ongoing for a long time, focusing on research and researchers from the Forest Conservation project, one which is not so well known even within IGES. We also chose this title due to the fact that many people around IGES have an interest in forests and satoyama, carrying out activities such as tree planting. The audience had a surprising amount of experience related to forestry and there was a lively question and answer session which lasted more than an hour.

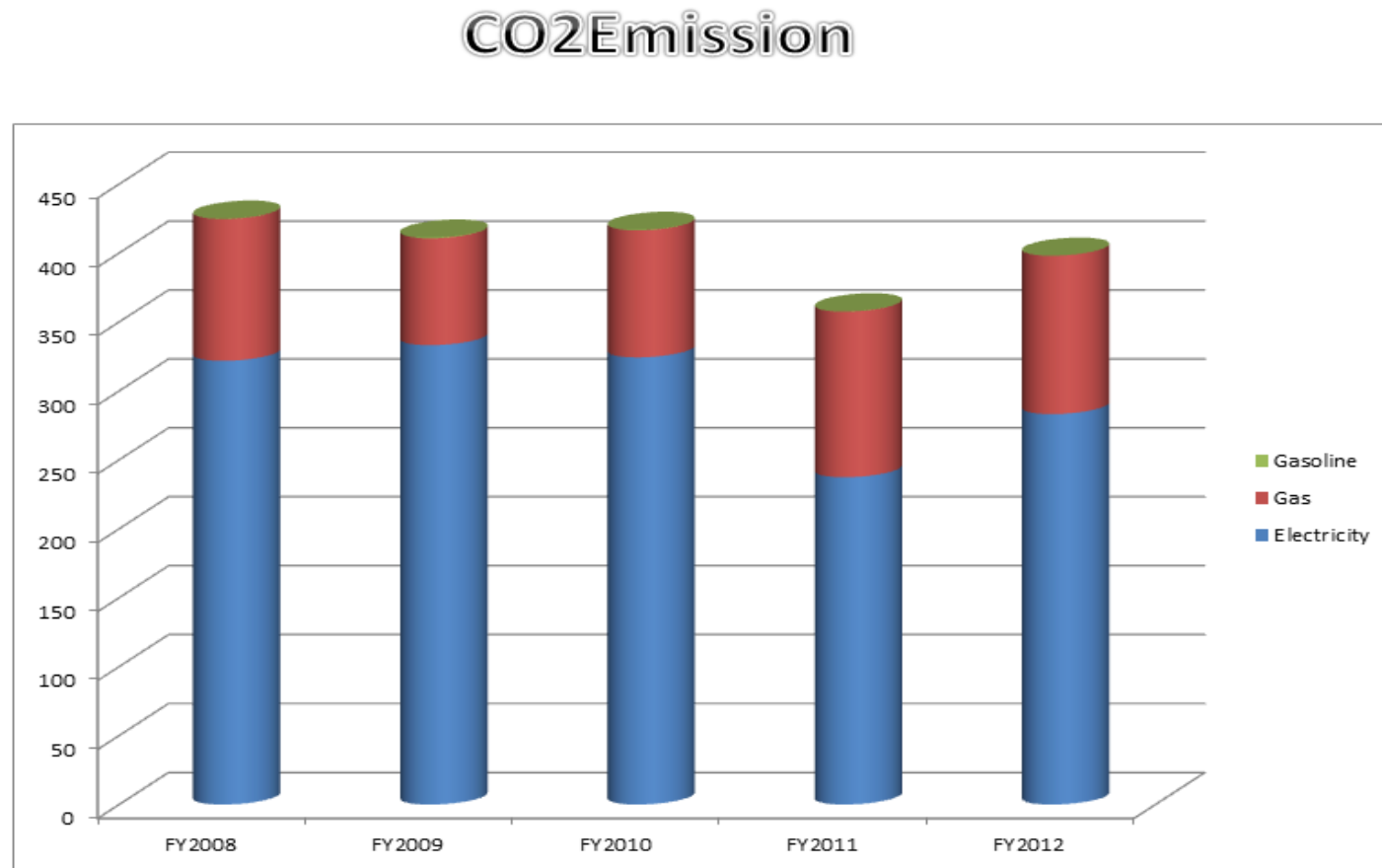
3) FY2012 lecturer and theme

「Saving Forests, Saving Ourselves: lessons from Papua New Guinea」

Henry Scheyvens and Taiji Fujisaki, Forest Conservation Team, IGES

4) Date and venue: 3 February 2013 (Sun.) (IGES Headquarters)

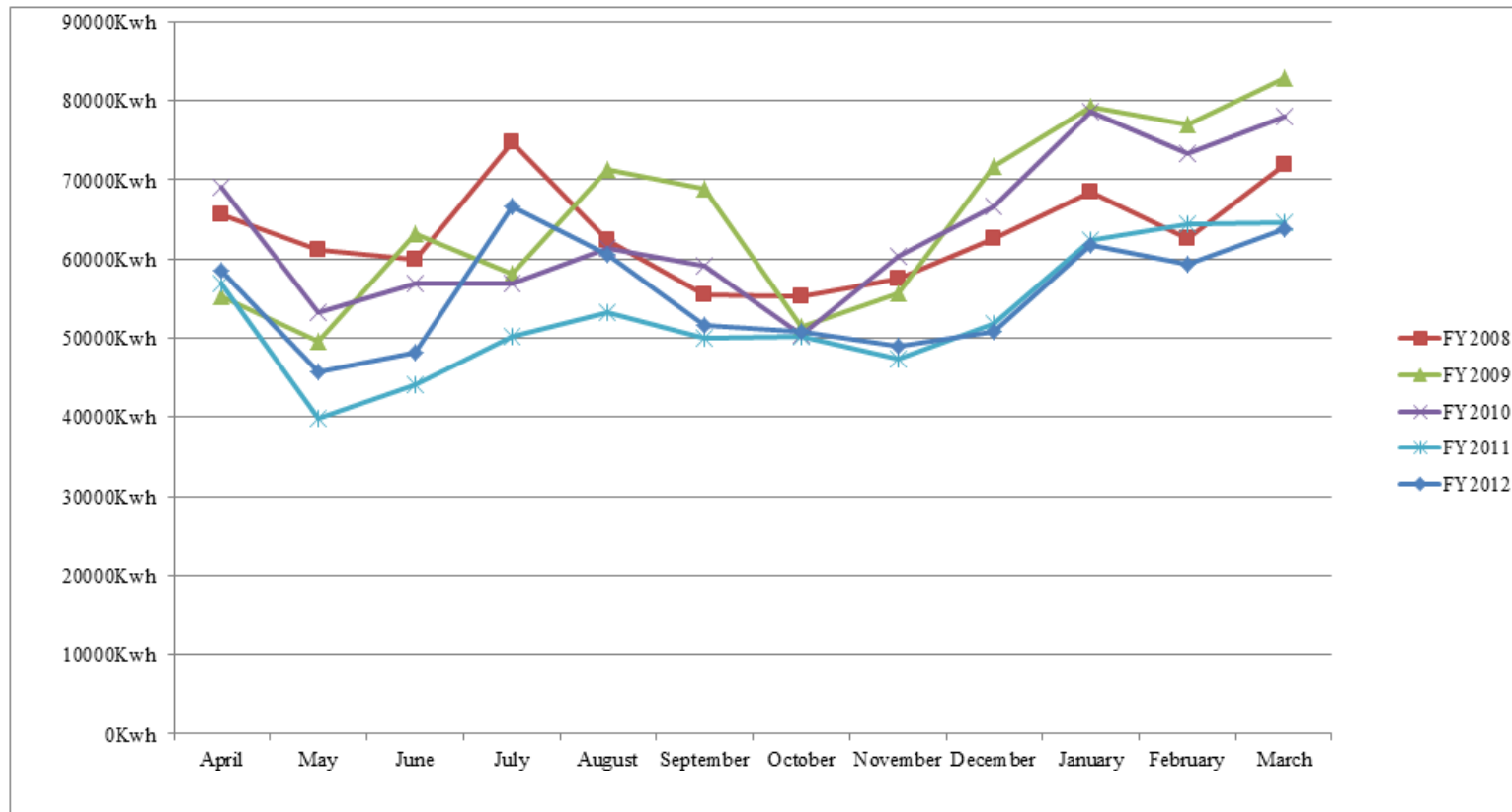
14. Reference Material



Unit : t-CO2

	Electricity	Gas	Gasoline	Total
FY2007	385.2	146.3	0	531.5
FY2008	321.9	102.9	0.1	424.9
FY2009	333.2	77.6	0.4	411.2
FY2010	324.4	92.2	0.2	416.8
FY2011	237.4	120.2	0.1	357.7
FY2012	283.2	114.9	0	398.1

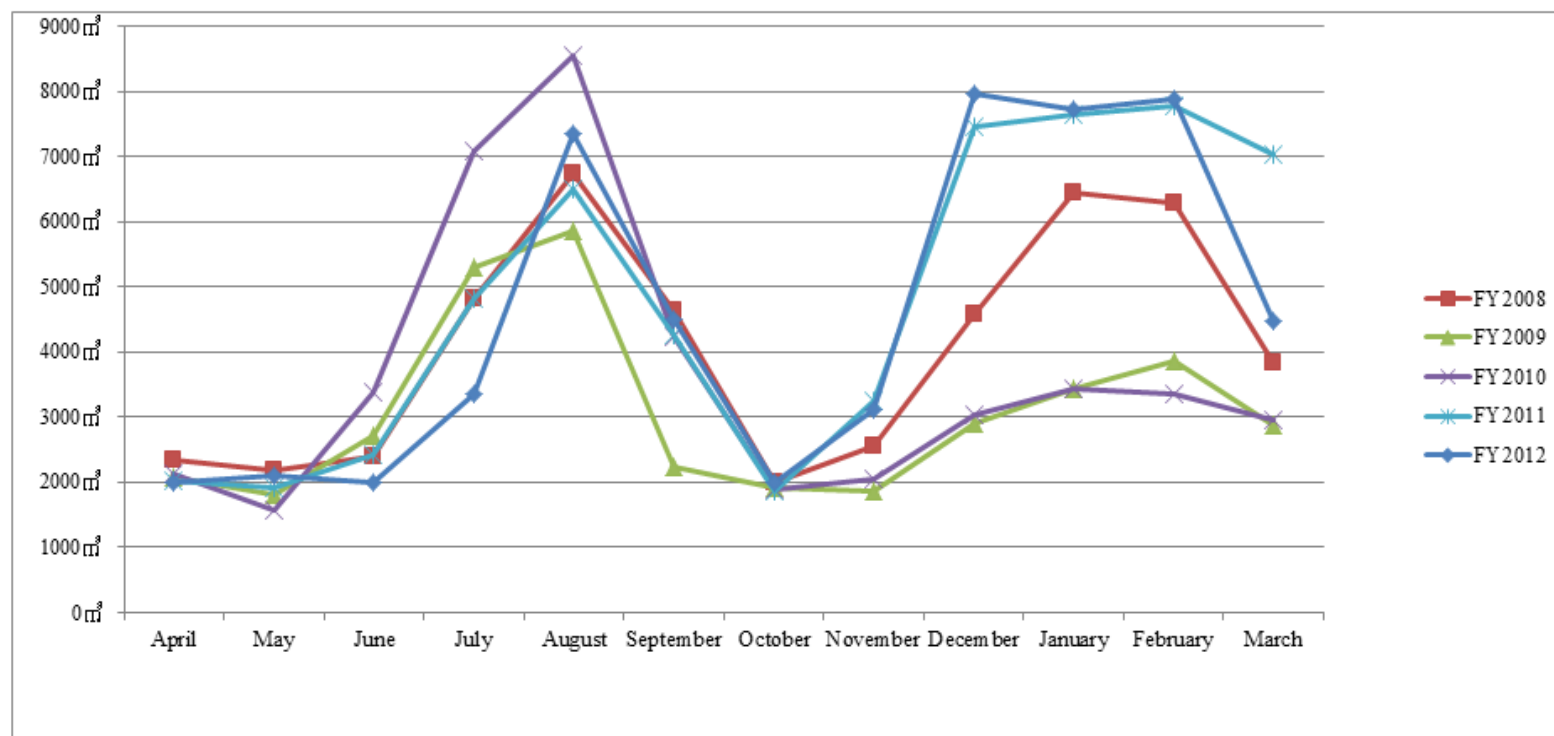
Use of Electricity



Use of Electricity

	Unit Kwh												Total
	April	May	June	July	August	September	October	November	December	January	February	March	
FY2007	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
FY2008	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
FY2009	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
FY2010	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
FY2011	56,809	39,812	44,094	50,262	53,210	49,917	50,114	47,255	51,732	62,424	64,439	64,667	634,735
FY2012	58,604	45,769	48,078	66,675	60,479	51,593	50,716	48,951	50,710	61,699	59,329	63,751	666,354

Use of Gas

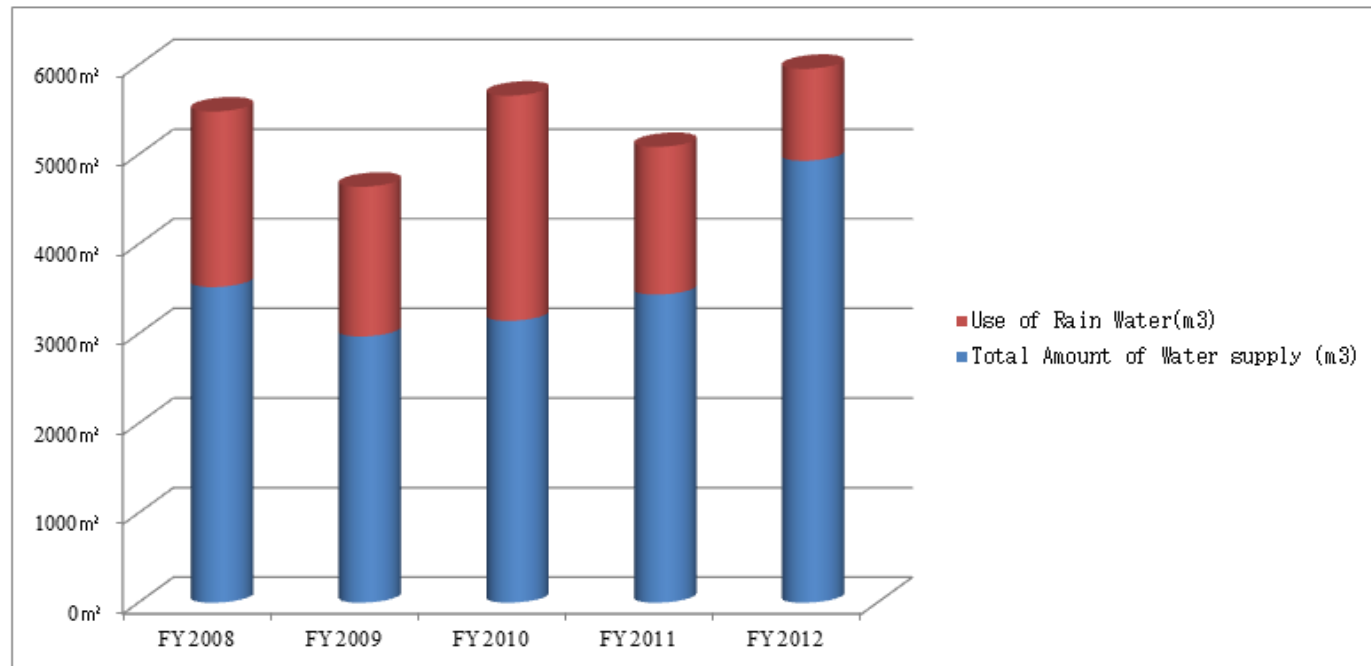


Use of Gas

Unit m³

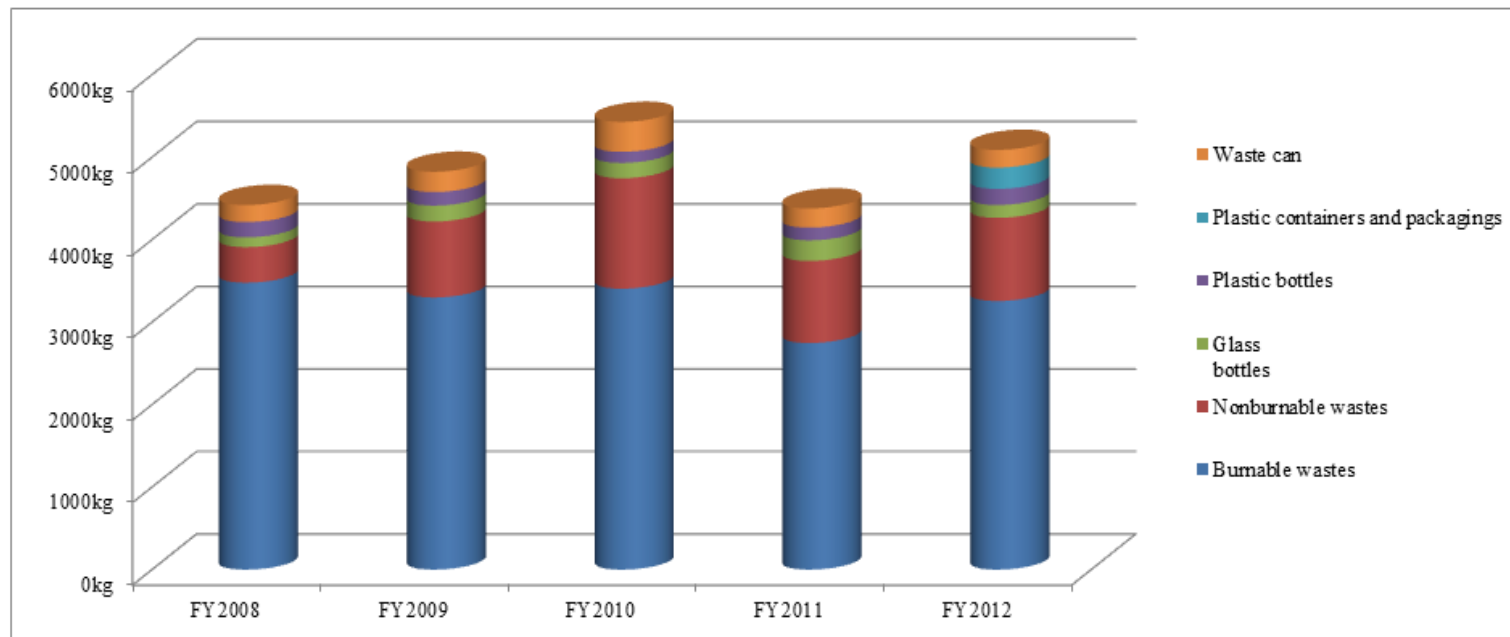
	April	May	June	July	August	September	October	November	December	January	February	March	Total
FY2007	4,205	3,840	4,322	5,720	10,140	5,892	4,323	5,106	6,727	6,891	8,207	4,021	69,394
FY2008	2,338	2,191	2,398	4,811	6,735	4,626	1,997	2,546	4,587	6,439	6,276	3,847	48,791
FY2009	2,078	1,807	2,705	5,313	5,860	2,237	1,914	1,852	2,905	3,449	3,873	2,883	36,876
FY2010	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
FY2011	2,018	1,928	2,434	4,820	6,506	4,276	1,872	3,249	7,468	7,644	7,790	7,035	57,040
FY2012	2,006	2,096	1,992	3,363	7,351	4,509	1,987	3,117	7,963	7,728	7,896	4,487	54,495

Use of Water



	Total Amount of Water supply (m3)	Reduction Ratio(Reference year FY2007)	Use of Rain Water(m3)	Amount of Rain Fall (mm)	Total drainage	Reduction Ratio(Reference year FY2007)
FY2007	5,863		2,497	1,461	7,920	
FY2008	3,524	39.89%	1,959	1,818	5,032	36.46%
FY2009	2,972	49.31%	1,671	1,715	4,332	45.30%
FY2010	3,146	46.34%	2,514	1,586	5,026	36.54%
FY2011	3,439	41.34%	1,648	1,422	4,570	42.30%
FY2012	4,933	15.86%	1,026	1,845	5,603	29.26%

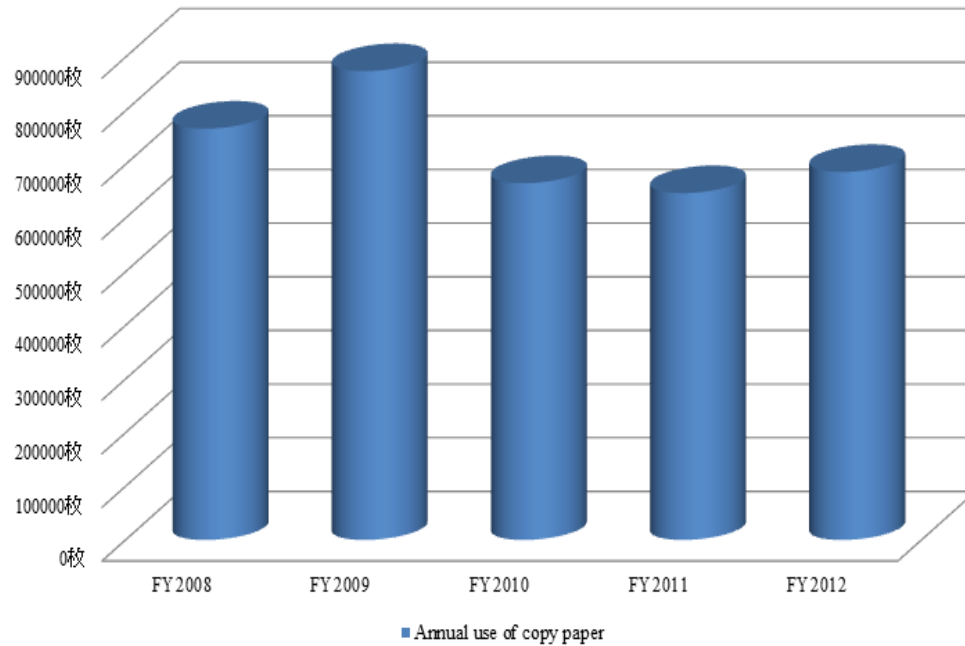
Waste



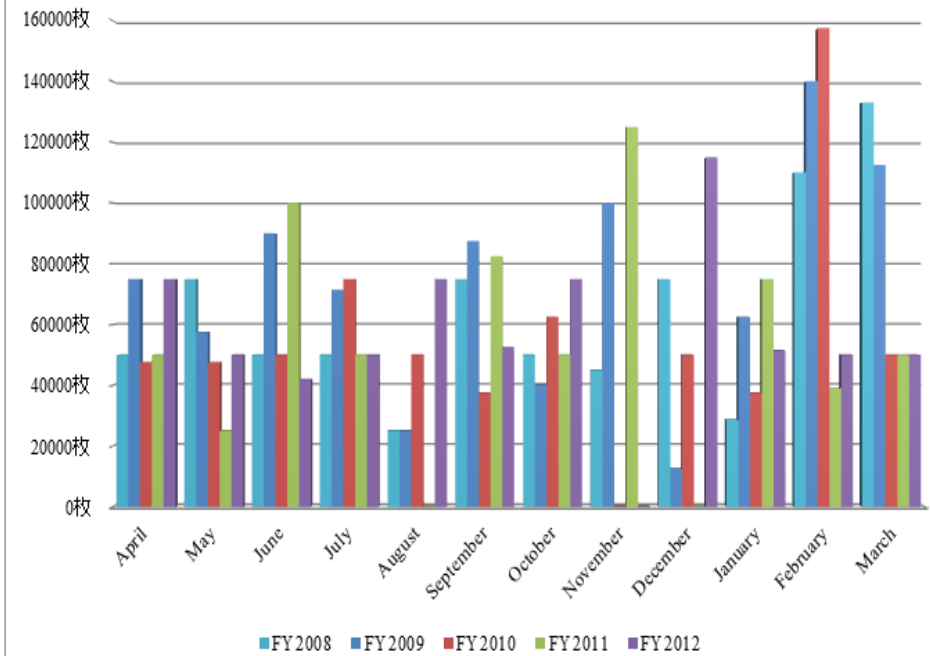
	Burnable wastes		Nonburnable wastes		Glass bottles		Plastic bottles		Waste can		Plastic containers and packagings	
	(kg)	Reduction Ratio(Reference year FY2007)	(kg)	Reduction Ratio(Reference year FY2007)	(kg)	Reduction Ratio(Reference year FY2007)	(kg)	Reduction Ratio(Reference year FY2007)	(kg)	Reduction Ratio(Reference year FY2007)	(kg)	Reduction Ratio(Reference year FY2007)
FY2007	4,777		515		194		126		184			
FY2008	3,479	27.2%	431	16.3%	119	38.7%	185	-46.8%	207	-12.5%		
FY2009	3,300	30.9%	921	-78.8%	192	1.0%	165	-31.0%	246	-33.7%		
FY2010	3,407	28.7%	1,339	-160.0%	185	4.6%	135	-7.1%	363	-97.3%		
FY2011	2,748	42.5%	995	reference year	249	-28.4%	155	-23.0%	232	-26.1%		
FY2012	3,257	31.8%	1,008	-1.3%	156	19.6%	195	-54.8%	215	-16.8%	258	

Use of copy paper

Amount of copy paper used in a year



Amount of copy paper used in a month



Annual use of copy paper	
FY2008	766,750
FY2009	874,000
FY2010	665,000
FY2011	646,500
FY2012	686,000

	April	May	June	July	August	September	October	November	December	January	February	March	Total	Reduction Ratio(Reference year)
FY2007	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	
FY2008	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	16.6%
FY2009	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	4.9%
FY2010	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	27.7%
FY2011	50,000	25,000	100,000	50,000	0	82,500	50,000	125,000	0	75,000	39,000	50,000	646,500	29.7%
FY2012	75,000	50,000	42,000	50,000	75,000	52,500	75,000	0	115,000	51,500	50,000	50,000	686,000	25.4%