

# **Fujirebio Group contributes to** world medical care.

Since the company's formation, under its management philosophy of contribution to worldwide healthcare, Fujirebio Inc. has supplied innovative products, technologies and information mainly in the area of clinical diagnostics, thus aiming at the realization of being a global life science company with higher corporate values. Hospitals and medical care facilities worldwide are actively engaged in developing therapeutic drugs to overcome various intractable diseases and at the same time, are still longing for development of clinical diagnostics\* and test equipment for early detection and clinical diagnostics of diseases. Fujirebio Inc.'s main products of test reagents for AIDS, colon and rectum cancer, and hepatitis are used in clinical practice at home and abroad. The LUMIPULSE

Series including clinical diagnostics and test equipment are also widely acclaimed as total system for tests both domestically and abroad. Fujirebio Inc. will continue its contribution to worldwide healthcare through the creation of new values with full awareness and responsibility for human life and health.

\*Clinical diagnostics : Clinical diagnostics are testing reagents that are not used directly for the human body but are intended for use in the diagnosis of disease, including determination or detection of substances or biological activities using blood, urine, or other substances taken from the human body as a specimen.



LUMIPULSE® Presto II

#### Corporate Profile (as of March 31<sup>st</sup>, 2013)

Company name Inception Head office	<ul> <li>FUJIREBIO INC.</li> <li>July 11, 2005 (Incorporation-type Company split)</li> <li>Shinjuku Mitsui Building, 2-1-1 Nishishinjuku, Shinjuku-ku, Tokyo 163-0410</li> <li>TEL : +81-3-6279-0800</li> <li>FAX : +81-3-6279-0854</li> </ul>
Representative	: President & CEO, Takeshi Koyama
Line of Business	: Manufacturing, sale and import/export of clinical diagnostic reagents and equipment for testing, and clinical test services.
Paid-in capital	: ¥4,252,902,860
Plants and Offices	: Hamachou Office, Hachioji Facility, Obihiro Facility, Ube Facility, Distribution Center, Kuki Distribution Center, Tokyc Branch (within Hamachou Office), Capital Region Branch (within Hamachou Office), Hokkaido Branch, Tohoku Branch, North-kanto Branch, Wangan Branch, Chubu
	Branch, Osaka Branch, Chushikoku Branch, Kyushu Branch
Number of employees	s : 592 staff (as of end-March 2013)



iQ200 Sprint/ iQ200 Elite

#### Origin of corporate name

The "rebio" part of the corporate name consists of "re" from the word revival and "bio," meaning life. The name is intended to symbolize the wish for restoration of life, which has been our dream and goal since the company's inception.









LUMIPULSE® S

Infection-related nucleic acid diagnostics Influenza-related diagnostics

In-vitro diagnostics

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### **Editorial Policy**

This report has been issued with the aim to make easily understood the environmental activities we have been conducting in order to further enhance our credibility to both internal and external stakeholders.

We have endeavored to create this report in a manner which helps to give a holistic view of our ongoing environmental activities to our employees, people in the community, and our shareholders, in line with the editorial policy from previous issues.

Simultaneously, the company's head office organization, including ourselves, have gathered in the form of Miraka Holdings in a high-rise in Shinjuku in order to improve functional priorities for 'work-sharing', which is designed to eliminate work duplication. Above all, we will introduce the current status on our efforts to contribute to reducing the burden on the environment, as well as information on further certification for the Advanced Life Science Institute, one of our group companies, as well as the Environmental Management System (EMS) situation of Hamachou Building after headquarters relocation. In addition, we will present topics with a focus on both the revival of the environment roundtable discussion, and environmental activities of the overseas group's affiliated companies, which is also a new initiative this time.

As an entire group, we are planning to promote continuous improvement for the further reduction of environmental impacts.

# In preparing the 2013 Environmental Report , emphasis was placed on the following two points:

1. Coverage

We referred to the Environmental Reporting Guidelines by the Ministry of the Environment in order to aim for systematic information disclosure in drafting our report.

#### 2. An easy-to-understand arrangement

We paid attention to the construction of chapters, sections and layout, and also gave consideration to visual presentation by use of illustrations and photos.

Fujirebio's Environmental Report is posted, as an annual report, on our website together with the English version.

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# Relation between our Business and the Environment

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#### About this Environmental Report 2013:

- Coverage: All business offices of Fujirebio Inc.
- This environmental report focuses on content from the FY 2012 report (including data). Please note however, it also contains some important topics and articles from FY 2013.
- Next issue: Scheduled for issuance in October, 2014

# Leading sustainable environmental care and business activities as we move forward fulfilling our corporate social responsibilities group-wide.



Takeshi Koyama President & CEO

At Fujirebio, we put into practice a combination of our management philosophy that, "We make contributions to medical services provided around the world by valuing human life, cultivating deeper awareness, assuming responsibility for maintaining public health, as well as creating new value," and our management policy that, "We endeavor to maintain good relations with local communities by devoting all possible measures to protect the environment." This fulfills our social responsibilities as a global life-science company that contributes to society and medicine through its clinical diagnostics business, in addition to environmental care. The activities taken through this commitment have allowed the Fujirebio Group to arrive at where we are today, working together with the support of you, our valued stakeholders. In regards to environment efforts, as has been indicated in this report every year, it has become quite natural for us to contribute to local communities and carry out a variety of activities typical in energy conservation, including environmental ISO certification, environmental law compliance, waste reduction, and CO<sub>2</sub> emissions reduction. We have also been reporting on the results of these, focusing on environmental care activities (quality improvement activities) from direct work duties we simultaneously take up, and updates on production. As mentioned briefly in the last issue, at the end of last year our parent company Miraka Holdings relocated headquarters to an office building in Shinjuku along with its operating business, amalgamating them in one location to work-share and reduce task overlaps as much as possible. This will contribute greatly, not only to improving operations, but also to reducing the burden on the environment. In addition, the ratio of staff in overseas group companies has topped 40%, globalization trends are also increasing, and global communications have intensified due to regular meetings between top executives and between departments after becoming a single group with domestic and international components. The current status of each overseas group company listed in this report will be reported on again in the future. Currently, responding to global environmental issues is an urgent issue facing humanity, and is becoming increasingly serious. Responding to global warming has become an issue that should be addressed by every country, industry, and individual person. Against this backdrop, and in terms of efforts to prevent global warming, our company also recognizes the important environmental challenges; we have set medium-term targets to reduce energy and CO<sub>2</sub> emissions and continue activities, from which we have been seeing steady results. Results from our participation in "Japan's Voluntary Emissions Trading Scheme (JVETS)," sponsored by the Ministry of the Environment, have spurred us to begin proactive efforts to further offset carbon emissions. We believe these efforts play a role leading the industry's future in terms of achievable total emission reductions.

Of course it is a given for companies to fulfill their Corporate Social Responsibilities (CSR), however, we would like to play a role that should be expected by industry by contributing through business practices and environmental activities to creating a shift in  $CO_2$  emission reductions.

Within this report you will find a proactive disclosure of our company's environmental activities with the hope that we can keep smooth, open communications with you about environmental care efforts in our company's operational activities. Please have a read through the report, and let us know your honest opinions.

The Fujirebio Group will continue striving to meet the expectations of all stakeholders. We thank you and look forward to your continued support.

# Environmental Policy

### 1. Creation of Environmentally-Friendly Products

In an effort to respect the environment in all stages of activity (from product design to disposal), Fujirebio strives to manufacture products that are friendly to the environment.

### 2. Prevention and Abatement of Pollution

Fujirebio actively confronts the issues of pollution prevention and abatement by implementing thorough safety measures in the management of chemical substances and microorganisms.

### 3. Energy Saving, Resource Conservation and Recycling

Each of Fujirebio's divisions is committed to waste elimination through the promotion of energy saving, resource conservation and recycling.

### 4. Regulation Compliance

Fujirebio fully observes and complies with all environmental laws, regulations, ordinances and agreements at the national, regional and local levels.

### 5. Review and advancement of Environmental Management System (EMS)

Fujirebio periodically reviews its environmental objectives and targets to ensure continuous advancement of its EMS.

### 6. Specifications of Organization and Authority

Fujirebio's written outline of specifications for organization and authority concerning the EMS constitutes the pillar around which all company members base their actions. Fujirebio expects its partners to support the terms of this policy.

# "Discussion of environmental challenges and topics from each site"

Suzuki: We are gathered here today with the Internal Audit Office and representatives from each site; Fujirebio, TFB, and the Advanced Life Science Institute. This will be the 8th Environmental Roundtable Discussion as a special feature for the Environmental Report. I believe the environmental discussion has already been held at each site. I would like to invite you to freely express your opinions in-line with the themes.

# Theme (1) Site-by-site information revealed from the environmental discussion

#### **Obihiro Facility report**

- Kanda: It's been two years since moving to a new building. With the exception of solar power, the structure incorporates every conceivable energy-saving control measure that can be implemented at present, including geothermal heat. Consequently, I recall the focus of our environmental discussion being predominantly about soft-aspect activities such as setting overtime-free days, and planning to reduce overtime hours. However, since it is still a new facility, going forward we will be taking energy-saving measures including making area-by-area adjustments, setting modes, and enhancing the operation of the equipment.
- Saito: As Mr. Kanda mentioned, Obihiro is one of the newest leading environmental facilities built, so it's quite difficult to make further quantitative reductions. From this point forward, I think what is expected is performance which will lead to added value, and, since the foundation for a solar power installation was installed at the time of completion, to accumulate reference data now for the time when we will make use of a new subsidy program.
- Kanda: We also experienced kerosene provisioning difficulties during the time of the earthquake. And, we are thinking that the rooftop solar power generator will be required not only for energy conservation, but for thermal storage equipment as well.

#### **Ube Facility report**

- Mikami: In Ube we primarily focus on controlling chemical substances and infectious agents. We have been holding overtime-free day on Wednesdays, but I think that it might be interesting if it was held without setting a day of the week or number of days. In terms of energy reduction, there have been reductions through operational voluntary efforts; however, I think it would be nice if management put more consideration into the environmental budget. The challenge is setting goals that link both quality and environmental concerns.
- Saito: It can be difficult to convince management unless it is budgeted for at the time of equipment is to be replaced, or if you can devise a scheme in which it adds value. At the Hamachou Office, we are negotiating upgrades to LED lighting in stages for the entire building, which is to be implemented at the same time as interior construction work.
  Mikami: I've heard there are plans to bring up city gas lines since

a major manufacturer will be relocating to an industrial park in the same region. Our company now uses LP gas, but I believe city gas would allow us to cut costs, and by extension contribute greatly to conserving energy and reducing CO<sub>2</sub> emissions.

#### Hachioji Facility report

- Yoshiki: Environmental discussions at Hachioji are being scheduled by fiscal year in many departments. There have been varied opinions, but regulatory compliance is firstand-foremost our foundation. In my opinion it was a great help when Mr. Saito was in the Hachioji general affairs department, since capital investments were made to reduce environmental impacts, and he carried out work with a focus on energy-saving measures. The key from here out, is how efficiently we can operate using routines, even if we are able to take measures that correspond to the times. The themes in the last few years have been energy savings, economizing, and chemical substance control, so I would like to see some other initiatives introduced. Quality improvement is a difficult approach, so I would prefer to put our efforts towards process improvement. To change our perspective (lean manufacturing), reducing reagents for example, which are the raw materials, equates to a reduction in environmental impact. We need to know how much efficiency will improve through these routines. I would like to revise the product assessment standards, and there are many other challenges to address
- Suzuki: I think transport of specimens is an important theme concerning environmental aspects. This includes creating procedures for packing and transporting, the staff education and training for these, as well as selecting specific tasks and substance control. I greatly admire Mr. Yoshiki's attitude always coping with such sincerity. It's important to advance sustainable environmental ISOs.

# Report on head office's new site in Hamachou (As Theme 2)

- **Iwaki:** This year was the first year for the Hamachou Office site and since it's a collection of departments that affect business directly, we carried out a thorough sampling of 'indirect environmental aspects related to our business'.
- **Nagamo:** Some people don't yet fully understand the flow of impact assessment when it comes to environmental aspect sampling.
- **Ostuka:** I think it would be beneficial to discuss what kind of work environment we want to create, how we can save energy, and also to review the business itself to see where problems are.
- Hosoda: There are still many employees who don't think about it until we're under the gun. I'm sure there are hidden environmental aspects in our day-to-day operations. I believe results will improve if we are able to calmly go about our environmental activities without making a fuss about it. Our future challenge is how direct interest in this direction.
- Suzuki: The Mitsui Building headquarters is a shared structure

consisting of three companies, including the parent company and our company, and although when we transferred last year we discussed several items as environmental activities, we have yet to implement them.

- Fukutani: The parent company Miraka HD hasn't acquired certification for environmental ISO, is that not a problem?
- **Suzuki:** The form the company takes on and management policies will differ depending on whether they acquire certification.

#### **TFB Inc. Report**

- Yamamoto: At TFB, I think we've hit the operational limit of activities under the energy saving theme. It's difficult to see what more we can do at the office site. Dealing with it from an equipment perspective, I'm not sure if it is worth it or not in terms of cost. Upgrading to hybrid vehicles is going according to plan. We have reached our best in regards to greening activities, low environmental impact R&D, and commercialization. We were looking forward to activity guidance from the parent company Fujirebio (Hamachou Office), however, I am concerned about the deterioration of morale after general affairs leaves the executive office.
- Saito: Even if head office functions were transferred to the Shinjuku Mitsui Building, I think it's a chance for Fujirebio to join with TFB's headquarters, which moved to the Hamachou Office at the same time, and work on efforts together.
- Suzuki: Compared with the department site that stayed behind at the Hamachou Office, I would say conversely that TFB is head and shoulders above. I'm looking forward to plans to share rules between the TFB site and Fujirebio's newly established Hamachou Office site.

#### Advanced Life Science Institute Report

- **Fukutani:** At the institute, we didn't have any awareness of environmental activities until we began activities for ISO14001 certification. Activity time after we started was short, so the executive office and staff responsible struggled day after day. But looking back on it now, I believe that these times when the staff worked as one was very productive. The power restrictions due to the earthquake before our environmental activities were unusually strict, so we heard some opinions that the office was too cold or dark, because the reality of the current situation is that we are at a impasse to maintain this from a data perspective. Thus we are planning to install demand monitoring system and LEDs across the board.
- Suzuki: We certainly saw overwhelming energy savings numbers from government-passed obligations for self-directed energy-saving environmental activities, or when it was instructed or ordered from superiors. However, some aspects of these were forced onto us and not really sustainable. This concludes reports from each respective site. Next, I would like to ask everyone's open opinion concerning the environmental report, which is published as part of Fujirebio Group's CSR.

#### Theme (3) Proposals for the Environmental Report

Saito: For several years now it has only been available on the homepage, so being unable to view it outside the internet is partly preventing us from providing a quick response to stakeholders. I think you all know that we are currently involved in the model project of the Ministry of the Environment. Since there is a need to spread word of the carbon neutral certification system globally, and also since we can receive subsidies to offset the cost of published booklets and HP publication of the report, we will be going ahead with creating these.

- **Ostuka:** Seeing that company has a booth in exhibitions we certainly need a company profile and booklet.
- Suzuki: During external audits, the auditor inspects every site while looking at the environmental report, so it's essential that we have a printed version. In terms of content, although our Company is quite proud of our Environmental Report, I think it should be reported frankly by including inadequacies and challenges as well, rather than just the good points or a list of activities we carried out.
- **Mikami:** A well-known major company adjacent to the Ube Facility has been reporting detailed statuses of their overseas group companies and environmental activities.
- **Hosoda:** Our company has plans to introduce the status of our overseas group companies under 'topics' in this year's Environmental Report.

# Theme (4) Reflecting on emissions trading and carbon-neutral

- Suzuki: In some aspects it is still not clear how far to go, since there is a difference in thinking approaches between the Ministry of Economy and the Trade and Industry Ministry of the Environment, as well as the fact that the government is still in a trial-and-error stage. There has also been news that transaction prices have plunged in Europe, who has been a forerunner. However, greenhouse gas reduction is a pressing challenge for the global environment.
- Saito: In regards to this theme, although our company took the initiative and gained public recognition from the government for its results, as Mr. Suzuki pointed out, opinions in upper management are divided between positive and pessimistic. Regardless of the form, as we see in COP meetings, this is a global movement. Thus, eventually it's likely going to form a massive trend that will lead to corporate obligations, so it is important to keep a firm focus on the future in dealing with it.
- **Suzuki:** On that note, next let's hear your opinions concerning future activities.
- Yoshiki: Revision of the product assessment standards. In this respect I want to refer to the overseas group company which is considered to be ahead of us. Reorganization of environmental data is also needed.
- Kanda: Concerning positive comments in environmental ISO external audits, it's absolutely crucial to have the involvement of peer groups. Eco-cap collection and regional cleanup activities are expanding at each site, but we should get certification, since we need to have a goal and to visualize the results of our efforts.



Suzuki: Thank you for all for your valuable opinions and participation in the environment roundtable discussion today.

### Fujirebio's business activities and their impacts on the environment

# We will accurately grasp environmental impacts influenced by our business activities and aim to create a recycling society

We reduce environmentally burdening emission matters through business activities including the reduction of raw materials used, improvement of productivity and energy saving activities. Furthermore, from manufacturing products considering environmental impact to services, we control targets based on input and output for reducing the environmental burden and make improvements every year.

By achieving these targets, we will aim to establish an environmental and recycling society.

E	Energy	Water			Paper		
Electric power	10.241.3 thousand kWh	Tap water	er 54.0 thousand m <sup>3</sup>		Copy paper	11.3 t	
City gas	230.3 thousand m <sup>3</sup>	Ground water	0.0 thousand m <sup>3</sup>				
LPG	123.0 thousand m <sup>3</sup>				Containers and packag	ing	
(liquefied petrole	um gas)	Chemical	substances		Glass containers	26.2 t	
Diesel oil	5.6 KL	PRTR reportable su	bstances*	0.6 t	Plastic containers	169.6 t	
Gasoline	251.1 KL	Baw materials, etc.		26.9.t	Bubber closures	51t	
Kerosene	129.6 KL	,			Metal	2.5 t	
					Packaging and labeling materials (paper)	168.4 t	







Waste		Air			Containers and Packaging materials		
Total generation	290.5 t	CO2	6,674.	1 t	(generated from plants)		
Amount recycled	267.3 t	PRTR reportable substar	ices* 0.	1 t	Glass containers	0.0	
PRTR reportable substances*	0.2 t				Plastic containers	5.3	
		Water			Rubber closures	0.0	
		Total effluent	45.1 thousand	m³	Metal	0.0	
		Discharge to public area	8.2 thousand	m <sup>3</sup>	Packaging and labeling materials	1.4	
		Discharge to sewerage	36.9 thousand	m³	(paper)		
	1 Aller	BOD	0.	1 t			
		COD	0.	1 t			

\*PRTR (Pollutant Release and Transfer Register): an environmental database or inventory of potentially hazardous chemical substances and/or pollutants released to air, water and soil and transferred off-site for treatment or disposal

PRTR reportable substances\*

0.2 t

0.1 t

SS

### **Environmental management activities**

# All of our sites including our group companies have obtained ISO 14001 certification.

#### Policy and outline of EMS

Every year management puts out a "Policy and Outline of the EMS," which fleshes out the environmental activity items from the "Environmental Policy" that should be focused on in the fiscal year. EMS policy and the matters to be performed for achieving the policy are presented for fiscal 2012. Its contents are incorporated in the "company-wide EMS" including the group companies. EMS will be further developed according to the progress management of policy implementation during period and the output from top management in the quarterly "Environmental Management Review."

#### Environmental management promotion organization

This organization includes the CEO, Environmental Management Representative, Environmental Management Committee, Environmental East and West Area Conference (broadcasted to all sales branches through a TV conference), and environmental meetings held under each site manager as lower organizations, thereby promoting the infiltration and continuous improvement of EMS. The representatives of group companies also participate in the Environmental Management Committee to encourage close communication.

While EMS is applied through corporate-wide environmental documents and site procedures, a feature of our environmental management system is that we pursue originality appropriate for the environmental impact of each site with the site system introduced.



#### Organization of Environmental Activities Promotion

#### **Compliance with legal regulations**

The responsible person for environmental legal regulations sends legal amendment information to all the sites as "environmental regulations news" through the network using the legal regulating management tools every month. Each site checks and updates the registered latest legal regulating information bimonthly and evaluates the lawabiding regulation at least twice a year. Evaluation of legal compliance to laws and regulations, including all items of district ordinances, were verified in the review for fiscal 2012. Laws and regulations that were newly revised and enacted are included in these, thus we will further enhance the lawabiding system by implementing even closer communication between sites.

#### Internal audit

In order to ensure the independence and expertise of the audit, we have established an "Internal Audit Office" for the internal environmental audit.

The results of each audit are reported to the president every month and an internal environmental auditor meeting is held quarterly by videoconference for reviewing internal audits and continuous training of auditors.



The internal auditors participate in an auditor training course by the outside lecturer once every year to brush up their auditing skills.

#### **Environmental discussion**

Our annual "environmental discussion," which is developed company-wide, is one of the characteristics of our EMS. All staff members discuss in detail the themes set by the executive office, and then the outcomes of these discussions are summarized by each administrative body and included in reports for each department, worksite environmental goal, and action, then utilized in the "EMS policy and overview for the next fiscal year" company-wide. We will present updates with reports from each site in the "Environmental Roundtable Discussion" special feature in this issue. Environmental objectives and results for FY 2012/Objectives for FY 2013

# We will set specific targets wherever possible and develop earth-conscious business activities

Fiscal year 2012 was the second of a three year medium term target activity period. The targets were set based on our performance in fiscal year 2009. Amid difficult conditions under which to reach year-by-year energy saving and global warming prevention goals, plants with sizable environmental impact were able to achieve their targets for CO<sub>2</sub> emissions reduction, as shown in energy consumption amounts below. As for waste control measures, these goals were achieved through a combination of thoroughly sorting of waste and continuously recycling. Our group company Advanced Life Science Institute (ALSI) newly acquired ISO14001 certification.

Item	Environmental Objective	Environmental targets for FY 2012	Specific measures for FY 2012		
	Deduction of concernation	Reduction of 3% compared with FY 2009 (Factory: Production process cost)	Achievement rate 94.7%	×	
Energy saving /	Reduction of energy consumption	Reduction of 3% compared with FY 2009 (Administration: Floor space prime cost)	Achievement rate 119.2%	0	
Prevention of global warming	Reduction of gasoline consumption	Further improvement of gas mileage	Eco activities and education record storage & management	0	
		Reduction of 3% compared with FY 2009 (Originated in energy use)	Achievement rate 105.6%	0	
	Reduction of CO <sub>2</sub> emission	Reduction of 3% compared with FY 2009 (Originated in non-energy use)	Achievement rate 102.7%	0	
	Reduction of office paper purchases	Reduction of 3% compared with FY 2009 (Personnel prime cost)	Achievement rate 101.2%	0	
Resource conservation / Waste minimization	Reduction of waste (general waste)	Reduction of 3% compared with FY 2009	Achievement rate 104.8%	0	
	Reduction of waste (industrial waste)	Reduction of 3% compared with FY 2009	Achievement rate 114.0%	0	
	Strict control for compliance with the amended Energy Saving Act and the amended Global Warming Solutions Act (Organized its administrative bodies a prepared a report and a plan for FY 2012.)		138 laws and regulations compliance evaluation (including ordinances) at [entire sites] all sites	0	
Legal regulations	regulations under environmental legislation	prepared a report and a plan for FY 2012.) Compliance with amended Tokyo Metropolitan ordinances (Prepared a report for FY 2012 and complied with the mandatory reduction of total volume.)	Preparing data on volume of energy used and $\mbox{CO}_z$ emissions A report on implementation and a plan submitted before the deadline	0	
Environmental care in products	Realization of Product Assessment Standard	Regular report on implementation of product assessment	In operation with design review	0	
Environmental documentation	Understanding of the environmental documentation management system	Continuation of periodic revision of all environmental documents for single year	Level 1,2 documents (22) have been revised and registered Level 3 documents (155) have been revised and registered	0	
Operation control	Management of industrial waste disposal companies	Continuing implementation of reliability assessment	Storing and managing agreements on observation of laws among 25 contracting companies	0	
Management of Industrial waste           operation control           disposal companies           Promotion of eco-officing           Implementation of the annual		Stricter control of eco-officing	Achieving company-wide energy saving target planning	0	
Environmental education	Promotion of eco-officing Stricter control of eco-officing Implementation of the annual environmental education policy and outline Implementation of FY 2012 environmental education policy an		Implementation of FY 2012 project for each site and department (education record and management of progress flow diagram at each site)	0	
	External communication with industrial waste disposal contractors	Continuation of commitment of compliance with laws to consignees	Reception of responses from 25 industrial waste disposal contractors (Completion of record and registration at every site)	0	
Environmental communication	Issuing of the environmental report	Issuance of Environment Report for FY 2012	Continually issuing		
	Improvement of internal communication	Implementation of company-wide environmental discussion and correction in FY 2012	Discuss emergency responses and aspects that could affect the environment. Use this outcome to develop worksite activities.	0	
ISO environmental management	Responding to ISO 14001 external auditing	Responding to ISO 14001 continual assessment (Including our group company TFB Inc.) Promoting further certification of group companies	Passed continual assessment of ISO 14001 (including our group company, TFB Inc.) Group company (ALSI) acquired certification	0	
Internal environmental audit	Reinforcement of internal audit	Implementation of internal audit policy for FY 2012	Completion of audit planning, implementation and review in FY 2012 (ensuring independence by establishing an internal audit office)	0	
	Continued issuance of medical science journals	Issuance of the academic journal Medicopia 2012	Issuance of the 54 <sup>th</sup> academic journal Medicopia 2012	0	
	Holding of educational lecture meetings and symposiums	Successive holding of seminars for FY 2012	Holding of the 33 <sup>th</sup> Medicopia symposium in FY2012	0	
Social contribution	Contribution to a wide range of blood collection businesses	Continuation of contribution for FY 2012	Implementation of contribution items	0	
	Contributing to healthcare in the world	Continuation of cooperation with contribution for FY 2012	Tutoring trainees at Hachioji Facility in 2012	0	
	Contribution to the community Continuation of holding and contribution for FY 2012		Holding of a summer festival and implementation of projects at each site in 2012	0	

Evaluation criteria: OTarget achieved OTarget achieved with some improvement required  $\triangle$ Efforts have been made but the performance evaluation is poor ×Target not achieved

### Environmental Efforts (FY 2013 objectives)

In FY 2013, we will advance the development of new measures and proactively install energy-saving equipment in an aim to achieve our medium-term objectives for the first year of activity, which starts from this fiscal year.

Item	Environmental Objective	Environmental targets for FY 2013				
,	Energy use reduction	4% reduction per unit of output, compared with FY 2009				
Prevention of global	Reduction of CO emission	4% reduction of energy-sourced $CO_2$ emission, compared with FY 2009				
Warning		4% reduction of non-energy-sourced $CO_2$ emission, compared with FY 2009				
	Reduction of office paper purchases	4% reduction per unit of output, compared with FY 2009				
Resource conservation / Waste minimization	Reduction of waste (general waste)	4% reduction, compared with FY 2009				
	Reduction of waste (industrial waste)	4% reduction, compared with FY 2009				
Legal regulations	Strict control for compliance with regulations under environmental legislation	Responding to the revised Energy Saving Act and the Law concerning the Promotion of Global Warming Countermeasures (energy use reduction, comparing with 2013 and establishment of a system) Responding to the revised Tokyo Metropolitan Ordinance on Environmental Preservation (FY 2013 report and responding to the mandatory total energy use reduction)				
Environmental Care	Addressing environmental aspects related to operations	Environmental aspects assessment and plan formulation				
Environmental documentation	Understanding of the environmental documentation management system	Continued regular revision of the entire environmental document each year				
	Management of industrial waste disposal companies	Continuing implementation of reliability assessment				
	Promotion of eco-officing	Stricter control of eco-officing				
Environmental education	Implementation of the annual environmental education policy and outline	Implementation of FY 2013 environmental education policy and outline				
Environmentel	External communication with industrial waste disposal contractors	Continuation of commitment of compliance with laws to consignees				
communication	Issuing of the environmental report	Issuance of Environment Report for FY 2013				
	Improvement of internal communication	Implementation and development of corporate-wide environmental discussions for FY 2013				
ISO environmental management	Responding to ISO 14001 external auditing	Responding to the ISO14001 renewal audit (including our group company TFB Inc.) Promoting the certification of other group companies				
Internal environmental audit	Reinforcement of internal audit	Implementation of internal audit policy for FY 2013				
	Continued issuance of medical science journals	Issuance of the academic journal Medicopia 2013				
	Holding of educational lecture meetings and symposiums	Successive holding of seminars for FY 2013				
Social contribution	Contribution to a wide range of blood collection businesses	Continuation of contribution for FY 2013				
	Contributing to healthcare in the world	Continuation of cooperation with contribution for FY 2013				
	Contribution to the community	Continuation of holding and contribution for FY 2013				

# We will eliminate the waste of resources and energy and deploy earth-conscious business activities

#### **Reduction of CO<sub>2</sub> emission**

In regard to  $CO_2$  emission reduction, the company started measuring the emission in FY 2005, in time for the enforcement of the Kyoto Protocol. We have been implementing strengthened measures of  $CO_2$  emission measurement accordingly, such as inclusion of the electricity-sourced  $CO_2$ , and setting the latest default value, which was announced by the Ministry of the Environment since FY 2006. The  $CO_2$  emission in FY 2006 was a 24.6% increase, compared with the previous year, because of the operation commencement of new Ube Facility. Since FY 2007, we have set company-wide targets to reduce  $CO_2$ emissions and reinforced  $CO_2$  reduction activities across all sites. At the Hachioji Facility however, which is positioned as a 'large-scale business institution' under the Tokyo Metropolitan Ordinance on Environmental Preservation, and a 'class II specified business institution' under the Energy Saving Act,



 $CO_2$  reduction efforts were carried out with particular focus on systematic installation of energy-saving equipment, as well as the introduction of energy savings-related equipment operation controls and  $CO_2$  visualization methods. In addition, at the Ube Facility we updated the aging facility and strengthened the facility's energy-saving operation controls. This gradually reduced company-wide  $CO_2$  emissions up to FY 2010. However, there was a 4.3% increase in  $CO_2$  emissions in FY 2011 compared with the previous year due to the expansion and relocation of the Obihiro Facility (with 2.4 times larger floor area than its previous location).

From 2012, in addition to the Energy Saving Act, the Global Warming Solutions Act, and the Tokyo Metropolitan Ordinance on Environmental Preservation, we were able to reduce  $CO_2$  emissions 1.4% compared with the previous year owing to compliance to summer power restrictions from the Ministry of Economy, Trade and Industry.

In addition, our number of offices had increased in 2012 as a result of the relocation of head office. At the time of relocation, priority was given to properties that cause less environmental impact, and it should be appreciated that despite the increase in offices,  $CO_2$  emissions were lower than the previous year.

We will continue in FY 2013 concentrating efforts towards reducing  $\rm CO_2$  emissions company-wide.

#### Comparison of CO<sub>2</sub> emissions by emission source and site

90.7% of CO<sub>2</sub> emissions originated from light and heat energy, most of which consisted of electricity-59.9%, LPG-18.8% and city gas-7.2% for FY 2012.

Although in FY 2011 we installed energy-saving equipment and equipment operation controls, especially at the Hachioji Facility, emissions increased 4.3% compared with the previous year due to the expansion and relocation of the Obihiro Facility. In FY 2012 we proactively exerted efforts on  $CO_2$  reduction measures at key sites, including the Obihiro Facility, and achieved a 1.4% reduction compared with the previous year.

Company-wide  $CO_2$  emissions at plants and research sites (Hachioji, Ube, Obihiro) accounted for 85.9% of the total. We believe there is a need to intensify the introduction of  $CO_2$  emission-reducing equipment and equipment operation controls particularly focusing on these areas.

In addition, given that CO<sub>2</sub> emissions from gasoline use in company vehicles accounted

for 8.7%, we are strictly promoting ecological driving methods and switching to vehicles with better fuel economy.





#### **Reduction of energy consumption**

In 2010, we began work in earnest to reduce energy consumption by setting medium term targets. It was the year the amended Energy Saving Act came into effect. Our energy use in fiscal year 2006 increased by 23.2% over the previous year. This was attributed to the new Ube Facility coming online. Since fiscal year 2007, we have set the reduction of electricity use as our company-wide goal, and every site has strengthened its commitment to it. At our Hachioji Facility, in particular, where a Type 2 Specified Plant designation from the Energy Saving Act and a large-scale plant designation from the Tokyo Metropolitan Ordinance on Environmental Preservation are in effect, we carried out a reduction policy that centered on deliberately introducing energy-saving equipment as well as facility operation and management techniques that contribute to energy conservation. As a result, we gradually reduced our



company-wide energy consumption up to fiscal year 2010. However, there was a 3.5% increase in energy consumption in FY 2011 compared with the previous year due to the expansion and relocation of the Obihiro Facility (with 2.4 times larger floor area than its previous location).

From 2012, in addition to the Energy Saving Act, the Global Warming Solutions Act, and the Tokyo Metropolitan Ordinance on Environmental Preservation, we were able to reduce power use by 1.4% in comparison with the previous year owing to the compliance to summer power restrictions from the Ministry of Economy, Trade and Industry. Further, it should be appreciated that CO<sub>2</sub> emissions were reduced 0.2% in comparison with the previous year despite the increase in offices resulting from the headquarter relocation in FY 2012, owing to relocation priority being given to properties that cause less environmental impact.

We will concentrate efforts company-wide in FY 2013, reduce energy consumption, and comply with the compulsory energy-use reduction of an average 1% per year (consumption rate , which is obligated under the Energy Saving Act.

#### Comparison: Energy Use by Emission Source and Site

Total energy use is broken down into the following types of energy: electricity, city gas, liquefied petroleum gas (LPG), kerosene, light gas oil, and Bunker A. Total energy use is broken down into the following types of energy: electricity, city gas, liquefied petroleum gas (LPG), kerosene, light gas oil, and Bunker A. 73.6% of our energy comes from electricity, 15.4% comes from LPG, and 7.5% from city gas.

The plants and research sites (Hachioji, Ube and Obihiro Facilities) used 93.4% of all energy consumed by our company. Production and research equipment, as well as energy used by ancillary equipment to support production and research operations tookup an extremely large proportion of energy, even company-wide. There is a need to further intensify the installation of energy-saving equipment, and equipment operation controls related to energy-saving, especially at the plants and research sites.





#### **Reduction of OA paper consumption**

We succeeded in reducing the previous OA paper consumption by half, by the following year after commencing activities in 2000 such as double-sided use of copy paper, electronic documentation of environment-related documents, and thorough use of non-printed matter. However, consumption increased in the subsequent three years due to response to the revision of the Pharmaceutical Affairs Law and an increase in sales promotion materials. Corporate-wide reduction activities have been developed since fiscal 2005 and the corporate-wide medium-term reduction target was set to enhance the reduction since fiscal 2007. As this result, the all-site OA paper consumption considerably decreased by 11.0%, comparing with FY 2005. In fiscal 2012, we set a corporate-wide medium-term reduction target (In 2012, a 3% reduction compared with fiscal 2009), and will work on stricter reduction control at the Head Office Site of which paper consumption is high.

#### **Reduction of Generation of Wastes and Roper Waste** Disposal

As a result of the promotion of corporate-wide stricter separation and promoting recycling by entrusting recycling work to an industrial waste processor since fiscal 2006, the total combustible wastes have decreased from year to year. Particularly, we succeeded in the 100% recycling of combustible wastes at the Hachioji Facility in fiscal 2007, achieving zero generation of combustible wastes. We have also promoted recycling efforts at other sites as well. Emissions in FY 2012 reached 4.3 tons, representing a 17.5% increase compared to FY 2006. A primary factor for the increase was due to a one-time disposal of combustible waste generated as a result of the relocation of the head office

As for non-combustible waste, the total amount of emissions has decreased year-after-year up to FY 2010, as a result of promoting strict waste separation and recycling companywide since FY 2006. At the Ube Facility and headquarters in particular, a 100% recycling record of non-combustible waste was achieved in FY 2010.

Other significant contributing factors include recycling of the sludge produced from laboratory animal excreta at the Obihiro Facility and recycling of the fusion furnace used for testing and product parts at our Sales and Marketing Office. The total amount of emissions for FY 2011 was reduced to 23.2 tons, representing a 21.9% decrease compared with FY 2006.

We will intensify our efforts for both combustible and noncombustible waste in FY 2013, aimed at the next "Zero emission trial-run." We will also concentrate efforts on reducing the total volume of waste at all sites.







#### Transition of noncombustible wastes

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#### **Control of chemical substances**

We are controlling the amount of purchase and release of PRTR object substances in accordance with the relevant laws and regulations, and are implementing their appropriate use, storage and control. The quantity of hazardous substances purchased, and their waste is managed according to laws, and their proper use and storage are strictly managed. Although we are not obliged to report hazardous substances because our consumption is less than one ton, we considered their environmental impact on air and water and thus conducted appropriate treatment to dispose and process waste in-house as much as possible. The table below lists the top 20 chemical substances in amount handled among substances subject to PRTR.

Nome of substances		Total	Release			Trai	nsfer	Consump-	Removal
	Name of substances	Handled	Air	Water	Land	Wastes	Sewerage	tion	Disposal
1	Hydrochloric acid	123.9	0.0	0.2	0.0	0.0	11.3	112.4	0.0
2	Methyl ethyl ketone	120.2	28.3	0.0	0.0	91.9	0.0	0.0	0.0
3	Formaldehyde	84.4	2.1	0.0	0.0	81.5	0.8	0.0	0.0
4	Sulfuric acid	25.3	0.0	0.0	0.0	0.0	0.0	25.3	0.0
5	Glutaraldehyde	18.7	0.0	0.0	0.0	0.1	18.6	0.0	0.0
6	Sodium azide	16.3	0.0	8.5	0.0	0.0	7.8	0.0	0.0
7	Methanol	11.6	0.0	0.0	0.0	11.0	0.0	0.6	0.0
8	Acetonitrile	11.5	0.0	0.0	0.0	11.5	0.0	0.0	0.0
9	Triton X-100	3.9	0.0	0.5	0.0	0.2	3.2	0.0	0.0
10	Acrylamide	3.6	0.0	0.0	0.0	2.5	0.0	0.0	1.1
11	N,N-dimethylformamide	2.2	0.0	0.0	0.0	2.1	0.1	0.0	0.0
12	Isopropyl alcohol	1.8	0.0	5.5	0.0	0.0	0.0	1.8	0.0
13	Chloroform	1.4	0.1	0.0	0.0	0.6	0.0	0.7	0.0
14	2 propanol	1.4	0.0	0.0	0.0	0.1	0.9	0.4	0.0
15	Maleic anhydride	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
16	Phenytoin	0.8	0.0	0.0	0.0	0.0	0.0	0.8	0.0
17	Xylene	0.7	0.0	0.0	0.0	0.2	0.0	0.5	0.0
18	Zinc chloride	0.6	0.0	0.0	0.0	0.5	0.1	0.0	0.0
19	Ethylene glycol	0.5	0.0	0.0	0.0	0.5	0.0	0.0	0.0
20	Ethylenediamine tetraacetic acid	0.5	0.0	0.0	0.0	0.5	0.0	0.0	0.0

#### Efforts to laws and regulations

#### (I) Energy Saving Act: Energy Consumption Report

Fiscal Year	2006	2007	2008	2009	2010	2011	2012	Last 4 years AV
Energy consumption		0.0947	0.0854	0.0835	0.0815	0.0803	0.0792	0.0811
Compared with the previous fiscal year (%)			90.2	97.8	97.6	98.5	98.6	98.1

★1% annual average reduction obligation (consumption rate) ⇒ Annual average reduction of 1.9% (FY 2008 to FY 2012) Consumption rate = Energy consumption (crude oil equivalent KL) ÷ total office floor space

#### Specified operators (all sites total) annual CO2 emissions

Electric/Gas/LP CO (2t) total amount	2006	2007	2008	2009	2010	2011	2012
	7,515	7,522	7,447	7,056	6,425	6,821	7,373
Recycled power use					5,668	6,202	6,986

\*Green power purchases contributed to recyclable energy

★Due to the ministry's revised Energy Saving Act, specified businesses began reporting in FY 2009

\*Due to power supply of thermal power caused by the suspension of nuclear power, the CO<sub>2</sub> conversion factor of power companies is higher, thus the reduction ratio is decreasing

(ii) manualing emission reductions in metropontair rokyo's global warming countermeasures and the emissions trauning scheme. Manualing emission reductions at the nacinoji racinoji racinoji racinoji								
	2009	2010	2011	2012	2013	2014	Total reductions during compulsory period	
Reference emissions amount		3,329	3,329	3,329	3,329	3,329	16,640	
Compulsory reduction rate		6.0%	6.0%	6.0%	6.0%	6.0%		
Emissions upper limit							15,645	995
Specific greenhouse gas emissions amount	2,682	2,639	2,483	2,510			7,632	
Emission reduction amount		689	845	818			2,352	
Excess reduction issuable amount		490	646	619			1,755	

\*Reference emissions amounts are average values from FY 2002 to FY 2004. (Extended from the old system)

(Emissions upper limit for the remainder of the compulsory reduction period (first reduction phase) were 8,013 t-CO<sub>2</sub>

A Tokyo Emissions Trading Scheme account has been established.

#### Connecting with the Community

### **TOPICS** We've relocated our headquarters!

Save for one department, Fujirebio's headquarters relocated from the FR building in Nihonbashi Hamachou, to the Shinjuku Mitsui building adjacent to the west exit of the Tokyo Metropolitan Government Office at the end of October of 2012. The relocation was carried out over a total of three days and nights. Indirect  $CO_2$  emissions generated from using power at night and truck transporting for the move were absorbed through the purchase of Renewable Energy Certificates (REC).



Nihonbashi Hamachou FR Bldg









1,000 kWh of Renewable Energy Certificates (REC) purchased (Oct 2012)



Shinjuku Mitsui Bldg.





#### Connecting with the Community Contributing to local communities

#### Building good relations with local communities

The Japan International Cooperation Agency (JICA) conducts international training for care and diagnosis of HIV-infected persons to exam technicians and their supervisors in Western Pacific, Southeast Asia, and African countries. On June 29th, 2012, twelve trainees took a day out of their one-month training to visit our company.

Explanations of HIV products, demonstrations of simplified test kits for syphilis, and a viewing of the testing system were held at the central research laboratory at our facility.

In the simplified testing, people were able to experience each test and get a true sense of their usefulness. For the testing system, given that several of



the trainees have been involved in blood testing in various countries, the Lumipulse CL4800, which has been adopted by the Red Cross Society in Japan, piqued the interest of several visitors, and a series of questions about the product followed. Our company has contributed to medical services globally by providing training kits for JICA training, which is carried out in countries around of the world, and by exporting products to developing countries through international organizations such as UNICEF and the WHO.

### Introduction to the head office's site

Starting with the Shinjuku Mitsui Building, central Shinjuku is home to the world's largest district heating and cooling systems, which networks together 22 buildings in central Shinjuku, including the Tokyo Metropolitan Government Office.



In a scheme to save energy, the Shinjuku Mitsui Building introduced a "Building Energy Management System," replacing heating and cooling systems. Upon evaluation of its abilities to reduce carbon dioxide, on February 12th, the Tokyo Metropolitan Government established the building as equivalent to being the top level office among the "best specified global warming control measure offices."

For the purpose of sharing information on reduction measures in this building, which has compulsory  $CO_2$  emission reductions imposed upon it, a ' $CO_2$  Reduction Measures Committee' meeting is held twice a year targeting tenant companies in the building; Our Company also participates in this committee.

#### Connecting with the Community

### Major environmental activities



Sorting corner on the floor of the head office

Recycling is managed into 17 categories of waste separation in the common rules of the

environmental procedure manual at the head office site, which follows Mitsui building rules.







Managing information leaks and standby power

Before leaving the office, all staff turns their computers off and stores them in a locked desk. (Number of PCs: 160)



At the clean-up activities



The Shinjuku Mitsui Building staff participates in a road beautification campaign on 'Zero Waste Day' in spring and autumn. At the Mitsui building, Fujirebio and other tenant company staff members participate in clean-up activities.

### The Advanced Life Science Institute acquires ISO 14001

In November of 2012, Fujirebio's group company Advanced Life Science Institute acquired ISO 14001 certification after a certification upgrade review.

Here, research and development, such as the development of the world's first HCV antigen measuring system, as well as HCV antibody diagnostic agents, HBV antigen diagnostic agents, and small cell lung cancer markers are conducted.

Without impeding R&D work, we pay attention to the 301,000 kWh/month mark for energy consumption (especially total consumption), as well as educate staff by installing demand throttling equipment and conducting visualizations.

This year, we incorporated our *eco-cap* collection activities at other sites. Although this is a small site with just 20 staff, they work that much harder on environmental activities to live up to the certification.



Recombinant culture device



Inside the research lab



The facility

### Introduction to the Hamachou Office

In October of 2012, headquarter functions were relocated from the Nihonbashi Hamachou FR building, to the Shinjuku Mitsui Building. The former got a fresh start as a tenant building for group companies. Each respective floor is home to TFB, SRL, and the Fujirebio Hamachou Office. Building management is handled by head office's general affairs division; however, activities are carried out as a singular 'Hamachou Office'.



#### Contributing to local communities and the environment

### **Our Efforts to Reduce Environmental Burdens – 1**

This year, 500 lights were upgraded in two phases to coincide with interior work after the head office's relocation. By upgrading existing FLR40 lights to LED lights, not only did we reduce energy consumption, but also allowed for a reduction of waste since the lifespan is triple that of the previous lighting.



	71100年12 7連環道:現代1	1012/01/1 1 1 10:008	-88L51 7888
Lighting	FLR40-type	HF-type	LED-type

Hamachou training room

#### Anticipated Results>

Using a theoretical value of 3,000 hours of lighting in one year, results are as follows:

- ① Yearly power consumption: 198,000kWh reduces to 70,500kWh
- 2 Yearly CO<sub>2</sub> emissions: 85.14t-CO<sub>2</sub> reduces to 30.32t-CO<sub>2</sub>
- ③ Yearly lamp changes: reduces to 250 units

**Our Efforts to Reduce Environmental Burdens – 2** 

# Efforts for our carbon neutral certified pilot office

#### Background

As part of its efforts to reduce emissions at the Hachioji Facility, which has compulsory reductions imposed on it as a specified business location, it was selected in September of 2011 by the Ministry of the Environment as a model business for carbon neutral certification. On February 24th, 2012 their certification plan was verified by the ministry's preparatory committee, and the company was registered in the plan after finding that it met the criteria.

Carbon-neutral is system to further enhance carbon offset efforts by reducing the total amount of greenhouse gas emissions generated by operations and other sources, which cannot be reduced through a combination of introducing of energy-saving technology, introducing renewable energy sources, and self-sustaining  $CO_2$  reduction solutions such as tree planting. This system offsets emissions (compensates for them) by reducing or absorbing them in other areas.

In May of 2012, the Ministry of the Environment integrated the "Carbon Neutral Certification Scheme" with the "Carbon Offsetting Certification Scheme" to form the "Japan Carbon Offsetting Scheme." We continue our efforts after being selected as a model business in order that we may effectively promote appropriate carbon neutral efforts and increase public awareness of the Japan Carbon Offsetting Scheme.



Carbon Neutral Plan Registration Certificate

#### Range of CO<sub>2</sub> emission sources from business activities at the Hachioji Facility



#### Evidence of CO<sub>2</sub> emissions reduction by year at the Hachioji Facility



### Iwate Prefectural Forest (J-VER) offset credit purchase

"Contribution to CO<sub>2</sub> absorption and reduction, even reconstruction aid; all through Iwate Prefectural Forest (J-VER) offset credit purchase!"

For the portion of direct emissions from the Hachioji Facility's FY 2012 business activities which could not be reduced through independent efforts, effective use was made of (J-VER), the emissions transaction system, run by the Ministry of the Environment. Our company entered into a contract to purchase 30 (t-CO<sub>2</sub>) lwate Prefectural Forest offset



Commemorative plaque and article in local newspaper

credits (J-VER), which are certified by the Ministry of the Environment, for the carbon dioxide CO<sub>2</sub> absorption amount of the forest created by an engineered thinning of the Iwate Prefectural Forest conducted between FY 2008 and FY 2010 to encourage growth. On October 29th, 2012, a ceremony was held to present a plaque commemorating the purchase.

#### About the Offset Credit (J-VER) Scheme

The J-VER scheme is a system that certifies (J-VER) credits for use in carbon offsetting CO<sub>2</sub> emissions in



Commemorative plaque presentation ceremony. Iwate Prefecture

Japan by leveraging market mechanisms to make effective use of biomass and other new arrangements that can be promoted. Credit costs are used to cover new forest thinning costs.



Thinned trees processed into chips to use as fuel

### At the 2013 Carbon Market Expo

Since FY 2011, the Ministry of the Environment has been holding business matching networking events between businesses putting their efforts into emission offsetting and credit providers in order to encourage carbon offset activities.

In the midst of companies' diversified voluntary efforts, the Carbon Market Expo targets a variety of efforts to visualize companies' emission reduction efforts. Held every year at the Tokyo International Forum, it aims to provide a comprehensive forum for visitors to take advantage of a wide array of global warming initiatives to apply to their own business and CSR activities. It held this year again on February 6th, 2013. At the event, prefectural staff conducted PR activities at the Iwate Prefectural Forest J-VER credit purchase booth. Fujirebio's corporate example of taking advantage of J-VER credits in our efforts was introduced to visitors to the booth.



#### Contributing to local communities and the environment

Our Efforts to Reduce Environmental Burdens – 3

## Summer power-saving measures continue!

In the FY 2011 summer season, a 15% reduction target was enacted for large enterprises in accordance with the power use restriction regulations, issued through Article 27 of the Electricity Business Act due to TEPCO's (Tokyo Electric Power Co.) urgent power supply

shortage. The Hachioji Facility achieved a significant power savings owing to a peak cut of 30%.

Power restriction ordinances carrying compulsory energy conservation were avoided for major customers in FY 2012. However, with the exception of some regions, there was a request from the government to conserve energy, albeit without numerical targets.

Aligning with Hokkaido Electric Power and Chugoku Electric Power's regional power-saving goals, Fujirebio implemented of summer power-saving measures at all sites; followed by demand peak cuts at each site, as well as a setting of voluntary targets for power-saving, which fell within the scope of not obstructing staff health or operations.

Demand reduction compared to reference year>					
Headquarters	: Target 14%  Actual 35.0% reduction				
Hachioji	: Target 16% 🔿 Actual 20% reduction				
Ube	: Target 7.6% 🏓 Actual 12% reduction				
	Chugoku Electric Power requested a				
	5% reduction				
Obihiro	: Target 11.9%  Actual 12.8% reduction				
	Hokkaido Electric Power requested a				
	7% reduction				

#### <Results and Outcomes>

35

We were able to greatly limit highest demand numbers of major sites beyond our targets. We also succeeded in reducing power consumption at all sites by a total of 8.6% during the period in comparison with reference year of 2010.

Power consumption rate reduction (by site) compared to 2010 summer period (July-September)



Checking the CO2 levels monitor at Hachioji



Hachioji Facility management demand monitoring



Ube Facility management meter monitoring

Two peaks occur at the research and manufacturing office showing maximum peak hours of power use between 10:00 to 11:00 am, and 13:30 to 14:30 pm. Facility management struggled to maintain our target demand numbers during these time periods, being pressed by power-restraints from air conditioning and the power board.

13.1

31

17.2

59

5.2 718.6

22

416

7.4 2950.5

37 3.881

#### <Results≻

2012 2Q (1000kwh)

Cost reduction

136.2

877

1541.6

1,492

59.0

106

26.9

62

1.8

0

4.1 409.7

> 0 743

5.1

9

4.4

25

By continuing the current and summer power saving measures, the Hachioji Facility was able to grasp the excess amounts of demand numbers, enabling them to lower their contracted power agreement from FY 2013 forward.

Reduction rate compared to same period <u>4</u>0 Head Hachioii Akishima Kitakanto Wangan Obihiro Hokkaido Osaka Chushikoku Kuki Tohoku Chubu Ube Kyusyu Office Kansai EPCO Tohoku EPCO Kyusyu EPCO Hokkaido EPCO Chubu EPCO Chugoku EPCO Tokyo Electric Power Company Head Office Site Hachioii Akishima Kuki Kitakanto Wangan Obihiro Hokkaido Tohoku Chubu Osaka Ube Kyusyu Total shikoku Reduction ra 6.5 11.4 14.1 -1.0 0.7 11.5 11.4 28.7 14.4 19.6 4.0 26.4 8.6 31.5 23.3 compared to 2010 (%) 2010 2Q (1000kwh) 198.8 1648.2 66.6 31.3 4.2 15.3 21.5 748.4 3227.7 1.8 5.8 6.2 6.8 10.1 708.4 2011 2Q (1000kwh) 119.7 1452.3 57.7 22.6 1.7 3.9 462.7 5.1 4.4 12.6 15.9 4.9 7.2 2879.1

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**Our Efforts to Reduce Environmental Burdens – 4** 

# Saving energy in winter too at the Obihiro Facility!

In the capacity of winter power supply-and-demand control measures within the jurisdiction of Hokkaido Electric Power, following the summer measures was a request to lower consumption by 7% versus FY 2010 on weekdays from January to March.

For production activities and the like, this meant saving energy by setting voluntary targets within a range that would not cause substantial impacts.

Since the Obihiro Facility moved to a new building, and thus had no results for FY 2010, we indexed against the maximum demand numbers from the same period in FY 2011. The results based on this target were a 4.2% (30,181 kWh) reduction of total power consumption within the period.

This equates to daily power consumption of 5,330 kWh. Calculated by days it would equal approximately 5.6 days of energy saved, meaning a reduction of 18.23 tons of  $CO_2$  emissions.



#### Obihiro Facility power usage and maximum demand values

Obihiro's Facility building incorporates the latest technology in energy-saving equipment.

BEMS, which centrally manages and automates energy conservation monitoring and control of all the energy equipment in the building, has also been integral in conserving energy.



Obihiro Facility in the winter



BEMS monitoring display



Checking power-savings in the Facilities Management Office

**Our Efforts to Reduce Environmental Burdens – 5** 

# The impact of geothermal heat at the Obihiro Facility!

The Obihiro Facility relocated to the Otofuke Industrial Complex in June of 2011. During new construction we installed "BEMS", a geothermal heat pump, and a heat exchanger as the building's high-efficiency energy system. During initial construction we calculated predicted power use cases with and without systems for FY 2011 after completion.

The results to date indicate a significantly higher reduction than predicted.





**Obihiro Facility** 



Geothermal heat pump

#### Graphical view and results

- ① Predicted power use without installing energy-saving system
- ② Predicted power use reduction with an energy-saving system installed was 24%
- ③ Actual values of power use in first year after completion

"Through efficient operation based on the designed values, power use was reduced approximately 16% more than was predicted if an energy-saving system was to be installed, and approximately 36% more than predicted when compared with before the energy-saving system was actually installed."

Actual values for power use for FY 2012, the second year after completion
 "Based on usage amounts of the previous fiscal year, power use was reduced 3.7% more than the actual values of the previous fiscal year through energy-saving activities."



#### Introduction to our overseas environmental activities

In pursuit of becoming a global company, Fujirebio has established manufacturing and sales facilities in the United States, Asia, and Europe. We also supply clinical diagnostics to more than 100 countries around the world. In terms environment activities as well, we are committed to the preservation of the global environment in concert with our overseas bases. Fujirebio and each of its overseas sites develop environmental activities independently, however, to support various environmental aspects and certification audits we are advancing the exchange of information to build a cooperative framework. Introduction to some overseas offices.



**Fujirebio Diagnostics AB** FDI subsidiary based in Sweden, here they manufacture and sell testing kits, reagents for research, and raw materials.



#### Fujirebio Europe NV (FRE)

FRE based in Europe has set out to build an environmental management system, aiming for ISO14001 certification. In their environmental activities, they are developing systems and integrating quality control systems. FRE is working towards their goal of complying with legal requirements while practicing continuous improvement. One major activity they are engaged in is reconsideration of their heating and cooling systems being as they regard energy consumption as an important environmental aspect. They are also placing focus on commuting. (Reference: http://www.fujirebio-europe.com/

company/about-innogenetics/innogenetics-andiso-14001-standard)



### Fujirebio Taiwan, Inc. (FTI)

FTI, one of the offices in Asia, assumes responsibility for producing FR products. They maintain ISO 9001 and ISO 13485 certification, and are building a GMP compliant framework. Although they have not acquired ISO 14001 certification, they

continue with business improvements and other basic environmental activities, such as compliance with local environmental laws and regulations, waste separation, and reuse of copy paper.





#### Fujirebio Diagnostics, Inc. (FDI)

FDI's U.S. office has acquired and maintains ISO 14001 certification. FDI's environmental activities have been deployed under an environmental health and safety management system. Major activities include: (1) Compliance with legal requirements, (2) Communication with stakeholders, including employees, (3) Continuous improvement, including products that take into consideration the environment, and (4) Pollution prevention. (Reference: http://www.fdi.com/about\_us/ environmental.html)

### Message from the Environmental Manager

Hybrid cars are commonplace nowadays, and it is frequently reported in the news that automobile manufacturers around the world are making cross-border alliances to develop electric vehicles and fuel cells. In addition, renewable energy using wind and solar power is drawing more attention in the wake of nuclear incidents. Meanwhile, the scale of natural disasters caused by extreme weather events in various parts of the world is becoming more and more prominent, and once they occur, they can impact thousands of lives. As you know, awareness of the environment on a global scale is on the increase against the backdrop of global warming. However, the reality is that global efforts are not going as well as one would hope, due to political differences between developed and developing countries. Apart from efforts that take place on a government level, the environmental efforts from the private sector are becoming increasingly important, as are the rising expectations to contribute social activities as a corporate citizen. In terms of the 'environment', which is a barometer of 'global health', which in



turn forms the basic prerequisite for 'human health', there is no change to the crucial theme that ongoing efforts must continue based on our management philosophy; being that we 'make contributions to worldwide medical services and public health'. This past year, after rolling out our company's environmental activities, we have shared the three points listed below with environment promotional team members. The first point is to steadfastly carry out lateral expansion within our company. Since acquiring ISO14001 certification in 2001, environmental activities have been firmly established internally in every location. In annual reviews by the TUV, rather than just having problems pointed out, there have been increasing instances where we received praise. However, people are the ones responsible for the organization, and they rotate with the passing of time. Activities we assumed to be firmly established one day, change the next when personnel are swapped out. We have experienced cases such as these firsthand. We need to pay attention to these types of risks, and exert constant effort to maintain and improve both activity levels and the environmental awareness across the entire organization. For this purpose, it is important to laterally expand good and bad examples within the company, and communicate the message of remaining alert and improving.

The second point is to be environmentally conscious in day-to-day operations. In addition to environmental aspects that are easily recognizable, such as saving energy, reducing photocopies, and separating garbage, we should be more conscious than ever about asking ourselves what aspects contribute to the environment. This applies to each operation in the value chain of our drug testing and primary businesses (including work-flow sequences, such as product research and development, basic and raw material procurement, manufacturing, shipping, sales, and management). We must also bear in mind that even small actions contribute to reducing environmental burdens.

The third point is global cooperation within the group. The Miraka global IVD system began full-scale operation in April of 2013, and cooperation on business development aspects between group companies in Japan and Europe have been picking up speed. While maintaining our foundation of environmental activities within the group in each country, we hope to continue to build a structure that mutually raises activity levels through sharing information and know-how with each other. We have specifically begun, firstly, by sharing information, but this will be followed by a gradual increase in cooperation. Rome was not built in a day. When steady, small efforts are combined with proper balance, steady progress begins to be



ISO14001 Certification Upgrade Review Photo from a top-level interview (President/Environmental Manager) seen, and not only in a major construction projects and technological innovations. The same applies to environmental activities. Layering small efforts and creative solutions in our everyday life and day-to-day operations is what is essential, not just the attentiongrabbing activities from dramatic ideas like introducing new technologies related to energy conservation or developing infrastructures. My hope is to continue to concentrate efforts on environmental activities as a global citizen, while sharing awareness of these issues with other employees.

> Akira Suenaga Environmental Manager FUJIREBIO INC.

#### Postscript by the editor

Again last year we experienced a long-lasting and abnormal heatwave, which is also regarded as one of the effects of global warming. This year, however, was the year of unusual typhoon occurrences on top of the already present heat. Typhoons #26 and #30, which dealt a great deal of damage to the Izu-Oshima area, then struck the Philippines with a 'Super Typhoon', which recorded 90 meter peak gusts and historically unprecedented violence - hitting the region with devastating blows in conjunction with tidal waves known as abrupt waves, before moving on. At that time, the sea surface temperature in Philippine waters was 29 degrees. It is said that the waters around Japan are approaching 29 degrees, due to the effect of global warming. In other words, there is a high possibility of this type of 'Super Typhoon' hitting the Japanese archipelago in the near future. Global warming caused by the greenhouse gas effect has definitely accelerated. The reason is because everyone generates it, and so people around the world should work together to face greenhouse effect gasses, yet the gap between developed countries and developing countries remains unfilled, and the COP conferences have also failed to come to an agreement. Earthquakes also have been occurring frequently in Japan. Even among scholars, opinion of this phenomenon seems divided; some believing that large earthquakes are avoided by the gradual releasing of energy, and some believing that it is a sign of an upcoming mega-earthquake - it's quite frightening.

The former prime minister, who was recently promoted during his tenure, suddenly announces "zero-nuclear" and even the ruling and opposition parties waver, yet zero-nuclear is obviously ideal for the nation's people. Immediately however, even with zero-nuclear the final disposal problem of radioactive waste continues. In order to make up for it with renewable energy, which is said to be currently 2% of energy, there will likely be enormous costs and several years involved, regardless of technological improvements. Assuming it is made up through thermal power generation, there will be increases in both energy import costs and  $CO_2$  emissions, meaning Japan could be labeled by the world as the deficit country, and the country driving global warming. What are we to do?

Perhaps what we can do is get back to basics - back to what Barbara Ward advocated, which was to, "Think globally, Act locally," and practice saving the planet by working on what is immediately around us, then steadily continuing to expand these activities. To that end, I propose that we should change our current lifestyle to eliminate waste, and make efforts on a personal, corporate and global level in order to minimize every aspect of  $CO_2$  emissions. Our discussion has gone slightly outside the scope of editor notes for the report; however, I lastly wish to thank you sincerely for reading the "Fujirebio 2013 Environmental Report" and truly hope you were able to get to know about our company's efforts, as well as the origin of our company name. Please do not hesitate to share your frank opinions.

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