

Achieving Harmony between Human Beings and the Earth

Iseki aims to "live peacefully with a stable natural environment"

**Environmental Report** by ISEKI & CO., LTD

# # 関農機構式会社

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# - MARY

The coverage of this report Term covered: Term covered: 2012 Fiscal Year (From April, 2012 to March, 2013)

Activities covered: Domestic activities Organization: Iseki & Co., Ltd., affiliates, domestic covered distributors and sales subsidiaries Guideline used: Environmental Report Guideline (2012 edition) as reference and GRI Guideline Picture taken at Miyoshi-shi, Tokushima prefecture

# Aiming to bring about a prosperous community, constantly growing in affluence

In June 2012, "United Nations Conference on Sustainable Development (Rio + 20)" was held in Rio de Janeiro in Brazil and participants from more than 100 countries arrived at a common perception that "green economy" that realizes both environmental conservation and economic growth is important. In Japan, the Great East Japan Earthquake and the subsequent nuclear accident have raised public interest in stable securement of clean and risk-free energy. We consider now is the time to utilize the limited natural resources and energy more effectively and efficiently to reduce the stresses to the environment.

Since its foundation in 1926, Iseki Group has made exertions to improve productivity through agricultural machines that promote agricultural streamlining and reduce fatigue farming work. Refining our skills that we have cultivated, we also develop products that realize further reduction of fuel and fertilizer and promote their use, while taking various environmentally-conscious approaches in the development and manufacturing of products, logistics, and office work. To name a few, we have been working on developing dryers with improved fuel and time efficiencies, diffusing a sparse planting cultivation system which realizes low-cost wet-field rice transplanting, and promoting the use of fertilizing machines in ridges, that reduce the use of fertilizer by 30%. For agriculture in the Tohoku (northwest) region that aims at recovery from the Great East Japan Earthquake, we set up a slogan "From recovery to a breakthrough" and work intensively on local requests while recognizing that "Japanese agriculture cannot have a breakthrough without recovery of agriculture in the Tohoku region". We will continue our efforts by utilizing our latest technologies.

Our environmental preservation activities were started primarily at our manufacturing factories and have now spread widely throughout the entire scope of our business, from headquarters to sales subsidiaries, through the implementation of the Environmental Management System (EMS). From initial product development, manufacturing, product logistics and all the way to after-sales activities, all business activities at Iseki Group are based on a tangible target and management system so as to be an environment-conscious company.

Iseki Group recognizes that it is our social responsibility to contribute to the society which is in the stage to be recycle-oriented. We therefore position this as one of our most important management tasks. We continue our efforts to be of assistance in establishing a "prosperous community, constantly growing in affluence."

We are pleased to have an opportunity to publish this 2012 report of our approach and actions to preserve the global environment. Iseki Group carries out now and in future years, our social responsibilities to even greater improve the environmental quality through the group-wide environmental management activities. We would like to ask for your further support, assistance, and cooperation to make our activities successful.



President

木村进

# (Company profile)

Company name	ISEKI & CO., LTD		
Headquarter	700 Umaki-cho, Matsuyama-shi, Ehime prefecture Phone: +81-89-979-6111 Fax: +81-89-978-6440		
Main office	5-3-14, Nishi-Nippori, Arakawa-ku, Tokyo Phone: +81-3-5604-7602 Fax: +81-3-5604-7701		
Foundation	August, 1926		
Capital	JPY 23,344,000,000 (as of March 31, 2013)		
Employees	Consolidated: 6,325 (as of March 31, 2013)		
Business activities	Our main business activities are manufacturing and sales of following products: Cultivating machiney ······· Tractors, Cultivators, High-clearance multipurpose vehicles, Lawnmowers Planting machinery ······· Rice transplanters, Vegetable transplanters Harvesting machinery ······· Combine harvesters, Binders, Harvesters, Vegetable harvesters Processing machinery ······ Rice hullers, Dryers, Rice milling, Rice graders, Vegetable processing machinery Others ······ Farming implements, Spare parts, Agricultural facilities		



# Sales composition by product category as of March, 2013 at the end of fiscal years



# (Financial statements)

(As of March 31, 2013)			
Summary of consolidated balance sheet			
Account	Amount (in mil. JPY)	Account	Amount (in mil. JPY)
Cash and deposits Notes and accounts receivable-trade Inventories	9,285 30,455 42,676	Notes and accounts payable-trade Short-term loans payable Long-term loans payable Others	42,609 21,283 20,382 31,818
Others	3,945	Total Current Liabilities	116,101
Total Current Assats	86 365	Capital stock	23,344
Property, plant and equipment Intangible assets Total Investments and other assets	81,844 965 9,852	Retained earnings Treasury stock Valuation difference on available-for-sale securities Revaluation reserve for land Foreign currency translation adjustment Minority interests	13,454 11,522 Δ25 928 11,816 288 1,598
Total Noncurrent Assets	92,662	Total Net Assets	62,927
Total Assets	179,028	Total Liabilities and Net Assets	179,028

(From April 1, 2012 to March 31, 2013)

Consolidated statement of income		
Account	Amount (in mil. JPY)	
Net sales	155,697	
Cost of sales	107,537	
Gross profit	48,159	
Selling, general and administrative expenses	43,014	
Operating income	5,144	
Non-operating income	1,806	
Non-operating expenses	1,536	
Ordinary income	5,414	
Extraordinary gains	404	
Extraordinary losses	327	
Income before income taxes	5,491	
Income taxes	1,486	
Minority interests in income (loss)	24	
Net income	3,979	

Note: The amount shown is the number after rounding the fractional part.

Note: The amount shown is the number after rounding the fractional part.

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# Major products



Environmental Report 2013 by ISEKI & CO., LTD, Corporate governance and compliance

Sociality report

# Approach to corporate governance >

# Corporate governance structure and dispatch of corporate information

We operate the management system by focusing on quick and accurate response to changes of the management environment to maintain fair management.

Iseki regards it as the most important issue for management to strive for steady improvement of the stockholder value. We try to improve corporate governance by disclosing information proactively in regular IR explanatory meetings, etc. to maintain good relationships with stockholders, customers, and stakeholders such as suppliers, local communities and employees.

# Establishment of internal control of group

To secure appropriateness of operations, we have defined the basic policy on internal control to organize the internal control system and review it if necessary. We disclose the basic policy on internal control on our website.

<Basic Policy on Internal Control (extracted)>

- (1) The system is to secure compliance of job execution by directors and employees with laws and regulations as well as the Article of Association
- (2) The system concerning maintenance and control of information related to job execution by directors
- (3) Regulations and other systems concerning management of risk of loss
- (4) The system to secure efficient job execution by directors
- (5) The system to secure appropriateness of operations of the company and the company group which consists of subsidiaries
- (6) Matters related to the independence of employees who assist in duties of corporate auditors from directors
- (7) A system for directors and employees to report to auditors and other system to secure effective implementation of auditing by auditors

### Approach to compliance >

# Compliance system

Under the director in charge of compliance, a company-wide compliance team takes initiative to provide compliance training continuously to prevent injustice and scandals from occurring by spreading consciousness of compliance to all the executives and regular employees.

In addition, we have established the "Management Supervisory Committee" with the president as the chairman, all the directors as members and all the auditors as observers to check the thoroughness of compliance.

#### <Main actions for the compliance system>

- (1) Establishment of the "Iseki Group Code of Ethical Behavior" and distribution to everyone in the group, and continuous execution of training based on the code.
- (2) Spreading consciousness of compliance by issuing and posting "Compliance News" regularly
- (3) Establishment and use of Group Internal Communications System (Ethical Hotline)

### Status of approaches to fair trade



Compliance training

#### <Fundamental principles of Iseki Group Code of Ethical Behavior>

- 1. To comply with laws and regulations
- 2. To respect basic human rights
- 3. To respect common sense
- 4. To disclose information properly to fulfill social responsibility for explanation
- 5. To make efforts for environmental preservation

For fair development of the society, we promote the following approaches to fair trade with our customers, suppliers and vendors.

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# [Approach to compliance with Act against Delay in Payment of Subcontract Proceeds, Etc. to Subcontractors]

- To comply with requirements stipulated in the Act against Delay in Payment of Subcontract Proceeds, Etc. to Subcontractors, we have entrenched check and supervision with control by a system and monitoring in audit, etc.
- We provide continuous education by introducing recent warning cases concerning the Act against Delay in Payment of Subcontract Proceeds, Etc. to Subcontractors.

### [Approach to compliance with Act against Unjustifiable Premiums and Misleading Representations]

 By following the rules of fair competition code for agricultural machines stipulated according to the regulations of the Act against Unjustifiable Premiums and Misleading Representations, we strive to create flyers and catalogs with necessary information described and make point-of-purchase display without giving customers wrong ideas.

# Aiming to respect human rights and for a happy workplace

Sociality report

# Approach to respect human rights >

In the "Iseki Group Code of Ethical Behavior" established in 2003, Iseki Group stipulates "to respect basic human rights and avoid discrimination and harassment based on nationality, race, religion, sex, disability, etc". According to this code of conduct, we promote actions to respect human rights.

# Prohibition of discriminatory treatment

Iseki Group observes the labor law and works on appropriate employment management, avoiding discriminatory treatment based on nationality, race, religion, sex, disability, etc.

# Education on respect for human rights

We distribute the "Code of Ethical Behavior" to all the employees of Iseki Group and educate them to behave with respect for human rights in the society and among people.

We also prohibit actions that ignore the personality of others such as sexual harassment and power harassment and instruct employees to be careful about their language and behavior on a daily bases.

# Internal communications system

As an internal communications system of Iseki Group, we have established the "Ethical Hotline" in order to detect potential problems in companies of Iseki Group and prevent them from occurring.

- The communication routes are (1) office organization route, (2) personnel division route and (3) external route to the lawyer.
- Items to be communicated are (1) violation of law, (2) violation of Code of Ethical Behavior such as respect for human rights and (3) violation of company rules such as work regulations. We try to create an environment where people can consult about problems easily.

### Protection of personal information

Recognizing importance of protection of personal information in an advanced information communication society, we set a philosophy to respect human rights and manage and use personal information legally and fairly as per respect of privacy and privacy policy.

# Approach to a happy workplace>

# Occupational safety and health

We set "a healthy and safe workplace" as a code and try to thorough management of safety and health across Iseki Group. Since the working environment differs from office to office, we work on activities for safety and health according to the actual state of each base of each company.

Especially, in manufacturing companies, we promote improvement of awareness by conducting safety and health patrol, striving not only for continuous "zero industrial accident" but also thorough reduction of accident risks.





\* Frequency rate: Casualty toll per 1 million working hours

\* Target: Iseki and four factories

Transition of severity rate (FY2008 to FY2012) 0.10 0.08 0.06 0.04 0.03 0.02 0.02 0.02 0 0 2008 2009 2010 2011 2012 Severity rate: Workdays lost per 1,000 working hours

<Statistics of industrial accidents>

\* Target: Iseki and four factories

# Health management

Recognizing the great impact of the working environment on the health of employees, we strive to create a comfortable working environment.

Especially, as for mental health, we try to prevent illness by conducting stress checks in periodical health examinations and educational activities for the management.

In addition, we promote "walking" for health enhancement, in which many employees participate.

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# Employment and human resource development

# Sociality report

# Approach to employment and human resource development >

Iseki Group regards "human resources" as an important point to survive in a fast-changing business environment, in addition to the development of competitive products. Therefore, we try to create a rewarding workplace to bring out motivation and abilities of employees to a maximum extent, which will lead to the development of our business.

### Recruitment

Iseki Group strives to secure necessary human resources to carry out its social mission and recruits people based on their personalities and abilities.

Above all, we focus on recruiting those who can respond to global management in order to promote the increase of overseas sales which is one of our most important issues. We also positively work on mid-career recruitment of people with high abilities and precious experiences.

### Human resource development

For sustainable growth of Iseki Group, human resource development is essential. We work on a variety of ability development to effectively utilize the human resources of the group and draw out maximum performance.

After education of new employees, we provide detailed education, including training divided by job in each division and each company, foreign language training, succession of skills and techniques with the introduction of the meister system, and a corresponding education system to promote self-development as well as training divided by level to the entire group according to skills of employees.

In addition to the Training Center (Tsukubamirai-shi, Ibaraki prefecture) that has developed human resources with training aiming at enhancement of sales and service capabilities, we will establish Iseki Technical Training Center (ITTC, Matsuyama-shi, Ehime prefecture) as a training base for human resource development for manufacturing sites in autumn 2013 to improve capabilities on sites.

# Diversity

As globalization of business deployment progresses and the securement of capable human resources is required, we promote recruitment of foreigners and appointment of women in management.

We will continuously take such actions and support career formation of employees so that diverse people can utilize their abilities to achieve the best performance.

We also promote recruitment of physically-challenged people and work on creation of a working environment that is friendly to everyone.

# Work-life balance

We have introduced the following measures to ensure that each employee leads a more fulfilling life by balancing the career and private life while fully displaying his/her ability to fulfill his/her duties at work (including those applied only to some departments).

- (1) Recruitment for jobs in limited work locations
- (2) Flexible working hour setting by flextime system
- (3) Reduction of extra work with implementation such as "no overtime" day.
- (4) Implementation of child care supporting measures through General Business Owner Action Plans based on Act on Advancement of Measures to Support Raising Next-Generation Children

# **Meister system**

The meister system is a system that allows skills to be passed on smoothly from skilled workers on site to young mid-level employees.

For each important job type, we certify a person as a meister (excellently skilled worker) who will be engaged in skill upgrading, instruction and cultivation of young employees.



#### <<Introduction of meister>>

Iseki-Kumamoto MFG. Co., Ltd. Press Machine Department **Yosuke Ueda** Meister job type: Press work

I belong to Press Group in Iseki-Kumamoto MFG. Co., Ltd. and have spent my whole career in press work since I joined the company. Every day, I work on equipment maintenance by making full use of five senses such as eyesight and hearing to give the highest priority to safety and secure the quality.

As a meister, I coach young employees with little experience to improve individual abilities so that they will have professional awareness and skills to deal with challenges with immediate judgment, etc.

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# To achieve customer satisfaction

# Sociality report

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Iseki distributes a promotion site (i-NEXT) in which information on products, implements and cultivation systems is digitized and webified to each company of Iseki Group and provides customers with the following latest information via sales persons of the sales subsidiaries.

- (1) The cultivation system of each prefecture concerning sparse cultivation of wet-field rice and related machine information
- (2) Product/implement information (catalogs, operation manuals, technical manuals, videos, price lists, etc.)
- (3) Back issues of agricultural information magazines issued by our company, data such as images necessary for creating flyers
- (4) Information on cultivation systems, products, and implements is also available in farm fields and exhibition sites without Internet environment





### <Cultivation system proposal tool>

In the website "i-NEXT", we have created "cultivation system proposal tool". The main characteristic of this tool is that you can know a set of cultivation systems, operation systems, and machine systems immediately wherever you are by entering the information such as region you live, cultivated crop, breed, desired horse power of tractor, with use of a tablet terminal, etc.

Our sales persons propose cultivation methods, machines, and materials that are most suitable to you by presenting images and videos with this tool.



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To achieve customer satisfaction

# **Sociality report**

The business activities of lseki Group consist of selling products and providing services to customers and the company motto says "our management philosophy is 'to provide consumers with products that please them', thereby we fulfill our social mission."

To satisfy customers, we make it a rule to recognize the values of products and services we provide from the view point of customers, and speedily provide what is required by customers and what satisfies them.

Aiming at the above, everyone in Iseki Group strives to provide safe and high-quality products and services after sales to customers.

#### <How to improve customer satisfaction>

We try to improve customer satisfaction with the following concepts.

(1) The next process is the customer
(2) Improvement of product satisfaction level: To develop products convenient for customers based on the results of market research.
(3) Improvement of service satisfaction
(4) Satisfaction of each customer
(7) To carry out our work with a concept of "The next process is the customer" in workplaces in all the departments.
(8) Improvement of service satisfaction
(9) Every employee responds to customers, always considering their convenience.

# Services after sales of products >

In-house education, external courses

renewed our sales training.

(customer-oriented).

<Aim of renewal>

In the training facility (Training Center) in the Technical

Support & Solution Center in Ibaraki prefecture, we provide

a wide range of courses such as training for maintenance

of agricultural machines with sales persons and service

persons of sales subsidiaries and successors of dealerships as trainees. This time, we have entirely

(1) Sales persons should always place themselves in the

(2) Training should be provided based on voluntary participation so that trainees can experience

"awareness" and "discovery" by themselves. (3) The idea that achievement of plan is "the motivation of

a sales person" should be instilled.

customer's position to think and take actions

# CS promotion activity

Iseki Group holds a CS Enhancement Committee every month to follow and check the results of instructions of product delivery to customers and results of condition inquiries in sales subsidiaries across Japan for CS promotion of Iseki Group.

- Service before the sales : Implementation of delivery instructions based on delivery check sheet
- Service after the sales : Implementation of inquiry about new vehicles and maintained vehicles

#### **Consumer consulting service**

### <Contact Us page of consulting service>

The "Contact Us" page is on our website. Please visit the following address. http://www.iseki.co.jp/inquiry.html

### <Inquiries to website by e-mail>

In the "Contact Us" page of the website of ISEKI CO. LTD., we welcome a variety of inquiries from customers concerning (1) products and (2) the entire company, etc.

In "Technical inquiries to manufacturer" of "Inquiries as to product," our Technical Support & Solution Department serves as a window of technical inquiries as to products and responds to inquiries from customers with responsible technology departments of the relevant products.

There were about 1,000 inquiries by e-mail in FY2012 and we have replied and responded to all of them.

### <Telephone consulting for technical inquiries as to products>

For the above "Inquiries as to products", we directly respond to phone calls from customers in addition to "inquiries by e-mail". There were about 600 inquiries by phone in FY2012.

We receive various inquiries and consultations not only from customers but also from various organizations such as administrative institutions, electric power companies, insurance companies, food companies, and TV stations. The person in charge responds to them with respect.



<Number of inquiries by e-mail in

FY2012: Approx. 1,000>	
Product	Inquiry rate
Tractors	28%
Cultivators/tilllers	18%
Rice transplanters	15%
Combine harvesters	12%
Others	27%

<Number of inquiries by phone in FY2012: Approx. 600>

Product	Inquiry rate
Tractors	27%
Cultivators/tillers	10%
Rice transplanters	7%
Combine harvesters	9%
Others	47%

# To achieve customer satisfaction

# Sociality report

# Approach to quality improvement >

Iseki Group puts the provision of products that please customers and the safety of customers as first priority, and promotes efforts for quality improvement to pursue the safety of products.

We carry out quality assurance activities by utilizing the system of "ISO9001," an international standard for quality assurance, and conduct thorough design review (DR\*1) from the upstream of product planning of the production process.

Also in the production process, we try to eliminate defective quality by utilizing "ISO9001" system.

To realize user-friendly products, we employ universal design ( $UD^{*2}$ ) to secure the safety of products.

 \*1 DR: Design review to check whether the design allows realization of a product required by customer.
 \*2 UD: Design that is suitable for everyone. After Iseki-Matsuyama MFG. Co. Ltd. (mainly producing tractors) acquired ISO9001 in November, 1995, all four factories acquired the certification and carry out quality assurance activities.



# Approach to quality assurance activities >

To make products that secure safety of customers and fulfill their expectations, we effectively organize consistent quality assurance activities from product planning to production and service, and make evaluation in DR for quality assurance for each step. We elaborate product planning in the Product Planning Committee (body to decide commercialization of products) and the quality of design and production in the quality improvement deliberation council (a body to validate the qualities of products).



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# **Sociality report**

# Approach to establishment of product quality information system >

To speed up response to product quality information inquiries from customers in Japan and abroad, we have built and run a new system to share information search and analysis functions among relevant departments. This new information system links relevant divisions from sales subsidiaries to development and manufacturing departments to speed up the course of problem detection, treatment, and response concerning the quality after shipping of product through the following. (1) Expansion of the information range and improvement of accuracy to respond to market problems promptly and properly (2) Globalization of the system to enhance approaches to overseas market problems to the same degree as those of domestic market problems (3) Uniform management of product quality/quality compensation information to improve efficiency of obtention and management of information (4) Enhancement of functions to search and analyze accumulated information to speed up improvement of product quality and increase accuracy Overseas base, agent Sales company in Affiliate Product quality Japan information Product quality Hotline information Hotline 6 0 Agri-Implements Dept. Parts Service Dept. Information check Internet Additional description Sales Promotion & Response contents check Marketing Dept. Agri-Plant Dept. Data aggregation Information analysis Analysis, graph Word search Information data Response data Previous information search check Image data Document data 24-hour operation service 2 Product Support Response Automatic graphing Dept. Defect factor
 Recurrence prevention measure Quality Image data Control Information data Search function etc Receipt Dept. Defect block Distributor/part name Information data Machine type/requirements Model **Technical Support** Each & Solution Response data factory Center Response data Information central Each control technology department

# 

If any problem occurred to products used by customers and we find it necessary to take improvement measures, we check and repair the products immediately, giving first priority to the safety of the customer.

When we implement a recall, we give notice and report to the relevant organizations (\*1) and disclose the information on the website of ISEKI CO., LTD. to draw attention of customers and provide them with information.



Notices on reporting of recall are posted on our website. Please visit the following address.

# http://www.iseki.co.jp/english/newsrelease.html

# <Transition of number of recalls over years (\*2)>

FY	2008	2009	2010	2011	2012
Number of recalls	4	2	6	2	3

\*1 Ministry of Land, Infrastructure and Transport, Ministry of Agriculture, Forestry and Fisheries, Ministry of Economy, Trade and Industry, etc.

\*2 Number of recalls reported to the Ministry of Land, Infrastructure and Transport



# Contribution to local communities

# Sociality report

# Support for recovery from the Great East Japan Earthquake >

Due to the "Great East Japan Earthquake" that occurred in March 11, 2011 and the subsequent "nuclear accident", many farming households in the Tohoku (northeast) and Kanto regions have suffered and their farm fields have been polluted by radioactive materials. To recover the polluted fields, the "farmland decontamination measures demonstration project" has been implemented in Fukushima prefecture, in which the Bio-oriented Technology Research Advanced Institution, Japanese Society of Agricultural Machinery and Food Engineers, and agricultural machine manufacturers established an industry-government-academia cooperation to develop decontamination technologies for farmland and establish measures applicable on site.

Iseki Group has participated in such a project and work on support activities proactively for recovery of the devastated areas by experimentally producing a machine that can be operated in contaminated fields based on the TJV85 semi-crawler type tractor and demonstrating it, etc.

### Participation in farmland decontamination seminar in lidate Village, Fukushima Prefecture

On July 19, 2012, a farmland decontamination seminar was held in lidate Village in Fukushima prefecture, and a demonstration of farmland decontamination was made with machines of agricultural machine manufacturers.

Our tractor can reduce the exposure dose of radiation to 50% with the window glass, floor, and ceiling covered with lead plates and can protect the operator from dust of radioactive materials with activated charcoal and hepafilters set on the ceiling.



Decontamination work with TJV85 tractor

# Cultivation support to company that has newly entered agriculture >

NANKAIKOGYO, Inc. that runs a recycling business of consumables for copying machines, etc. at the foot of Ashigara Mountain in Kanagawa prefecture established "NANKAI Farm" in 2009 as a new business, entering agriculture from a totally different business.

From the establishment of NANKAI Farm, Yanagita Iseki Co., Ltd., a member of Iseki Group, has supported them proactively with farming in addition to agricultural machines. Based on such a background, NANKAI Farm requested us to give guidance about "onion growing" and our "Agri-Business Support Department" supported the entire process of onion growing from deep plowing of the onion field, preparation of open ditches and culverts, preparation of soil with soil amendment materials to harvest, resulting in securement of a sufficient yield amount.

With a motto of "contribution to community", NANKAI Farm intends to expand their business, considering that success in agriculture leads to regional vitalization. We promote and support low-cost agriculture that aims at further improvement of efficiency in agriculture, continuously supporting "agriculture with dreams".



Herbicide application and ridge making at the same time



Transplantation of onions by Nauerunana

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# Contribution to local communities

Sociality report

# Approach to revitalization of deserted farmland >

The area of deserted farmland has been increasing in these 20 years. It is reported to be approx. 400,000 ha all over the country. Deserted farmland is especially found in mesomountainous regions mainly because of decrease of successors of agriculture in the regions. It has also caused depopulation and exhaustion there, which is one of the important problems of Japanese agriculture to be solved.

In such circumstances, approaches that aim at revitalization of deserted farmland and regional activation are promoted nationwide as one of the plans promoted by the government to increase the food self-sufficiency ratio. Iseki Group also supports local activities and proactively works on them.

# Support for revitalization of deserted farmland in Wakayama prefecture

Iseki Group has joined in the "Home of companies" system in Wakayama prefecture and conducted supporting activities for resurgence of "hatake-gonbo" in the Nishibata area in a mesomountainous region of Hashimoto-shi, Wakayama prefecture.

The "Home of companies" system is a project of Wakayama prefecture that aims at promotion of local production for local consumption in rural regions and local landscape preservation, etc.

In this Nishibata area, they cultivated thick fragrant burdock roots "hatake-gonbo" as their specialty products during the Edo period (1603-1868), however, cultivation died out at the beginning of the Showa period (1926-1989), because it was done in steep-sided fields of reddish soil and digging work at the time of harvest was very heavy.

In the Nishibata area whose population has been shrinking and deserted farmland has been increasing in recent years, they decided to revive hatake-gonbo after 80 years for regional activation.

Though the revived hahake-bonbo enjoyed a good reputation, harvesting operation was a big challenge for expansion for production. Therefore, we propose revitalization of deserted farmland and power-saving cultivation with a machinery system for solution of challenges of harvesting operation, make a demonstration of cultivation of hatake-gonbo, and establish technologies based on this demonstration, providing support to lead to expansion of production and regional activation.





Change of deserted farmland

# Support for revitalization of deserted farmland in Yamaguchi prefecture



Restoration of rice fields from deserted farmland

As one of local regeneration activities, "Green Co-op Yamaguchi" in Yamaguchi prefecture started a business to produce agricultural products by themselves to provide their union members with safe and secure agricultural products.

For this purpose, they use deserted farmland in the prefecture effectively to restore paddies and challenge cultivation of sticky rice and soybeans. Iseki Group supports them with this restoration of paddies from deserted farmland and provides cultivation techniques.

"Green Co-op Yamaguchi" also has implemented trial cultivation of agricultural products by utilizing deserted farmland so that their profit will be reaped mainly through the new business. The purposes of the trial cultivation are learning of how to prepare soil from deserted farmland, improvement of cultivation techniques of farm producers, and provision of safe and secure agricultural products produced by themselves to union members. Iseki Group gives guidance about revitalization of deserted farmland, sparse rice cultivation, and <sup>Note )</sup> Soybean 300A techniques by utilizing agricultural machines.

Note) "Soybean 300A techniques" are plowing/sowing techniques to avoid moisture damage that is a factor of unstable yield amount (unit crop) per unit area.
 "300" of "300A" means that the yield amount per 10 are is 300kg. "A" means quality A class (1 and 2 classes), aiming at high quality and much yield amount.



# Contribution to local communities

# Sociality report

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In FY2012, the Aso Kumomato Airport Community Development Project was set up and an approach for regional activation was started. Iseki Kyushu Co., Ltd., a member of Iseki Group, supports this approach and has made fields of "sunflowers" and "cosmos" on the east of the airport in cooperation with Aso Kumamoto Airport Community Development Council as the first shot of the project. The company was in charge of tasks such as mowing, tilling, and sowing.

In late August, sunflowers were in full bloom and cosmos flowers were at their peak in early October. Many visitors enjoyed the view. As a company rooted in the community, we support activities of the project.

### <What is Aso Kumamoto Airport Community Development Council>

They intended to fill farmland near the Aso Kumamoto Airport with landscape plants such as "sunflowers" to create a tourism resource in Kumamoto and promote regional activation by encouraging communication within the community and with outside of the community. The council has been established by farmers, and individuals and corporate bodies who agreed this purpose.



Sunflower field

# Support for "Rapport Festival" in Niigata



"Rapport Festival" with community people

Every year, Iseki-Niigata MFG. Co., Ltd. participates in a local cleaning activity led by the community association of 3-chome Nishiohsaki, Sanjo-shi, Niigata prefecture in which the company is located.

After the cleaning work, we have "Rapport Festival" for the residents in the district in our parking space to interact with community people.

• Date: August 25, 2012

• Number of participants: Approx. 250 people

# Support for Ehime Prefecture Children's Exhibit of Invention and Devices

The awards ceremony of the 71st Ehime Prefecture Children's Exhibit of Invention and Devices was held in the first annex to Ehime prefectural government building on October 26, 2012. Also this year, many children in elementary and junior high schools entered this exhibit and 5 special prizes, including Iseki Prize, 10 awards for excellence and 20 awards for effort were given to 35 works in total. We participate in the review of this exhibit and give Iseki Prize every year to help children to improve their motivation for invention. This year, "Rice Washing Water Pot" invented by a fifth grader was selected for Iseki Prize and an award certificate and trophy were given to the inventor.

With this work, you can wash rice in a sieve set in a water pot. After that you can remove the sieve, set a lid, and give the used water to flowers. This is an environmentally-friendly work, allowing you to use water effectively.



Iseki Prize winner "Rice Washing Water Pot"

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# Eco vision

Iseki Group has determined the direction that can be the base of our "Eco vision: Green Circle", and the words, "Environmental concept", "Basic environmental policy", and "Environmental conduct guidelines", best explain our principles. We promote these concepts across the group.

# [Green Circle]

\*1:3A is The management on the Axis of Agriculture and Agricultural machine (3A) "Business Management with Agriculture and Agricultural Machinery as its key"



Iseki Group has walked together with Agriculture since its establishment. Based on our managerial creed, "Management on the Axis (3A) of Agriculture and Agricultural machines", we promote environmental preservation activities with harmony between nature and society.

#### [Environmental conduct guidelines] [Environmental concept] "Agriculture and Agricultural machines" are the axes of 1. Development activities considering environment our management and we contribute to the formation of a Recycling and reduction of noise, vibration, fuel consumption, continuously growing society through activities for emission das, and environmental stress substances 2. Environment-friendly manufacturing activities harmonizing nature, society, and business entities. Prevention of (air, water, noise, and vibration) pollution, energy-[Basic environmental policy] saving, resource-saving, and purchasing green 1. Maintain environmental management system and its 3. Office activities considering environment functional applications Energy-saving and resource-saving 2. Reducing elements of our business activities and 4. Distribution and logistics considering environment products which may be causing stress on the Improvement of transportation (packing material, more efficient environment transportation), disposal 3. Compliance with environmental laws, regulations, 5. Development of biodiversity and standards Promotion of tree-planting activities of Iseki Group 4. Environmental education and information disclosure 6. Environmental education and information disclosure Environmental education to be offered to employees, participation in social activities and information disclosure

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# **Outline of management**

Environmental management

We deploy our approaches to develop the recycling-oriented and Low-Carbon society and biodiversity within all of our group companies.

### (Promotional scheme)

According to the environment management system, Iseki Group promotes environmental preservation activities through the entire cycle of product development, manufacturing, logistics and disposal, aiming to develop a recycling-oriented and Low-Carbon society and to preserve biodiversity.

### (Environmental planning group meeting)

The Environmental Planning Group Meeting deploys environmental targets and action plans decided in the Directors' Operation Committee to each district and manages the progress of such plans.

### (Environment committee)

With the CEO as Chairman, the Directors' Operation Committee deliberates and determines Iseki Group's basic policies regarding the environment, as well as the accommodation of management targets, action plans, and corrective actions for critical environment issues submitted by the Environmental Planning Group Meeting.

# (Environment management system employed in each district)

An Executive Officer responsible to promote the environmental management activities and an Environmental Manager are assigned to Tokyo, Matsuyama (Tobe), Matsuyama (Wake), Kumamoto, Niigata and sales subsidiaries. They are responsible for the determination of policies, deployment of action plans and management of progress in each district according to the environment management system.



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# Second mid-term and long-term environmental targets and results of FY2012

Environmental management

Iseki Group has defined the second mid-term and long-term environmental targets from FY2011 to 2015 and work on them. Hereby, we report on the results of our major activities of FY2012.

# 1. Second mid-term and long-term environmental targets and accomplishments in FY2012

Item	m Second mid-term and long-term environmental targets		Accomplishments in FY2011	Evaluation	Relevant pages
Realization emissi	Reduction of CO <sub>2</sub> emissions	To reduce the volume of energy- generated CO <sub>2</sub> emissions per production volume by 4% or more compared to the average result of three years from FY2008 to FY2010	The achievement rates of the total volume of $CO_2$ emissions and the volume of $CO_2$ per production volume were 100% and 96% respectively against the second mid-term and long-term environmental target, falling short of the goal. We will continuously strive to reduce the volume of $CO_2$ emissions by replacing facilities with energy-saving ones.		22
of a low-carbon on society	Reduction of logistics CO <sup>2</sup> emissions	To reduce the volume of energy- generated CO <sub>2</sub> emissions per transportation volume (10,000ton-km) by 2% or more compared to the average result of three years from FY2008 to FY2010	The achievement rate of the volume of $CO_2$ emissions per transportation volume was 102% against the second mid-term and long-term environmental target. We will continuously strive to reduce the volume of $CO_2$ emissions by promoting modal shift.	0	22
Formation of orientec	Reduction of volume of final wastes	To reduce the volume of final wastes per production volume by 10% or more compared to the average result of three years from FY2008 to FY2010	The achievement rates of the total volume of final wastes and the volume per production volume were 52% and 49% respectively, significantly falling short of the goal. This is because we conducted landfill operation due to closure of the recycling company of molding sand and delay of selection of a new recycling company. We will continuously strive for reduction.	×	24
f a recycling- t society	Reduction of volume of water used	To reduce the volume of water used per production volume by 28% or more compared to the average result of three years from FY2008 to FY2010	The achievement rates of the total volume of water used and the volume of water used per production volume were 91% and 86% respectively against the second mid-term and long-term environment target, falling short of the goal. We will continuously strive for reduction by repairing water piping etc.		23
Restraint of toxic chemical substances	Reduction of used volume of chemical substances subject to PRTR law	To reduce the used volume of chemical substances subject to the PRTR law per production volume by 8% or more compared to the average result of three years from FY2008 to FY2010	The achievement rates of the total volume of use of chemical substances subject to the PRTR law and the used volume per production volume were 89% and 85% respectively against the second mid-term and long-term environmental target, falling short of the goal. We will continuously strive for reduction by promoting change to paint and thinner with less chemical substances subject to the PRTR law and regeneration of thinner, etc.		23
Restraint of manufacturing resource	Reduction of total material input	To reduce the total volume of materials input per production volume by 2% or more compared to the average result of three years from FY2008 to FY2010	The achievement rates of the total volume of materials used for production and the volume of materials used for production per production volume were 118% and 112% respectively against the second mid-term and long-term environmental target, achieving the goal. We will continuously strive for reduction.	0	22

# 2. Mid-term and long-term targets of business activities and results of FY2012

Classification	Item to be implemented	Accomplishments in FY2011	Evaluation	pages
	<ol> <li>Quality improvement of environmental management system</li> </ol>	According to the environment management systems of ISO14001 and EA-21, we prepared action plans by making use of the characteristics of each department to improve the quality of activities.	0	16
nvironmental nanagement	(2) Implementation of environmental education	We specified and promoted environmental education of the year based on the policy of each general manager.	0	30
	(3) Environmental communication and contribution to society	We promoted cleaning activities of roads around offices in cooperation of local communities. We also participated in tree-planting activities as one of our actions for prevention of global warming and preservation of biodiversity.	0	31
P	(1) Development of products in consideration of biodiversity	We promoted development of products in consideration of biodiversity and formation of a recycling-oriented society.	0	25
	(2) Development of products to reduce environmental stresses	We promoted development of products to reduce environmental stresses by improving the durability, fuel and working efficiencies, etc. with use of the product assessment system.	0	26
oduct dev and se	(3) Prohibition, reduction and restraint of use of toxic substances included in procured parts	We promoted grasp, reduction and abolition of toxic substances according to our green purchase standard in cooperation with our suppliers.	0	29
evelopment	(4) Establishment and expansion of product assessments and execution of LCA evaluation	We promoted environment-conscious designing that allows grasp of the volume of CO <sub>2</sub> emissions in the entire cycle from parts manufacturing to disposal, etc. by executing product assessments and LCA evaluation.	0	26
	(5) Provision of information contributing to environmentalpreservation	On product manuals, we properly described cautions for using the products and failure diagnosis, as well as cautions for disposing the product from the view points of environment, safety and health.	0	26

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# Environmental accounting

# **Environmental report**

The FY2012 is the eighth year since lseki Group employed the environmental accounting system. We deal with the use of aggregated costs of investment and expenses used for the environmental preservation activities for our management decisions relevant to environmental preservation, as well as for a guideline of evaluation of business concerning contribution to society. The amount invested for environmental preservation costs (pollution prevention, environmental preservation, and resource recycling costs) in FY2012 was 107 million JPY. The total amount of expenses was 437.7 million JPY that we made through some investments into diesel engine emission gas and improvement of fuel efficiency, mainly for prevention of air pollution to comply with the laws and regulations of Europe, U.S, and Japan.

Environment preservation cost							
	Category	Major programs	Amount of investment (in mil. JPY)	Expenses (in mil. JPY)			
(1)	Cost spent in the business area		92.8	94.7			
Bre	(1) Pollution prevention cost	Sewage treatment	30.2	31.6			
akdo	(2) Environment preservation cost	Inverter installation	62.6	1.6			
own	(3) Resource recycling cost	Waste treatment	0.0	61.5			
(2)	Cost required at previous and later stages	Green purchasing	0.0	20.9			
(3)	Control activity cost	Maintenance of environment management system	0.4	48.8			
(4)	Research and development cost	Corresponding to emission gas regulation	13.8	268.5			
(5)	Community activity cost	Cleaning activity in the district	0.0	4.8			
(6)	Environment recovery cost		0.0	0.0			
	Total		107.0	437.7			

Economic effects resulted from the environment preservation measures					
Details of effect Amount (in mil. JP)					
(1)	Reduction of volume of various resources to be consumed	0.8			
(2)	Reduction of environmental stress substances	32.8			
(3)	Reduction of energy consumption	1.2			
	Total	34.8			

The economic effect resulting from the environment preservation measures, such as recycling of wastes, streamlining of painting methods, use of energy-saving machines, use of processing machines equipped with inverters and appropriate control and operation of boilers, was 34,800,000 JPY. The physical effect was the reduction of CO<sub>2</sub> emission by 2,442 tons, reduction of water consumption by 32,789 tons, and recycling of wastes by 3,278 tons.

Scope of aggregation : (Iseki-Matsuyama, Iseki-Kumamoto, Iseki-Niigata, and Iseki-Houei MFG. Co., Ltd. and tobe office) Period of data : April, 2012 to March, 2013

# Environmental risk management

# **Environmental report**

# [Actions to comply with Antipollution Laws]

### (Establishment of self-directed standards and management in the company)

4 local factories of Iseki Group set up and applied more stringent self-directed control standards than those described in the environment-related laws and regulations. As shown in the table below, we have cleared all the self-directed control standards in FY2012, making progress toward reduction of environmental pollution.

			Iseki-Matsuy	ama & Iseki-Houe	i MFG. Co., Ltd.	FG. Co., Ltd. Iseki-Kumamoto MFG. Co., Ltd. Iseki-Niigata MF			viigata MFG.	Co., Ltd.	
	Measured item	Units	Regulatory standards	Self-directed control standards	Result in 2012	Regulatory standards	Self-directed control standards	Result in 2012	Regulatory standards	Self-directed control standards	Result in 2012
Water quality Nolume of biochemical oxygen demand (B n-hexane (Mineral oil)	Volume of suspended substances (SS)	~~~/l	600 (Note 1)	500	9	200	40	4.0	90	45	3.0
	Volume of biochemical oxygen demand (BOD)	IIIg/L	600 (Note 2)	500	4.4	25	8	Less than 1	60	30	9.6
	n-hexane (Mineral oil)	ppm	5	4	Less than 1	5.0	2.4	Less than 0.5	5.0	5.0	2.0
	Particulate	g/m₃N	0.30	0.18	Less than 0.01	0.30	0.08	Less than 0.01	0.20	0.10	0.01
Air	Nitrogen oxide (NOx)	ppm	260	91	72	250	200	14	230	50	16
	Particulate (electric casting melt furnace)	g/m₃N	0.10	0.08	Less than 0.01	—	-	—	-	—	-

- : shows standard N/A or not applicable machines (Note 1)(Note 2): With the expanded sewerage works implemented by Matsuyama city in FY2008 and afterward, the regulated value of water discharge to the synthetic effluent treatment outfall has been raised from 160mg/L to 600mg/L, however, the self-directed control standard of Iseki-Matsuyama MFG. Co., Ltd. and Iseki-Houei MFG. Co., Ltd is 500mg/L , because industrial effluent is mixed. The measured values are as shown above

# (Frequency of environment data measurement)

Madding and includes	Manager 124 and	Measuring frequency				
Machine, equipment, and place	Measured Item	Iseki-Matsuyama & Iseki-Houei MFG. Co., Ltd.	Iseki-Kumamoto MFG. Co., Ltd.	Iseki-Niigata MFG. Co., Ltd.		
Industrial effluent	Water quality	Once a year	Once a year	Once a month		
Casting melt furnace	Δir	Twice a year	-	-		
Boiler		Twice a year	Twice a year	Twice a year		
Let beerder line	Noise	Twice a year	Once a year	Once a year		
Lot boarder line	Vibration	Twice a year	-	_		

-: shows standard N/A or not applicable machines

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# Business activities and environmental stresses

**Environmental report** 

# [Eco balance]

Iseki Group uses materials such as fuel, electricity, water and other raw materials in the process of production, and discharges chemical substances and industrial wastes subject to laws related to carbon dioxide (CO<sub>2</sub>) and PRTR law.

We always check the volume of materials used for production (INPUT) and discharged volume of chemical substances and industrial wastes (OUTPUT) as an index in reducing discharge of such chemical substances and industrial wastes for realizing business activities with less environmental stresses. The following shows figures of undertakings for 2012.



# [ECO-efficiency]

It is important to improve eco-efficiency to realize a sustainable society. Eco-efficiency is presented as a value calculated by subtracting environmental stresses from the value of a product or service. On the other hand, we defined "eco-efficiency = production volume ÷ environmental stresses" and evaluated eco-efficiency with the eco-efficiency index and environmental stress integrated index. This means eco-efficiency increases as the production volume increases or environmental stresses decrease.

In FY2009 and 2012, the production volume of four factories has significantly decreased compared to the reference year FY2005. We have been continuously taking actions to reduce environmental stresses and achieved improved eco-efficiency of 109 and environmental stress integrated index of 79 in FY2012 compared to the index of 109 in the reference year FY2005.

# [Eco-efficiency index: the higher the more efficient]

Our eco-efficiency is presented as a value calculated by subtracting the environmental stress integrated index of our four factories from the production volume of the four factories. The environmental stresses have three items integrated; volume of CO<sup>2</sup> emissions, volumes of non-methane VOC emissions and displacement and volume of landfilled wastes.

# [Environmental stress integrated index:

the lower the index is, the smaller environmental stresses are ] Based on the Panel Method of Professor Nagata at Waseda University, we adopted the average value of the integration coefficients for Japan presented by LCA experts, environmental experts and enterprise experts for integration of environmental stresses, with the value of CO<sub>2</sub> defined as 1.

1	Integration	20	05	20			
Item	coefficient	Actual value (t)	Integrated value	Actual value (t)	Integrated value		
Volume of CO <sup>2</sup> emissions	1	34,600	34,600	28,000	28,000	(Index)	
Volume of non-methane VOC emissions and displacement	239	174	41,500	143	34,100	120	
Volume of landfilled wastes	3	2,750	8,260	1,380	4,150	100 -	
Total of environmental stress integrated values		-	84,300	-	66,200		
Eco-efficiency		-	83.3	-	90.8	80 -	
Environmental stress integrated index (2005 as reference year)		_	100	_	78.5		
Eco-efficiency in	idex	-	100	-	109		



Environmental stress integrated index



Eco-efficiency index

Trend of eco-efficient index and environmental stress integrated index (100 in FY2005)

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# Control to inhibit emission of greenhouse gas

# Environmental report

# Approach to reduction of electrical usage by using highly-efficient lighting>

Iseki-Matsuyama MFG. Co., Ltd. replaced the conventional night lighting installed in the outdoor passages in the factory with energy-saving fluorescent mercury lamps (Neocera 200W lamps) with higher energy efficiency to promote energy saving. We could use the existing mercury lamp stabilizers as they were and realized high efficiency, high color rendering, and long lifetime while reducing the installation cost. We have replaced lighting in 28 positions in the entire factory, which also helped to improve security.

#### [Reduction results in FY2012]

- Reduction of electrical usage: Approx. 16,000kWh/year
- Reduction of electricity charges: Approx. 131,000 yen/year
- Reduction of CO2 volume: Approx. 5,350kg-CO2/year



When a mercury lamp 400W is replaced with [HL-Neocera 2] 200W



\*If a 200W lamp is replaced with a mercury lamp 400W, the light flux of the lifetime is reduced by approx. 13% (calculated value).

# (Approach to reduction of CO<sup>2</sup> emissions by introducing LED lighting and highly-efficient air conditioners)

Iseki-Kumamoto MFG. Co., Ltd. set an intensive "guest corner" for meetings with our customers and suppliers on the first floor of the head office to improve information security and space saving of each office. At that time, we replaced decrepit lighting and air conditioners with LED lighting and highly-efficient air conditioners. In addition, we attached light-blocking films on every glass window to significantly cut heat rays and ultraviolet rays. We will continuously promote prevention of global warming and energy saving by replacing inefficient equipment.

### [Reduction results in FY2012]

- Reduction of electrical usage: Approx. 18,000kWh/year
- Reduction of electricity charges: Approx. 116,000 yen/year
- Reduction of CO<sub>2</sub> volume: Approx. 9,300kg-CO<sub>2</sub>/year



Guest corner



# Control to inhibit emission of greenhouse gas

**Environmental report** 

# Approach to reduction of electrical usage by introducing energy-saving lamps>

Tobe Office replaced the mercury lamps of the combine zone lighting of the experiment building to longer-lasting energy-saving lamps (electrodeless lamps - eneBright) to reduce the electrical usage.



- Reduction of electrical usage: Approx. 552kWh/year
- Reduction of electricity charges: Approx. 183,000 yen/year
- Reduction of CO<sub>2</sub> volume: Approx. 305kg-CO<sub>2</sub>/year (Calculated with 7h/day × annual operating days)





### (Approach to reduction of electrical usage by replacing air conditioner in three-dimensional measuring room)

Iseki-Hoei MFG. Co., Ltd. has a three-dimensional measuring room where precision parts such as mission cases are measured after machine processing. It is a thermostatic chamber that is stable in 24 hours to secure stable accuracy of instruments. The air conditioner with which we replaced this time was an energy-saving type with a high-performance DC fan motor and could significantly reduce electrical usage.

### [Reduction results in FY2012]

- Reduction of electrical usage: Approx. 6,700kWh/year
- Reduction of electricity charges: Approx. 80,000 yen/year
- Reduction of CO<sub>2</sub> volume: Approx. 3,700kg-CO<sub>2</sub>/year



Power saving is realized with a high-performance DC fan motor installed on the turbo fan.

APF value by ability

All models of HyperInverter comply with the energy-saving standards in 2015





Three-dimensional measuring room

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# Preventing global warming

# Environmental report

# [Reduction of energy use in the factories]

The four factories of Iseki Group promote reduction in consumption of electricity and fuel required for production activities in the factories, by realizing the efficient operation of all machines and facilities, and by replacing existing machine and equipment with energy-saving type ones.

We have established and promoted the second new mid-term and long-term plan (from FY2011 to FY2015) with the average of three years, from FY2008 to FY2010, as a reference value. In FY2012, the achievement rates of the total volume of  $CO_2$  emissions and the volume of  $CO_2$  per production volume were 100% and 96.9% respectively against the reduction target of 4%/year, falling short of the goal. We will continuously strive to reduce the volume of  $CO_2$ emissions. Volume of CO<sub>2</sub> emissions resulted by using energy at 4 factories

	1997	2008	2009	2010	Average of results of 3 years	_	2011	2012
Total volumo						Target	28,600	28,000
	34,500	29,800	28,600	29,300	29,200	Result	29,600	28,000
(1-002)						Achievement rate	97%	100%
Per production volume						Target	45.4	44.4
$(t C \Omega_2 / 100 \text{ million yon})$	50.0	43.3	47.2	48.4	46.3	Result	49.2	46.5
						Achievement rate	92%	96%



# [Reduction of energy use in product distribution]

We grasp the environmental stresses in distribution of lseki products and parts and take actions to reduce them.

In FY2006, we became a specified shipper because the  $CO_2$  emissions slightly exceeded 30 million ton-km. After that, the emissions have been varying slightly under 30 million ton-km.

We have promoted modal shift and contributed to reduction of the total volume of  $CO_2$  emissions, however, the modal shift rate has been flat since FY2009.

Volume of CO2 emissions in product distribution

	2008	2009	2010	2011	2012
10,000ton-km	2,990	2,920	2,980	2,790	2,800
Total volume (t-CO2)	4,740	3,920	4,180	3,780	3,870
Rate (t-CO2/10,000ton-km)	1.59	1.34	1.40	1.35	1.38
Modal shift rate	31%	46%	43%	44%	46%

Note) Modal shift rate = (railway ton-km + sea freight ton-km) ÷ total ton-km

# Reducing total material input

The four factories of Iseki Group reduce total material input such as raw materials, production supporting materials, purchasing parts, etc. to promote energy saving activities.

We have established and promoted the second new mid-term and long-term plan (from FY2011 to FY2015) with the average of three years, from FY2008 to FY2010, as a reference value. In FY2012, the achievement rates of the total volume of materials used for production and the volume of materials used per production volume were 118% and 112% respectively against the reduction target of 2%/year, exceeding the goal substantially.

We will continuously strive to reduce the total volume of materials used for production.

### Total volume of materials used at 4 factories

	2005	2008	2009	2010	Average of results of 3 years	_	2011	2012
Total valuma						Target	59,600	59,000
(top)	72,100	66,000	56,900	57,600	60,200	Result	48,300	50,000
(ton)						Achievement rate	123%	118%
Dor production volume						Target	94.1	93.2
(ton/100 million yon)	103	96.1	93.9	95.2	95.1	Result	80.2	83.2
(IOUN TOO HUMBOLL YELL)						Achievement rate	117%	112%



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Total volume of materials used for production <sup>120</sup>
(in per production volume)



# **Environmental report**

# Reduction of volume of water used

Volume of water used at 4 factories

According to the installation of the water circulation facility and implementation of countermeasures for water leakage, the four factories of Iseki Group strive to reduce the volume of water used.

We have established and promoted the second new mid-term and long-term plan (from FY2011 to FY2015) with the average of three years, from FY2008 to FY2010, as a reference value. In FY2012, the achievement rates of the total volume of water used and the volume of water used per production volume were 91% and 86% respectively against the reduction target of 28%/year, falling short of the goal.

Water shortage is becoming a more serious issue than food shortage or exhaustion of fossil fuels with the population growth expected in the future. We will continuously strive to reduce water usage.

Average of 1997 2008 2009 2010 \_ 2011 2012 esults of 3 years Target 26.9 32.2 Total volume 34.2 35.5 Result 31.8 297 582 424 374 (Unit: 10,000ton) Achievement rate 101% 91% Target 507 425 Per production volume 844 617 565 588 590 Result 529 493 (ton/100 million yen) Achievement rate 96% 86%



# Optimal control and reduction of use of chemical substances

# [Optimal control of use of chemical substances]

The four factories of Iseki Group strive to reduce chemical substances subjected to PRTR law by replacing paint with one which contains less toxic chemical substances stipulated and introducing regeneration facilities of paint thinner.

We have established and promoted the second new mid-term and long-term plan (from FY2011 to FY2015) with the average of three years, from FY2008 to FY2010, as a reference value. In FY2012, the achievement rates of the total volume of use and the used volume per production volume were 89% and 85% respectively against the reduction target of 8%/year, falling short of the goal.

We will continuously strive to perform appropriate control and management of such chemical substance and reduce the volume of use.

Volume of use of chemical substances controlled by PRTR law at 4 factories Average of 2001 2008 2009 2010 2011 2012 esults of 3 years

Total volumo						Target	147	141
(top)	157	165	145	149	153	Result	153	157
(1011)						Achievement rate	96%	89%
Dor production volume						Target	0.232	0.222
(ton/100 million von)	0.277	0.240	0.240	0.245	0.242	Result	0.254	0.262
(ton/ roo minion yen)						Achievement rate	91%	85%
Volume of		Volume of water u	sed					
<sup>200</sup>					0.5	(in per production	volume)	
150 -					0.4			
					0.3-			



(unit : ton)

2009 2010 2011 2012

[Volume of use of substances controlled by PRTR law]

			2001					2011					2012		
	Matsuyama	Kumamoto	Niigata	Houei	Total	Matsuyama	Kumamoto	Niigata	Houei	Total	Matsuyama	Kumamoto	Niigata	Houei	Total
Xylene	20.1	26.7	13.9	6.50	67.2	35.3	23.6	10.2	0.14	69.2	31.9	27.8	12.9	0.17	72.8
Toluene	13.4	4.71	8.54	1.00	27.7	18.1	2.15	4.57	0.18	25.0	18.2	2.72	5.12	0.17	26.2
Ethyl benzene	16.8	14.7	9.09	0.00	40.6	33.0	12.1	8.72	0.04	53.8	30.4	13.0	10.4	0.07	53.8
Water-soluble zinc compound	0.00	1.21	0.00	3.20	4.41	0.33	2.44	0.26	0.00	3.03	0.38	2.41	0.28	0.00	3.07
Dichloromethane	13.0	0.00	2.42	0.00	15.4	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.01	0.00	0.01
1, 3, 5-Trimethylbenzen	0.75	0.00	1.41	0.00	2.16	1.32	0.37	0.27	0.00	1.96	1.10	0.21	0.30	0.00	1.61
Total	64.1	47.3	35.4	10.7	157	88.0	40.6	24.1	0.37	153	82.0	46.1	28.9	0.41	157

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# **3R of production processes**

# Environmental report

# [Reduction of wastes]

To build a recycling-oriented society, four factories of Iseki Group have been contributing to an effective usage of their wastes by promoting restriction of wastes, reuse and recycling.

We have established and promoted the second new mid-term and long-term plan (from FY2011 to FY2015) with the average of three years, from FY2008 to FY2010, as a reference value.

In FY2012, the achievement rates of the total volume of final wastes and the volume of final wastes per production volume were 52% and 49% respectively against the reduction target of 10%/year, significantly falling short of the goal. This is because we conducted landfill operation due to closure of the recycling company of molding sand and delay of selection of a new recycling company. We will continuously strive for reduction of the total volume of final wastes.

Total volume of wastes at 4 factories

		1997	2008	2009	2010	Average of results of 3 years	-	2011	2012
	Total volume (t)	11,900	10,400	8,990	9,390	-	—	10,100	9,670
Wastes	Per production volume (t/100 million yen)	17.3	15.1	14.8	15.5	-	-	16.8	16.1
			754	859		4 796	Target	756	716
	Total volume (t)	4,390			774		Result	430	1,380
Volume of							Achievement rate	176%	52%
final wastes							Target	1.20	1.14
	Per production volume (t/100 million ven)	6.36	1.10	1.42	1.28	3 1.26	Result	0.72	2.30
	(1/100 million yen)						Achievement rate	168%	49%
Reduction v	Reduction volume (t)		571	483	553	-	—	572	1,044
Recycled volume of wastes (t)		6,270	9,050	7,650	8,060	-	_	9,100	7,240
Rate of final wastes (%)		37	7.3	9.6	8.2	-	_	4.3	14
Rate of recy	cling (%)	53	87	85	86	-	_	90	75



Volume of final wastes (in per production volume)



# Waste disposal flow

The waste disposal flow in FY2012 is as shown below. The rate of final waste was 14% and the rate of recycled volume was 75% which were greatly improved from the reference year 1997 but significantly decreased compared with the last year. As described above, closure of the recycling company of molding sand affected the results significantly. In accordance with the operations of the four factories, we will continue to promote restraint, thorough segregation and recycling of wastes, and reduction of final volume, aiming at zero emission (our standard: the rate of the final volume of wastes against the total volume of wastes shall be less than 1%).



Note1) The reduction volume, the recycling volume after treatment and the volume of final wastes after treatment associated with the intermediate treatment are the results of investigation to the subcontractor of waste disposal.
 Note2) Rate of the volume of final wastes = volume of final wastes (D+H) ÷ total of waste emissions (A)
 Note3) Rate of the recycling volume = recycling volume (B+G) ÷ total of waste emissions (A)

Environmental Report 2013 by ISEKI & CO., LTD.	
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# Approach to preserve biodiversity

# **Environmental report**

Iseki Group regards the approach to preserve biodiversity as an important challenge in environmental management, while recognizing that we benefit from blessings of nature produced by biodiversity (ecological system service) and strives to realize a sustainable society co-existing with nature.

# Approaches that we have taken for preservation of biodiversity >

Since its foundation in 1926, Iseki has provided safe and easy-to-use agricultural machines and facilities and strived to preserve biodiversity by supporting approaches to sustainable Japanese agriculture and preservation of natural environment such as farmland and rivers.

# <Approaches that we have taken for preservation of biodiversity>

- (1) We provide easy-to-use, high-performance, environment-friendly agricultural machines that have excellent energy-saving performance.
- (2) We provide agricultural machines and facilities that reduce use of fertilizer and sterilization harmful to living organisms and control them properly.
  - (Examples) Riding tillers for highly-efficient sterilization
    - Boom tablers (granular chemical applicator) that spread chemical fertilizer properly
    - Inside ridge processors
    - Warm water sterilization treatment machines for seed rice treatment
    - Promotion of use of indigenous bees for greenhouse cultivation
    - Hydroponics aiming at pesticide-free production
- (3) We issue "Farm Love-land News" that introduces a wide range of proposals and approaches for low-cost agriculture such as sparse planting cultivation for rice planting and provide positive information to our farmhouse customers.
- (4) As a promotion partner of "FOOD ACTION NIPPON", Iseki Group develops activities to increase the food self-sufficiency ratio with themes of "local production for local consumption", "low-cost agriculture", and "food in the future".
- (5) We promote prohibition/reduction of use of harmful substances in environmentfriendly designing.



Eco-Unemaze-kun



Sparse planting cultivation



In Central Park



Matsuyama outer circumferential road

### Approach to reduction of fertilizer usage >

For an approach to biodiversity, we promote growth of forests as biodiverse habitats. Iseki joins in with "Promotion Group of 'Town Development with Forests'" led by Iyo Bank, Ltd. of Ehime prefecture and participates in tree-planting ceremonies held in various locations.

<Matsuyama Bicycle Racetrack in Central Park>

- Date: November 11, 2012
- Participants: 29 groups, approx. 400 persons
- Tree planting: Approx. 1,500 plants of 9 kinds of evergreen broad-leaved trees such as camellia hiemalis
- <Joint tree-planting ceremony on Matsuyama outer circumferential road>

  Date: March 24, 2013
  - Participants: 26 groups, approx. 500 persons
  - Tree planting: Camellia hiemalis, Rhaphiolepis umbellata, approx. 6,000 plants

"Promotion Group of 'Town Development with Forests" (started from August 2010) carries out tree-planting activities in company-owned land and public land in the town, aiming to plant 50,000 trees by three years later to "grow real forests near ourselves to leave an environment for healthy growth of children to the next generation", with companies in the center that are working on preservation of local natural environment.

Environmental Report 2013 by ISEKI & CO., LTD.	
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Approach to design for environment

# Environmental report

# Approach of eco-product certification system >

# <Eco-product certification system>

From November 1, 2011, Iseki set its own environment-friendly design standard and started to implement "eco-product certification system" in which environmental labels are used only for products that have passed the standard.

This "eco-system certification system" is intended to evaluate the compatibility of products with environmental preservation in our standard and provide information on reduced environmental stresses of the certified products to customers and all stake holders more plainly.

We also utilize it as an index or guideline to further promote environment-friendly design in in-house product development.

\*Among the environmental labels specified by International Organization for Standardization (ISO), our environmental labels comply with "Type II environmental label" for self-declaration of environmental friendliness of the product based on the business operator's own standard.

### <Certification standard>

We evaluate the compatibility of our products with environmental preservation with our own evaluation indexes. Products that have passed the in-house standard are certified as eco-products.

In addition, products are certified either as "super eco-products" or "eco-products" according to the level of environmental friendliness.

### <Certification labels>

The certification labels of eco-products have a mark and description of environmental performance that are presented on the product catalogue, operation manuals, etc.

### <Evaluation item>

- 1. Weight reduction of product
- 2. Restraint of use of harmful environmentally hazardous substances
- 3. Easiness of maintenance and inspection
- 4. Reduction of environmental stresses in use
- 5. Improvement of recyclability
- 6. Reduction of environmental stresses in manufacturing stage
- 7. Reduction of environmental stresses in logistics of product
- 8. LCA (life cycle assessment)
- 9. Disclosure of information on product usage (communication)
- 10. Noteworthy function

The ten items above are further divided into detailed items to be evaluated with score respectively. Comprehensive evaluation is made with the total score of improvement.

#### <Certified eco-products>

Subject pro	oduct	Rank of eco-product	Major improvement
Combine harvester	HFC330/433	Eco-product	Our standard LCA (calculated value of CO <sub>2</sub> emissions of the entire cycle from production to disposal) has been improved compared with that of our conventional model
<b>Dryer</b> GML25H/30H/ 35H/40H/45H		Super eco-product	Energy-saving performance has been realized with a heat recycling mechanism installed (only H type)
Electrical mini cultivator	KDC20 VAB235	Super eco-product	Gas emissions have been reduced to zero by changing from conventional engine drive to motor drive

Environmental Report 2013 by [SEK] & CO., LTD.	
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# Approach to design for environment

**Environmental report** 

# < Approach of NTA tractor series >

To reduce emissions of carbon dioxide (CO<sub>2</sub>), promotion/enlightenment activities of energy-saving agricultural machines are in progress. For example, the Ministry of Agriculture, Forestry and Fisheries has prepared "Energy saving manual for agricultural machines". We developed the new model tractor NTA series as products that can contribute to energy saving and reduction of environmental burdens with a function to display the workload status of the tractor on the monitor that allows the operator to easily select efficient work.

# **Embedded Green Navi**

NTA tractors have an embedded "Green Navi" function that displays the workload status of the tractor on the color LC monitor "Multi-eye" to show the work/operation statuses of the tractor.

"Green Navi" allows the operator to grasp the status of engine load with lighting status of the five "green marks". The operator can select energy-saving operation by adjusting the traveling speed and engine speed so that "Green Navi" should display the optimal work efficiency.



NTA35 (specification with high speed)

# **Energy-saving effect**

In cultivation work with a tractor, fuel consumption can be reduced by energy-saving operations such as decreasing of the engine speed or decreasing of the engine speed with increased traveling speed under a working condition where the engine has enough power.

"Energy Saving Manual for Agricultural Machines" introduces cases of reduction by 15 to 30%.

In the past, energy-saving operations required experiences and instincts. However, "Green Navi" allows anyone to select an efficient energy-saving operation, contributing to low-cost agriculture.

### **Dual clutch transmission**

The NTA tractors (specification with high speed) employ a dual clutch transmission with 32-speed forward-reverse shift that allows you to change gears with no clutch operation. Since it has a number of speeds, you can finely select a more efficient operating speed, which is an energy-saving operation utilizing "Green Navi". In addition, you can shift gears easily also during the operation.





Multi-eye screen

Display status of green marks



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Environmental report

# $\langle$ Approach of multi-crop combine harvester HC758 for China $\rangle$

In the Chinese market, a multi-crop combine harvester that can perform harvesting operation of rapeseed in addition to those of rice/wheat was required. Also, improvement of crop adaptability was required for harvesting operation. We have developed a multi-crop combine harvester HC758 for China to respond to such requests, considering environment-friendly designing such as reduction of number of parts.

# Improvement of crop adaptability

With the multi-crop combine harvester HC758 for China, we have improved crop adaptability by installing the following two new mechanisms.

- (1) Threshing drum with bars: A mechanism with round bars arranged on the surface of the threshing drum to reduce load and loss
- (2) Stalk dividing vertical cutter: A mechanism with a stalk dividing vertical cutter attached to the reaping section to cut rape and divide stalks simultaneously so that a cluster of rape can be continuously reaped



Multi-crop combine harvester HC758



# **Reduction of number of parts**

We reduced the number of parts greatly by unifying and simplifying parts and narrowing down functions. Compared with the domestic soybean combine harvester HC380, the number of parts was reduced by 48%.



<Reduction of number of parts>



 Environmental Report 2013 by ISEKI & CO., LTD.	
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# Green purchase / Green supply

# **Environmental report**

# 

We promote green purchase to prioritize products with environmental labels such as eco marks and GPN (Green Purchase Network)\* standard products when purchasing commercialized commodities such as office supplies and electric and electronic devices. The total amount of green purchase of entire Iseki Group was 93% of the total purchase in FY2012.





# ⟨ Green supply >

We evaluate our suppliers and vendors based on our green purchase standard. We jointly promote increase of green purchase for environmental preservation and building of a sustainable resource recycling society.

<Criteria of green purchase>

- Certifications such as ISO14001, EA-21, etc. are acquired.
- Voluntary and progressive environmental approaches complying with Iseki Green Purchase Guideline are promoted.

In FY2012, the green purchase ratio was 59% of the total number of vendors and suppliers and the amount of green purchase from these suppliers and vendors was 78%. Iseki will strive to encourage our suppliers and vendors to acquire the certification of EMS in the future so as to increase the ratio of our green purchase.



# Support for solar radio control car race and utilization of green electricity >



Since 2010, Iseki has supported the "solar radio control car endurance race" that is the only one in Japan and has been held in the multipurpose athletic field in the Central Park in Bochan Stadium in August every year since 2009 by Matsuyama-shi for the purpose of utilization of solar energy to promote proactive introduction of solar power generation and industries related to solar power. We also contribute to reduction of environmental burdens by purchasing green electricity certificates.





### <Supporting companies>

ISEKI & CO., LTD., IYO RAILWAY CO., LTD., STNet, Inc., EHIME BANK LTD., EHIME NISSAN MOTOR CO., LTD., Matsuyama Branch of YONDEN Shikoku Electric Power CO., Inc., SEKI Co., LTD., Ehime Branch of SEKISUI HOUSE, LTD., DAIKI AXIS CO., LTD., EHIME Photovoltaic, Ehime Branch of Daiwa House Industry Co., Ltd., FUJIKEN ENGINEERING CO., LTD., Fujisaki Electric Co., Ltd, Fujihira Co., Ltd.

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# Education and training for environment / Qualified persons

# **Environmental report**

# Approach to systematic environmental education and training >

To develop the recycle-oriented society and realize the Low-Carbon emission society, it is necessary for each employer to enhance their own consciousness and competency of the environment to promote the reduction of environmental stresses.

For this, Iseki Group aims to improve environmental consciousness by providing education and training based on an environmental program with three major steps according to the level of environmental stresses: general environmental education for every employee, training and education for special jobs, and training for employees who engage with jobs which require certain official qualifications.



System for education and training for environment / Qualified persons

# Strict compliance to environment-related laws and legal qualification and promotion of licenses related to environment >

As we acknowledge that conformance to environment-related laws and legislation is the basis of environmental preservation activities, we therefore encourage all of our employees to observe them strictly.

At the same time, we encourage our employees to have the official qualifications needed for the promotion of developing recycling-oriented society, such as managers in charge of pollution supervisor, chief electrical engineer, and boiler engineers.

The number of employees qualified for official environmental qualification as of the end of March, 2013 is shown in the following table.

Name of qualif	Number of employees	
	Air	17
Dollution oupon ipor	Water quality	18
Pollution supervisor	Noise	16
	Vibration	16
Energy control engineer	7	
Energy controller		3
Chief electrical engineer		9
Boiler engineer		89
High pressure gas production safety supervisor		12
Industrial waste treatment facility engineer		3
Specific chemical substances chief operator		18
Hazardous material handler		149

The number of officially qualified persons for environment

### Environmental education >

Iseki Group promotes the environmental preservation not only in their workshops but also in their home and community such as energy saving in their home and eco-driving.

For promotion of environmental preservation, awareness of every employee is required. We strive to raise the awareness of the environment through various environmental training and issuance of Iseki Group newsletters.



Lecture for environment

### 

Iseki confirms the effectiveness of the system through the environmental education based on the environmental management system and yearly regular audits by external certification institutes, as well as internal system application audits.

Iseki Group trains internal auditors in a planned and regular way to enhance internal audit. We have been offering our employees in-house education and, if necessary, unified and systematic training and education by external institutions as we think it is important to up-grade the skills and capabilities of our employee in order to spiral up in PDCA of the environmental management system.

# < Environmental training >

It is required to complete training and educations to a certain level for any employees assigned to particular jobs such as casting, heat treatment and painting, based on training programs for each job including legal requirements, before performing actual jobs.

This training and education is offered on a regular basis, handling the impacts of such particular jobs to the environment, daily management procedures, and emergency procedures with due investigation and check of regulatory changes.

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# **Environmental report**

# Approach rooted in community >

Iseki Group promotes various activities in each district to be attached firmly to the community and contribute to the society. As a company firstly registered to "FOOD ACTION NIPPON(FAN) Promotion Headquarters" set in the Ministry of Agriculture, Forestry and Fisheries, we work on improvement of the food self-sufficiently ratio and promotion of friendship with communities as local production for local consumption activities and conduct CO<sub>2</sub> emission reduction activities to promote a Low-Carbon society.



1)財団法人省エネルギーセンター「家庭の省エネ大事典」

CO2 emission reduction activity in Matsuyama district



Rapport Festival in Niigata district



Rice planting in Kumamoto district

Communication with people outside of Iseki-Matsuyama, Kumamoto, and Niigata >

As a part of communication with people from outside, Iseki-Matsuyama MFG. Co., Ltd., located at the birthplace of Iseki, and other Iseki's manufacturing factories, such as Iseki-Kumamoto MFG. Co., Ltd. and Iseki-Niigata MFG. Co., Ltd. accept elementary school students, senior high school students, local residents, and people from other countries for plant tours on a steady basis.

In each exhibition facility, we provide a panel corner of "increase of food self-sufficiency" and "local production for local consumption" and exhibition of agricultural products of each district and present materials concerning food to dispatch information for increase of food self-sufficiency.

# Our website http://www.iseki.co.jp



Visit to Iseki-Matsuyama MFG. Co., Ltd.





Visit to Iseki-Niigata MFG. Co., Ltd.

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Visit to Iseki-Kumamoto MFG. Co., Ltd.

Environmental report



# < Living together, cultivating together >

Iseki Group exhibited agricultural machines and riding corners in "Farmers & Kids Festa 2012" held in Hibiya Park from November 10 (Sat.) to 11 (Sun.) in 2012. Professional farmers gathered in this event from all over Japan to transmit messages of vital Japanese agriculture to urban children as "a bridge between children and agriculture". This time, we had 64,000 visitors.

# Outline

- Date : November 10 (Sat.) to 11 (Sun.), 2012
- Place : Hibiya Park
- Organizer : Executive Committee for Farmers & Kids Festa

Co-organizers: Japan Agricultural Corporations Association,

Japan Brand Agricultural Corporation,

Japan Professional Agriculture Total Support Organization

# •Events in the Iseki booth

- Home gardening with electrical mini cultivator (ERENA)
- Taking a commemorative photo with a tractor BIG-T
- Riding agricultural machines



Iseki booth



Sanae-chan gained much popularity also this year!



Operating ERENA corner

As in last year, many people visited the Iseki booth. In the corner to take commemorative photos, we provided a service to take photos of visitors with our largest tractor TJV behind them and print the photos on calendars to give them as presents to visitors. In the ERENA operating corner, we prepared an agricultural field with soil to let children simulate agricultural work. We believe that operation of an agricultural machine unfamiliar in their daily life provided the families with a good memory and awakened their interest in agriculture and food.

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**Environmental report** 



Iseki presented its products in "Food in Hometown & Food in Japan National Festival " held in Yoyogi Park from March 9 (Sat.) to 10 (Sun.) in 2013. "Food in Hometown & Food in Japan" that was started from 2001 is an event aiming to review local food cultures and hand them on the next generation. On this day, we were blessed with good weather most of the time and had many visitors.

# Outline

Date

- : March 9 (Sat.) to 10 (Sun.), 2013
- Place : Yoyogi Park
- Organizer
- er : "Food in Home Province & Food in Japan" National Planning Committee (Central Union of Agricultural Cooperatives, National Federation of Fisheries Co-operative Associations, Japan Fisheries Association, NHK)

# •Events in the Iseki booth

- Home gardening with electrical mini cultivator ERENA
- Taking a commemorative photo with a tractor BIG-T
- Riding agricultural machines



Large-sized combine harvester





Operating ERENA

Taking a commemorative photo with a large-sized tractor

Also in this event, the Iseki booth was thriving and many children stood in a long line in front of the ERENA operating corner and the exhibition corner of machines. This time, we had our largest tractor BIG-T in the corner to take commemorative photos. Children exclaimed with astonishment, seeing how enormous it was.

Many visitors came to the Iseki booth in both events "Farmers & Kids Festa" and "Food in Hometown & Food in Japan". Children showed great interest in machines they saw for the first time and had a great time learning about agricultural machines with their families. We believe we could not only let general public recognize "ISEKI CO., LTD." but also play a part in "a bridge between children and agriculture" as a company engaged in agriculture.

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Environmental report

# Approach to succession of skills and techniques to meet globalization >

Iseki will establish "Iseki Technical Training Center (ITTC)" to be completed in October 2013 to cultivate front-line engineers, skilled workers, supervisors, etc. for the purpose of succession of skills and techniques in production activities and response to globalization of overseas production bases that will be rapidly expanded in the future. The new building will be built in the premises of Iseki-Matsuyama MFG. Co., Ltd. It will have an environment-friendly structure in consideration of the environment and energy saving, employing (1) bright and simple appearance, (2) design in consideration of acceptance of trainees from overseas, and (3) use of LED for all the lighting. Especially, it will be a sending base that plays a central role of manufacturing technologies of Iseki Group, supporting overseas production bases.



Completion image of ITTC



# 

In February 2013, ISEKI & CO., LTD. earned the highest rating ("environmental consciousness notable progressive") of "DBJ Environmental Rating" of Development Bank of Japan (hereafter called "DBJ") seven times in a row. "DBJ Environmental Rating" evaluates index of sustainable management of companies by a screening system <sup>(\*1)</sup> developed by DBJ. It is the first loan menu in the world which offers advantageous interest rate according to the point. Evaluation and rating are made based on not only information such as environmental reports but also on the results of questions to which companies reply by themselves.

The following points were evaluated as our efforts to improve the level of environmental management. As a result, we earned the highest rating seven times in a row.

- (1) Introducing "eco-product certification system" based on strict assessment and promoting development of environment-friendly agricultural machines.
- (2) Working on enlightenment activities of low-cost agriculture and sparse planting cultivation by cultivation of instructors of sparse planting farming and issuing the farming information magazine "Farm Love-land News", and striving for preservation of ecosystem through improvement of efficiency and resource saving of agriculture.
- (3) Developing environmental activities with all the employees involved by utilizing an "improvement proposal system" to encourage employees to submit proposals for improvement in areas such as environment, quality and safety.

Environmental Report 2013 by ISEKI & CO., LTD.

		Rating	Major company	Small and medium-sized company	Interest rate	
Environmental screening Approximately 120 items, out of 250	Environmental	А	160 or	more	Special interest rate II	2 Art
	В	140 to	o 159	Special interest rate I	DBJ 環境格付 2012	
	Approximately 120 items, out of 250	С	100 to 139	80 to 139	General interest rate	作問意機称式会社 政 責任は「D D J 環境時代」 展在の 環境への収縮に対する私り組みが
		D (Engagement)	80 to 99	50 to 79	General interest rate	TESEBOARLE PAIN RASHII460000000 RASHII460000000
Company		Without rating	Less than 80	Less than 50	Not passed	Certificate

# Iseki-Matsuyama MFG. Co., Ltd.

Environmental report

# Company profile >



Address	700 Umaki-cho, Matsuyama-shi, Ehime prefecture
Number of employees	608 (As of March 31, 2013)
Area	151,000m <sup>2</sup>
Major products	Tractors, Riding mower, Dryers, Engines

# < Action policy >

#### 1. Continuous improvement

Continuously improve the environmental management system and environmental performance by observing the environmental management system based on ISO14001.

- Observation of laws and regulations concerning environment Observe environment-related legislation, local government regulations, and agreements concluded by the company.
- 3. Mitigation of negative impacts on environment and prevention of contamination
  - 1) Minimize volume of CO<sub>2</sub> generated as a result of production and electric energy use
  - 2) Reduce wastes and segregate them for collection and recycling
  - 3) Reduce and control chemical substance optimally
  - 4) Product design to consider the environment

These purposes and targets shall be set up within a technically and economically possible range, reviewed on a regular basis in order to deploy them into business activities, and aim to improve the company profit on top of the reduction of environmental stresses and the prevention of pollution.

- 4. Contribution to community
  - Save electricity and use electricity efficiently as a corporate citizen in order to contribute to the severe water issues that our community has.
  - Proactive participation in the environmental preservation activities of community.
- 5. Familiarization of information to all employees

Familiarize all the information of environmental policy to all employees in the company and deal with the environment issues together through a publicity using company news and environmental education.

6. Disclosure of environmental policies

Disclose the environmental policies upon request of outsiders.









0tor

1997







2009 2010 2011 2012

2001 ( 2009 2010 2011 2012

- 1, 3, 5- Trimethylbenzene
- Dichloromethane
- Water-soluble zinc compound
- Ethyl benzene
- Toluene
- Xylene

Volume of chemical substances use

(in per production volume)

0.4

0.3

0.2

0.

Oto

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<sup>2001 2009 2010 2011 2012</sup> 

# Iseki-Kumamoto MFG. Co., Ltd.

**Environmental report** 

# Company profile >



Address	1400 Yasunaga, Mashiki-cho, Kamimashiki-gun, Kumamoto prefecture
Number of employees	294 (As of March 31, 2013)
Area	217,000m <sup>2</sup>
Major products	Head-feeding combine harvester, Multi-crop combine harvesters, Carrot harvesters

### < Action policy >

1. Continuous improvement

Continuously improve the environmental management system and environmental performance by observing the environmental management system based on ISO14001.

- 2. Observation of laws and regulations concerning environment Observe environment-related legislation, local government regulations, and agreements concluded by the company.
- Mitigation of negative impacts on environment and prevention of contamination
  - 1) Promote energy-saving and resource-saving
  - 2) Promote reduction of industrial wastes
  - 3) Accelerate recycling approach

Set up targets to the extent technically and economically possible to carry out. Execute and review the targets on a regular basis so as to mitigate negative impacts and prevent contamination.

4. Contribution to community

Open company welfare facilities up to public and contribute to the environmental preservation through cleanup activities.

5. Familiarization of information to all employees

Familiarize all the information of environmental policy to all employees and constituent members in the company and deal with the environment issues together through a publicity using company news and environmental education.

6. Disclosure of environmental policies

Disclose the environmental policies upon request of outsiders.







5,000

4.000









2009 2010 2011 2012

1, 3, 5- Trimethylbenzene
 Dichloromethane
 Water-soluble zinc compound

Ethyl benzene
 Toluene
 Xylene



Environmental Report 2013 by ISEKI & CO., LTD. 36

60

50

40

30

20

10 Oton

2001

# Iseki-Niigata MFG. Co., Ltd.

# **Environmental report**

# Company profile >



Address	3-12-23 Nishiohsaki, Sanjo-shi, Niigata prefecture
Number of employees	259 (As of March 31, 2013)
Area	29,000m²
Major products	Rice transplanters, Rice hullers, Vegetable transplanters, Binders

# Action policy >

1. Continuous improvement

Continuously improve the environmental management system and environmental performance by observing the environmental management system based on ISO14001.

- 2. Continuous improvement and prevention of contamination Set up the environmental target and practice to achieve the target while reviewing the target on a regular basis in order to improve the environmental performance continuously.
  - 1) Improve energy use
  - 2) Improve use of natural resources
  - 3) Reduce waste and recycle
  - 4) Control chemical substances properly
- 3. Familiarization of information to all employees and contribution to community

Distribute publicity to every employee through corporate environmental activities and education, as well as having close communication with people in the community, in order to promote environment preservation activities.

We will disclose our environmental policies to the public upon request so that the people in the community will know our policies.

4. Disclosure of environmental policies

Disclose the environmental policies upon request of outsiders.









Volume of water use (in per production volume)





Volume of chemical substances use (in per production volume) 0.5 0.4 0.3 0.2 0.1 0to 2001



2009 2010 2011 2012 2001 1, 3, 5- Trimethylbenzene Dichloromethane Water-soluble zinc compound Ethyl benzene

### Toluene

Xylene

Environmental Report 2013 by ISEKI & CO., LTD.

CENVIRONMENTAL data >

# Iseki-Houei MFG. Co., Ltd.

# **Environmental report**

# 



Address	878-1 Umaki-cho, Matsuyama-shi, Ehime prefecture
Number of employees	240 (As of March 31, 2013)
Area	8,959m²
Major products	Cultivators, Tillers, Walk behind mower, System rice cooker

# 

- 1. Continuous improvement
- Continuously improve the environmental management system and environmental performance by observing the environmental management system based on ISO14001.
- Observation of laws and regulations concerning environment Observe environment-related legislation, local government regulations, and agreements concluded by the company.
- 3. Mitigation of negative impacts on environment and prevention of contamination
  - 1) Reduce volume of electric energy use
  - 2) Reduce volume of water use
  - 3) Segregate wastes for collection and recycle
- 4. Contribution to community
  - Save electricity and use electricity efficiently as a corporate citizen in order to contribute to the severe water issues that our community has.
  - Participate in the environmental preservation activities in our community proactively
- 5. Familiarization of information to all employees

Familiarize all the information of environmental policy to all employees and constituent members in the company and deal with the environment issues together through a publicity using company news and environmental education.

6. Disclosure of environmental policies

Disclose the environmental policies upon request of outsiders.



Volume of CO<sub>2</sub> emissions resulted by using fossil fuel (in per production volume)





Environmental data >



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Contact about this report

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