

ISEKI Group environmental management

We strive to contribute to the creation of a sustainable society.

We position environmental preservation as one of the priority issues that enables the creation of a sustainable society and proactively works on environmental management under the concept of "Eco vision."

More specifically, we have introduced an environmental management system (EMS) on a group-wide basis to set specific targets and establish a system for promoting group-wide corporate activities under the management system for all processes ranging from the early stage of product development and production to product distribution and sales and services. It is specified in the mid- and long-term environmental burden reduction targets to achieve a "26% reduction of CO₂ emissions by 2030 (compared with the FY2013 results)" and environmental activities are promoted to that end. In addition, we utilize an "eco-product certification system" to promote the reduction of environmental burden through environmentally-friendly design.

We continue to work on the reduction of environmental burden on a group-wide basis from the both aspects of business activities and products, based on environmental preservation activities and environmental management that are in harmony with nature and society, with the objective of contributing to the creation of a sustainable society.



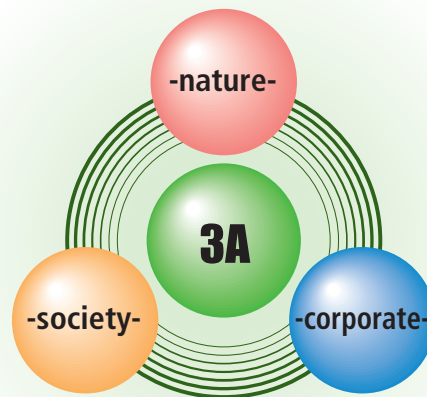
Seiji Senba,

Managing Corporate Officer, Deputy Chief
Operation Officer, Development &
Production Division, Assigned to
Environmental Control Section

Eco Vision

Under environmental management at ISEKI Group, all members of the group participate in environmental preservation activities by following "Environmental Concept," "Basic Environmental Policy" and "Environmental Conduct Guidelines" based on "Eco Vision."

management on the Axis of Agriculture and Agricultural machine (3A)



Environmental Concept (Green Circle)

ISEKI Group is committed to contributing to the creation of a sustainable society under the concept of "management on the Axis of Agriculture and Agricultural machine (3A)" through activities that aim to achieve harmony among nature, society and corporations.

Basic Environmental Policy

1. Maintain environmental management system and its functional applications
2. Reducing elements of our business activities and products which may be causing stress on the environment
3. Compliance with environmental laws, regulations, and standards
4. Environmental education and information disclosure

Environmental Conduct Guidelines

1. Development activities considering environment
Recycling and reduction of noise, vibration, fuel consumption, emission gas, and environmental stress substances
2. Environment-friendly manufacturing activities
Prevention of (air, water, noise, and vibration) pollution, energysaving, resource-saving, and purchasing green
3. Office activities considering environment
Energy-saving and resource-saving
4. Distribution and logistics considering environment
Improvement of transportation (packing material, more efficient transportation), disposal
5. Development of biodiversity
Promotion of tree-planting activities of Iseki Group
6. Environmental education and information disclosure
Environmental education to be offered to employees, participation in social activities and information disclosure

System for promoting environmental management

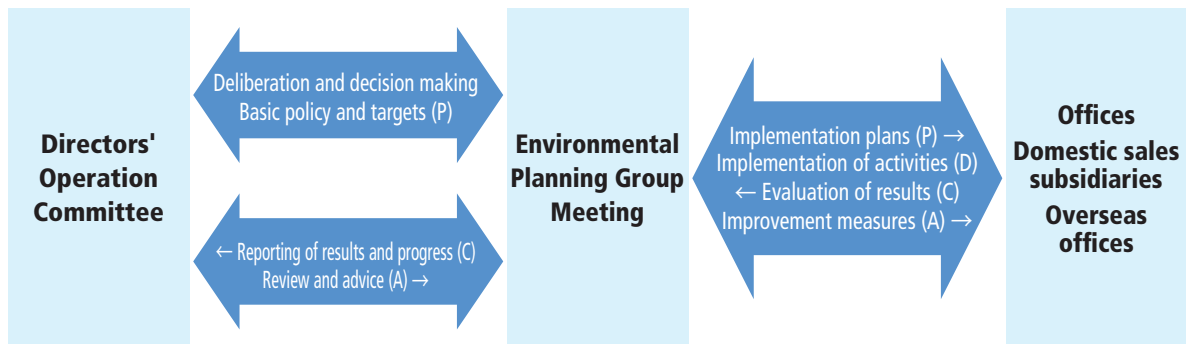
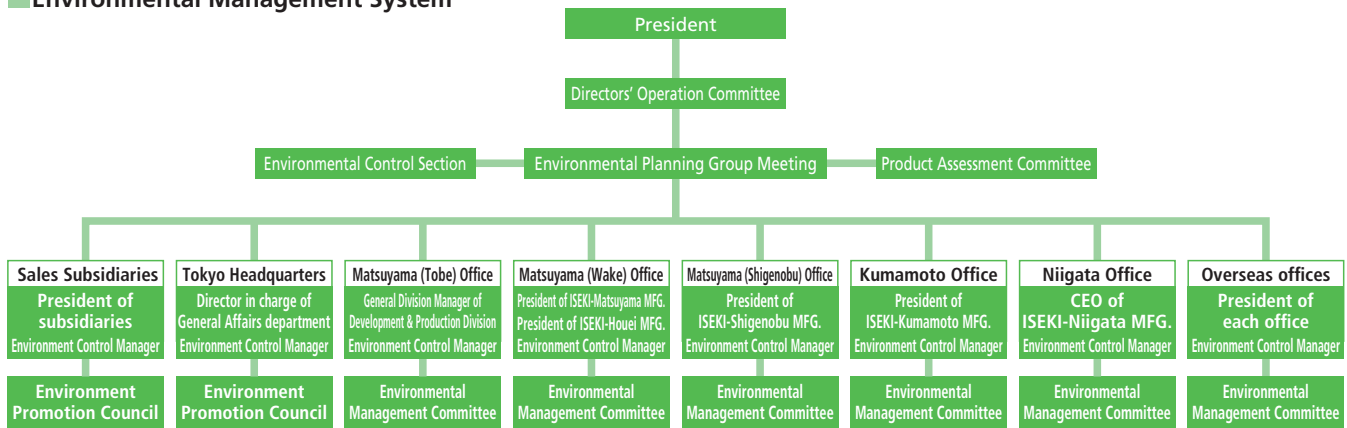
ISEKI Group promotes environmental management on a group-wide basis.

The Directors' Operation Committee chaired by the President deliberates and decides upon action plans and targets based on the Basic Environmental Policy. ISEKI Group works on environmental management centered around a Plan-Do-Check-Action (PDCA) cycle by establishing an intragroup environmental management system with the Environmental Planning Group Meeting serving as the core.

The Environmental Planning Group Meeting implements the environmental targets and action plans deliberated and decided upon by the Directors' Operation Committee across the group and manages the progress thereof. The Meeting summarizes the action plans, targets and results and responses to important environmental issues of each office based on the status of their activities and escalates and reports them to the Directors' Operation Committee. Upon receipt of the review results from the Directors' Operation Committee, the Meeting horizontally implements them to the offices. Chief Managers and Environment Control Managers who promote environmental control activities are put in place in each office to strengthen this system to promote environmental management.

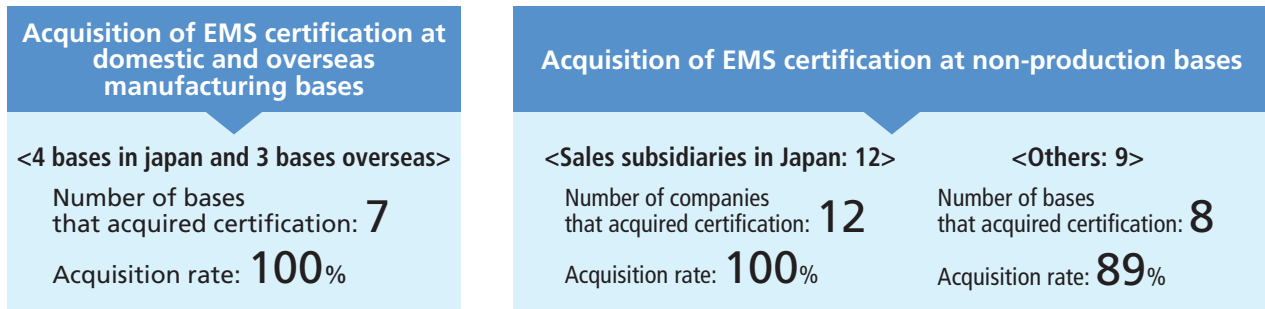
In FY2017, the Environmental Planning Group Meeting held four meetings and made reports/escalations to the Directors' Operation Committee four times.

Environmental Management System



Acquisition of environment-related certifications at ISEKI Group

ISEKI Group has acquired EMS certification (ISO14001 and EA21) at manufacturing bases in Japan and overseas and non-production bases including domestic sales subsidiaries, and carries out environmental preservation activities in line with their respective business activities and regional characteristics.



* ISO14001: An international standard for environmental control stipulated by the International Organization for Standardization

* EA21 (Eco Action 21): A Japan-specific environmental management system (EMS), which is formulated by the Ministry of the Environment

For more details, please refer to the website.

Environmental targets and results

ISEKI Group works on environmental management by introducing an environmental management system (EMS) on a group-wide basis and has set new mid-term environmental burden reduction targets for Japan covering 2016 to 2020. The results of environmentally-friendly business activities in FY2017 and the future issues are as indicated below.

Mid-term environmental burden reduction targets by 2020 and activity results in FY2017

Major activity results in FY2017 in promoting the environmental management system

Major activity targets in FY2017	Major activity results in FY2017
Further promotion of the environmental management system	Acquisition of EA21 Certification by Tsukubamirai Office
Improved environmental awareness of employees	Provision of environmental education (twice) and participation in cleaning activities
Prohibition, reduction and restraint of use of toxic substances included in procured parts	Improved green procurement ratio through the promotion of certification acquisition by suppliers and information provision
Development of environmentally-friendly products through implementation of the product assessment system and life-cycle assessment (LCA) evaluation	Addition of four "eco-product" certified models through the promotion of environmentally-friendly design
Development and sales of products in consideration of biodiversity	Full-fledged launch of variable fertilizing rice transplanters with soil sensor
Promotion of environmental burden reduction in production	See below

Promotion of environmental burden reduction in production activities

	Mid-term environmental burden reduction targets by 2020		FY2017 targets	FY2017 achievement rate		Rating
To realize a low-carbon emission society	Reduction of CO ₂ emission	Reduction of 11% by 2020 Reduction of 1.57% per year	Reduction of at least 6.3%	Per production unit	89%	△
		Emission volume		97%	△	
Manufacturing resources	Reduction of CO ₂ emissions during transportation	Reduction of 10.5% by 2020 Reduction of 1.5% per year	Reduction of at least 6%	Per transportation unit (10,000 ton-km)	101%	○
		Reduction of total material input		Reduction of 10.5% by 2020 Reduction of 1.5% per year	Reduction of at least 6%	Per production unit
To build a recycling-oriented society	Reduction of volume of water used	Reduction of 51% by 2020 Reduction of 7.3% per year	Reduction of at least 29%	Input	105%	○
		Reduction of final volume of waste		Reduction of 14% by 2020 Reduction of 2% per year	Reduction of at least 8%	Per production unit
Toxic chemical substances	Reduction of used volume of chemical substances subject to PRTR law	Reduction of 19.6% by 2020 Reduction of 2.8% per year	Reduction of at least 11%	Volume of water used	123%	○
		Reduction of 19.6% by 2020 Reduction of 2.8% per year		Reduction of at least 11%	Per production unit	130%
				Volume of waste	141%	○
						Per production unit
				Volume of chemical substances used	155%	○

* Targets and results per production unit with FY2013 used as reference

* Targets and results per transportation unit (10,000 ton-km) for the reduction of energy-generated CO₂ emissions during transportation

* Scope: Three factories in Japan (ISEKI-Matsuyama MFG. Co., Ltd., ISEKI-Kumamoto MFG. Co., Ltd. and ISEKI-Niigata MFG. Co., Ltd.)

Priority issues and targets for the future

- ▶ Raising the level of environmental burden reduction activities at domestic sales subsidiaries and overseas offices
- ▶ Further promotion of green procurement in collaboration with suppliers and initiatives for CSR procurement
- ▶ Provision of safe and secure products, product quality assurance and further promotion of environment-conscious designing

FY2030

CO₂ emission volume: Reduction of **26%**
(compared with FY2013)

FY2020

Ratio of eco-products: **30%**
(sales ratio in Japan)

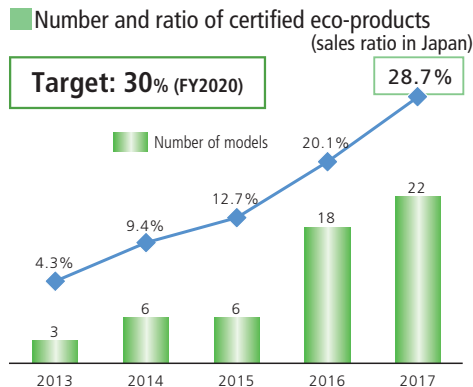
* ISEKI-Houei MFG. Co., Ltd. merged with ISEKI-Matsuyama MFG. Co., Ltd. in January 2018.

Initiatives for environmentally-friendly design

Eco-product certification system

ISEKI Group promotes environmentally-friendly design by implementing product assessment including life-cycle assessment with the aim of reducing the environmental burden in each of the stages of manufacture, use by customers and disposal in the entire product development process.

The "eco-product certification system" is a program under which environmental labels are granted only to the products that meet the ISEKI-original evaluation criteria. Information on the certified products is delivered to customers through catalogs and websites in an easy-to-understand manner. ISEKI Group is committed to continuing the provision of environmentally-friendly products.



Eco-products certified in FY2017 and thereafter

As of April 2018

Certified product	Certification rank	Key point for certification			FY of certification
		Energy-saving and laborsaving	Reduction of environment-burdening substances	Resource-saving	
System rice cookers	AR3 series	Eco-product	Reduced time for rinsing rice	Water-saving	2017
Tractors	BIG-T7700 series		Improved fuel efficiency	Engine compliant with the Act on Regulation, Etc., of Emissions from Non-road Special Motor Vehicles of 2014 is mounted	
	TJX series			Engine compliant with the Act on Regulation, Etc., of Emissions from Non-road Special Motor Vehicles of 2014 is mounted	
	RTS series			Reduced manufacturing time thanks to the reduction of the number of parts	
Variable fertilizing rice transplanters with soil sensor	NP80 with straight-travel assist	Super-eco-product	Laborsaving Reduced plant lodging	Reduced fertilizer loss	2018
Rice transplanters	NP80 with straight-travel assist	Eco-product	Laborsaving		
Combine harvesters	HJ6115, HJ5101			Engine compliant with the Act on Regulation, Etc., of Emissions from Non-road Special Motor Vehicles of 2014 is mounted	

Examples of certified products

OPERESTA NP80D, variable fertilizing rice transplanters with soil sensor with straight-travel assisting system



This rice transplanter, certified as a super-eco-product, is a "variable fertilizing rice transplanter" that enables laborsaving and lower cost by reducing plant lodging and the amount of fertilizer through its optimal application, having the additional "straight-travel assisting function" that enables easy and straight-line planting for anyone.

The automated straight-travel operations enable the mitigation of operator fatigue and improvement in operational efficiency. In addition, no adjustment in the amount of water in rice paddies is required even if the markings are not visible due to water at the time of rice planting, which contributes to water-saving and the preservation of quality for agricultural water.

Certification as super-eco-product

Energy-saving and laborsaving

- ▶ Laborsaving
- ▶ Speedy straight-travel operations
- ▶ Mitigation of operator fatigue
- ▶ Improvement in operational efficiency thanks to reduced plant lodging^(*)
- ▶ Control and mowing operations after rice planting are made easy

Resource-saving

- ▶ Reduction of fertilizer loss^(*)
- ▶ Saving and preservation of agricultural water

Reduction of environmental burden

- ▶ Reduction of water and soil pollution^(*)



* 1: Effect of variable fertilizing using soil sensor

Reduction of environmental burden in production

The environmental burden reduction results in FY2017 and the trend in recent years in production at three domestic factories and three overseas factories are as indicated below.

Creation of a low-carbon society

Reduction of CO₂ emissions

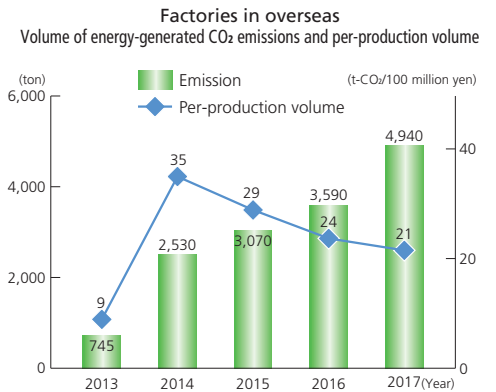
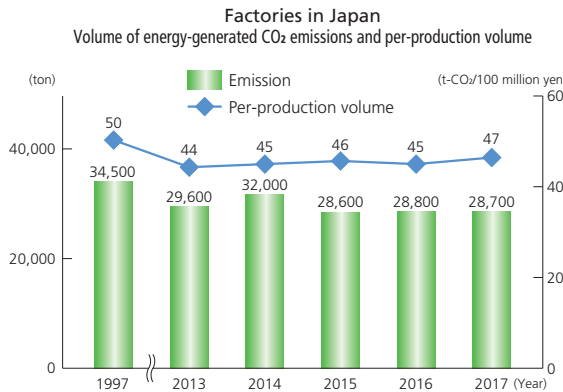
In Japan

The target was not achieved as the electricity consumption in processing increased due to an increase in the rate of production of parts, etc., although the emission volume is slightly lower than the previous year. ISEKI Group continues with improvement activities at sites toward the achievement of the target.

Overseas

The CO₂ emission volume increased following the expansion of the production scale at Dongfeng ISEKI Agricultural Machinery Co., Ltd. (Xiangyang Factory) and PT. ISEKI INDONESIA, while the ratio to the production volume decreased thanks to the full-fledged operation of the production lines.

Factories in Japan
 <Emission volume>
 FY2017 target:
 27,700 tons
 Achievement rate: 97%
 <Per-production volume>
 FY2017 target:
 42 t-CO₂/100 million yen
 Achievement rate: 89%



Note: In order to assess the trend of reduction in Japan since before, the electricity emission factor 0.378 kg-CO₂/kWh is used for the calculation.

Reduction of CO₂ emissions in product distribution

The target in terms of the ratio to cargo transportation volume was achieved. The modal shift rate of at least 50% was maintained for three consecutive years. ISEKI Group works to reduce CO₂ emission volume and improve the modal shift rate by further promoting the improvement of loading efficiency.

	2013	2014	2015	2016	2017		
					Target	Result	Achievement rate
Cargo transportation volume (10,000 ton-km)	3,180	2,900	2,800	2,710	—	2,520	—
CO ₂ emission volume (t-CO ₂)	4,340	4,150	3,660	3,400	—	3,200	—
Ratio to cargo transportation volume (t-CO ₂ /10,000 ton-km)	1.37	1.43	1.31	1.25	1.28	1.27	101%
Modal shift rate	47%	38%	52%	54%	—	53%	—

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

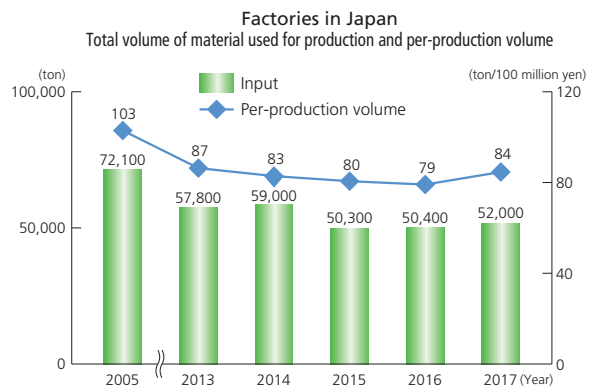
Reduction of manufacturing resources

Reduction of total material input

Although the input target was achieved, the target in terms of the per-production volume was not achieved as the material input increased due to an increase in the rate of production of parts, etc. Going forward, ISEKI Group will promote improvement activities, as well as reduction activities, to achieve the target in terms of per-production volume.

Factories in Japan

<Input>
 FY2017 target:
 54,300 tons
 Achievement rate: 105%
 <Per-production volume>
 FY2017 target:
 82 t/100 million yen
 Achievement rate: 97%



* The results for years in and after 2013, the reference year, are calculated for the period from January to December due to a change in the fiscal year-end in 2015. Accordingly, they do not match the data in the reports issued in the past.

* Scope: Factories in Japan (ISEKI-Matsuyama MFG. Co., Ltd., ISEKI-Kumamoto MFG. Co., Ltd. and ISEKI-Niigata MFG. Co., Ltd.), overseas factories (Dongfeng ISEKI Agricultural Machinery Co., Ltd. (Xiangyang Factory and Changzhou Factory) and PT. ISEKI INDONESIA

* ISEKI-Houei MFG. Co., Ltd. merged with ISEKI-Matsuyama MFG. Co., Ltd. in January 2018.

Development of recycling-oriented society

Reduction of volume of water used

In Japan

The targets for both the volume of water used and the per-production volume were achieved. ISEKI Group will promote further reduction activities at sites.

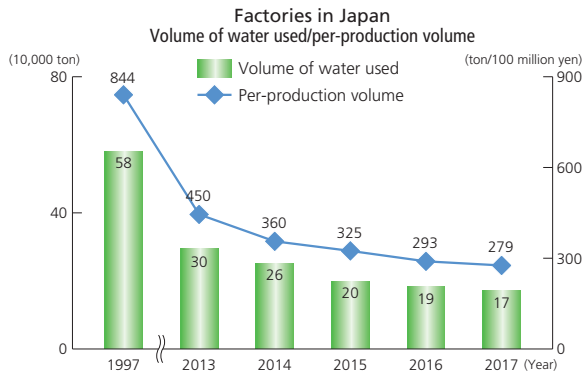
Overseas

The volume of water used increased following increases in the production lines and offices; however, the per-production volume decreased. ISEKI Group implements initiatives in Japan at overseas factories as well and works to achieve a reduction of the volume of water used.

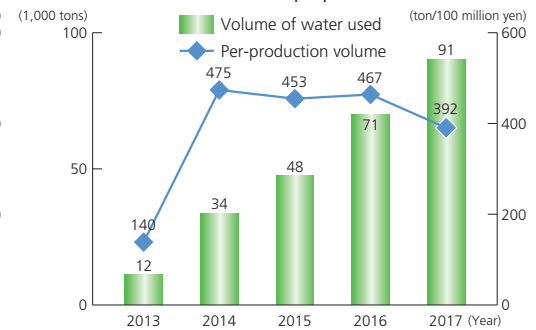
Factories in Japan

<Volume of water used>
FY2017 target:
210,000 tons
Achievement rate: 123%

<Per-production volume>
FY2017 target:
319 t/100 million yen
Achievement rate: 114%



Factories in overseas



Reduction of final volume of waste

In Japan

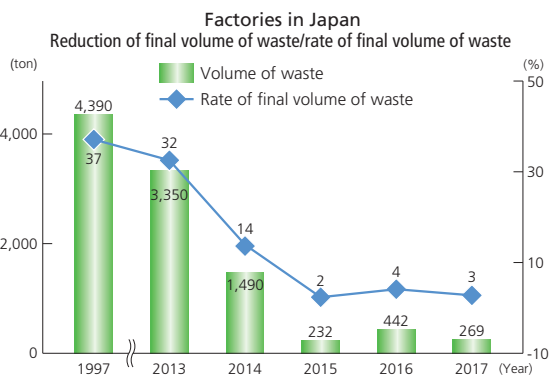
The target for the volume of waste was achieved as the rate of final volume of waste declined. ISEKI Group will work to reduce the volume further and improve the recycling rate.

Overseas

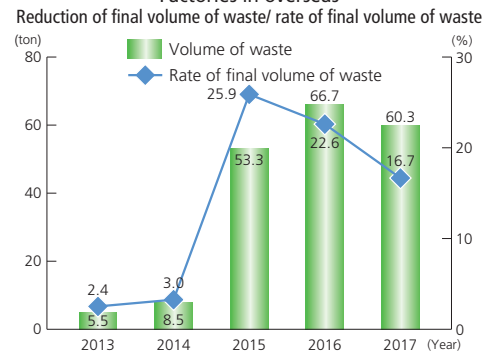
The rate of final volume of waste declined following the commencement of full-fledged production. ISEKI Group will work to promote recycling and reduce the volume by further implementing management on a continuous basis.

Factories in Japan

<Volume of waste>
FY2017 target:
378 tons
Achievement rate: 141%



Factories in overseas



Reduction of volume of toxic chemical substances used

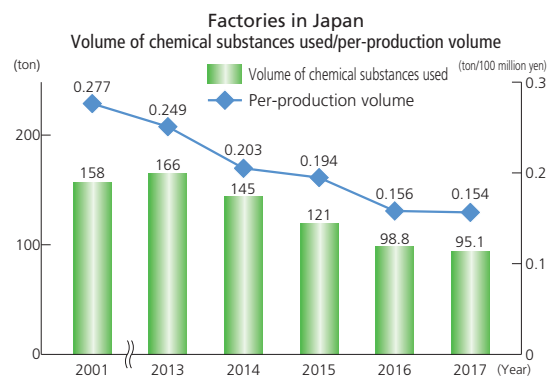
Reduction of volume of chemical substances used

The reduction targets for both the volume of chemical substances used and the per-production volume were achieved. ISEKI Group takes measures such as review on the paint solvents used in all the factories to further promote improvement activities.

Factories in Japan

<Volume of chemical substances used>
FY2017 target:
148 tons
Achievement rate: 155%

<Per-production volume>
FY2017 target:
0.222 t/100 million yen
Achievement rate: 144%



* The results for years in and after 2013, the reference year, are calculated for the period from January to December due to a change in the fiscal year-end in 2015. Accordingly, they do not match the data in the reports issued in the past.

* Scope: Factories in Japan (ISEKI-Matsuyama MFG. Co., Ltd., ISEKI-Kumamoto MFG. Co., Ltd. and ISEKI-Niigata MFG. Co., Ltd.), overseas factories (Dongfeng ISEKI Agricultural Machinery Co., Ltd. (Xiangyang Factory and Changzhou Factory) and PT. ISEKI INDONESIA

* ISEKI-Houei MFG. Co., Ltd. merged with ISEKI-Matsuyama MFG. Co., Ltd. in January 2018.

Preservation of biodiversity

Benefited from the blessings of nature that biodiversity produces, ISEKI Group has formulated the Biodiversity Guidelines recognizing its initiatives for the preservation of biodiversity as a priority issue of its environmental management. In cooperation with various stakeholders, ISEKI Group will promote biodiversity-friendly business activities, work on the preservation of biodiversity and thereby contribute to the realization of coexistence with nature and sustainable society.

Initiatives for the preservation of biodiversity

Proposing biodiversity-friendly agriculture (solar powered plant factories)

In 1987, ISEKI was quick to introduce Dutch "solar powered plant factories (Venlo glass greenhouses)" in Japan and it has built many plant factories ever since.

ISEKI proposes biodiversity-friendly agriculture including the complex environmental control system "MINORI +," a "plant growth diagnosis device" that allows for measurement of the photonic synthesis capacity of plants without destruction/contact, a nutrient solution circulation system that would enable the reduction of environmental burden and pollination by native species "black bumblebees."

In addition, the ISEKI High-tech Greenhouse utilizing advanced technologies exhibits major agricultural models for customers who are examining possibilities of research and development and human resource development concerning plant factories and entrance into agriculture as a corporation.



Support for revitalization of deserted farmland

An increase in deserted farmland may lead to not only a decline in several functionalities of agriculture including land conservation and water source recharge, but also the onset of insect pests and bird or animal damage and interference with the use and consolidation of farmland. Local communities and corporations are working to prevent the occurrence and elimination of such deserted farmland.

ISEKI Group is working together with local communities and corporations to restore deserted farmland and support cultivation after restoration as the "Supporter of dreamful agriculture."

The photo on the right shows deserted farmland in Kyushu (Fukuoka) where weeding and other work was performed and which is currently used as an open-field for vegetables. ISEKI and ISEKI Kyushu Co., Ltd. provide support from both hard and soft aspects including the utilization of agricultural machinery and cultivation expertise.



Evaluation by third parties

DBJ Environmental Rating – highest rating 12 times in a row –

In March 2018, ISEKI received the highest rating as one of the "Companies doing environment-friendly business activities progressively," 12 times in a row, by the Development Bank of Japan Inc., in receiving loans under the DBJ Environmentally Rated Loan Program.

<Points that are highly evaluated in the rating for this year>

- 1) That ISEKI positions CSR initiatives in its core operations
- 2) That ISEKI contributes to laborsaving and improved productivity in agriculture
- 3) That ISEKI proactively develops and markets biodiversity-friendly products, etc.



Third-party comments

ISEKI humbly received comments on its initiatives from experts.



Professor Tetsuo Morimoto,
Community Collaboration Center Saijo, Social
Cooperation Promotion Mechanism, Ehime University

The environmental report for this fiscal year is quite organized and rich in content, covering almost all environmental activities that should be addressed by an agricultural machinery manufacturer.

Specifically, ISEKI announced a concept of environmental management that proactively incorporates environmental issues into the management strategies and promotes environmental preservation activities participated in by all members of the group, under which agriculture and the production of agricultural machinery are in harmony with nature and society, clearly demonstrating ISEKI's commitment to tying such activities to the sustainable growth of the company.

In its environmental policy, ISEKI positions environmental issues as one of the management issues of the highest priority and will work to build a recycling-oriented manufacturing system under which the environmental burden is reduced, harmonious coexistence with nature and society is achieved and the company develops sustainably toward the future. Setting such a policy is critically important for a manufacturer in terms of corporate ethics.

ISEKI's environmental control system is comprised of the President placed at the top, the Directors' Operation Committee, the Environmental Planning Group Meeting under the Committee and the Environment Promotion Council of each office. ISEKI makes the commitment that these bodies will work together in working on environmental issues in a united fashion. The Directors' Operation Committee at the highest level deliberates and decides upon environmental targets and action plans, while the Environmental Planning Group Meeting promotes the attainment of targets by each office based on these targets and plans, evaluates the activity results of various locations, considers responsive measures to be taken and returns the results back to the Directors' Operation Committee. ISEKI clearly states this system for environmental control initiatives with the PDCA cycle, allowing us to learn about the proactive stance taken by the company.

The company sets environmental burden reduction targets to be achieved by 2020, and partly by 2030, with 2013 used as reference. Although it is desirable to attain 100% or more achievement rates in all items in the future, the achievement rates for each item other than CO₂ emission volume are excellent and therefore I believe that the company's initiatives for reducing the environmental burden are generally sufficient. In addition, ISEKI develops biodiversity-friendly plant factories and human resources for those factories, while proactively participating in educational and various other activities related to biodiversity.

Although the initiatives, etc., described herein may seem a little low profile and less attention grabbing, this environmental report conveys ISEKI's ardent ambitions to resolve environmental issues and the steady progress the company is making. Items in this report are properly assessed based on data and simply described. Accordingly, I find this report very fine in general.

This CSR Report 2018 is composed with an emphasis on not only contribution to "the creation of a prosperous and sustainable society" that ISEKI has been pursuing for some time, but also the simultaneous achievement of the resolution of social issues through business and the improvement of corporate value.

Firstly, in the Message from the President section at the top of this report, the "activities to meet the demands of society" that echo the management philosophy of "contributing to agriculture both in Japan and throughout the world" that has been passed down since the founding of the company are discussed in relation to the current Mid-term Management Plan. We can also see that ISEKI has launched an approach to promote CSR activities together with its core business under the leadership of the company's executives as exemplified by the participation of the Directors' Operation Committee members in the "Corporate Social Responsibility Committee." In addition, a holistic view of the value that ISEKI desires to achieve by utilizing the "strengths that support ISEKI" is presented in the early part of this report, with the needs and issues of society as the starting point. By doing so, this report provides an easy-to-understand introduction to understand the value creation story that ISEKI is pursuing.

Furthermore, social issues that need to be resolved are presented at the top of each of the parts "Development and production," "Domestic business" and "Overseas business" in the Business development sections, together with the latest topics related to ISEKI's business strategies and specific initiatives. This structure makes the activity reports supporting the stories presented in the early part persuasive for readers. In each part of Governance, Society and the Environment, while we are generally prompted to refer to the website for detailed data, the representative key performance indicator (KPI) targets and results are included in the report. Such a prioritized editorial structure based in part on the recent trend for environmental, social and governance (ESG) information disclosure gives us the impression that this report is improved compared with the previous ones.

I believe that most of the social issues in the agricultural field that ISEKI is facing require a long time to resolve. Going forward, I hope that reports will be made in a way that more specific explanations will be provided on the progress of the processes wherein the resolution of social issues and the improvement of corporate value are simultaneously achieved, while utilizing ISEKI's characteristics and strengths including the setting of KPIs that are linked with product and service development over the long term and other outcomes to be attained.



Masato Tahara,
General Manager of the Sustainability Planning &
Support Department, Development Bank of Japan Inc.

<Reply to third-party comments>



Seiji Senba,
Managing Corporate Officer, Deputy Chief
Operation Officer, Development &
Production Division,
Assigned to Environmental Control Section

I would like to express my deepest appreciation to Professor Tetsuo Morimoto for making the valuable comments on our environmental management from the previous year. Ehime University has been providing us with exceptional cooperation in terms of joint research and development. I appreciate that Professor Morimoto regarded our environmental preservation activities as being undertaken steadily and diligently. In recent years, awareness has taken root in us in which people realize environmental preservation activities and activities tied to the development and growth of agriculture through agricultural machinery are related to the protection of the security and safety of food and ultimately lead

to the creation of the sustainable growth of society. We are committed to continuing with steady and diligent efforts using the PDCA cycle aiming to achieve the environmental burden reduction targets. I sincerely hope for and look forward to the continued guidance and support of Professor Morimoto.

This is the third "CSR Report" that we issue on a yearly basis. Following the previous year, we asked Mr. Masato Tahara of the Development Bank of Japan Inc. to provide us with comments on sections other than the Environment from the perspective of a third party. I wish to extend my sincere gratitude for the valuable comments Mr. Tahara gave us once again on the CSR activities that ISEKI Group has just started.

I believe that the passion of the founder who said "I want to free farmers from exhausting labor" is precisely the origin of ISEKI Group's CSR. Taking the comments into our heart but without overreaching ourselves, we intend to firmly entrench the CSR activities that draw on our characteristics originated from the passion of the founder in the group, one step at a time. We will strive to achieve the resolution of social issues and the improvement of corporate value simultaneously.



Shirou Tomiyasu,
Director & Executive Vice
President