# **Environmental Report**

The KUBOTA Group has made global environmental conservation a high priority goal of its CSR management, and is pursuing activities aimed at raising the level of its environmental management.

## **Basic Policy**

**KUBOTA Group** Charter

The KUBOTA Group aims to create a society where sustainable development is possible on a global scale and conducts its operations with concern for preserving the natural environment.

# KUBOTA Group Action Guidelines

- The KUBOTA Group takes initiatives for the protection of the natural environment in all its activities.
  - (1) By setting specific goals on its own initiative while remaining in compliance with all laws and regulations
  - (2) By promoting initiatives at all levels of its operations, from product development to production, sales, distribution, and services
  - (3) By taking a proactive stance toward securing the understanding of the importance of protecting the environment among its suppliers and actively obtaining their cooperation
  - (4) By promoting activities friendly to the natural environment and biodiversity
- The KUBOTA Group works to protect the environment and create a symbiotic relationship with the community.
  - (1) By participating in community beautification and environmental enlightenment activities in its role as a good corporate citizen (2) By engaging in business activities that take full account of environment protection in the community, including pollution prevention
- The KUBOTA Group undertakes systematic initiatives to protect the environment.
  - (1) By conducting environmental impact assessments, working to reduce environmental risk, and preventing environmental pollution
  - (2) By working to solve environmental issues, including prevention of global warming, creation of a recycling society, and reduction of the release of harmful substances
- 4. The KUBOTA Group implements a thorough program of environmental management.
  - (1) By introducing environmental management systems and promoting initiatives in everyday operations
  - (2) By proactively monitoring whether the "Plan, Do, Check, Action (PDCA)" cycle is functioning in environmental management activities
  - (3) By promoting enlightenment and educational activities related to the environment and working to heighten awareness of the environment
- The KUBOTA Group is proactive in communicating its environmental perspective.

"Eco-Eirst" mark

- (1) By issuing timely and easily understandable environmental information
- (2) By gathering environmental information from a broad range of stakeholders and reviewing as well as upgrading its environmental protection activities

## Basic direction of corporate environmental management

The KUBOTA Group has established "Stop Climate Change," "Work Towards a Recycling-based Society," and "Control Chemical Substances" as the three basic goals of our corporate environmental management, for building a society capable of sustainable development on a global scale. We are also focusing on the enhancement of the "Environmental Management System" and "Environmental Communication" as the foundation of our efforts toward these goals.

## Approval as an "Eco-First Company"

In May 2010, having made the "Eco-First Commitment" to the Japanese Environment Minister, pledging to carry out environmental preservation measures, KUBOTA was officially approved as an "Eco-First Company." Making a commitment to undertake the four measures listed below, the KUBOTA Group has incorporated them into its Medium-Term Environmental Conservation Plan, and is tackling them

- Stopping climate change
- Working towards a recycling-based society
- Controlling chemical substances
- Conserving biodiversity

## **Stop Climate Change** Energy conservation Conversion from usage of fossil fuels Expanded usage of natural energy Reduction in product weight Reduction in product energy consumption during use, etc.

## **Environmental Management System**

Work Towards a Recycling-based Society

Zero emissions

Reduction in industrial waste Diversification of recyclable product items Improvement in usage ratio of recycled materials, etc.

## Sustainable Society

environment

substances

**Control Chemical Substances** 

Reduction in use of chemical

Development and usage of

Promotion of detoxification

Conservation of the global

(pollution prevention), etc.

substitute materials

**Environmental** Communication The environmental information in this document (KUBOTA REPORT 2011-Business and CSR Activities), in combination with that given on our website (http://www.kubota-global.net /csr/report/r2011.html), has received third-party assurance by KPMG AZSA Sustainability Co., Ltd. Indices covered by this assurance are indicated by the "\( \infty \)" mark.

## The Medium-Term Environmental Conservation Plan

The KUBOTA Group adopted and has been promoting the Medium-Term Environmental Conservation Plan in order to put into practice the basic policy of our corporate environmental management.

Since FY2010, we have been tackling this undertaking on a group-wide basis, including our overseas business sites. The implementation of our Medium-Term Environmental Conservation Plan was also designated as "Enhancement of CSR management" in our management policy for FY2012.

## Medium-Term Environmental Conservation Plan and Targets/Results for FY2011 Global Data

Issues	Actions	Management Indicators	Base FY	Plan Do		Check	Action	Plan	
				Targets FY2011	Results FY2011	Self- evaluation <sup>2</sup>	Achievements, Future Tasks and Actions to be Taken (reasons for failing to achieve targets for FY2011)	Targets	
								FY2012	FY2013
1 Stopping climate change	Reduce CO <sub>2</sub>	CO₂ emissions per unit of sales	2009	-4%	-8.3%	0	By means of energy-saving actions at our business sites, we reached our target.  To accommodate the power shortages following the Great East Japan Earthquake, we organized a Rotating Operation System, and are implementing power-saving measures, at the 21 KUBOTA Group business sites in the Kanto and Kansai areas. These measures, which include appropriate management of heating and air-conditioning temperatures, mainly at our offices, are implemented methodically, and the Cool Biz dress code period is extended for the six-month period from May 1 to October 31, which is longer than in a normal year.	-7%	-10%
			(2005)	(-3.2%)	(-7.5%)	0		(-6.2%)	(-9.3%)
			(1991 (KUBOTA production plants))	(-19.2%)	(-31.2%)	0		(-21.7%)	(-24.2%)
		Volume of CO₂ emissions	2009	-4%	-22.7%	0		-7%	-10%
			(2005)	(+7.8%)	(-13.2%)	0		(+4.4%)	(+1.0%)
			(1991 (KUBOTA production plants))	(-26.7%)	(-44.1%)	0		(-29.0%)	(-31.3%)
	Reduce CO₂ during distribution	CO <sub>2</sub> emissions per unit of sales (business sites in Japan)	2009	-2%	+0.2%	×	Reason for failure: Although our emissions fell by 16.6% from the FY2009 level, our sales decreased, so we did not reach our target.	-3%	-4%
			(2007)	(-7.7%)	(-5.7%)	×		(-8.7%)	(-9.6%)
Working towards a recycling- based society	Reduce waste	Waste discharge per unit of sales	2009	-4%	-11.7%	0	By reducing our waste discharge and increasing the thoroughness of our waste sorting, we reached our target.	-6%	-8%
			(2005)	(-11.7%)	(-18.8%)	0		(-13.5%)	(-15.4%)
		Ratio of business sites that have achieved zero emissions goal	_	50%	50%	0	By finding new recycling contractors and other measures, we reached our target.	60%	70%
	Conserve water resources	Water consumption per unit of sales	2009	-2%	-1.5%	×	Reason for failure: Although the volume of water we used fell by 17.0% from the FY2009 level, our sales decreased, so we did not reach our target.	-3%	-4%
			(2005)	(-21.8%)	(-20.7%)	×		(-22.6%)	(-23.4%)
3 Controlling chemical substances	Reduce PRTR-designated substances <sup>11</sup>	Release and transfer per unit of sales (business sites in Japan)	2009	-4%	-23.9%	0	Through finding alternatives and other reduction activities, combined with the effect of revised legislation and other factors, we reached our target.	-6%	-8%
			(2005)	(-31.5%)	(-44.1%)	0		(-32.9%)	(-34.4%)
	Reduce chemical substances in products	Ratio of models with reduced RoHS-designated substances	-	30%	22.2%	×	Reason for failure: Due to remaining difficulties in substitution for principal components for machinery, we did not reach our target. Going forward, we will continue to encourage our suppliers towards finding alternatives, and to develop technology with this end in view.	35%	40%

<sup>\*1:</sup> Due to the revision of the PRTR Law, the designated substances have been reviewed. \*2: Key to self-evaluation rating symbols Q: Target exceeded (by at least 20%) Q: Target reached x: Target not reached

Our performance regarding the FY2011 targets in our Medium-Term Environmental Conservation Plan is as follows.

As for "reducing CO<sub>2</sub>," the reduction measures implemented with increased intensity since FY2010 have started to bear fruit, and this, along with other factors, has enabled us to reach this target. In FY2012 and onwards, we will continue to devote effort to reducing emissions, and to pursue activities aimed at reaching our final targets for FY2013.

As for "reducing  $CO_2$  during distribution" and "conserving water resources," however, we were unable to reach our FY2011 targets. The principal reason is that our sales were lower than in the Base

Year, so the figures per unit of sales were worse than the Base

As for "reducing chemical substances in products," we are still facing difficulties in finding alternatives for lead in some components, especially those for agricultural machinery and environmental equipment, so we did not reach our target. However, by developing alternative technology, we succeeded in reducing use of hexavalent chromium.

In FY2012 and onwards, we plan to step up our pursuit of measures aimed at reaching our targets by tackling these issues.

# **Stopping Climate Change**

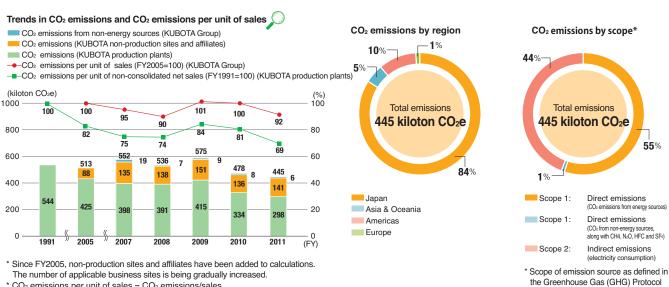
As a manufacturer, the KUBOTA Group has placed special emphasis on its production process in implementing measures to prevent climate change. To add momentum to our group-wide activities to reduce CO2 emissions from FY2010, we have set new medium-term goals and are concentrating our efforts on their achievement.

## Reducing CO<sub>2</sub> emissions



Our CO<sub>2</sub> emissions were 445 kilotons, which was 22.7% lower than the FY2009 level, and our CO2 emissions per unit of sales were 8.3% lower than the FY2009 level. By means of CO2 reduction activities, including cutting the standby power used by our production equipment, switching to town gas as fuel for the kerosene burners used in our casting process, and reducing the amount of coke we use by improving the combustion efficiency of our cupola furnaces, we succeeded in reaching our target.

In FY2012, besides robustly implementing power-saving measures throughout the KUBOTA Group in order to accommodate the power shortage caused by the Great East Japan Earthquake, we are also pursuing climate-change prevention measures.



- \* CO2 emissions per unit of sales = CO2 emissions/sales ( -- Consolidated net sales, -- Non-consolidated net sales)

## Report from

## Energy-saving activities involving the ladle-drying equipment at the Keiyo Plant (Funabashi)

At our Keiyo Plant (Funabashi), ductile iron pipes are cast for use in pipelines for water, sewage, gas, etc.

The photo on the right shows the equipment used for drying and preheating the ladles. These ladles - the vessels from which the molten metal used to make the pipes is poured into the molds-need to be heat-resistant. At the Keiyo Plant (Funabashi), the following energy-saving activities have been implemented in the equipment used to dry the ladles.

- Using town gas instead of kerosene as the burner fuel
- Optimizing the gas combustion pattern
- Increasing thermal efficiency by reviewing the position and angle of the ladle, and its distance from the shield board
- Removing the need for a soot collector by fuel conversion By means of these activities, we were able to achieve a 30% reduction in the amount of fuel used by the burners relative to the FY2011 level, and the reduction in CO2 came to 1,100 tons. Going forward, we will continue to undertake improvement activities aimed at manufacturing iron pipes underpinning lifeline services for the general public, using even less energy.





Ladle drying and preheating equipment

## Reducing CO<sub>2</sub> during distribution

Activity theme in our Medium-Term **Environmental Conservation Plan** 

CO<sub>2</sub> emissions during distribution per

unit of sales (business sites in Japan)

FY2011 targets

A 2% decrease from

the FY2009 level

FY2011 results

Self-evaluation

A 0.2% increase over the FY2009 level

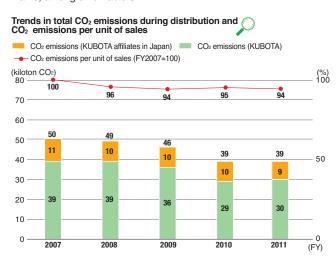
×

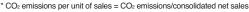
As consignors, we shipped 300 million ton-km of freight traffic within Japan, generating 39 kilotons of CO<sub>2</sub> emissions.

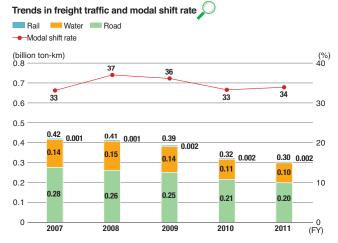
Our CO<sub>2</sub> emissions during distribution per unit of sales rose by 0.2% over the FY2009 level, and we did not reach our target. This was because the decrease in our sales was greater than the decrease in our CO<sub>2</sub> emissions (of 16.6%) achieved by sharing combined-load transportation to optimize distribution, and the improvement in the modal shift rate for transportation between our Hanshin and Keiyo Plants, among other factors.

In the future, we will continue pursuing the following measures aimed at decreasing CO<sub>2</sub> emissions during distribution:

- Improving load efficiency by changing packing, shipment leveling, vehicle aggregation and other means
- Shortening transportation distances by changing production sites, increased use of direct shipment and other means
- Reducing fuel consumption by idle reduction
- Promoting a modal shift away from road transportation and towards transportation by water and rail







<sup>\*</sup> Modal shift rate = freight traffic by rail and water/total freight traffic

#### Voice



### Combined-load transportation of several products

KBS KUBOTA is implementing ongoing improvements jointly with the consignor, KUBOTA, in order to optimize distribution across the KUBOTA Group.

The photos on the right show examples of combined loading of plastic pipes and waste water treatment tanks (upper photo) and plastic pipes and iron pipes (lower photo). Although expertise is needed to perform combined loading of products requiring different types of freight-handling, this approach allows empty space to be utilized effectively, and helps to save energy.

Making use of the accomplishments and expertise we have amassed so far, we will continue to come up with new solutions to the challenges of distribution, and to take our energy-saving activities even farther.



Combined loading of plastic pipes and iron pipes

# Working towards a Recycling-based Society

The KUBOTA Group encourages recycling and reduction of waste to achieve zero emissions and contribute toward the formation of a recycling-based society.

## Promoting the 3Rs (Reduce, Reuse, Recycle)



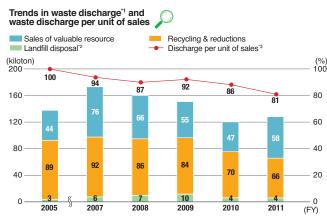
## Waste discharge per unit of sales

Waste discharge per unit of sales in FY2011 declined by 11.7% from the FY2009 level; thus, the target for the year was achieved. Total waste discharge amounted to about 70.0 kilotons, down 25.6% from the FY2009 level. By converting waste oil into fuel, recovering rubber

crawlers from construction machinery, recovering iron from waste chips and grinding sludge, and so on, we are pursuing internal recycling. Through even more meticulous management in the future, we plan to reduce our waste discharge.



Waste rubber crawlers



- 1: Includes business sites in Japan only in FY2005 and overseas business sites from FY2007.
- 2: Landfill disposal = direct landfill disposal + landfill disposal after intermediate treatment 3: Discharge per unit of sales (FY2005=100) = waste discharge/consolidated net sales

#### Waste discharge by region



#### **Zero emissions**

The zero emissions achievement ratios in FY2011 are: 67% for production sites in Japan, 11% for overseas production sites, and 50% in total. Thus, the target for FY2011 was achieved. Going forward, we will intensify recycling initiatives at our overseas business sites.

- \*1: Number of business sites certified by Environmental Protection Department, KUBOTA Corporation as having achieved the zero emissions goal / number of production sites (30sites, excluding defunct sites) among the production sites included when the Medium-Term Environmental Conservation Plan was formulated x 100(%).
- \*2: The percentage of business sites that have achieved the zero emissions goal for FY2010 was erroneous and corrected.
- \*3: Landfill ratio (%) = (Amount of waste direct to landfill + amount of waste final landfill disposal after intermediate treatment) / (amount of valuable resources sold + amount of waste discharged) x 100%
- \*4: Includes business sites in Japan only up to FY2009 and overseas business sites from FY2010.

#### Trends in ratio of business sites that have achieved zero emissions goal\*1, 2, and trends in landfill ratio\*3, 4 Ratio of business sites that have achieved the zero emissions goal \_\_\_ Landfill ratio (%) (%) 50 10 50 40 8 6.0 30 20 3.2 1.0 2008 2009 2010 2011 (FY) 2007

# Voice Kenji Matsuura KUBOTA Corporation Kyuhoji Business Center General Affairs Section

#### Waste-management initiative using measurement system

At the Kyuhoji Business Center, a waste measurement system has been installed in order to "Reduce" (in other words, reduce waste), which is one of the "3Rs." This system is used to measure and manage the weight of waste generated by each worksite.

It is now possible to find out how much waste has decreased (or increased) at each workplace, and waste reduction activities have been made "visible." Going forward, we will continue to devote effort to reducing our environmental impact by ongoing activities that "reduce waste by measuring it."



Waste measurement system

## **Chemical Substance Controls**

The KUBOTA Group has continued concerted efforts to provide appropriate control over chemical substances and achieve the target for reducing them.

## **Reducing PRTR-designated substances**

Targets and results in FY2011

Activity theme in our Medium-Term Environmental Conservation Plan

FY2011 targets

FY2011 results

Self-evaluation

Self-evaluation

A 23.9% decrease from the substances\* per unit of sales

A 4% decrease from the FY2009 level

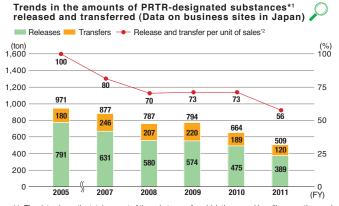
Since FY2011, following the revision of the PRTR Law, 8 substances have been newly designated as Class I Chemical Substances, and 3 substances

"Since FY2011, following the revision of the PRTR Law, 8 substances have been newly designated as Class I Chemical Substances, and 3 substances have been removed. Three designated chemical substances derived from recycled resources have also been excluded from the totals.

## Measures taken to reduce PRTR-designated substances

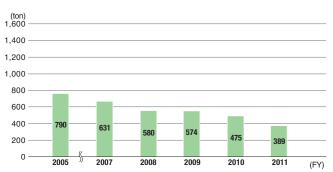
We are working for the reduction of PRTR-designated substances by: replacing conventional products with alternative ones that do not contain these substances, introducing waste thinner recycling units,

and improving the production process. In FY2011, we achieved a 35.9% reduction in the amount of PRTR-designated substances released and transferred from the FY2009 level.



- \*1: The data shows the total amount of the substances for which the annual handling quantity equaled one ton or more (0.5 tons or more for Specific Class I designations) at each business site and for which reporting is required under the PRTR Law (business sites in Japan only).
- \*2: Release and transfer per unit of sales (FY2005=100) = total release and transfer/consolidated net sales

Trends in the amounts of VOC\*1, 2 released ◯



\*1: VOC stands for Volatile Organic Compound.

(Data on business sites in Japan)

\*2: The data shows the total amount of VOCs for which reporting is required under the PRTR Law only

## Reduction of chemical substances in products





# Initiatives aimed at reducing RoHS-designated substances

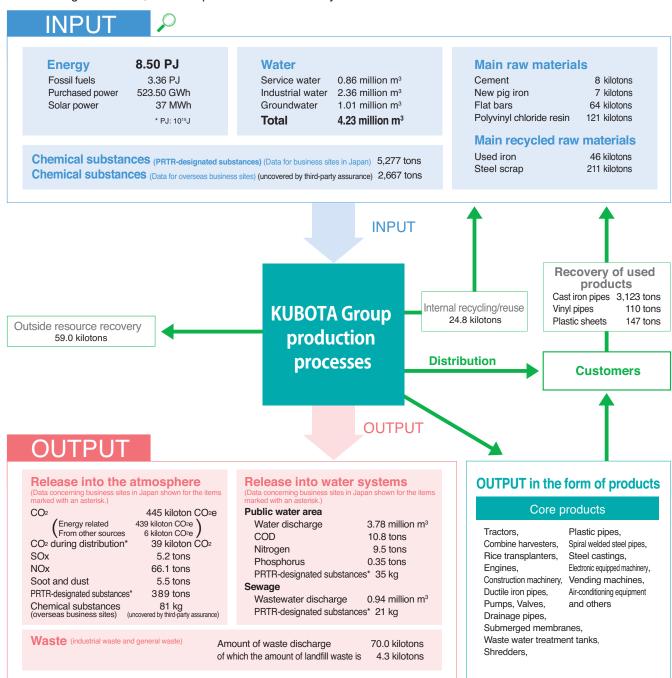
The EU's RoHS and ELV directives and similar regulations of other countries and regions are intended for electrical/electronic equipment and automobiles, and are not applied to most of the industrial machinery offered by the KUBOTA Group. However, we have been taking voluntary measures to reduce the six RoHS-designated substances (lead, mercury, cadmium, hexavalent chromium, PBB, and PBDE) in a well-planned manner. The ratio of KUBOTA models with reduced RoHS-designated substances is 22.2% in FY2011, against the target of 30%.

## **Building a management system**

The EU's REACH regulation ("REACH" stands for Registration, Evaluation, Authorisation and restriction of Chemicals) requires that chemical substances are registered and information is provided regarding Substances of Very High Concern contained in products. In FY2011, we drafted new internal rules for the identification and appropriate management of chemical substances contained in KUBOTA Group products. We also established a list of "Substances to be Restricted" of which we are going to use less, and for which we are going to find alternatives. We have incorporated these rules into our Green Procurement Guidelines, and, while forging even closer links with our materials suppliers, we are moving ahead with our compliance with REACH and other relevant legislation.

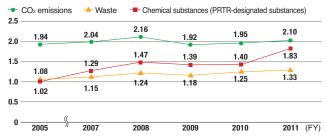
# **KUBOTA Group Business Activities and Environmental Loads**

The numerical data and an overview of the environmental load resulting from the KUBOTA Group's corporate activities both in Japan and abroad are shown below. We are ascertaining and analyzing our environmental load, and endeavoring to reduce it, and to improve our eco-efficiency.



(Items not specifically marked with a note include data for overseas business sites. The method used to calculate each indicator is given under "Calculation Standards of Environmental Performance Indicators" on our website (http://www.kubota-global.net/csr/report/r2011.html).

## Eco-efficiency indicator\*



Across all three indicators, our eco-efficiency has risen relative to the previous fiscal year due to a reduction in environmental load.

- Eco-efficiency indicator for CO₂=Consolidated net sales (million yen)/CO₂ emissions (ton CO₂e) (KUBOTA Group)
- Eco-efficiency indicator for waste=Consolidated net sales (million yen). Waste discharge (100 kg) (FY2005: KUBOTA Group in Japan; during and after FY2007: Entire KUBOTA Group)
- Eco-efficiency indicator for chemical substances=Consolidated net sales (million yen)/
  PRTR-designated substance release and transfer (kg) (KUBOTA Group in Japan)
- \* Because each indicator has improved, our sales per unit of environmental load such as CO₂ and others have increased and our eco-efficiency is likely to have increased.

# **Environmental Management**

At the KUBOTA Group, we are working to enhance our environmental management system to promote environmentally-friendly corporate management. We are also working to enhance the standards of our environmental activities by checking our compliance with the rules for environmental conservation activities and by providing educational programs to increase environmental awareness among our employees.

Note: By "environmental management" we mean pursuing environmental conservation initiatives, setting our own environmental policies and targets, and taking steps towards reaching those targets.

## **Promoting environmental management**

## **Environmental management promotion system**

The Environmental Protection Department, which drives the KUBOTA Group's environmental conservation activities, is located at our head office. We have also established departments in charge of environmental management at our business sites and affiliates: integrated with the Environmental Protection Department, these departments tackle environmental protection on a global and regional hasis

## **Compliance with environmental laws**

To ensure good compliance with environmental laws, the KUBOTA Group is setting independent control values for gas emissions, waste water, noise, vibration and other parameters, at its business sites. These values are even stricter than the regulation values imposed by

If an independent control value is exceeded, even if the value is within, for example, the legal limit, a rigorous investigation is conducted to determine the cause, and corrective measures are implemented to prevent re-occurrence.

In FY2011, there was not a single critical violation of environmental laws throughout the KUBOTA Group.

## **Environmental education**

When it comes to environmental issues, it is important to start with awareness. Through education by employee-level, we are working on a regular basis to raise awareness of environmental issues.

To ensure that we deal with such issues in a well-judged way, we are systematically providing specialist education including courses for internal environmental auditors. As well as raising skill levels, this is helping more employees gain environmental qualifications, and leading to better implementation of environmental conservation. In FY2012, by establishing new courses on energy-saving activities at our production sites, among other measures, we will be continuing to upgrade our environmental education.

## **Environmental auditing**

We conduct annual "KUBOTA Group Environmental Audits," pursuant to the "Environmental Risk Management Policy" established for each fiscal year, based on the "Environmental Risk Management Regulations and Environmental Preservation Rules and Guidelines" that were formulated by the internal control system of the KUBOTA

In FY2011, our focus was on checking the viability of the internal auditing function exercised by each business site and upper level managerial division, in addition to the checking of existing audit details performed principally by the head office Environmental Protection Department.

On-site guidance and auditing is conducted at our overseas production sites, just as at our sites in Japan.

Auditing is also conducted at our maintenance and servicing sites, offices, and construction departments. If any shortcoming is found, rigorous corrective measures are implemented.



Audit conducted at an overseas production site

#### Voice



Nora DeForest HR Manager

## **Kubota Engine America Corporation's Green Initiative**

The KUBOTA Group has been promoting the slogan "For Earth, For Life" and Kubota Engine America (KEA) has been taking it very seriously by taking steps to protect and sustain the environment, including initiatives to reduce electricity use. KEA has replaced all light switches with automatic sensors. After 10 – 15 minutes, if no activity in a room is detected, lights will automatically switch off. We have also changed all of the warehouse light fixtures. The new fixtures provide highly efficient lighting which enhances the brightness of the work environment while using less energy.

In an effort to reduce waste, KEA has started a company wide recycling program for paper, cardboard, aluminum cans, and metal scrap. All of these items are collected weekly and sent to a recycling center.

Most importantly, KEA has invested in beautifying the landscape by adding more flowers, shrubs, and trees. The addition of over 50 trees provides cleaner air and reduces ozone levels. We have also added bird feeders to attract more exotic birds. These changes are KEA's way of participating and promoting the new company Kubota Engine America Corporation slogan, "For Earth, For Life."



Trees planted at entranceway





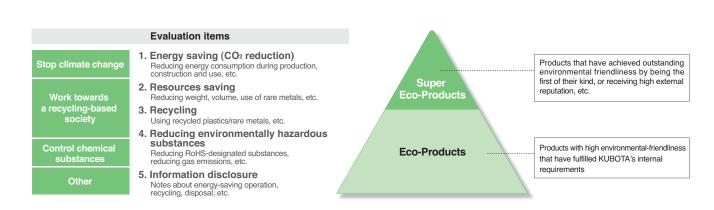
# **Environmentally-Friendly Products**

One of the ways we are making our products more environmentally-friendly is by working to reduce the environmental load throughout the product life-cycle.

## **KUBOTA's internal Eco-Products Certification System**

In FY2012, the KUBOTA Group began running its own Eco-Products Certification System to certify environmentally friendly products. Products which have fulfilled our internal requirements, which include "energy saving," "resources saving and recycling," and "reducing environmentally hazardous substances," are certified as "Eco-Products," and display our proprietary Eco-Products label. By means of this system, we are improving our range of environmentally-friendly products, and further intensifying our efforts to preserve the global environment as an environmentally leading company.

# X% reduction in fuel consumption (Relative to KUBOTA model XX in FYXXXX)



## Endeavors in development of environmentally-friendly products up to FY2011 (case studies)

### **Tractor Kingwell R-PC**



- Energy saving
- Reducing gas emissions

To the Kingwell R-PC series of medium-sized Power Krawler Tractors (24 to 34 PS) for the Japanese market, we added an "e-Guide" function and a fuel consumption graph display, enabling energy-saving operation. This series is also equipped with engines that meet the Ministry of Land, Infrastructure and Transport and Tourism's exhaust gas emissions regulations for special vehicles

\* A lamp on the instrument panel that lights up when energy-saving operation is possible

### **KUBOTA Membrane Bioreactor**

(applied in reconstruction of medium to large-scale sewage treatment plants)



- Effluent purification, conserving water bodies
- Resources savingEnergy saving

The KUBOTA Membrane Bioreactor is an advanced processing system for sewage, whereby eutrophication can be prevented and processed water can be re-used. It can be applied at medium to large-scale sewage treatment plants without securing extra land, and contributes to the resources saving by effective use of existing civil engineering structures. This system also uses large-scale unit siphon filtration and other energy-saving technologies.

# Digital Platform Scale KL-100NX Kubo-Eco Series



- Energy saving
- Reducing environmentally hazardous substances

At the time of the Digital Platform Scale KL-100NX series model change, we implemented power-saving designs, and realized a battery life of 2,000 hours using alkaline batteries. We also minimized the use of RoHS-designated substances lead, cadmium, mercury and hexavalent chromium. Consequently, the environmental load generated during use and at disposal, is now greatly reduced.

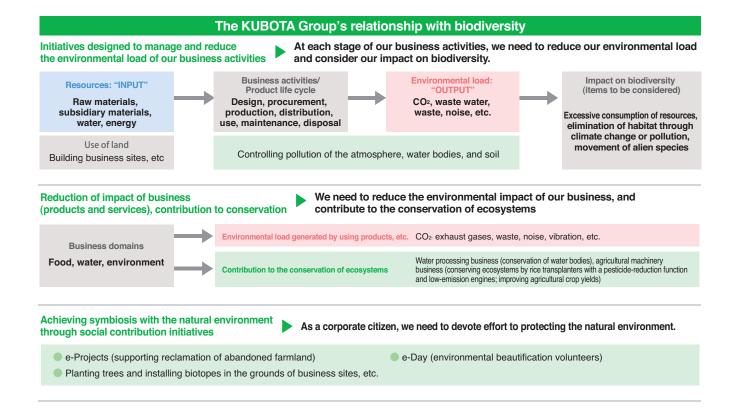
# **Conservation of Biodiversity**

One of the targets included in the KUBOTA Group's Eco-First Commitment is to "conservation of biodiversity." In our business activities and our social contribution initiatives, we are endeavoring to ensure that care is taken to conserve biodiversity and protect the natural environment.

## Understanding KUBOTA Group's relationship with biodiversity

In December 2009, in order to conserve biodiversity and ensure that natural resources are used in a sustainable way, the KUBOTA Group incorporated a principle on biodiversity into its Environmental Action Guidelines. To impose order on KUBOTA's relationship with biodiversity, we also drafted the list shown below. KUBOTA defines its business domains as "food," "water" and "the environment." All our business activities use the bounty of nature in some form, while

simultaneously having a major impact on animal and plant life. Besides the biotope installation and tree-planting initiatives we have been carrying out for some years, we are managing the environmental load of our business activities in an appropriate way. We are also engaging in biodiversity protection activities in the KUBOTA e-Project, one of our social contribution initiatives (see P. 39 for details).



## Report from the Front

# Rooftop garden opened at KUBOTA head office

In May 2011, a rooftop garden was opened at KUBOTA head office as a part of "communication space" for employees. By setting up vegetable beds and a meadow, along with various tree species, care was taken to allow the garden to become a habitat and stopover for insects, birds and other living things. Organic vegetables and rice grown in the vegetable beds are used in meals served at the employee lounge built adjoining the rooftop garden. Resource recycling initiatives are also in place: these include using KUBOTA membrane processing technology to recycle waste water from the lounge's kitchen for use in irrigation, and using fallen leaves for composting.



Fruit trees and other plants



Vegetable-bed boxes

# Third-Party Assurance on Environmental Reports

Since FY2005, the KUBOTA Group has received third-party assurance in order to improve the reliability and comprehensiveness of its environmental data. The "p" symbol is used to indicate the sections of this pamphlet and our website that have received third-party assurance. Following the third-party assurance this fiscal year, our environmental report was accorded the environmental report assurance and registration symbol\*1 of the Japanese Association of Assurance Organizations for Sustainability Information (J-SUS)\*2. This indicates that the reliability of the environmental data given in the KUBOTA REPORT 2011 – Business and CSR Activities meets the requirements for this mark.

#### **Factory visit**





Hanshin Plant (Mukogawa)

- \*1: The mark appears on the back cover of this report.
- \*2: http://www.j-sus.org/

## KPMG

## Independent Assurance Report

To the Representative Director, Chairman, President and CEO of Kubota Corporation

#### Purpose and Scope

We were engaged by Kubota Corporation (the "Company") to provide limited assurance on its KUBOTA Report 2011-Business & CSR Activities on KUBOTA's website (the "website Report") on its website for the fiscal year ended March 31, 2011. The purpose of our assurance engagement was to express our conclusion, based on our assurance procedures, on whether:

- the environmental performance indicators and environmental accounting indicators marked with: for the period
  from April 1, 2010 to March 31, 2011 included in the website Report (the "Indicators") are prepared, in all material
  respects, in accordance with the Company's reporting criteria; and,
- all the material environmental information defined by the Japanese Association of Assurance Organizations for Sustainability Information ("J-SUS") is included in the website Report.

The content of the website Report is the responsibility of the Company's management. Our responsibility is to carry out limited assurance procedures and to express our conclusion.

#### Criteria

The Company applies its own reporting criteria as described in the website Report. These are derived, among others, from the Sustainability Reporting Guidelines 2006 of the Global Reporting Initiative and Environmental Reporting Guidelines of Japan's Ministry of the Environment. We used these criteria to evaluate the Indicators. For the completeness of material environmental information, we used the 'Criteria for Granting an Environmental Report Assurance and Registration Symbol' of J-SUS.

#### Procedures Performed

We conducted our engagement in accordance with 'International Standard on Assurance Engagements (ISAE) 3000, Assurance Engagements other than Audits or Reviews of Historical Financial Information' issued by the International Auditing and Assurance Standards Board, and the 'Practical Guidelines of Sustainability Information Assurance' of the Japanese Association of Assurance Organizations for Sustainability Information ("J-SUS").

The limited assurance engagement on the website Report consisted of making inquiries, primarily of persons responsible for the preparation of information presented in the website Report, and applying analytical and other procedures. The level of assurance provided is thus not as high as that provided by a reasonable assurance engagement. Our assurance procedures included:

- Interviews with the Company's responsible personnel to obtain an understanding of its policy for the preparation of the website Report.
- Reviews of the Company's reporting criteria.
- Inquiries about the design of the systems and methods used to collect and process the Indicators.
- Analytical reviews of the Indicators.
- Examining, on a test basis, evidence supporting the generation, aggregation and reporting of the Indicators in conformity with the Company's reporting criteria, and also a recalculation of the Indicators.
- Visits to the Company's domestic factory, selected on the basis of a risk analysis.
- Assessment of whether or not all the material environmental information defined by J-SUS is included in the website Report.
- Evaluating the overall statement in which the Indicators are expressed.

#### Conclusion

Based on the procedures performed, as described above, nothing has come to our attention that causes us to believe that:

- the Indicators in the website Report are not prepared, in all material respects, in accordance with the Company's reporting criteria as described in the website Report; and
- 2) all the material environmental information defined by J-SUS is not included in the website Report.

We have no conflict of interest relationships with the Company that are specified in the Code of Ethics of J-SUS.

KPMG AZSA Sustainability Co., Ltd.

KPMG AZSA Sustainability Co., Ltd.

Osaka, Japan July 14<sup>th</sup>, 2011