Environmental Management Basic Policy

With “For Earth, For Life” as our Brand Statement, the KUBOTA Group continues to support the creation of abundance in people’s lifestyles while protecting the beautiful global environment. As a sustainable company, KUBOTA supports the creation of a sustainable society by working to find solutions to problems in the fields of food, water and the environment through our business activities.

The KUBOTA Group Environmental Charter

- The KUBOTA Group aspires to create a society where sustainable development is possible on a global scale.
- The KUBOTA Group contributes to the conservation of global and local environments through its environmentally friendly operations, products, and technologies.

The KUBOTA Group Environmental Action Guidelines

1 Environmental Conservation Efforts in All Business Activities

(1) We promote environmental conservation measures in all stages of our corporate activities, including product development, production, sales, physical distribution, and service.

(2) We also request that our suppliers understand the importance of environmental conservation efforts and cooperate in this regard.

2 Global Environmental Conservation

(1) We promote global environmental conservation measures for stopping climate change, creating a recycling- based society, and controlling chemical substances.

(2) We promote global environmental conservation by providing technologies and products contributing to solving environmental problems.

(3) We strive to ensure our corporate activities are friendly to the natural environment and biodiversity.

3 Environmental Protection to Create a Symbiotic Relationship with Local Societies

(1) We make efforts in the reduction of environmental risks and promote our business activities with proper consideration for the protection of local environments, including pollution prevention.

(2) We actively participate in environmental beautification/education activities in local communities.

4 Our Voluntary and Organized Efforts in Environmental Conservation

(1) By introducing the environmental management system and establishing voluntary targets and action plans, we work on our daily business operations.

(2) We endeavor to enhance environmental awareness through active environmental education/enlightenment activities.

(3) We actively provide the stakeholders with environment-related information.

(4) We collect stakeholders’ opinions broadly through environmental communication, and reflect the findings in our environmental activities.

Message from the Environmental Conservation Control Officer

The KUBOTA Group has made it our mission to solve problems in the fields of food, water and the environment and contributes to the conservation of the global environment through “Made by KUBOTA” manufacturing activities. Since FY2014, management has endeavored to further strengthen environmental management by guiding the implementation of measures to update our environmental management promotional structure, reduce environmental loads and environmental risks, and expand a line-up of environmentally friendly products. In June 2014, KUBOTA made a commitment to work towards our new targets to the Japanese Environment Minister, and was recertified as an “Eco-First Company”. On this occasion, we would like to improve our environmental communications with our customers, employees and other stakeholders in a bid to enhance our brand value. The KUBOTA Group will unify our efforts to help conserve the global environment.

Senior Managing Executive Officer
GM of Quality Assurance & Manufacturing Headquarters
(Environmental Conservation Control Officer)
Kenshiro Ogawa

Basic Direction of Corporate Environmental Management

As the basic direction of the environmental management of the KUBOTA Group, we established these three items.

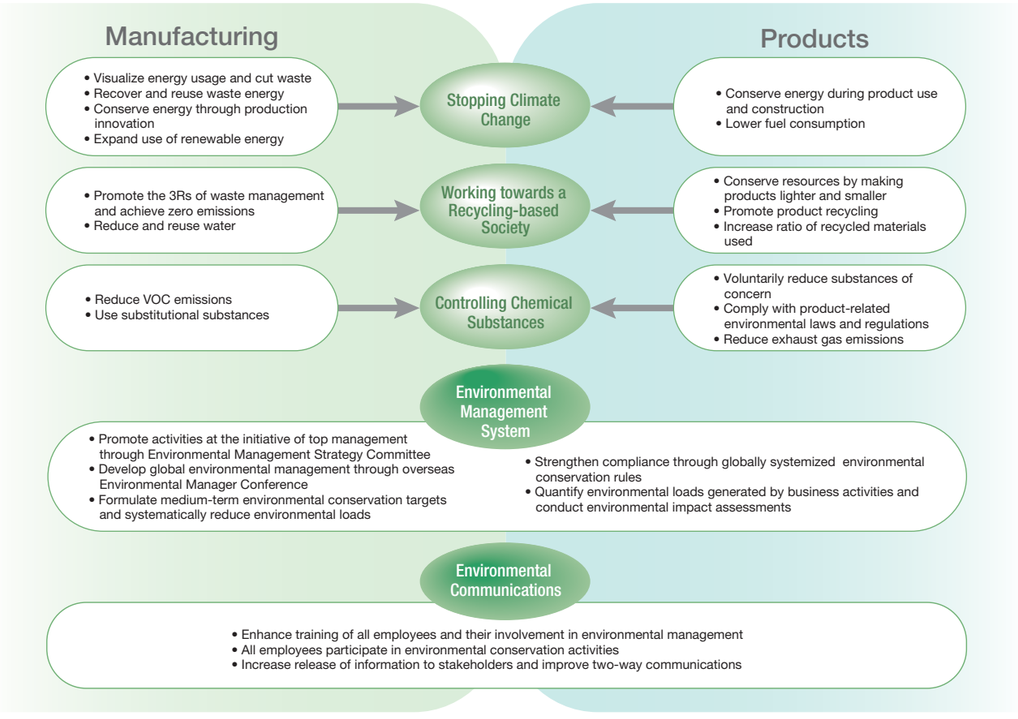
- Stop Climate Change
- Work Towards a Recycling-Based Society
- Control Chemical Substances

The KUBOTA Group aims to fortify these two items as the platform of our environmental activities.

- Environmental Management System
- Environmental Communications

Key measures

Based on the Basic Direction of Corporate Environmental Management, the KUBOTA Group engages in environmental management with key measures focused on manufacturing and products.

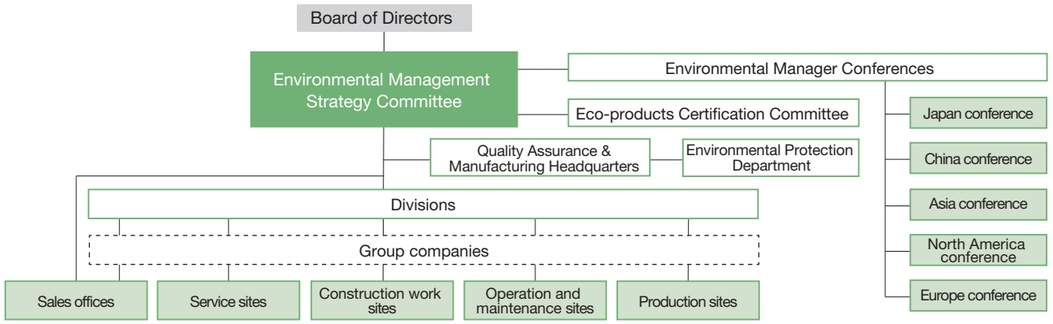


Environmental Management Promotion System

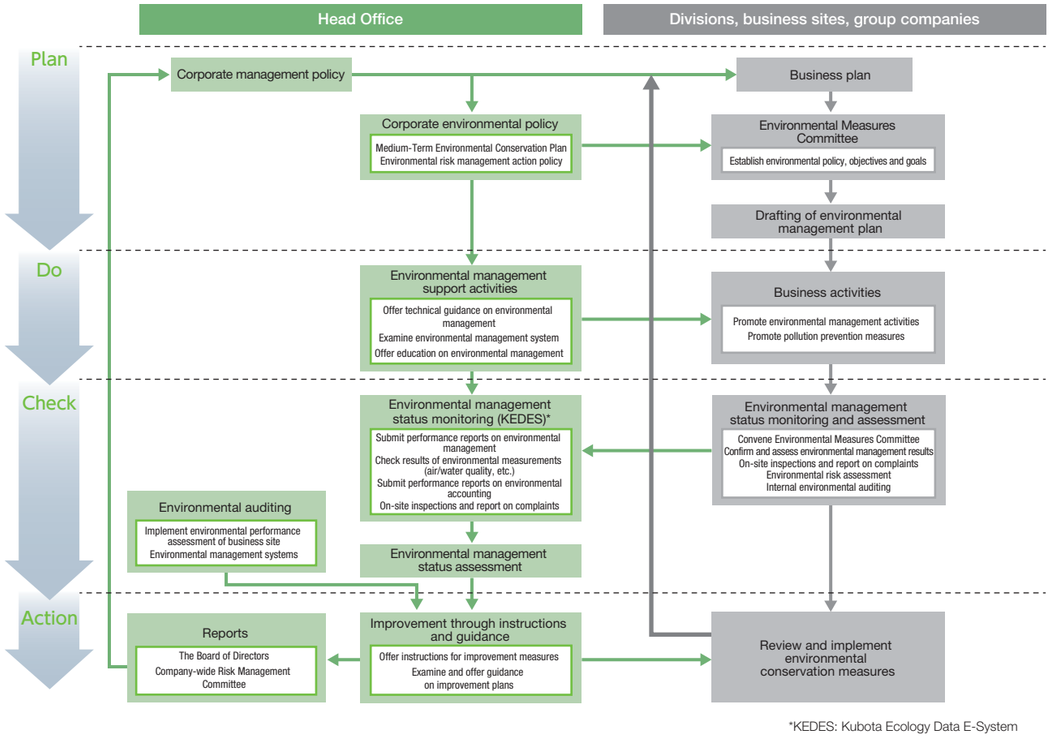
In FY2015, the Environmental Management Strategy Committee was newly established to bolster and accelerate environmental management. By transitioning to a management-led promotional structure, we aim to take a more strategic and innovative approach to environmental management.

Environmental Manager Conferences, which had been held only in Japan, are held in China, Asia, North America and Europe to globally advance environmental management across the KUBOTA Group.

Organization structure



The KUBOTA Group environmental management system



*KEDES: Kubota Ecology Data E-System

FY2016 Medium-Term Environmental Conservation Targets

The Results for FY 2014

The KUBOTA Group has created the FY2016 Medium-Term Environmental Conservation Targets in line with our Basic Direction of Corporate Environmental Management to systematically promote environmental conservation activities in each stage of manufacturing and product development. As presented below, results for FY2014 show that we are generally on track to achieve our targets for FY2016.

Issues	Actions	Management Indicators*2	Scope	Base FY	Targets FY2016	Results FY2014*2	Self-evaluation*6	Achievement Status (reasons for not achieving FY2016 targets)	Detail Page
Stopping climate change	Reduce CO_2	CO_2 emissions per unit of production*3	Global production	2009	▲14%	▲27.5%	◎	We are making progress on energy conservation in production facilities, air handling systems and lighting.	47
	Energy conservation	Energy use per unit of production	Global production	2009	▲14%	▲22.2%	◎		
Working towards a recycling based society	Reduce waste	Waste discharge per unit of production	Global production	2009	▲14%	▲32.5%	◎	We are making progress on waste separation and introduction of returnable containers.	49
		Recycling ratio*4	Production sites in Japan	—	99.5% or above	99.8%	○	We are implementing waste conversion to valuable resources and maintaining the higher recycling ratios than the target.	49
			Overseas production sites	—	90.0% or above	79.6%	△	We are not currently achieving the target due to an increase in landfill waste volume that resulted from a change in contractors.	
	Conserve water resources	Water consumption per unit of production	Global production	2009	▲21%	▲37.8%	◎	We are making progress on water conservation by the installation of wastewater recycling facilities.	51
Controlling chemical substances	Reduction of VOCs*1	VOC emissions per unit of production	Global production	2009	▲21%	▲37.1%	◎	We are making progress on VOC reduction by improving coating efficiency and use of non-VOC paints	52
Improve environmental performance of products	Expand line of Eco-Products	Sales ratio of Eco-Products*5	Global	—	40%	18.1%	△	In FY2014, we certified 35 products as Eco-Products.	53

*1 VOCs comprise the six VOCs that are most prevalent in emissions from the KUBOTA Group, namely xylene, toluene, ethylbenzene, styrene, 1, 2, 4-trimethylbenzene, and 1, 3, 5-trimethylbenzene.
*2 The figures per unit of production represent the intensity of the environmental load per unit of production money amount. The exchange rate of the base fiscal year is used when translating the production value of overseas sites into yen.
*3 CO_2 emissions include greenhouse gases from non-energy sources. We use the emissions coefficient for electricity of the base fiscal year in our calculation of CO_2 emissions from energy sources.
*4 Resource recycling ratio (%) = (Sales volume of valuable resources + External recycling volume) / (Sales volume of valuable resources + External recycling volume + Landfill disposal) × 100. Heat recovery is included in external recycling volume.
*5 Sales ratio of Eco-Products (%) = Sales of Eco-Products / Sales of products (excluding construction work, services, software, parts and accessories) × 100
*6 Self-evaluation rating symbols: ◎ Target exceeded (by at least 20%) ○ Target reached △ Target not yet reached

Environmental information in the online version of the KUBOTA REPORT 2014 has received the third-party assurance from KPMG AZSA Sustainability Co., Ltd. Indicators covered by this assurance are marked with the 🔍 symbol.

As an “Eco-First Company”

In June 2014, the KUBOTA Group created the FY2016 Medium-Term Environmental Conservation Targets with a commitment to achieving the following five objectives, and was recertified as an “Eco-First Company.” The KUBOTA Group will aggressively work toward achieving these objectives based on this new commitment.

- Work towards a recycling-based society
- Stop climate change
- Reduce emission into the atmosphere
- Develop environmentally friendly products
- Conserve biodiversity

Eco-First Mark

Eco-First certification ceremony

Access our website for further information about Eco-First Company: http://www.kubota-global.net/environment/ecofirst.html

Business Activities of the KUBOTA Group that Aims to Contribute to Global Environmental Conservation

Food


Tractors


Combine harvesters


Rice transplanters


Power tillers


Rice mills


Engines

Stabilize food production

Increase crop harvests

Increase agricultural efficiency

Reduce spray volume of agricultural chemicals

Reduce fertilizer usage

Control eutrophication of water

Make exhaust gas cleaner

Continue to support the future of the earth and humanity

Secure food supplies

Safe and secure water supplies

Global environmental conservation

Sanitary water supply

Long-term stable water supply

Multi-region water supply

Treat and purify sewage

Reuse water

Treat and reduce volume of waste

Water


Iron pipes


Pumps


Valves


Seismically reinforced water tanks

Environment


Submerged membrane units


Waste water treatment tanks


Desulfurization equipment and denitrification


Waste shredders

Stopping climate change

Resource circulation

Prevention of environmental pollution

CO_2 reduction

Resource conservation and recycling

Prevention of atmosphere, water and soil pollution

Provide products

Planning → R&D → Procurement → Production → Distribution → Installation → Use → Disposal

Water recycling amount 80.4 thousand m^3

Internal resource recycling amount 26.3 kilotons

Provide products

The KUBOTA Group's Initiatives at Plants and Offices • Conserve energy • Promote 3Rs of waste management • Reduce water consumption • Reduce VOC emissions • Conserve biodiversity

INPUT

Energy

Fossil fuels	4,600TJ	Solar power generation	66.7MWh
Purchased electricity	690,600MWh		
Transportation fuel*	695TJ		
Total	12,150 TJ		

Water resources

Service water	1.10 million m^3
Industrial water	2.56 million m^3
Groundwater	1.02 million m^3
Total	4.68 million m^3

Major raw materials

Cement	5.9 kilotons
New pig iron	7.7 kilotons
Band steel	101 kilotons

Recycled materials

Old pig iron	59.4 kilotons
Steel scrap	236 kilotons

Recovery of used products

Cast iron pipes	4,425 tons
Vinyl pipes	350 tons
Plastic sheets	71.3 tons
Crawlers	250 tons

Chemical substances

Volume of PRTR-designated substances handled*	5,839 tons
Volume of chemical substances handled (overseas sites)	5,623 tons

OUTPUT

Atmospheric emission

CO_2	663 kilotons CO_{2e}
(Energy sources	657 kilotons CO_{2e}
Other than the above)	6 kilotons CO_{2e}
Distribution CO_2*	48 kilotons CO_{2e}
SOx	17.6 tons
NOx	79.6 tons
Soot and dust	9.2 tons

Water system discharge (Discharge water includes rain and spring water)

Public water areas		Sewage lines	
Amount of discharge water	3.82 million m^3	Amount of discharge water	1.23 million m^3
COD*	10.9 tons		
Nitrogen*	9.1 tons		
Phosphorous*	0.3 tons		

Waste

Amount of waste discharge	98.2 kilotons
External recycling	75.9 kilotons
Landfill waste (included in the above)	13.1 kilotons
Amount of construction waste, etc. discharge*	23.8 kilotons

Chemical substances

Atmospheric emission		PRTR-designated substances in water system discharge*	
PRTR-designated substances*	462 tons	Public water areas	8.4 kg
VOC (included in the above)*	460 tons	Sewage lines	21.4 kg
Chemical substances (overseas sites)	230 tons		
VOC (included in the above) (overseas sites)	186 tons		

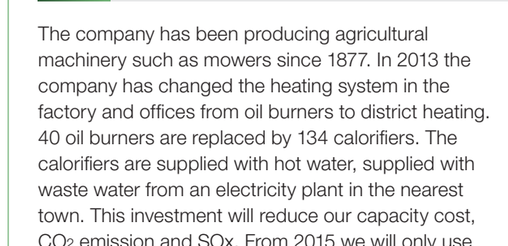
(FY2014 results) *indicates data concerning business sites in Japan

Stopping Climate Change

The fifth report issued by the Intergovernmental Panel on Climate Change (IPCC) states that there is little room for doubt about the global warming of climate systems and reports that human activity is highly likely to be a factor behind climate change. The KUBOTA Group aims to reduce CO_2 emissions, mainly through measures to conserve energy, to contribute to stopping climate change.

CO_2 Emissions (scope 1 and scope 2)

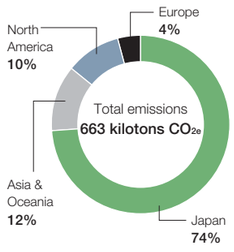
Trends in CO_2 emissions and emissions per unit of sales



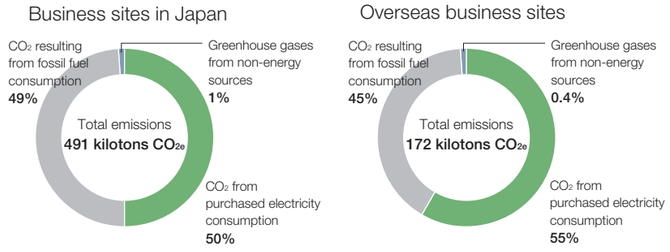
In FY2014, CO_2 emissions stood at 663 kilotons CO_{2e} and increased 13.3% compared with the previous fiscal year. We made efforts to conserve energy by upgrading to highly efficient equipment and reducing unproductive use of energy, but the CO_2 emission coefficient for electricity worsened due to the earthquake and natural disaster in Japan, and CO_2 emissions increased overseas as a result of higher production volume. However, the CO_2 emissions per unit of sales decreased 9.1% compared to the previous fiscal year.

*1 CO_2 Emissions per unit of sales = CO_2 emissions / Consolidated net sales
*2 CO_2 emissions (663 kilotons) include portions of CO_2 that were not released into the atmosphere but absorbed as carbon into products such as iron pipes (26 kilotons CO_{2e}).
*3 CO_2 emissions include GHG from non-energy sources.
*4 CO_2 emissions from FY2010 to FY2013 were revised to improve accuracy.

CO_2 emissions by region (FY2014 results)



CO_2 emissions by emission source (FY2014 results)



Voice Introduction of Heating Systems that Use Waste Heat

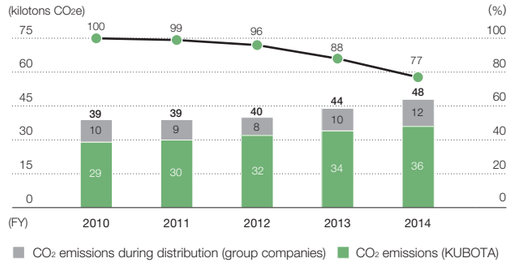
The company has been producing agricultural machinery such as mowers since 1877. In 2013 the company has changed the heating system in the factory and offices from oil burners to district heating. 40 oil burners are replaced by 134 calorifiers. The calorifiers are supplied with hot water, supplied with waste water from an electricity plant in the nearest town. This investment will reduce our capacity cost, CO_2 emission and SOx. From 2015 we will only use oil in our hardening process.


Kverneland Group Kerteminde

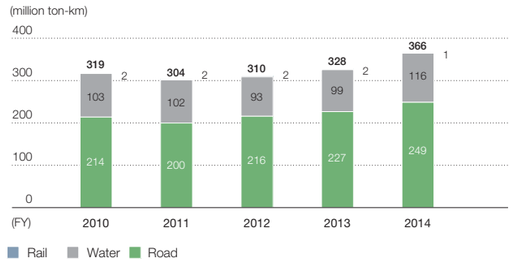

Kverneland Group Kerteminde Production Manager
Niels Erik Andersen

CO_2 Emissions during Distribution (business sites in Japan)

Trends in CO_2 emissions during distribution and emissions per unit of sales



Trends in freight traffic



* CO_2 emissions during distribution per unit of sales = CO_2 emissions during distribution / Consolidated net sales

In FY2014, CO_2 emissions during distribution stood at 48 kilotons CO_{2e} and increased 8.8% compared to the previous fiscal year. However, CO_2 emissions during distribution per unit of sales decreased 12.7% owing to greater transportation efficiency from mixed cargo and the promotion of modal shift. (See page 62 for details.)

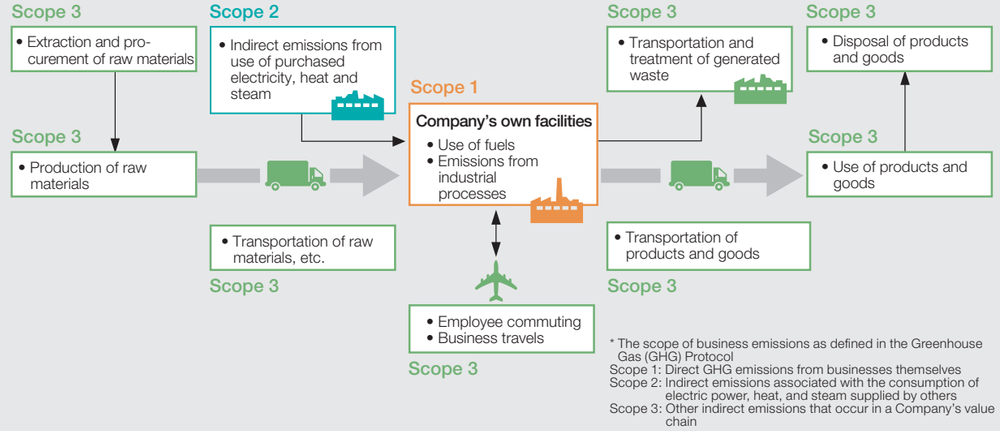
Greenhouse Gas Emissions throughout Value Chain

The KUBOTA Group makes concerted efforts to figure out greenhouse gas emissions throughout our value chain in addition to our business sites. Based on guidelines* issued by the Japanese Ministry of the Environment, the KUBOTA Group calculates greenhouse gas emissions based on Scope 1, Scope 2 and Scope 3, and continues to expand the scope of our calculation of greenhouse gas emissions.

* Basic guidelines for calculating greenhouse gas emissions in supply chains

Classification		Scope of calculation	CO_2 emissions (kilotons CO_{2e})
KUBOTA emissions	Direct emissions (Scope 1)	Use of fossil fuels	319
		Non-energy-related greenhouse gas emissions	6
	Indirect emissions (Scope 2)	Purchased electricity use	338
Upstream and downstream emissions	Other indirect emissions (Scope 3)	Extraction, production and transportation of fuels for generation of electricity used	24
		Disposal of waste emitted from bases	17
		Employee business trips	5
		Transportation of products and waste	48

Example Activities of Each Scope



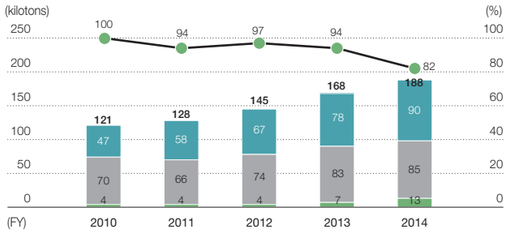
* The scope of business emissions as defined in the Greenhouse Gas (GHG) Protocol
Scope 1: Direct GHG emissions from businesses themselves
Scope 2: Indirect emissions associated with the consumption of electric power, heat, and steam supplied by others
Scope 3: Other indirect emissions that occur in a Company's value chain

Working towards a Recycling-based Society—Promotion of 3Rs

Resource depletion and insufficient space for landfill are just a few of the problems faced by a society based on mass production, mass consumption, and mass disposal. The KUBOTA Group makes every effort to reduce resources needed in our business activities and effectively use the resources we do need, while reducing waste and recycling resources.

Wastes from Business Sites

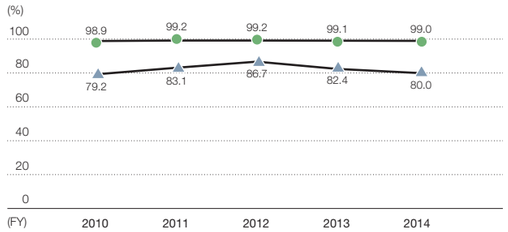
Trends in waste, etc. discharge (including valuable resources) and waste discharge per unit of sales



Volume of valuable resources
Resource recycling and volume reduction
Landfill disposal*1
Discharge per unit of sales (compared to FY2010)*2

*1. Landfill disposal = Direct landfill disposal + Final landfill disposal following intermediate treatment
*2. Waste Discharge per unit of sales = Waste discharge / Consolidated net sales
Waste discharge volume = resource recycling and volume reduction + landfill disposal
* Volume of valuable resources for FY2013 was revised to improve accuracy.

Trends in recycling ratio

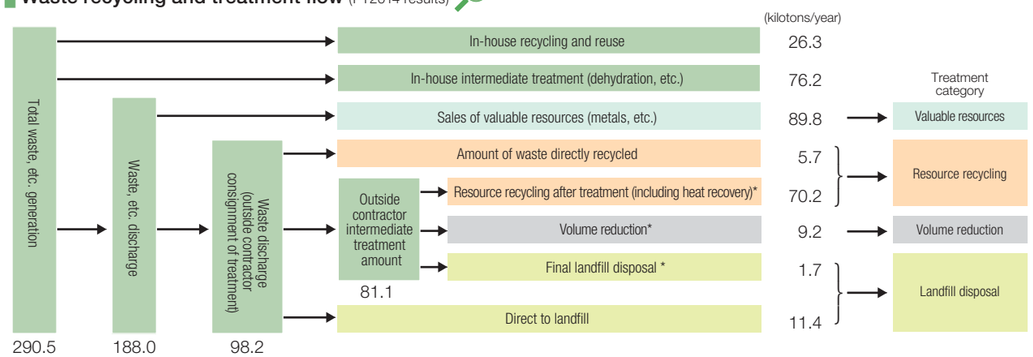


Recycling ratio (in Japan)
Recycling ratio (overseas)

Starting in FY2014, heat recovery is included in external recycling volume. The resulting difference compared with the previous method that did not include heat recovery is minor.

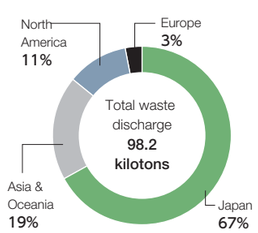
In FY2014, waste discharge amount was 98 kilotons, an increase of 8.9% from the previous fiscal year. However, waste discharge amount per unit of sales was reduced by 12.8%, reflecting higher consolidated net sales and cuts in the volume of effluent discharged due to the installation of wastewater treatment systems at an overseas business site.

Waste recycling and treatment flow (FY2014 results)



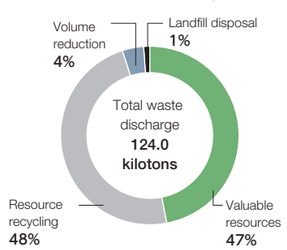
* The amounts of resource recycling after treatment, volume reduction, and final landfill disposal were the results of surveys conducted by outside intermediate treatment companies.

Waste discharge by region
(FY2014 Results)

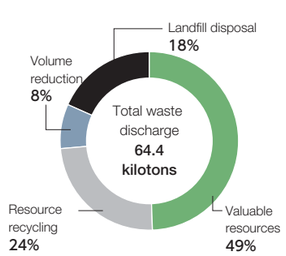


Amount of waste, etc. discharge by treatment category (FY2014 Results)

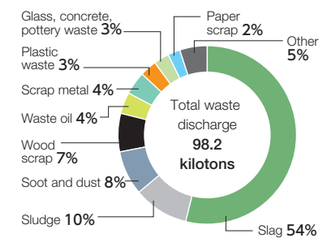
Business sites in Japan



Overseas business sites

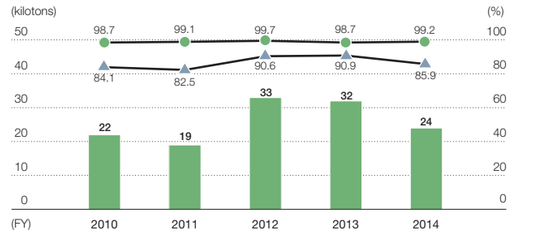


Amount of waste discharge by type
(FY2014 Results)



Waste generated from Construction Work

Trends in the amount construction waste, etc. discharge and recycling ratio (Business sites in Japan)



Amount of construction waste, etc. discharge
Recycling rate (Specific construction materials)*
Recycling rate (Including construction waste other than specific construction materials)*

* Recycling rate =[sales of valuable resources + resource recycling + volume reduction (heat recovery)]/ amount of construction waste, etc. discharge (including sales of valuable resources) x 100 (%)

Handling and Storage of Equipment Containing PCBs

Transformers, capacitors and other equipment containing polychlorinated biphenyls (PCBs) are properly delivered, stored and handled based on the Japanese Act on Special Measures concerning Promotion of Proper Treatment of PCB Wastes. Equipment containing PCBs are being disposed of steadily, being with sites for which acceptance at PCBs treatment facilities are available.

Equipment containing PCBs are locked in storage, periodically inspected, and environmentally audited as part of a thorough management system. We plan to properly process these wastes by the treatment deadline of March 2027.

Voice Working to Reduce Waste with Dehydrators (KUBOTA Runfil)

At the KUBOTA Hanshin Plant in Mukogawa, sludge water generated from the wastewater processing facility at the plant is dehydrated to reduce its volume. The introduction of the KUBOTA Runfil dehydrator in April 2012 has successfully reduced the volume of the sludge water, cutting the total volume by 10% and reducing the water content of residual sludge from 63% to 59%. KUBOTA Runfil is also easier to maintain and manage because its high-speed processing reduces the frequency of operations. We are trying to contribute to the environment through the volume reduction in sludge water and reductions in energy use from lower operating frequency.

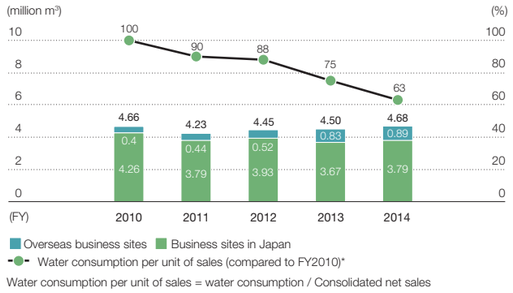
* In July 2013, KUBOTA Runfil won the Japanese Minister of Economy, Trade and Industry Prize in the 39th Excellent Environmental Equipment Awards sponsored by the Japan Society of Industrial Machinery Manufacturers. The award recognized the successful development of innovative methods and the considerable reduction of time required to exchange filter cloth and perform other maintenance duties commonly associated with filter presses.

Hanshin Plant, KUBOTA Corporation
(From left)
Yasuhiro Nakaya (supervisor), Yasutaka Kamata, Tetsuo Kuroyama (foreman), Makoto Kaminogoya, Yasuhiro Fukuda (group leader)

Working towards a Recycling-based Society —Conservation of Water Resources

The Organization for Economic Cooperation and Development (OECD) has reported that more than 40% of the world's population will live near river basins with severe water shortages by 2050. The KUBOTA Group aims to effectively use water resources by promoting the recycle of wastewater.

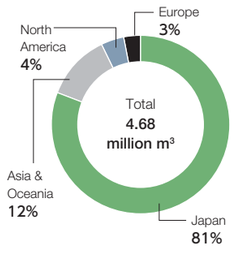
Trends in total water consumption and consumption per unit of sales



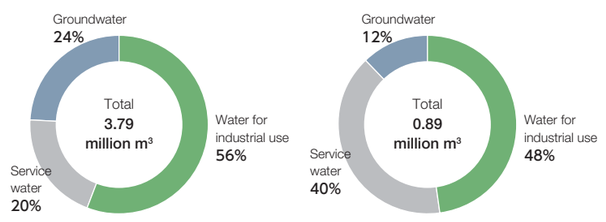
Water consumption per unit of sales = water consumption / Consolidated net sales

In FY2014, the KUBOTA Group's water consumption amounted to 4.68 million m³, an increase of 4.0% from the previous fiscal year. However, water consumption per unit of sales was reduced by 16.5% owing to successful efforts to conserve water and recycle wastewater, and higher consolidated net sales.

Total water consumption by region (FY2014 Results)



Total water consumption by type (FY2014 Results)



Voice Wastewater Recycling with Membrane Treatment Facilities

Wastewater processing facilities at Kubota Agricultural Machinery (Suzhou) Co., Ltd. process residential and industrial wastewater with the original KUBOTA wastewater recycling system comprising membrane bioreactors, activated carbon filter and reverse osmosis membrane treatment. After being treated, this recycled water is reused in production processes. The facility can process about 180 tons of wastewater per day, 40% of which becomes recycled water. The recycled water is used for cleaning parts before coatings and to supply boilers. Wastewater recycling helps prevent water shortages and pollution of the Yangtze River, where discharged water leads.

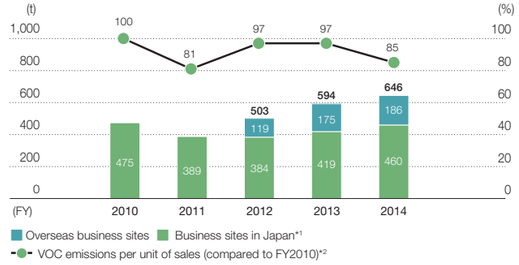
Kubota Agricultural Machinery (SUZHOU) Co., Ltd.

Production Engineering Division
Kubota Agricultural Machinery (SUZHOU) Co., Ltd.
Zhu Zhiqiang

Controlling Chemical Substances

International frameworks are being created to minimize the adverse effects of chemical substances on human health and the environment. The KUBOTA Group appropriately controls chemical substances while striving to meet reduction targets.

Trends in VOC emissions and emissions per unit of sales

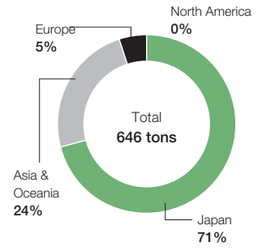


In FY2014, VOC emissions totaled 646 tons, a year-on-year increase of 8.6%. However, VOC emissions per unit of sales were reduced by 12.8%, reflecting better coating efficiency and higher consolidated net sales.

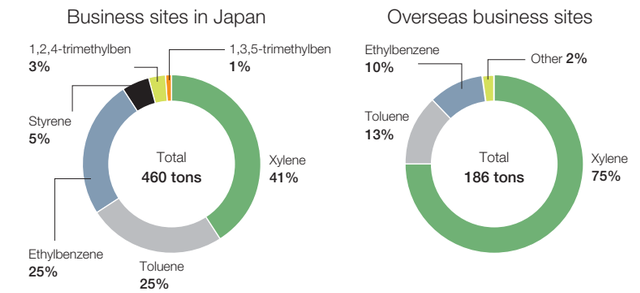
*1 Starting in FY2014, VOC emissions at production sites in Japan cover the six substances that account for the highest ratio of emissions by the KUBOTA Group: xylene, toluene, ethylbenzene, styrene, 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene. VOC emissions for FY2013 have been retroactively adjusted to reflect this change. VOC emissions for FY2013 and FY2014 do not change much when including substances other than the six above.

*2 VOC emissions per unit of sales = VOC emissions / consolidated net sales

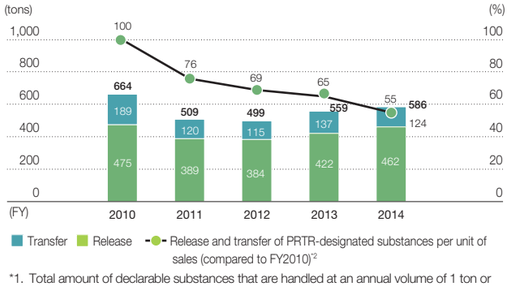
VOC emissions by region (FY2014 Results)



VOC emissions by substance (FY2014 Results)



Trends in release and transfer of PRTR-designated substances*1, release and transfer per unit of sales



*1. Total amount of declarable substances that are handled at an annual volume of 1 ton or more (0.5 ton or more for Specific Class I designations) at each site (Group production sites in Japan)

*2. Release and transfer of PRTR-designated substances per unit of sales =Total release and transfer / Consolidated net sales

Release and transfer of PRTR-designated substances was 586 tons in FY2014, up 4.9% from the previous fiscal year, but reduced by 15.9% on a release and transfer per unit of sales basis.

Groundwater monitoring (FY2014)

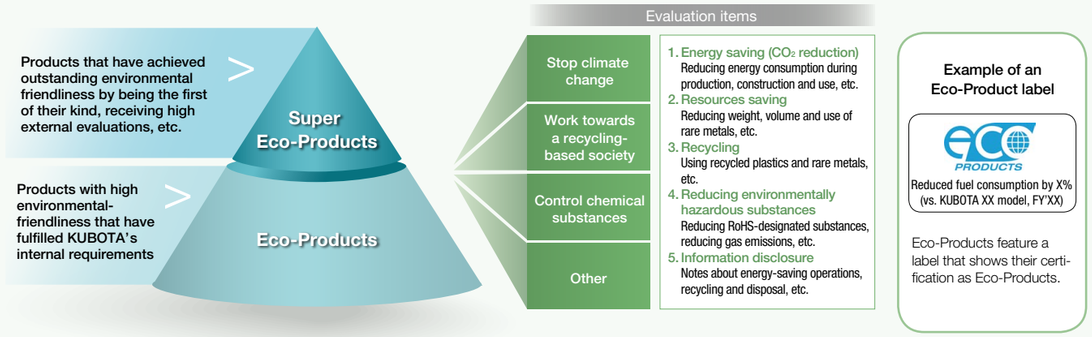
Results of groundwater measurements conducted on the premises of the business sites that used organic chlorine-based compounds in the past are as shown below.

Business site	Substance	Measured groundwater value	Environmental standard
Tsukuba Plant	Trichloroethylene	Non detected (Less than 0.0001mg/L)	Less than 0.03 mg/L
Utsunomiya Plant	Trichloroethylene	Non detected (Less than 0.001mg/L)	Less than 0.03 mg/L

Expanding Lineup of Environmentally Friendly Products

Based on the Eco-Products Certification System, an in-house certification of the environmental friendliness of products, the Group certified 35 Eco-Products in FY2014. We will continue to focus on reducing environmental impacts throughout the life cycle of its products.

Internal certification system for Eco-Products



Example of an Eco-Product label

ECO PRODUCTS
Reduced fuel consumption by X% (vs. KUBOTA XX model, FY'XX)

Eco-Products feature a label that shows their certification as Eco-Products.

Products Certified as Eco-Products in FY2014 (excerpt)

Energy Conservation
Compliant with Exhaust Gas Regulations

Mini backhoe
KX040-4 (North America)

Rice transplanter
WELSTAR RACWELα ZP67 ,etc. (Japan)

Energy Conservation

Compact color sorting equipment
KG-S071

Rice milling equipment sheds
K-CR512CS

Can and PET bottle vending machine
R1234yf refrigerant: 36 selections
CO_2 refrigerant: 42 selections

Compact heat pump air conditioners
EJ-250-DT-HP, etc.

Compliant with Exhaust Gas Regulations

Tractors
GLOBE M135G, etc. (Japan, North America, Europe)

Combine harvester
DYNAMAX REVO ER6120, etc. (Japan)

Compact tracked loader
SVL90-2 (North America)

Diesel engines
V6108-E4 series, etc. (Japan, North America, Europe)

Longer Service Lives

GENEX soft-seal valves
SX-G, SY-G

Rolls for steel mills
V-type KS roll

Voice Energy Conservation in Agriculture from New Technique for Direct Sowing Iron-Coated Seeds

Rice Transplanters Technology Division, KUBOTA Corporation
(From right) **Team leader Kunimitsu Makihara, Taro Nakamura**

Although mechanization has reduced overall labor hours, the time that it takes to raise seedlings remains a major obstacle to shortening the time required to plant rice fields. In 2005, the KUBOTA Group began working on a new technique for direct sowing iron-coated seeds with customers of Niigata-Kubota Corporation. In 2010, KUBOTA launched Testumakichan as an implement for multi-purpose rice transplanters for sowing iron-coated seeds with high precision. Thereafter, KUBOTA also developed specialized equipment for sowing iron-coated seeds.

The direct sowing of iron-coated seeds is a technique for sowing seeds coated with iron powder in a cultivated field. Compared with the transplant cultivation method, this technique eliminates the energy expended at rice seedling nurseries and reduces the labor time associated with raising seedlings and transplanting these seedlings to fields. The iron coating is less harmful than conventional coatings (oxygen generating agents) and allows work volume to be leveled out because the iron-coated seeds can be stored over long periods. The direct sowing of iron-coated seeds substantially reduces man hours by allowing work to be performed simultaneously and at high speed on the sowing of spaced seeds, fertilization, herbicide application and soil grooving. It is possible to reduce man hours per 10 ares by roughly 60% and production costs by about 36%.*

Direct seeder for iron-coated rice seeds (WELSTAR WORLD WP60D-TC)

To encourage the widespread adoption of direct sowing of iron-coated seeds, it is necessary to improve performance and keep prices low for farmers. The six-row direct seeder for iron-coated rice seeds launched in 2013 features a new and improved layout and lower costs.

The KUBOTA Group has also provided direct seeder for iron-coated rice seeds as reconstruction assistance for customers that lost their seedling nurseries in the Great East Japan Earthquake.

To promote the adoption of direct sowing of iron-coated seeds even further, KUBOTA is developing machinery tailored to customer needs in our aim of contributing to the realization of labor-saving, low-cost agriculture and larger-scale farming.

* Sources: Man hours and production costs for rice transplantation based on 2009 Niigata Agriculture, Forestry and Fisheries Annual Statistics.
Man hours and production costs for the direct sowing of iron-coated seeds based on 2009 National Agricultural Systemization Research Association.

Voice Palm Oil Mill Effluent Processing Helps Prevent Global Warming and Water Pollution

Biogas PT
Water & Environment Business Promotion Headquarters
KUBOTA Corporation
Seiji Kato

Malaysia and Indonesia have many palm oil production plants, and post-extraction effluent used to be dumped into open lagoons. However, this mill effluent released methane (a greenhouse gas) into the atmosphere and polluted neighboring water resources through runoff.

KUBOTA was able to realize the following three outcomes by introducing water treatment technologies that use our membranes and membrane-type methane fermentation technologies it accumulated processing sewage and food waste in Japan.

- Zero emissions of methane gas that had been released into the atmosphere
- Biogas generated by the mill effluent can be reliably extracted in high concentration and reused as fuel

(* Biogas fuel is a form of renewable energy derived from plants.)

- After biogas is collected, the mill effluent is processed to stringent wastewater standards

The first mill effluent processing facility installed in Malaysia has the capacity to recover 26 thousand cubic meters of biogas per day, which is used as fuel at an adjacent plant. This is equivalent to 5.7 million m^3 of natural gas fuel annually, cutting CO_2-equivalent emissions by 85 thousand tons annually.

As this was our first project developed overseas on a fairly large scale, we had some problems that were not encountered with the prototype in Japan, so it was a relief when construction on the facility was completed and safely handed over to the customer in March 2014.

The KUBOTA Group will continue to help solve environmental issues in Southeast Asia by aiming to expand the use of palm oil mill effluent processing facilities. In addition to palm oil mill effluent, we aim to find solutions to other environmental problems, such as growing demand for water and water pollution, in the upstream and downstream water treatment business.

First palm oil mill effluent processing facility in Malaysia (for BBC Biogas)
External view of membrane-type methane fermentation facility

Conservation of Biodiversity

Conservation of biodiversity is set as one of the targets for the KUBOTA Group's "Eco-First Commitment."
In its business activities and social contribution initiatives, the Group endeavoring to ensure that care is taken to conserve biodiversity and protect the natural environment.

Relationships between the KUBOTA Group and biodiversity

Management and reduction of environmental loads involved in its business activities

In each stage of business activities, the KUBOTA Group reduces environmental loads and consider its influence on biodiversity.

Input (resources)	Business activities/product life-cycles	Output (environmental loads)	Impact on biodiversity (issues to be considered)
Raw materials, sub-materials, water resources, energy sources	Design, procurement, manufacturing, logistics, use of products, maintenance, disposal	CO_2 emissions, wastewater, waste, noise, etc.	Excessive consumption of resources, loss of habitats due to climate change or pollution, transfer of exotic species
Land use: Construction of business sites, etc.	Control of pollution of the air, water bodies and soil		

Impact reduction and environmental contributions through its businesses (products/services)

The KUBOTA Group reduces environmental impacts of its business activities, and contribute to conservation of ecosystems.

Business fields		
Food, water and the environment	Environmental loads due to product use, etc.	CO_2 emissions, exhaust gas, waste, noise, vibration, etc.
	Contributions to conservation of ecosystems	Water treatment business (conservation of water bodies), agricultural machinery business (conserving ecosystems by rice transplanters with a pesticide-reduction function and low-emission engines; improving agricultural crop yields)

Symbiosis with the natural environment through social contribution initiatives

As a corporate citizen, the KUBOTA Group devotes efforts to preserving the natural environment.

KUBOTA e-Project (supporting reclamation of abandoned farmland), KUBOTA e-Day (environmental beautification volunteers), Planting trees and installing biotopes on the grounds of business sites, etc.

Action Report

KUBOTA Hanshin Plant

Participation in Amagasaki 21st Century Afforestation Project

At the Hanshin Plant, we participate in the Amagasaki 21st Century Afforestation Project* by growing tree saplings at the plant for the prefecture. The tree saplings tended to by our employees grew bigger and bigger, and in early March 2014, they were transplanted to the main pasture of Amagasaki forest near the plant by employees of the plant and by representatives of the Amagasaki Port Administration Office of Hyogo Prefecture. We have received new tree saplings to raise and plan to transplant them next spring. We will continue activities like this that leave a good impression on our customers and communities.

* Hyogo Prefecture started this public-private project in March 2002 with the objective of fostering communities in harmony with the environment by creating water resources and abundant greenery along the Amagasaki waterfront area. In the industrial area of Amagasaki, project participants are planting trees that will become a forest 100 years from now. The project aims to add greenery to industrial sites and surrounding areas, promote the use of canals, and children's environmental education.

P.T. Kubota Indonesia

Tree Planting to Commemorate 40th Anniversary

To commemorate its 40th anniversary in FY2014, P.T. Kubota Indonesia held a joint tree planting event with students in the region. On May 16, a total of 200 employees and students from Diponegoro University who are studying environmental engineering worked together to plant 1,972 mangrove trees to reflect the year that Kubota Indonesia was founded, along the Morosari coastline of Demak city.

On June 21, a total of 200 employees and students from Semarang State University planted 1,972 tanjong trees in a tree planting event held on the slopes of Mt. Ledek near Semarang City. P.T. Kubota Indonesia will continue to contribute to the preservation of the natural environment in the region.

Environmental Management

The KUBOTA Group aims to enhance its risk management activities and strengthen our environmental management structure, including at overseas business sites.

Compliance with Environmental Laws and Regulations

To ensure compliance with environmental laws, the KUBOTA Group has set and thoroughly manages its own control values at each of its bases for exhaust gas, wastewater, noise, vibration and other variables that are stricter than the relevant laws and regulations.

Environmental audits conducted in FY2014 did not reveal any serious violations of environmental laws and regulations at Group companies.

Environmental Auditing

Each year environmental audits are conducted by the KUBOTA Environmental Protection Department, based on the internal control system of the KUBOTA Group.

Audits in FY2014 were conducted by means of paper audits and field audits with factors that have the potential to cause environmental accidents listed as priority checklist items, focusing on production sites, service sites, offices and construction departments in Japan as well as overseas production sites.

Also, at production sites in Japan and overseas, in addition to environmental audits conducted by the Environmental Protection Department, internal environmental audits are also implemented by the staff of each site with the aim of raising the level of environmental management.

■ FY2014 Environmental audit implementation status
[Number of subject sites and departments]
201 sites and departments
[Number of audit items]
99 items (for production sites in Japan)
[Audit details]
- **Water & Air quality management**
- **Noise & Vibration management**
- **Waste material & Chemical substance management**
- **Climate change prevention**
- **Response to abnormalities and emergencies**
- **Environmental management system**
- **Reduction of environmental load**

Audit of overseas production site SIAM KUBOTA Technology Co., Ltd.

Audit of business site in Japan
Keiyo Plant (Funabashi), KUBOTA Corporation

Drills for responding to abnormal and emergency situations

The KUBOTA Group is making efforts to identify and minimize the environmental risks associated with its business activities. It carries out regular training based on the procedures established to respond to specific risks at each site to mitigate the impact on the ambient environment in case of an environmental accident.

Drainage outlet blockage training KUBOTA Vending Services Co., Ltd.

Effluent recovery training
Shinyodogawa Environmental Plant Center, KUBOTA Corporation

Environmental Education

The KUBOTA Group provides environmental training and education to our employees around the world. The education program for employees consists of rank-based training, professional training, and general training. KUBOTA assists external group's environmental education programs.

Results of environmental education in FY2014

Classification	Course title	Frequency	No. of participants	Course descriptions
Education by employee-level	Training for new recruits	2	178	Environmental issues and KUBOTA's environmental conservation activities
	Training for employees promoted to managerial positions	2	104	The KUBOTA Group's environmental management
	Training for newly appointed foremen	3	22	KUBOTA's environmental management and efforts as foremen
	Training for newly appointed supervisors	1	44	KUBOTA's environmental management and efforts as supervisors
	CSR training (Employees of "creative" personnel who have worked for nine years)	2	76	Environmental issues and environmental risk management
Professional education	Basics of environmental management education	1	17	Basic knowledge of legal systems, environmental risk, and environmental conservation
	Pollution prevention technology education	1	16	Pollution control technology and pollution control laws
	Energy saving technology education	1	6	Energy saving technology, energy saving laws
	Waste management education	2	45	Waste Management and Public Cleansing Law, practical training in consignment contracts and manifests, etc.
	New waste management system training	12	59	Waste management using ICT systems
	Education to train ISO 14001 environmental auditors	2	30	The ISO 14001 standard, environment-related laws, audit techniques
General training	Overseas production sites Environmental education	15	156	The KUBOTA Group's environmental management and medium-term environmental conservation targets
	Business sites in Japan Environmental education	1	28	The KUBOTA Group's environmental management and environmental risk management
	Total	45	781	
Support to education in outside organizations	Internship program with Utsunomiya Hakuyo High School	1	4	KUBOTA's environmental conservation activities and efforts at Utsunomiya Plant

Environmental education (SIAM KUBOTA Corporation Co., Ltd.)

Waste management education

Report on the Month for the Environment — Thailand

SIAM KUBOTA Metal Technology

Month for the Environment activities are held in June every year. This year, as a part of environmental education, employees visited regional elementary and junior high schools, cleaned areas around the schools, and taught students how to separate and reduce trash. A total of 260 people participated, creating an opportunity to interact with local children in Thailand and think about the environment.

KUBOTA Engine (Thailand)

In July, CSR and Environment Day was held. Around 50 employees including the plant manager and 20 locals participated, visiting local town schools to plant trees and clean the area. We spent valuable time with local villagers, awarded scholarships, and donated sporting goods to children.

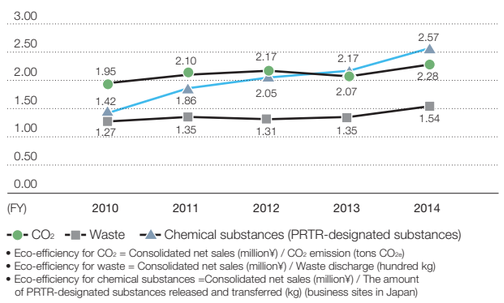
Trends in Major Environmental Indicators (Trends in the last five year)

Indicators listed on pages 45 and 46

Environmental indicators				Unit	FY2010	FY2011	FY2012	FY2013	FY2014
INPUT	Total energy input*3			TJ	9,195	9,235	9,646	11,320	12,150
		Fossil fuel*3		TJ	3,695	3,535	3,726	4,370	4,660
		Purchased electricity		MWh	503,400	523,490	543,100	642,400	690,600
		Transportation fuel (business sites in Japan)		TJ	561	564	587	641	695
	Water consumption			million m^3	4.66	4.23	4.45	4.50	4.68
		Overseas business sites included in the above		million m^3	0.4	0.44	0.52	0.83	0.89
		Service water		million m^3	0.93	0.86	0.87	1.03	1.10
		Water for industrial use		million m^3	2.69	2.36	2.56	2.46	2.56
		Groundwater		million m^3	1.04	1.01	1.02	1.01	1.02
	Amount of PRTR-designated substances handled (business sites in Japan)			tons	5,507	5,277	5,321	5,667	5,839
	Amount of chemical substances handled (overseas business sites)			tons	—	2,667	4,488	4,138	5,623
OUTPUT	CO_2 emissions*3			kilotons CO_{2e}	483	451	471	585	663
		Overseas business sites included in the above*3		kilotons CO_{2e}	69	76	93	135	172
		Energy sources*3		kilotons CO_{2e}	475	445	465	579	657
		Other than the above		kilotons CO_{2e}	8	6	6	6	6
	Distribution CO_2 (business sites in Japan)			kilotons CO_{2e}	39	39	40	44	48
	Atmospheric discharge	SOx emissions*1		tons	3.8	5.2	2.9	6.6	17.6
		NOx emissions*1		tons	49.5	66.1	61.7	64.3	79.6
		Soot and dust emissions*1		tons	3.8	5.5	6.4	5.7	9.2
		Amount of PRTR-designated substances released (business sites in Japan)		tons	475	389	384	422	462
			VOC (included in the above)*4	tons	475	389	384	419	460
		Amount of chemical substances released (overseas business sites)		tons	—	81	119	211	230
			VOC (included in the above)	tons	—	—	119	175	186
	Water system discharge	Public water areas	Wastewater discharge	million m^3	3.86	3.78	3.82	3.48	3.82
			COD*2 (business sites in Japan)	tons	9.5	10.6	11.9	10.4	10.9
			Nitrogen discharge*2 (business sites in Japan)	tons	9.7	9.5	10.2	9.7	9.1
			Phosphorous discharge*2 (business sites in Japan)	tons	0.25	0.35	0.29	0.3	0.35
			Amount of PRTR-designated substances released (business sites in Japan)	kg	33	35	40	9	8.4
		Sewage lines	Wastewater discharge	million m^3	0.99	0.94	1.01	1.34	1.23
			Amount of PRTR-designated substances released (business sites in Japan)	kg	20	21	20	20	21
	Waste	Amount of waste discharge		kilotons	74.3	70	78.2	89.7	98.2
			Overseas business sites included in the above	kilotons	9.9	10.2	14.5	25.4	32.6
		Landfill waste		kilotons	3.9	4.3	4.1	7.2	13.1
	Amount of construction waste, etc. discharge (business sites in Japan)			kilotons	21.5	18.9	32.7	31.8	23.8

*1 Data for overseas business sites is included from FY2011 onwards. *2 Data for total discharge from business sites subject to total emission control.
*3 Figures of fossil fuel and energy sources from FY2010 to FY2013 were revised to improve accuracy.
*4 As shown in *1 of the graph of VOC emissions and emissions per unit of sales on page 52.

Eco-efficiency



- Eco-efficiency for CO_2 = Consolidated net sales (million¥) / CO_2 emission (tons CO_{2e})
- Eco-efficiency for waste = Consolidated net sales (million¥) / Waste discharge (hundred kg)
- Eco-efficiency for chemical substances =Consolidated net sales (million¥) / The amount of PRTR-designated substances released and transferred (kg) (business sites in Japan)

Eco-efficiency improved in all three categories comprising CO_2 emissions, waste emissions, and chemical substances. The KUBOTA Group will step up efforts at environmental conservation to continue improving eco-efficiency.

How to read the graph

The improvement of the figures means that the sales per unit of environmental load have increased, which is considered to indicate higher eco-efficiency.

Status of Environmental Management System Certification Acquisition
(ISO 14001 and EMAS)

The KUBOTA Group's production sites are preparing to acquire external certification for their environmental management systems. In FY2014, two production sites in China obtained ISO 14001 certification.

[I] ISO 14001 Certification

KUBOTA in Japan

No	Name	Other included organizations and subsidiaries	Main business	Inspecting/ Certifying organ	Date of certification
1	Tsukuba Plant	• Eastern Main Parts Center • KUBOTA F.I.M. Service Ltd. KS Tsukuba Training Center • Kanto Kubota Precision Machinery Co.,Ltd.	Engines, tractors, etc.	LRQA	November 28, 1997
2	Keiyo Plant	• Distribution Center	Ductile iron pipes, spiral welded steel pipes	LRQA	July 16, 1998
3	Ryugasaki Plant	• KUBOTA Vending Service Co., Ltd. Ryugasaki Plant • KUBOTA Kanto Vender Center Inc. Ryugasaki Plant	Vending machines	DNV	November 13, 1998
4	Hanshin Plant	• Marushima Factory	Ductile iron pipes, rolls, potassium titanate, KUBOTA TXAX products	LRQA	March 5, 1999
5	Kyuhoji Business Center	• KUBOTA Environmental Service Co., Ltd • KUBOTA Membrane Corp. • KUBOTA Keiso Corp.	Measuring instruments, measuring systems, CAD systems, rice-milling products, waste shredder systems, submerged membranes, and mold temperature controllers	DNV	March 19, 1999
6	Hirakata Plant		Valves, cast steel, new ceramic materials, and construction machinery	LRQA	September 17, 1999
7	Okajima Business Center		Industrial cast iron products, drainage pipes, and other cast iron products	JICQA	December 22, 1999
8	Sakai Plant/Sakai Rinkai Plant		Engines, tractors, small-size construction machinery, etc.	LRQA	March 10, 2000
9	Shiga Plant		FRP products	JUSE	May 18, 2000
10	Water Engineering & Solution Business Unit	• Shin-yodogawa Environmental Plant Center	Sewage & sludge water purification, waste water treatment facilities	LRQA	July 14, 2000
11	Pumps Business Unit	• KUBOTA Kiko Ltd.	Sewage & water purification plants, pumps and pump stations	LRQA	July 14, 2000
12	Water Engineering & Solution Business Unit (membrane filtration system)		Filtration membrane unit	LRQA	July 14, 2000
13	Utsunomiya Plant	• KUBOTA F.I.M. Service Ltd. KS Utsunomiya Training Center	Rice transplanters and combine harvesters	LRQA	December 8, 2000

KUBOTA Group: Companies in Japan

No	Name	Other included organizations and subsidiaries	Main business	Inspecting/ Certifying organ	Date of certification
1	Nippon Plastic Industry Co., Ltd.	• Head office and plant, Mino Plant	Plastic pipes, plastic sheets, etc.	JSA	October 27, 2000
2	KUBOTA Construction Co., Ltd.		Design and construction of civil engineering structures and buildings	JQA	December 22, 2000
3	KUBOTA Environmental Service Co., Ltd.		Installation, maintenance and management of environmental systems for service water, sewage, landfill disposal, raw waste and waste plants, etc. and services	MSA	November 20, 2002
4	KUBOTA-C.I. Co., Ltd.	• Tochigi Plant • Sakai Plant • Odawara Plant • Kyushu KUBOTA Chemical Co., Ltd.	Plastic pipes and couplings	JUSE	March 27, 2003 (integrated authentication in 2011)
5	KUBOTA Air Conditioner Co., Ltd.	• Tochigi Plant	Central air conditioning systems	JQA	August 27, 2004
6	KUBOTA Precision Machinery Co., Ltd.		Hydraulic valves, hydraulic cylinders, transmissions, hydraulic pumps, hydraulic motors, etc.	LRQA	March 17, 2007
7	KUBOTA KASUI Corporation		Design, construction and maintenance management of environmental conservation facilities	BCJ	February 1, 2010

KUBOTA Group: Overseas companies

No	Name	Main business	Inspecting/ Certifying organ	Date of certification
1	SIAM KUBOTA Corporation Co.,Ltd. (Navanakorn, Thailand)	Small diesel engines and agricultural machinery	MASCI	February 28, 2003
2	P.T. Kubota Indonesia(Indonesia)	Diesel engines and agricultural machinery	LRQA	February 10, 2006
3	Kubota Materials Canada Corporation (Canada)	Cast steel products	SGS (U.S.)	June 15, 2006
4	P.T.Metec Semarang (Indonesia)	Vending Machines	TÜV	March 16, 2011
5	Kubota Precision Machinery (Thailand) Co.,Ltd. (Thailand)	Equipment for tractors	SGS	August 27, 2012
6	Kubota Manufacturing of America Corporation (U.S.)	Small-sized tractors, mowers, Utility Vehicles and tractor implements	BSI	September 20, 2012
7	SIAM KUBOTA Corporation Co.,Ltd. (Amata Nakorn, Thailand)	Tractors and combine harvesters	BV	September 27, 2012
8	Kubota Industrial Equipment Corporation (U.S.)	Tractor implements and tractors	DEKRA	November 28, 2012
9	KUBOTA SANLIAN PUMP (ANHUI) Co., Ltd. (China)	Pumps	CCSC	May 29, 2013
10	Kubota Agricultural Machinery (SUZHOU) Co., Ltd. (China)	Combine harvesters, rice transplanters and tractors	SGS	November 13, 2013

LRQA : Lloyd's Register Quality Assurance Limited (U.K.)
DNV : DNV Certification B.V. (Netherlands)
JICQA : JIC Quality Assurance Ltd. (Japan)
JUSE : Union of Japanese Scientists and Engineers ISO Center
JSA : Japanese Standards Association
JQA : Japan Quality Assurance Organization
MSA : Management System Assessment Center (Japan)
JCQA : Japan Chemical Quality Assurance Ltd.
BCJ : The Building Center of Japan
MASCI : Management System Certification Institute (Thailand)
SGS (U.S.) : Systems & Services Certification, a Division of SGS North America Inc.(U.S.)
TÜV : TÜV Rheinland Cert GmbH (Germany)
SGS : SGS United Kingdom Limited (U.K.)
BSI : BSI Assurance UK Limited (U.K.)
BV : Bureau Veritas Certification Holding SAS—UK Branch (U.K.)
DEKRA : DEKRA Certification, Inc. (U.S.)
CCSC : China Classification Society Certification Company (China)

[II] EMAS certification

KUBOTA Group: Overseas companies

No	Name	Main business	Inspecting/ Certifying organ	Date of certification
1	Kubota Baumaschinen GmbH (Germany)	Construction Machinery	IHK	January 3, 2013

IHK: Industrie- und Handelskammer für die Pfalz (Germany)

Information related to Controlling Chemical Substance

FY2014 results of PRTR reporting (production sites in Japan)

Number specified in Cabinet Order	Chemical substance	Releases				Transfers	
		Atmosphere	Public water areas	Soil	On-site landfills	Sewerage	Transfers to off-site
1	Water-soluble zinc compounds	0.0	8.4	0.0	0.0	21	1,257
53	Ethylbenzene	113,976	0.0	0.0	0.0	0.0	24,257
71	Ferric chloride	0.0	0.0	0.0	0.0	0.0	0.0
80	Xylene	190,723	0.0	0.0	0.0	0.0	36,590
87	Chromium and chromium (III) compounds	0.0	0.0	0.0	0.0	0.0	3,601
132	Cobalt and its compounds	0.0	0.0	0.0	0.0	0.0	3.7
188	N,N-Dicyclohexylamine	0.0	0.0	0.0	0.0	0.0	1,139
239	Organic tin compounds	0.0	0.0	0.0	0.0	0.0	14
240	Styrene	25,442	0.0	0.0	0.0	0.0	0.0
243	Dioxins	0.0094	0.0	0.0	0.0	0.0	0.82
277	Triethylamine	0.0	0.0	0.0	0.0	0.0	0.0
296	1, 2, 4-trimethylbenzene	12,796	0.0	0.0	0.0	0.0	2,566
297	1, 3, 5-trimethylbenzene	2,239	0.0	0.0	0.0	0.0	8.0
300	Toluene	114,987	0.0	0.0	0.0	0.0	20,739
302	Naphthalene	2,031	0.0	0.0	0.0	0.0	0.0
305	Lead compounds	6.6	0.0	0.0	0.0	0.0	6,941
308	Nickel	1.8	0.0	0.0	0.0	0.0	522
309	Nickel compounds	0.0	0.0	0.0	0.0	0.0	508
349	Phenol	0.0	0.0	0.0	0.0	0.0	0.0
354	Di-n-butyl phthalate	0.0	0.0	0.0	0.0	0.0	169
392	n-Hexane	0.0	0.0	0.0	0.0	0.0	0.0
400	Benzene	1.7	0.0	0.0	0.0	0.0	0.0
405	Boron compounds	0.0	0.0	0.0	0.0	0.0	1,859
411	Formaldehyde	179	0.0	0.0	0.0	0.0	0.0
412	Manganese and its compounds	0.0	0.0	0.0	0.0	0.0	23,565
448	Methylenebis (4, 1-phenylene) diisocyanate	0.0	0.0	0.0	0.0	0.0	0.0
453	Molybdenum and its compounds	0.0	0.0	0.0	0.0	0.0	0.0
Total		462,384	8.4	0.0	0.0	21	123,737

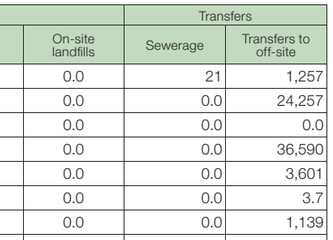
* Total of substances with annual handling volume of one ton or more (0.5 ton or more for Specific Class I Designations) at each business site.
* Unit: kg/year (Dioxins: mg-TEQ/year)
: Volatile Organic Compound (VOC)
: Six VOC substances targeted for reduction in FY2016 Medium-Term Environmental Conservation Targets

Green Procurement

For the purpose of providing products that are friendly to the global and local environment, the KUBOTA Group is seeking to procure products with reduced environmental impacts from eco-friendly suppliers.

In order to effectively promote eco-friendly sourcing activities, the Group presents its policy for green procurement in the KUBOTA Group's Green Procurement Guidelines, to request the understanding and cooperation of suppliers.

Please refer to WEB http://www.kubota-global.net/environment/procure.html for details regarding the KUBOTA Group Green Procurement Guidelines.



KUBOTA Group's Green Procurement Guidelines and Appendix

Reduction of Chemical Substances contained in Products

The KUBOTA Group has set rules for identifying and properly managing chemical substances in products in order to comply with REACH regulations*1 in Europe and other chemical substance regulations. Since FY2011, chemical substances in products have been classified as one of the three following categories and managed appropriately. With cooperation from our suppliers, we investigate chemical substances in products on a global basis.

– Control levels –

1. **Substances to be Prohibited; Should not be contained in products**
2. **Substances to be Restricted; Should not be contained in products under certain conditions and applications**
3. **Substances to be Controlled; Their presence in products should be recognized**

*1 REACH Regulation: EU's Regulation for Registration, Evaluation, Authorisation and Restriction of Chemicals

Environmental Accounting

The KUBOTA Group performs environmental accounting and publicizes data about the cost of investments in environmental conservation and the economic and environmental benefits of these investments.

Environmental conservation costs

(Yen in millions)

Classifications		Main activities	FY2013		FY2014	
			Investment	Expenses	Investment	Expenses
Within the business area cost			722	1,424	679	1,353
	Local environmental conservation cost	Prevention of air and water pollution, soil contamination, noise, vibration, etc.	160	393	377	341
	Global environmental conservation cost	Prevention of climate change	453	217	301	233
	Resource recycling cost	Minimizing waste production, reducing quantity of waste, and recycling	109	814	0.5	779
Upstream and downstream costs		Collection of used products and commercialization of recycled products	0	24	0	30
Management activities cost		Environmental management personnel, ISO maintenance and implementation, environmental information dissemination	4	1,225	2	1,326
R&D cost		R&D for reducing of product environmental load and developing environment conservation equipment	339	5,262	288	6,394
Social activities cost		Local cleanup activities and membership fees and contributions to environmental groups, etc.	0	1	0	1
Environmental remediation cost		Contributions and impositions, etc.	0	200	0	199
Total			1,065	8,136	969	9,303

Total capital investment (including land) for the corresponding period (consolidated data)	51,200
Total R&D costs for the corresponding period	35,600

Environmental conservation effects

Effects	Items	FY2013	FY2014
Environmental effect related to resources input into business activities	Energy consumption (Except for transportation fuel) [units of heat; in terajoules (TJ)]	7,660	7,870
	Water consumption (million m^3)	3.67	3.79
Environmental effect related to waste or environmental impact originating from business activities	CO_2 emissions (Energy related) (kilotons CO_2)	444	485
	SOx emissions (tons)	4.1	16.2
	NOx emissions (tons)	58.0	64.7
	Soot and dust emissions (tons)	3.5	3.4
	Releases and transfers of PRTR-designated substances (tons)	559	586
	Waste discharge (kilotons)	64.3	65.6
	Waste to landfills (kilotons)	1.0	1.2

Economic effects

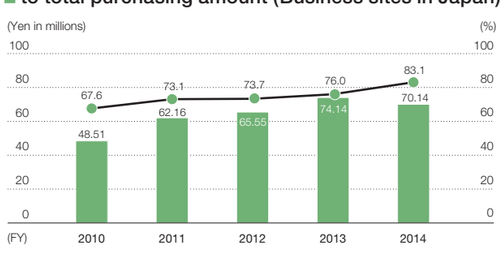
(Yen in millions)

Classifications	Details	Annual effects
Energy conservation measures	Use alternative fuels for production facilities and switch to more efficient lighting and air handling systems	139
Zero-emissions measures	Reduce the amount of industrial waste; promote resource recycling; other	64
	Sales of valuable resources	1,127
Total		1,330

<Environmental accounting principles>
1) The period covered spans from April 1, 2013 to March 31, 2014.
2) The data of business sites in Japan are considered in the calculation.
3) Data was calculated referring to the Environmental Accounting Guidelines 2005, published by Japan's Ministry of the Environment.
4) "Expenses" includes depreciation costs. Depreciation cost was calculated based on the standards applied to KUBOTA's financial accounting, and assets acquired in and after 1998 were considered in the calculation. "Management activities" and "R&D costs" include personnel expenses.
"Resource recycling costs" does not include costs incurred during disposal of construction waste at construction sites.
"R&D costs" represents that which was spent on environmental purposes, calculated on a pro-rata basis.
5) "Economic effects" is obtained only by adding up tangible results and does not include estimated effects.

Green Purchasing

Amount spent on green products and the ratio to total purchasing amount (Business sites in Japan)



We promote Green Purchasing, the prioritization of procured products that have minimal impact on the environment. In FY2014 the ratio of the amount spent on green products to total purchasing amount was 83.1%.

* Starting in FY2014, we reformulated the office supplies subject to Green Purchasing. Toner cartridges and ink cartridges were removed from the calculation of Green Purchasing amounts and ratios. Using the same basis as in FY2013, the amount spent on green products would be ¥84.04 million and the Green Purchasing ratio would be 77.6%.

Receiving Environmental Awards

In FY2014, the KUBOTA Group continued to engage in environmental conservation activities. Some of these environmental activities were recognized with awards from external parties as leading examples of environmental conservation.

KUBOTA Tsukuba Plant: Chairman's Incentive Award in 32nd National Competition for Promotion of Greenery at Factories

In November 2013, the Japan Greenery Research and Development Center presented the Tsukuba Plant with the Chairman's Incentive Award for factories with excellent greenery.

The Tsukuba Plant contributes to the promotion of greenery in the region by maintaining about eight hectares of greenery on the premises of the plant and operating environmental facilities. On the premises, there are grass lawns and tree-lined walkways. These beautiful natural environments offer employees a place to rest as well as a space for communication and recreation. Cherry blossom trees grown on the site where an expansion of the No. 2 plant was planned were transplanted to line the walkway that employees take to work. These trees are a symbol of the plant and blossom every spring.

KUBOTA Corporation & KUBOTA LOGISTICS CORPORATION Minister of Economy, Trade and Industry Award for Green Logistics Partnership's Leading Business Council

In December 2013, KUBOTA Corporation and KUBOTA LOGISTICS CORPORATION were honored with the Japanese Minister of Economy, Trade and Industry(METI) Minister's Award for the Excellent Green Logistics Commendation, sponsored by METI, the Ministry of Land, Infrastructure and Transport, and other entities. The award recognizes the efficient container round use based in inland container terminals for transporting containers, which would be empty during either the loading or backloading process. CO_2 emissions were cut as a result of shortening the distance traveled by the trucks. We also created a model for alleviating chronic congestion on roads around shipping container yards in Tokyo Bay.

KUBOTA Head Office: Mayor's Award for Excellent Waste Reduction Buildings

In November 2013, Osaka City's Environmental Office sponsored the 2013 Excellent Waste Reduction Building Awards at the Abeno-ku Citizens Center in Osaka, Japan. KUBOTA's Head Office Building was awarded the Mayor's Award. Every year, Osaka City conducts on-site inspections of buildings to evaluate the effectiveness of efforts to reduce and recycle waste. Our Head Office building has won the award for more than ten years running, recognized as an excellent building.

This year, the No. 2 building of the Head Office also received the award, for the fifth year straight. We do our best to reduce waste at our offices.

P.T. Kubota Indonesia: Blue PROPER Award

P.T. Kubota Indonesia has received the Blue PROPER Award from the Ministry of Environment of Republic of Indonesia in recognition of its corporate activities over the year beginning in July 2012. The Environmental Performance Rating Program PROPER) is a rating program that Characterized by certain colors operated by the Ministry of the Environment in Indonesia. The PROPER Awards aim to drive companies to comply to environmental regulations and achieve environmental excellence through the integration of sustainable development principles in production and service, the implementation of environmental management systems, 3R (reuse, reduce, recycle) of wastes, energy efficiency, resource conservation, biodiversity protection and conduct ethical business responsibility through community development programs.

P.T. Kubota Indonesia received the Blue PROPER Award in recognition of its proper environmental management system that complies with related laws and regulations.

SIAM KUBOTA Corporation (Amata Nakorn Plant): Green Industry Level 3 Award

SIAM KUBOTA Corporation (Amata Nakorn Plant) has made concerted efforts to reduce waste and water usage. These efforts were recognized in July 2013 with an award from the government of Thailand as an environmentally friendly, clean plant. Out of five levels, the Green Industry Level 3 Award is given when they run a proper operation of an environmental management system.

In addition to these efforts to reduce waste and water consumption, SIAM KUBOTA Corporation is bolstering efforts to cut emissions of CO_2 and VOC with an eye on the Level 5 Award.

In September 2012, SIAM KUBOTA Metal Technology Co., Ltd was recognized by the government of Thailand as an environmentally friendly factory and awarded Level 2 in the Green Industry Project. Going forward, everyone in the company will continue to eagerly work to conserve the environment and pursue a higher rating.

KUBOTA Group Production Sites Data

Data on KUBOTA production sites in Japan (results of FY2014)

Item \ Business site			Hanshin Plant (Mukogawa, Marushima)		Hanshin Plant (Amagasaki)		Keiyo Plant (Funabashi, Distribution Center)		Keiyo Plant (Ichikawa)		Hirakata Plant		Okajima Business Center		Sakai Plant		Sakai Rinkai Plant		Utsunomiya Plant		Tsukuba Plant		Kyuhoji Business Center *4		Ryugasaki Plant *4		Shiga Plant	
INPUT																												
Energy		Unit	Volume of use	Heat conversion GJ	Volume of use	Heat conversion GJ	Volume of use	Heat conversion GJ	Volume of use	Heat conversion GJ	Volume of use	Heat conversion GJ	Volume of use	Heat conversion GJ	Volume of use	Heat conversion GJ	Volume of use	Heat conversion GJ	Volume of use	Heat conversion GJ	Volume of use	Heat conversion GJ	Volume of use	Heat conversion GJ	Volume of use	Heat conversion GJ	Volume of use	Heat conversion GJ
	Fossil fuel	Crude oil equivalent kL	18,092	701,259	5,607	217,321	23,838	923,964	100	3,878	5,444	211,027	4,842	187,692	4,100	158,928	3,014	116,818	1,444	55,955	6,306	244,404	277	10,752	241	9,345	575	22,293
	Purchased electricity	MWh	46,235	452,454	32,094	319,981	49,211	479,477	5,392	53,754	44,491	435,388	38,749	376,218	35,512	346,677	16,452	160,368	6,238	61,653	44,873	437,652	2,321	22,787	3,214	32,039	2,548	25,401
	Total	Crude oil equivalent kL	29,766	1,153,713	13,862	537,301	36,209	1,403,440	1,487	57,632	16,677	646,414	14,549	563,910	13,045	505,604	7,151	277,185	3,034	117,608	17,597	682,056	865	33,540	1,068	41,384	1,231	47,694
Water usage		thousand m^3	844		213		1017		12		171		75		120		53		115		216		19		1.2		80	
OUTPUT																												
CO_2 emission	CO_2 emissions from energy sources	tons CO_{2e}	80,064		27,349		107,341		3,081		33,808		38,242		27,412		15,755		6,517		37,260		1,782		1,792		2,421	
Waste	Discharge amount	tons	11,272		4,922		20,828		151		3,889		14,501		1,316		613		454		2,467		143		109		220	
	Recycling ratio	%	99.6		99.9		99.9		99.9		99.9		100.0		99.8		99.7		98.8		99.8		99.5		99.6		98.1	
Exhaust gas*1	Main smoke and soot generating facilities*2		Melting furnaces			Heating furnaces			Melting furnaces				Heating furnaces			Melting furnaces			Drying furnaces				Boilers			Boilers				Boilers		
		Unit	Control content	Control value	Measurement	Control content	Control value	Measurement	Control content	Control value	Measurement		Control content	Control value	Measurement	Control content	Control value	Measurement	Control content	Control value	Measurement		Control content	Control value	Measurement	Control content	Control value	Measurement		Control content	Control value	Measurement
	SOx	Total emission control and K-value control: m^3N/h	K-value control	0.22	0.007	Use of town gas with zero sulfur content			Total emission control	22.8	2.3		Use of town gas with zero sulfur content			Total emission control	2.859	0.26	Total emission control	1.477	0		Use of town gas with zero sulfur content			K-value control	10.3	0.06		Use of town gas with zero sulfur content			Use of town gas with zero sulfur content		
	NOx	Total emission control: m^3N/h, Concentration control: ppm	Total emission control	25.94	3.14	Total emission control	2.24	0.187	Total emission control	26.7	2.92		Total emission control	9.168	0.053	Total emission control	2.4	0.49	Total emission control	1.535	0.002		Concentration control	150	44	Concentration control	230	120		Concentration control	230	47	Concentration control	180	27
	Soot and dust	Concentration control: g/m^3N	Concentration control	0.1	0.0023	Concentration control	0.1	0.0011	Concentration control	0.1	0.002		Concentration control	0.1	0.005	Concentration control	0.05	0.03	Concentration control	0.1	0.005		Concentration control	0.1	0.001	Concentration control	0.25	0.01		Concentration control	0.2	Less than 0.01	–	–	–

*1 Total emission control: Control value (including agreed value) by plant or facility and the measurement value. K-value control and concentration control: Control value (including agreed value) of major smoke and soot generating facilities and the measurement value (maximum value).
*2 Smoke and soot generating facilities: Those subject to the laws concerning emissions into the atmosphere.

		Item	Unit	Control value	Measurement	Control value	Measurement	Control value	Measurement	Control value	Measurement	Control value	Measurement	Control value	Measurement	Control value	Measurement	Control value	Measurement	Control value	Measurement	Control value	Measurement	Control value	Measurement	Control value	Measurement	Control value	Measurement
Drainage*3	Public water areas	pH	Minimum value, Maximum value	5.8–8.6	6.8–7.7	—	—	5.0–9.0	6.6–7.4	5.0–9.0	6.6–7.5	5.8–8.6	6.8–7.5	—	—	—	—	5.8–8.6	5.8–7.6	5.8–8.6	7.0–7.5	5.8–8.6	7.4–7.9	—	—	—	—	6.0–8.5	7.4–7.8
		BOD	mg/L	30	6	—	—	—	—	—	—	25	5.9	—	—	—	—	30	9.7	25	15.7	20	3.6	—	—	—	—	30	1.5
		COD	mg/L	20	6	—	—	20	3.5	60	18.7	25	10.6	—	—	—	—	30	23.2	—	—	20	8.5	—	—	—	—	30	2.9
		Nitrogen	mg/L	120	5.7	—	—	20	4.6	70	23	120	11	—	—	—	—	120	72.2	—	—	60	11	—	—	—	—	12	1
		Phosphorus	mg/L	16	0.2	—	—	2	0.08	7	2.3	16	1	—	—	—	—	16	10.6	—	—	8	0.8	—	—	—	—	1.2	Non-detected
		Hexavalent chromium	mg/L	0.35	Non-detected	—	—	0.05	Non-detected	—	—	0.05	Non-detected	—	—	—	—	0.5	Non-detected	—	—	0.5	Non-detected	—	—	—	—	0.05	Non-detected
		Lead	mg/L	0.1	Non-detected	—	—	0.1	0.02	—	—	0.01	0.005	—	—	—	—	0.1	Non-detected	—	—	0.1	Non-detected	—	—	—	—	—	—
		COD, total emission control	kg/day	97.44	13.3	—	—	110.5	55.4	4	0.87	38	2	—	—	—	—	3.3	0.87	—	—	—	—	—	—	—	—	—	—
		Nitrogen, total emission control	kg/day	40.51	13.6	—	—	114.7	20.2	2.865	0.86	38.3	2	—	—	—	—	13.2	1.6	—	—	—	—	—	—	—	—	—	—
		Phosphorus, total emission control	kg/day	1.424	0.5	—	—	11.65	0.7	0.391	0.087	4.4	0.2	—	—	—	—	1.76	0.12	—	—	—	—	—	—	—	—	—	—
	Sewerage lines	pH	Minimum value, Maximum value	5.7–8.7	7.0–8.4	5.7–8.7	6.4–7.8	—	—	—	—	—	—	5.7–8.7	6.7	5.7–8.7	6.9–7.2	—	—	—	—	—	—	5.7–8.7	6.8–7.6	5–9	6.2–7.4	—	—
		BOD	mg/L	300	140	300	7	—	—	—	—	—	—	600	29	300	39	—	—	—	—	—	—	300	37	600	68	—	—
		COD	mg/L	—	—	—	—	—	—	—	—	—	—	—	—	—	160	—	—	—	—	—	—	—	—	—	—	—	—
		SS	mg/L	300	2	300	23	—	—	—	—	—	—	600	6	300	24	—	—	—	—	—	—	300	33	600	35	—	—

*3 Total emission control: Control value (including agreed value) by plant and the measurement value. Concentration control: Control value (including agreed value) by plant and the measurement value (maximum value).
*4 Includes Group company data within the same site.

Results of PRTR Reporting (Unit: kg/year)

Business site	Substance name	Cabinet Order No.	Released amount				Transferred amount	
			Atmosphere	Public water areas	Soil	On-site landfills	Sewerage	Transfers to off-site
Hanshin Plant (Mukogawa)	Ethylbenzene	53	6,357	0.0	0.0	0.0	0.0	61
	Xylene	80	8,905	0.0	0.0	0.0	0.0	90
	Triethylamine	277	0.0	0.0	0.0	0.0	0.0	0.0
	1, 2, 4-trimethylbenzene	296	3,199	0.0	0.0	0.0	0.0	0.0
	Toluene	300	8,925	0.0	0.0	0.0	0.0	1,547
	lead compounds	305	0.0	0.0	0.0	0.0	0.0	6,497
	Nickel	308	0.0	0.0	0.0	0.0	0.0	276
	Phenol	349	0.0	0.0	0.0	0.0	0.0	0.0
	Methylenebis (4,1-phenylene) diisocyanate	448	0.0	0.0	0.0	0.0	0.0	0.0
Hanshin Plant (Marushima)	Ethylbenzene	53	14,369	0.0	0.0	0.0	0.0	0.0
	Xylene	80	35,785	0.0	0.0	0.0	0.0	0.0
	Toluene	300	28,283	0.0	0.0	0.0	0.0	0.0
	Nickel	308	0.0	0.0	0.0	0.0	0.0	207
Hanshin Plant (Amagasaki)	Chromium and Chromium (III) compounds	87	0.0	0.0	0.0	0.0	0.0	455
	Toluene	300	1,514	0.0	0.0	0.0	0.0	0.0
	Nickel	308	1.8	0.0	0.0	0.0	0.0	0.23
	Boron compounds	405	0.0	0.0	0.0	0.0	0.0	1,849
	Manganese and its compounds	412	0.0	0.0	0.0	0.0	0.0	6,366
	Molybdenum and its compounds	453	0.0	0.0	0.0	0.0	0.0	0.0

Business site	Substance name	Cabinet Order No.	Released amount				Transferred amount	
			Atmosphere	Public water areas	Soil	On-site landfills	Sewerage	Transfers to off-site
Keiyo Plant (Funabashi)	Ethylbenzene	53	24,021	0.0	0.0	0.0	0.0	479
	Xylene	80	36,181	0.0	0.0	0.0	0.0	699
	Triethylamine	277	0.0	0.0	0.0	0.0	0.0	0.0
	1, 2, 4-trimethylbenzene	296	2,582	0.0	0.0	0.0	0.0	20
	Toluene	300	58,948	0.0	0.0	0.0	0.0	923
	Nickel	308	0.0	0.0	0.0	0.0	0.0	28
	Phenol	349	0.0	0.0	0.0	0.0	0.0	0.0
	Di-n-butyl phthalate	354	0.0	0.0	0.0	0.0	0.0	118
	Manganese and its compounds	412	0.0	0.0	0.0	0.0	0.0	9,993
	Methylenebis (4,1-phenylene) diisocyanate	448	0.0	0.0	0.0	0.0	0.0	0.0
Keiyo Plant (Distribution Center)	Ethylbenzene	53	6,389	0.0	0.0	0.0	0.0	130
	Xylene	80	23,505	0.0	0.0	0.0	0.0	480
	Toluene	300	7,365	0.0	0.0	0.0	0.0	150
Keiyo Plant (Ichikawa)	Manganese and its compounds	412	0.0	0.0	0.0	0.0	0.0	0.0
Hirakata Plant	Ethylbenzene	53	1,327	0.0	0.0	0.0	0.0	17,377
	Xylene	80	2,265	0.0	0.0	0.0	0.0	27,604
	Chromium and Chromium (III) compounds	87	0.0	0.0	0.0	0.0	0.0	2,197
	Cobalt and its compounds	132	0.0	0.0	0.0	0.0	0.0	4
	1, 2, 4-trimethylbenzene	296	179	0.0	0.0	0.0	0.0	2,375
	Toluene	300	1,436	0.0	0.0	0.0	0.0	16,371
	Nickel	308	0.0	0.0	0.0	0.0	0.0	10
	Boron compounds	405	0.0	0.0	0.0	0.0	0.0	10
	Manganese and its compounds	412	0.0	0.0	0.0	0.0	0.0	4,263
	Molybdenum and its compounds	453	0.0	0.0	0.0	0.0	0.0	0.0

Business site	Substance name	Cabinet Order No.	Released amount				Transferred amount	
			Atmosphere	Public water areas	Soil	On-site landfills	Sewerage	Transfers to off-site
Okajima Business Center	Chromium and Chromium (III) compounds	87	0.0	0.0	0.0	0.0	0.0	948
	Triethylamine	277	0.0	0.0	0.0	0.0	0.0	0.0
	1, 2, 4-trimethylbenzene	296	1,745	0.0	0.0	0.0	0.0	0.0
	1, 3, 5-trimethylbenzene	297	524	0.0	0.0	0.0	0.0	0.0
	Phenol	349	0.0	0.0	0.0	0.0	0.0	0.0
	Formaldehyde	411	179	0.0	0.0	0.0	0.0	0.0
	Manganese and its compounds	412	0.0	0.0	0.0	0.0	0.0	1,806
	Methylenebis (4,1-phenylene) diisocyanate	448	0.0	0.0	0.0	0.0	21	0.0
Sakai Plant	Water-soluble zinc compounds	1	0.0	0.0	0.0	0.0	0.0	0.0
	Ethylbenzene	53	2,147	0.0	0.0	0.0	0.0	193
	Xylene	80	3,036	0.0	0.0	0.0	0.0	442
	1, 2, 4-trimethylbenzene	296	151	0.0	0.0	0.0	0.0	30
	1, 3, 5-trimethylbenzene	297	123	0.0	0.0	0.0	0.0	8
	Toluene	300	983	0.0	0.0	0.0	0.0	177
Sakai Rinkai Plant	Ethylbenzene	53	40	0.0	0.0	0.0	0.0	14
	Xylene	80	136	0.0	0.0	0.0	0.0	44
	Toluene	300	192	0.0	0.0	0.0	0.0	47
	Benzene	400	1.7	0.0	0.0	0.0	0.0	0.0
Utsunomiya Plant	Water-soluble zinc compounds	1	0.0	8.4	0.0	0.0	0.0	440
	Ethylbenzene	53	12,797	0.0	0.0	0.0	0.0	4,989
	Xylene	80	17,956	0.0	0.0	0.0	0.0	7,000
	1, 2, 4-trimethylbenzene	296	361	0.0	0.0	0.0	0.0	141
	Toluene	300	1,208	0.0	0.0	0.0	0.0	471
	Naphthalene	302	2,031	0.0	0.0	0.0	0.0	0.0
	n-hexane	392	0.0	0.0	0.0	0.0	0.0	0.0

Business site	Substance name	Cabinet Order No.	Released amount				Transferred amount	
			Atmosphere	Public water areas	Soil	On-site landfills	Sewerage	Transfers to off-site
Tsukuba Plant	Water-soluble zinc compounds	1	0.0	0.0	0.0	0.0	0.0	817
	Ethylbenzene	53	45,441	0.0	0.0	0.0	0.0	967
	Xylene	80	55,090	0.0	0.0	0.0	0.0	0.0
	1, 2, 4-trimethylbenzene	296	4,579	0.0	0.0	0.0	0.0	0.0
	1, 3, 5-trimethylbenzene	297	1,593	0.0	0.0	0.0	0.0	0.0
	Naphthalene	302	0.0	0.0	0.0	0.0	0.0	710
	Nickel compounds	309	0.0	0.0	0.0	0.0	0.0	508
	Manganese and its compounds	412	0.0	0.0	0.0	0.0	21	1,136
	Methylenebis (4,1-phenylene) diisocyanate	448	0.0	0.0	0.0	0.0	0.0	0.0
Shiga Plant	Xylene	80	0.0	0.0	0.0	0.0	0.0	73
	Styrene	240	21,831	0.0	0.0	0.0	0.0	0.0
	Di-n-butyl phthalate	354	0.0	0.0	0.0	0.0	0.0	52
	Methylenebis (4,1-phenylene) diisocyanate	448	0.0	0.0	0.0	0.0	0.0	0.0

Data on KUBOTA group production sites in Japan (results of FY2014)

Item \ Business site			KUBOTA-C.I. (Sakai)		KUBOTA-C.I. (Odawara)		KUBOTA-C.I. (Tochigi)		KUBOTA Air Conditioner (Tochigi)		KUBOTA Precision Machinery		Nippon Plastic Industry		Kyushu KUBOTA Chemical	
INPUT																
Energy		Unit	Volume of use	Heat conversion GJ	Volume of use	Heat conversion GJ	Volume of use	Heat conversion GJ	Volume of use	Heat conversion GJ	Volume of use	Heat conversion GJ	Volume of use	Heat conversion GJ	Volume of use	Heat conversion GJ
	Fossil fuel	Crude oil equivalent kL	89	3,431	127	4,941	83	3,230	286	11,081	770	29,849	59	2,304	2	71
	Purchased electricity	MWh	14,229	138,880	32,452	314,452	22,782	219,344	2,717	27,091	14,509	140,845	15,291	148,154	8,363	80,449
	Total	Crude oil equivalent kL	3,672	142,311	8,240	319,393	5,742	222,574	985	38,172	4,404	170,694	3,882	150,458	2,077	80,519
Water usage		thousand m^3	17		36		273		64		19		20.1		6	
OUTPUT																
CO_2 emission	CO_2 emissions from energy sources	tons CO_{2e}	6,337		17,299		12,181		1,987		8,962		8,017		5,123	
Waste	Discharge amount	tons	21		103		115		168		524		32		17	
	Recycling ratio	%	99.9		99.8		99.9		99.9		100.0		99.4		99.5	
Exhaust gas*1	Main smoke and soot generating facilities*2	Unit	No smoke and soot generating facilities		No smoke and soot generating facilities		No smoke and soot generating facilities		Drying furnaces: Control content	Drying furnaces: Control content	Drying furnaces: Measurement	No smoke and soot generating facilities	No smoke and soot generating facilities		No smoke and soot generating facilities	
	SOx	K-value control							Use of town gas with zero sulfur content							
	NOx	Concentration control: ppm							Concentration control	230	Less than 5					
	Soot and dust	Concentration control: g/m^3N							Concentration control	0.2	Less than 0.005					

*1 K-value control and concentration control: Control value (including agreed value) of major smoke and soot generating facilities and the measurement value (maximum value).
*2 Smoke and soot generating facilities: Those subject to the laws concerning emissions into the atmosphere.

		Unit	Control value	Measurement	Control value	Measurement	Control value	Measurement	Control value	Measurement	Control value	Measurement	Control value	Measurement	Control value	Measurement
Drainage*3	Public water areas: pH	Minimum value, Maximum value	5.8–8.6	6.5–7.5	5.8–8.6	8.1–8.4	5.8–8.6	7.9–8.2	5.8–8.6	7.4–7.7	—	—	5.8–8.6	5.0–7.5	—	—
	BOD	mg/L	25	10	60	1.3	20	5	30	9.8	—	—	160	0.9	—	—
	COD	mg/L	25	12	60	2.4	—	—	—	—	—	—	160	1.4	—	—
	Nitrogen	mg/L	60	42	120	0.6	60	0.66	—	—	—	—	—	—	—	—
	Phosphorus	mg/L	8	5.6	16	0.12	1	Non-detected	—	—	—	—	—	—	—	—
	Hexavalent chromium	mg/L	0.5	Non-detected	0.5	Non-detected	0.1	Non-detected	0.1	Non-detected	—	—	—	—	—	—
	Lead	mg/L	0.1	0.03	0.1	Non-detected	0.1	0.02	0.1	Non-detected	—	—	0.1	Non-detected	—	—
	COD, total emission control	kg/day	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Nitrogen, total emission control	kg/day	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Phosphorus, total emission control	kg/day	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Sewerage lines: pH	Minimum value, Maximum value	—	—	—	—	—	—	—	—	No specific facilities		—	—	No specific facilities	
	BOD	mg/L	—	—	—	—	—	—	—	—			—	—		
	COD	mg/L	—	—	—	—	—	—	—	—			—	—		
	SS	mg/L	—	—	—	—	—	—	—	—			—	—		

*3 Total regulations are plant unit control values, agreed values and measurement values. Concentration regulations are plant unit control values (including agreed values) and measurement values (maximum value).

Results of PRTR reporting (Unit: kg/year)

Business site	Substance name	Cabinet Order No.	Released amount: Atmosphere	Released amount: Public water areas	Released amount: Soil	Released amount: On-site landfills	Transferred amount: Sewerage	Transferred amount: Transfers to off-site
KUBOTA-C.I. (Sakai)	Xylene	80	36	0.0	0.0	0.0	0.0	0.0
	Organic tin compounds	239	0.01	0.0	0.0	0.0	0.0	0.1
	1, 2, 4-trimethylbenzene	296	0.01	0.0	0.0	0.0	0.0	0.0
	Lead compounds	305	0.95	0.0	0.0	0.0	0.0	33
KUBOTA-C.I. (Odawara)	Organic tin compounds	239	0.0	0.0	0.0	0.0	0.0	8.8
	Lead compounds	305	0.0	0.0	0.0	0.0	0.0	113
KUBOTA-C.I. (Tochigi)	Chromium and chromium (III) compounds	87	0.0	0.0	0.0	0.0	0.0	0.7
	Organic tin compounds	239	0.0	0.0	0.0	0.0	0.0	2.5
	Toluene	300	594	0.0	0.0	0.0	0.0	0.0
	Lead compounds	305	0.0	0.0	0.0	0.0	0.0	245
KUBOTA Air Conditioner (Tochigi)	Ferric chloride	71	0.0	0.0	0.0	0.0	0.0	0.0
	Methylenebis (4, 1-phenylene) diisocyanate	448	0.0	0.0	0.0	0.0	0.0	0.0
KUBOTA Precision Machinery	N,N-Dicyclohexylamine	188	0.0	0.0	0.0	0.0	0.0	1,139
Nippon Plastic Industry	Chromium and chromium (III) compounds	87	0.0	0.0	0.0	0.0	0.0	0.0
	Lead compounds	305	3.7	0.0	0.0	0.0	0.0	6.2
Kyushu KUBOTA Chemical	Organic tin compounds	239	0.0	0.0	0.0	0.0	0.0	2.1
	Lead compounds	305	1.9	0.0	0.0	0.0	0.0	48

Data on KUBOTA Group Overseas Production Sites (results of FY2014)

Region			North America						Europe					
Item \ Business site			Kubota Manufacturing of America Corporation		Kubota Industrial Equipment Corporation		Kubota Materials Canada Corporation		Kubota Baumaschinen GmbH		Kverneland Group Operations Norway AS		Kverneland Group Soest GmbH	
INPUT														
Energy		Unit	Volume of use	Heat conversion GJ	Volume of use	Heat conversion GJ	Volume of use	Heat conversion GJ	Volume of use	Heat conversion GJ	Volume of use	Heat conversion GJ	Volume of use	Heat conversion GJ
	Fossil fuel	Crude oil equivalent kL	4,269	165,467	2,431	94,240	6,611	256,222	576	22,325	2,785	107,964	740	28,690
	Purchased electricity	MWh	24,042	239,700	22,922	228,530	16,600	165,502	2,434	24,269	38,460	383,449	3,665	36,535
	Total	Crude oil equivalent kL	10,453	405,167	8,327	322,769	10,880	421,724	1,202	46,594	12,678	491,413	1,683	65,225
Water usage		thousand m^3	73		29		50		6		60		3	
OUTPUT														
CO_2 emission	CO_2 emissions from energy sources	tons CO_{2e}	23,210		18,688		15,885		2,264		6,292		3,051	
Waste	Discharge amount	tons	2,465		1,524		4,981		351		365		465	
	Recycling ratio	%	92.3		96.0		30.3		98.0		92.5		90.0	
Exhaust gas*1	Main smoke and soot generating facilities*2	Unit	Boilers: Control content	Boilers: Control value	Boilers: Measurement	Boilers: Control content	Boilers: Control value	Boilers: Measurement	—: Control content	—: Control value	—: Measurement	No smoke and soot generating facilities	—: Control content	—: Control value	—: Measurement	—: Control content	—: Control value	—: Measurement
	SOx	Concentration control	Use of town gas with zero sulfur content			Concentration control	—	—	Concentration control	—	—		Concentration control	—	—	Concentration control	—	—
	NOx	Concentration control: ppm	Concentration control	—	25	Concentration control	—	24	Concentration control	—	—		Concentration control	—	—	Concentration control	—	—
	Soot and dust	Concentration control: g/m^3N	Concentration control	—	—	Concentration control	—	—	Concentration control	—	—		Concentration control	—	—	Concentration control	—	—

*1 Concentration control: Control value (including agreed value) of major smoke and soot generating facilities and the measurement value (maximum value).
*2 Smoke and soot generating facilities: Those subject to the laws concerning emissions into the atmosphere.

		Unit	Control value	Measurement	Control value	Measurement	Control value	Measurement	Control value	Measurement	Control value	Measurement	Control value	Measurement
Drainage*3	Public water areas: pH	Minimum value, Maximum value	—	—	—	—	—	—	—	—	—	—	—	—
	BOD	mg/L	—	—	—	—	—	—	—	—	—	—	—	—
	COD	mg/L	—	—	—	—	—	—	—	—	—	—	—	—
	Nitrogen	mg/L	—	—	—	—	—	—	—	—	—	—	—	—
	Phosphorus	mg/L	—	—	—	—	—	—	—	—	—	—	—	—
	Hexavalent chromium	mg/L	—	—	—	—	—	—	—	—	—	—	—	—
	Lead	mg/L	—	—	—	—	—	—	—	—	—	—	—	—
	COD, total emission control	kg/day	—	—	—	—	—	—	—	—	—	—	—	—
	Nitrogen, total emission control	kg/day	—	—	—	—	—	—	—	—	—	—	—	—
	Phosphorus, total emission control	kg/day	—	—	—	—	—	—	—	—	—	—	—	—
	Sewerage lines: pH	Minimum value, Maximum value	6.0–9.5	7.6	6.0–9.0	7.7	5.5–9.5	7.5	6.5–9.0	7.4, 8.7	(Sewage discharge)		(Sewage discharge)	
	BOD	mg/L	900	98.6	250	10.4	300	2	—	—				
	COD	mg/L	—	—	—	—	—	—	1,000	1,100*4				
	SS	mg/L	900	31.8	250	19.8	350	3	—	—				

*3 Concentration regulations are plant unit control values (including agreed values) and measurement values (maximum value).
*4 Post-treatment water quality temporarily exceeded regulated values, but the water was discharged with government approval.

Results of chemical substances reporting
Toxics Release Inventory (TRI) Program (U.S. EPA) (Unit: kg/year)

Business site	Substance name	CAS Number	On-site disposal and amount of emissions	Recycled Off-site	Off-site disposal and amount of emissions
Kubota Manufacturing of America Corporation	Chromium	7440-47-3	732	26,207	0.39
	Manganese	7439-96-5	5,934	209,658	0
	Nickel	7440-02-0	981	35,292	2.62
	Ethylene glycol	107-21-1	0	0	676
	Lead	7439-92-1	19.5	699	0
	Sulfuric acid	7664-93-9	0	0	0
	Diisocyanates	101-68-8	0	0	0
Kubota Industrial Equipment Corporation	Chromium	7440-47-3	0.27	0.06	0
	Manganese	7439-96-5	176	0.12	0
	Nickel	7440-02-0	0.11	0.02	0
	Lead	7439-92-1	3.45	0.002	0
	Methyl Isobutyl Ketone	108-10-1	2,865	15,297	0

Reporting to National Pollutant Release Inventory (Canada) (Unit: kg/year)

Business site	Substance name	Control law number	Release quantity	Amount of off-site recycled waste
Kubota Materials Canada Corporation	Chromium (and its compounds)	NA-04	68	24,569
	Manganese (and its compounds)	NA-09	189	1,039
	Nickel (and its compounds)	NA-11	72	31,129
	PM10-Particulate Matter≦10μm	NA-M09	16,251	0
	PM2.5-Particulate Matter≦2.5μm	NA-M10	16,169	0

Data on KUBOTA Group Overseas Production Sites (results of FY2014) (Continued from page 66)

Region			Europe												Asia													
Item \ Business site			Kverneland Group Nieuw-Vennep B.V.		Kverneland Group Kerteminde AS		Kverneland Group Les Landes Génusson SAS		Kverneland Group Modena SpA		Kverneland Group Ravenna S.r.l.		Kverneland Group Manufacturing Lipetsk		Kubota Agricultural Machinery (SUZHOU) Co., Ltd.		Kubota Construction Machinery (WUXI) Co., Ltd.		Kubota Guozhen Environmental Engineering (ANHUI) Co., Ltd.		Kverneland Agricultural Equipment Daqing Ltd.		SIAM KUBOTA Corporation (Headquarter)		SIAM KUBOTA Corporation (Amata Nakorn Plant)		SIAM KUBOTA Metal Technology	
INPUT																												
Energy		Unit	Volume of use	Heat conversion GJ	Volume of use	Heat conversion GJ	Volume of use	Heat conversion GJ	Volume of use	Heat conversion GJ	Volume of use	Heat conversion GJ	Volume of use	Heat conversion GJ	Volume of use	Heat conversion GJ	Volume of use	Heat conversion GJ	Volume of use	Heat conversion GJ	Volume of use	Heat conversion GJ	Volume of use	Heat conversion GJ	Volume of use	Heat conversion GJ	Volume of use	Heat conversion GJ
	Fossil fuel	Crude oil equivalent kL	1,029	39,878	1,211	46,951	25	970	231	8,969	443	17,174	6	216	1,915	74,211	232	8,983	3	105	67	2,600	373	14,448	1,468	56,883	336	13,017
	Purchased electricity	MWh	2,536	25,288	5,603	55,857	585	5,832	790	7,877	1,409	14,048	70	695	11,171	111,376	4,093	40,811	66	654	121	1,208	8,970	89,430	14,372	143,286	34,382	342,790
	Total	Crude oil equivalent kL	1,681	65,166	2,652	102,808	175	6,802	435	16,846	806	31,222	23	910	4,788	185,586	1,285	49,794	20	758	98	3,808	2,680	103,878	5,164	200,169	9,180	355,807
Water usage		thousand m^3	12		34		2		4		8		0.3		108		13		0.8		0.4		72		164		59	
OUTPUT																												
CO_2 emission	CO_2 emissions from energy sources	tons CO_{2e}	2,995		4,735		119		774		1,442		37		12,767		3,548		56		222		5,401		10,797		18,420	
Waste	Discharge amount	tons	475		312		64		97		101		2		635		69		0		0		320		631		15,193	
	Recycling ratio	%	94.6		98.0		85.4		24.2		49.1		80.0		99.7		76.0		—		—		97.3		93.6		66.1	
Exhaust gas[*1]	Main smoke and soot generating facilities[*2]		—		—		—		Boilers		—		—		Boilers		Preheating furnaces		—		—		Drying furnaces		Drying furnaces		Heating furnaces	
	Unit		Control content	Control value	Measurement	Control content	Control value	Measurement	Control content	Control value	Measurement	Control content	Control value	Measurement	Control content	Control value	Measurement	Control content	Control value	Measurement	Control content	Control value	Measurement	Control content	Control value	Measurement	Control content	Control value	Measurement	Control content	Control value	Measurement	Control content	Control value	Measurement
	SOx	Concentration control	Concentration control	Non-detected	—	Concentration control	Non-detected	—	Concentration control	Non-detected	—	(ppm)	Non-detected	1.2	Concentration control	Non-detected	—	Concentration control	Non-detected	—	(mg/m^3)	100	2	(mg/m^3)	550	0.023	Concentration control	Non-detected	—	Concentration control	Non-detected	—	(ppm)	60	Less than 1.3	(ppm)	60	2.83	(ppm)	500	3.55
	NOx	Concentration control: ppm	Concentration control	Non-detected	—	Concentration control	Non-detected	—	Concentration control	Non-detected	—	Concentration control	Non-detected	44.3	Concentration control	Non-detected	—	Concentration control	Non-detected	—	Concentration control	400	25.8	(mg/m^3)	240	0.1	Concentration control	Non-detected	—	Concentration control	Non-detected	—	Concentration control	200	2	Concentration control	200	1.9	Concentration control	—	—
	Soot and dust	Concentration control: g/m^{3}N	Concentration control	Non-detected	—	Concentration control	Non-detected	—	Concentration control	Non-detected	—	Concentration control	Non-detected	0.0001	Concentration control	Non-detected	—	Concentration control	Non-detected	—	Concentration control	0.05	0.014	Concentration control	0.12	0.006	Concentration control	Non-detected	—	Concentration control	Non-detected	—	Concentration control	0.32	0.004	Concentration control	0.32	0.021	Concentration control	0.015	0.001

			Unit	Control value	Measurement	Control value	Measurement	Control value	Measurement	Control value	Measurement	Control value	Measurement	Control value	Measurement	Control value	Measurement	Control value	Measurement	Control value	Measurement	Control value	Measurement	Control value	Measurement	Control value	Measurement	Control value	Measurement	Control value	Measurement
Drainage[*3]	Public water areas	pH	Minimum value, Maximum value	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	(No external water discharge)	
		BOD	mg/L	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
		COD	mg/L	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
		Nitrogen	mg/L	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
		Phosphorus	mg/L	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
		Hexavalent chromium	mg/L	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
		Lead	mg/L	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
		COD, total emission control	kg/day	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
		Nitrogen, total emission control	kg/day	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
		Phosphorus, total emission control	kg/day	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
	Sewerage lines	pH	Minimum value, Maximum value	6.5–9.0	7.4	6.5–9.5	2.8[*4], 8.8	(Sewage discharge)		(Sewage discharge)		5.5–9.5	6.9	(Sewage discharge)		6.5–9.5	7.9	6.0–9.0	7.7, 8.0	—	—	(Sewage discharge)		6.0–9.0	7.3	5.5–9.0	6.9				
		BOD	mg/L	—	—	—	—					250	Non-detected			300	59.9	300	3.4	—	—			450	110	500	77				
		COD	mg/L	—	—	—	—					500	37			500	125	500	34.3	500	60.0			650	263	750	107				
		SS	mg/L	—	—	—	—					200	Non-detected			400	25.5	400	7	400	8			500	86	200	38				

Region			Asia									
Item \ Business site			KUBOTA Engine (Thailand)		Kubota Precision Machinery (Thailand)		P.T.Kubota Indonesia		P.T.Metec Semarang		Kubota Saudi Arabia Company	
INPUT												
Energy		Unit	Volume of use	Heat conversion GJ	Volume of use	Heat conversion GJ	Volume of use	Heat conversion GJ	Volume of use	Heat conversion GJ	Volume of use	Heat conversion GJ
	Fossil fuel	Crude oil equivalent kL	363	14,058	17	663	406	15,738	372	14,414	3,522	136,508
	Purchased electricity	MWh	8,510	84,843	357	3,563	2,813	28,048	4,900	48,849	0	0
	Total	Crude oil equivalent kL	2,552	98,901	109	4,226	1,130	43,786	1,632	63,262	3,522	136,508
Water usage		thousand m^3	10		2		49		36		11	
OUTPUT												
CO_2 emission	CO_2 emissions from energy sources	tons CO_{2e}	5,286		228		3,171		4,517		9,064	
Waste	Discharge amount	tons	507		54		9		343		792	
	Recycling ratio	%	91.4		85.5		97.1		88.7		3.4	
Exhaust gas[*1]	Main smoke and soot generating facilities[*2]		Preheating furnaces		—		—		Drying furnaces		—	
	Unit		Control content	Control value	Measurement	Control content	Control value	Measurement	Control content	Control value	Measurement	Control content	Control value	Measurement	Control content	Control value	Measurement	Control content	Control value	Measurement
	SOx	Concentration control	(ppm)	Non-detected	38.4	(ppm)	Non-detected	—	Concentration control	Non-detected	—	(mg/m^3)	800	2.0	Concentration control	Non-detected	—
	NOx	Concentration control: ppm	Concentration control	Non-detected	25.1	Concentration control	Non-detected	—	Concentration control	Non-detected	—	(mg/m^3)	1000	1.0	Concentration control	Non-detected	—
	Soot and dust	Concentration control: g/m^{3}N	Concentration control	Non-detected	0.062	Concentration control	Non-detected	—	Concentration control	Non-detected	—	Concentration control	0.35	0.012	Concentration control	Non-detected	—

			Unit	Control value	Measurement	Control value	Measurement	Control value	Measurement	Control value	Measurement	Control value	Measurement	Control value	Measurement
Drainage[*3]	Public water areas	pH	Minimum value, Maximum value	(No external water discharge)		—	—	6.0–9.0	6.0, 8.1	6.0–9.0	6.0, 8.0	—	—
		BOD	mg/L			—	—	100	20	100/50[*5]	155/68[*5]	—	—
		COD	mg/L			—	—	250	47	250/100[*5]	338/162[*5]	—	—
		Nitrogen	mg/L			—	—	—	—	—	—	—	—
		Phosphorus	mg/L			—	—	—	—	—	—	—	—
		Hexavalent chromium	mg/L			—	—	0.1	0.0015	0.5	0.0004	—	—
		Lead	mg/L			—	—	0.1	0.01	0.1	0.005	—	—
		COD, total emission control	kg/day			—	—	—	—	—	—	—	—
		Nitrogen, total emission control	kg/day			—	—	—	—	—	—	—	—
		Phosphorus, total emission control	kg/day			—	—	—	—	—	—	—	—
	Sewerage lines	pH	Minimum value, Maximum value			5.5–9.0	7.3	—	—	—	—	Transported to sewage plant	
		BOD	mg/L			500	23	—	—	—	—		
		COD	mg/L			750	275	—	—	—	—		
		SS	mg/L			200	34	—	—	—	—		

*1 Concentration control: Control value (including agreed value) of major smoke and soot generating facilities and the measurement value (maximum value).
*2 Smoke and soot generating facilities: Those subject to the laws concerning emissions into the atmosphere.
*3 Total regulations are plant unit control values, agreed values and measurement values. Concentration control: Control value (including agreed value) by plant and the measurement value (maximum value).
*4 Post-treatment water quality temporarily exceeded regulated values, but the water was adjusted receiving government approval.
*5 Due to a change in the categories of regulations made in September 2013, the regulation values and measured values for the period prior to August and the period after September are reported. Between August and October, the measured value exceeded the regulation value, but this was reported to the government and we have been implementing an alternative plan. As of November, the measured value has been under the regulation value.

Calculation Standards of Environmental Performance Indicators

- Period: April 2013 to March 2014 (overseas data: January 2013 to December 2013)
- Organizations covered: KUBOTA Corporation and 61 consolidated subsidiaries in Japan, and 101 overseas consolidated subsidiaries (Totals for consolidated subsidiaries (162 companies)) (100% coverage)

Environmental performance indicators		Unit	Calculation method
Energy and CO_2-related	Total energy input (TJ: 10^{12}J)	TJ	[Calculation formula] • Amount of purchased electricity x per-unit heat value + ∑ [amount of each fuel consumed x per-unit heat value of each fuel] • Per-unit heat value is determined in accordance with the Enforcement Regulation for the Act on the Rational Use of Energy, Japan [Calculation scope] • Purchased electricity and fossil fuel used at business sites • Transportation fuel used in distribution (business sites in Japan)
	CO_2 emissions	kilotons CO_{2e}	[Calculation formula] • Amount of purchased electricity x CO_2 emission coefficient + ∑ [amount of each fuel consumed at business sites x per-unit heat value of each fuel x CO_2 emission coefficient of each fuel] + non-energy source greenhouse gas emissions • Non-energy source greenhouse gas emissions = CO_2 emissions from non-energy sources + non-CO_2 greenhouse gas emissions • The method for calculating non-energy source greenhouse gas emissions is based on the Guidelines for Calculating Greenhouse Gas Emissions from Businesses of Japan's Ministry of the Environment. [CO_2 emission coefficients] FY1991 Fuel: Based on the Report on Survey of Carbon Dioxide Emissions (Japan's Environment Agency 1992) and the Guideline for Measures to prevent Global Warming (Japan's Environment Agency 1993) From FY2010 to FY2014 Fuel: Based on the Manual for Calculation and Report of Greenhouse Gas Emissions (latest version every fiscal year; Japan's Ministry of the Environment and Ministry of Economy, Trade and Industry) Electricity: Data for Japan are effective emission coefficients published by electricity utilities (before reflecting carbon credits) Overseas data are emission coefficients of respective countries published in the Greenhouse Gas Protocol Initiative (Ver. 4.4) Effect of CO_2 emission coefficients for electricity: The difference between the emitted amount of CO_2 calculated using the FY2012 CO_2 emission coefficients for electricity in Japan, which are based on the amounts reported by electricity utilities in FY2011, and the emitted amount of CO_2 calculated using the same CO_2 emission coefficients for each year. [Calculation scope] • Non-energy source greenhouse gas data up to FY2011 are for business sites in Japan only • Data are for HFC, PFC and SF6 emissions from January to December included in non-energy source greenhouse gases
	CO_2 emissions per unit of sales	%	[Calculation formula] • CO_2 emissions per unit of sales = total CO_2 emissions / consolidated net sales • CO_2 emissions per unit of sales for each fiscal year / FY2010 CO_2 emissions per unit of sales × 100 (as shown in the graph on page 47)
	Freight traffic	million ton-km	[Calculation formula] • ∑ [Freight transportation amount (tons) × distance traveled (km)] [Calculation scope] • Transportation in Japan (products and industrial waste discharge)
	CO_2 emissions during distribution	kilotons CO_{2e}	[Calculation formula] • Truck transportation: Fuel consumption during transportation = freight traffic x fuel consumption per ton-kilometer x per-unit heat value; CO_2 emissions = fuel consumption during transportation x CO_2 emission coefficient x 44 / 12 • Other than truck transportation: Fuel consumption during transportation = freight traffic x fuel consumption per ton-kilometer x per-unit heat value; CO_2 emissions = freight traffic x CO_2 emissions per ton-kilometer by means of transportation • The method of calculation is based on the ton-kilometer method stipulated under the Manual for Calculation and Report of Greenhouse Gas Emissions (Ver.3.5) (Japan's Ministry of the Environment and Ministry of Economy, Trade and Industry June 2014) [Calculation scope] • Transportation in Japan (products and industrial waste discharge)
	CO_2 emissions during distribution per unit of sales	%	[Calculation formula] • CO_2 emissions during distribution / consolidated net sales • CO_2 emissions per unit of sales of each fiscal year / CO_2 emissions per unit of sales in FY2010 x 100 (as shown in the graph on page 48)
	Scope 3 emissions (disposal and treatment of waste; employee business trips)	kilotons CO_{2e}	• The calculation method is based on the Basic Guidelines regarding the Calculation of Greenhouse Gas Emissions throughout the Supply Chain (Ver. 2.1) and the Emissions per Unit Database for the Purpose of Calculating the Greenhouse Gas and Other Emissions of Organizations throughout the Supply Chain (Ver. 2.1) (Japan's Ministry of the Environment and Ministry of Economy, Trade and Industry March 2014) Resource extraction, production and transportation for fuels used to generate electricity purchased by KUBOTA: [Calculation formula] Resource extraction, production, etc. of purchased electricity: CO_2 emissions = electricity consumption (amount of purchased electricity) x (CO_2 emissions per unit of sales); [Calculation scope] Purchased electricity (Japan and overseas) Disposal of waste generated at business sites: [Calculation formula] CO_2 emissions = ∑ [(amount of waste discharge by type) x (emissions per unit)]; [Calculation scope] Waste generated at business sites (Japan and overseas) Employee business travels: [Calculation formula] CO_2 emissions = ∑ [(transportation expenses paid by mode of transport) x (emissions per unit)]; [Calculation scope] The amount of transportation expenses paid is the portion traveled based on airline tickets (domestic and international) and railway tickets (in Japan)
Waste-related	Amount of waste, etc. discharge	tons	[Calculation formula] • Sales of valuable resources + amount of waste discharge
	Amount of waste discharge	tons	[Calculation formula] • Amount of waste recycled and waste reduction + landfill disposal • Amount of industrial waste discharge + amount of general waste discharged from business activities
	Waste discharge per unit of sales	%	[Calculation formula] • Waste discharge / consolidated net sales • Waste discharge per unit of sales of each fiscal year / waste discharge per unit of sales in FY2010 x 100 (as shown in the graph on page 49)
	Amount of landfill disposal	tons	[Calculation formula] • Direct landfill + final landfill following external intermediate treatment
	Recycling ratio	%	[Calculation formula] • (Sales of valuable resources + external recycling volume) ÷ (Sales of valuable resources + external recycling volume + amount of landfill disposal) x 100 [External recycling volume includes heat recovery]
	Amount of construction waste, etc. discharge	tons	[Calculation formula] • Amount of construction waste discharge (Including construction waste other than specific construction materials) + sales of valuable resources (generated from construction) (covers directly contracted companies that buy valuable materials from the KUBOTA Group) [Calculation scope] • Business sites in Japan
	Recycling ratio of construction waste	%	[Calculation formula] • (Sales of valuable resources + resource recycling + amount reduced (including heat recovery)) / amount of construction waste, etc. discharge (including sales of valuable resources) x 100

*1 From FY2014, the KUBOTA Group's accounting policy has changed to reflect in the consolidated financial statements the preliminary results of some consolidated subsidiaries with different ends to their fiscal years. The period covered in the Environmental Report is as stated at the top of page 69.
*2 In accordance with changes in the KUBOTA Group's accounting policy (adjusting for fiscal year ends), consolidated net sales from FY2010 to FY2014 have been restated to reflect the new accounting policy. As a result, indicators per unit of sales, which use consolidated net sales in the denominator, and eco-efficiency which uses them in the numerator, have been restated from FY2010 to FY2013.

Environmental performance indicators		Unit	Calculation method
Water-related	Water consumption	million m^3	[Calculation formula] • Total amount of service water, industrial water and groundwater consumption
	Water consumption per unit of sales	%	[Calculation formula] • Water consumption / consolidated net sales • Water consumption per unit of sales for each fiscal year / water consumption per unit of sales for FY2010 x 100 (as shown in the graph on page 51)
	Wastewater discharge (public water areas, sewage lines)	million m^3	[Calculation formula] • Total wastewater discharge to public water areas and sewage lines (including rain and spring water)
	Amount of COD, nitrogen and phosphorus discharge	tons	[Calculation formula] • COD, nitrogen or phosphorous concentration (mg/L) x amount of effluent discharged to public water area (m^3) x 10^{-6} [Calculation scope] • Business sites subject to total emission control in Japan
	Amount of recycled water	million m^3	[Calculation formula] • Amount of water purified in on-site effluent treatment facilities and recycled (excluding the recycled cooling water used)
Chemical substance-related	Amount of PRTR-designated substances handled	tons	[Calculation formula] • Total amount of chemical substances handled, which are designated as Class I under the Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (the PRTR Law) whose amount handled by each business site is one ton or more (or 0.5 ton or more for Specific Class I Designated Chemical Substances) per year [Calculation scope] • Business sites in Japan (business sites subject to legal notification only) • After FY2013 data includes designated chemical substances derived from recycled resources in accordance with revisions to the Manual for PRTR Release Estimation Methods in the Steel Industry (Ver. 12 FY2013 use)
	Amount of PRTR-designated substances released and transferred	tons	[Calculation formula] • Total release and transfer amount of the chemical substances which are designated as Class I under the PRTR Law and whose annual total amount handled by each business site is one ton or more (or 0.5 ton or more in case of Specific Class I Designated Chemical Substances). • Amount released = amount discharged to the atmosphere + amount discharged to public water areas + amount discharged to soil + amount disposed of by landfill in the premises of the business site • Amount transferred = amount discharged to sewerage + amount transferred out of the business site as waste • The amount of each substance released and transferred is calculated in accordance with Manual for PRTR Release Estimation Methods Ver. 4.1 (March 2011) of the Ministry of the Environment and the Ministry of Economy, Trade and Industry, and Manual for PRTR Release Estimation Methods in the Steel Industry Ver. 13 (March 2014) of the Japan Iron and Steel Federation. [Calculation scope] • The same scope of calculation as the amount of PRTR-designated substances handled
	Amount of PRTR-designated substances released and transferred per unit of sales	%	[Calculation formula] • Amount of PRTR-designated substances released and transferred / consolidated net sales • PRTR-designated substances released and transferred per unit of sales of each fiscal year / PRTR-designated substances released and transferred per unit of sales in FY2010 x 100 (as shown in the graph on page 52)
	Amount of chemical substances handled	tons	[Calculation formula] • Total amount of chemical substances handled at business sites covered by laws and regulations + the total amount of VOCs handled [Calculation scope] • Overseas business sites • The subject laws and regulations are the Toxics Release Inventory (TRI) Program, US EPA, the European Pollutant Emission Register (EPER), the European Pollutant Release and Transfer Register (E-PRTR), and Reporting to the National Pollutant Release Inventory (Canada) • VOCs are xylene; toluene; ethylbenzene; 1, 2, 4-trimethylbenzene; 1, 3, 5-trimethylbenzene that are at each site handled in amounts of one ton or more per year (only xylene, toluene, ethylbenzene in FY2012)
	VOC emissions	tons	[Calculation formula] • The total emissions of xylene; toluene; ethylbenzene; styrene; 1, 2, 4-trimethylbenzene; 1, 3, 5-trimethylbenzene [Calculation scope] • In Japan and overseas • Xylene; toluene; ethylbenzene; styrene; 1, 2, 4-trimethylbenzene; 1, 3, 5-trimethylbenzene that are at each site handled in amounts of one ton or more per year
	VOC emissions per unit of sales	tons	[Calculation formula] • VOC emissions / consolidated net sales • VOC emissions per unit of sales for each fiscal year / VOC emissions per unit of sales in FY2010 x 100 (as shown in the graph on page 52)
	SOx emissions	tons	[Calculation formula] • Amount of fuel consumed (kg) x sulfur content in the fuel (Wt %) / 100 x 64 / 32 x [(1 - desulphurization efficiency) / 100] x 10^{-3}, or amount of SOx emitted per hour (m^3N/h) x annual operation hours of the relevant facility (h) x 64 / 22.4 x 10^{-3}, or SOx emission concentration (ppm) x annual exhaust gas from facilities (m^3N/y) x 64 / 22.4 x 10^{-6}, or SOx emission concentration (mg/m^3N) x annual exhaust gas from facilities (m^3N/y) x 10^{-9} [Calculation scope] • For FY2010, the smoke and soot generating facilities of business sites in Japan as defined by the Air Pollution Control Law. • From FY2011, the facilities of overseas business sites subject to the law are included • The smoke and soot generating facilities with burner combustion capacity in fuel oil equivalent of more than 50 liters / hour (city gas: above 80m^3 / hour) or rated capacity of transformers of more than 200kVA (kilovolt amps).
	NOx emissions	tons	[Calculation formula] • NOx concentration (ppm) x 10^{-6} x amount of gas emitted per hour (m^3N/h) x annual operation hours of the relevant facility (h) x 46 / 22.4 x 10^{-3} [Calculation scope] • For FY2010, the smoke and soot generating facilities of business sites in Japan as defined by the Air Pollution Control Law. • From FY2011, the facilities of overseas business sites subject to the law are included • The smoke and soot generating facilities with burner combustion capacity in fuel oil equivalent of more than 50 liters / hour (city gas: above 80m^3 / hour) or rated capacity of transformers of more than 200kVA (kilovolt amps).
	Soot and dust emissions	tons	[Calculation formula] • Soot and dust concentration (g/m^3N) x amount of gas emitted per hour (m^3N/h) x annual operation hours of the relevant facility (h) x 10^{-6} [Calculation scope] • For FY2010, the smoke and soot generating facilities of business sites in Japan as defined by the Air Pollution Control Law. • From FY2011, the facilities of overseas business sites subject to the law are included • The smoke and soot generating facilities with burner combustion capacity in fuel oil equivalent of more than 50 liters / hour (city gas: above 80m^3 / hour) or rated capacity of transformers of more than 200kVA (kilovolt amps).
Other	CO_2 eco-efficiency	million¥/ tons CO_{2e}	[Calculation formula] • Consolidated net sales / CO_2 emissions
	Waste eco-efficiency	million¥/ hundred kg	[Calculation formula] • Consolidated net sales / amount of waste discharge
	Chemical substance eco-efficiency	million¥/kg	[Calculation formula] • Consolidated net sales / amount of PRTR-designated substances released and transferred by production sites in Japan
	Green purchasing ratio	%	[Calculation formula] • Amount spent to purchase eco-friendly office supplies (paper, stationery, etc.) / total amount spent to purchase items subject to green purchasing x 100 • Green products are items purchased through the office supply procurement site operated by Group companies [Calculation scope] • Business sites in Japan

Third-Party Assurance on Environmental Report

Since FY2005, the KUBOTA Group has received the third-party assurance in order to improve the reliability and comprehensiveness of its environmental data. The symbol is used to indicate information assured by the third party. Based on the third-party assurance in this fiscal year, its environmental report was accorded the environmental report assurance and registration mark of the Japanese Association of Assurance Organizations for Sustainability Information (J-SUS). This mark* indicates that the reliability of environmental data presented in the KUBOTA REPORT 2014 – Business and CSR Activities satisfies the requirements for the environmental report assurance and registration marking specified by J-SUS.

http://www.j-sus.org/english.html

KUBOTA REPORT 2014 is published in three languages (Japanese, English and Chinese in online version). The entire online version of the Environmental Report has been verified by a third party.

J-SUS Assurance

Factory visit

Sakai Plant, KUBOTA Corporation

KPMG

Independent Assurance Report

To the President and Representative Director of Kubota Corporation

We were engaged by Kubota Corporation (the "Company") to undertake a limited assurance engagement of the environmental performance indicators marked with "" for the period from April 1, 2013 to March 31, 2014 (the "Indicators") included in its KUBOTA REPORT 2014 – Business & CSR Activities in the Company's website (the "Website Report") for the fiscal year ended March 31, 2014, and the completeness of material environmental information in the Website Report.

The Company's Responsibility

The Company is responsible for the preparation of the Indicators in accordance with its own reporting criteria (the "Company's reporting criteria"), as described in the Website Report, which are derived, among others, from the Sustainability Reporting Guidelines version 3.1 of the Global Reporting Initiative and Environmental Reporting Guidelines of Japan's Ministry of the Environment, and for including the material environmental information defined in the 'Sustainability Reporting Assurance and Registration Criteria' of the Japanese Association of Assurance Organizations for Sustainability Information ("J-SUS") in the Report.

Our Responsibility

Our responsibility is to express a limited assurance conclusion on the Indicators based on the procedures we have 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', 'ISAE 3410, Assurance Engagements on Greenhouse Gas Statements', issued by the International Auditing and Assurance Standards Board, and the 'Practical Guidelines for the Assurance of Sustainability Information' of J-SUS. The limited assurance engagement consisted of making inquiries, primarily of persons responsible for the preparation of information presented in the Report, and applying analytical and other procedures, and the procedures performed vary in nature from, and are less in extent than for, a reasonable assurance engagement. The level of assurance provided is thus not as high as that provided by a reasonable assurance engagement. Our assurance procedures included:

- Interviewing with the Company's responsible personnel to obtain an understanding of its policy for the preparation of the Report and reviewing the Company's reporting criteria.
- Inquiring about the design of the systems and methods used to collect and process the Indicators.
- Performing 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 recalculating the Indicators.
- Visiting to the Company's factory selected on the basis of a risk analysis.
- Assessing whether or not all the material environmental information defined by J-SUS is included in the 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 Report are not prepared, in all material respects, in accordance with the Company's reporting criteria as described in the Report, and all the material environmental information defined by J-SUS is not included in the Report. .

Our Independence and Quality Control

We have complied with the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which includes independence and other requirements founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior. In accordance with International Standard on Quality Control 1, we maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

KPMG AZSA Sustainability Co., Ltd.

KPMG AZSA Sustainability Co., Ltd.
Osaka, Japan
August 29, 2014

Third-Party Comments

Comments on the KUBOTA REPORT 2014 - Business and CSR Activities

Professor Katsuhiko Kokubu,
Graduate School of Business Administration, Kobe University

A Report that Links both the Printed and Online Formats

KUBOTA REPORT 2014 is published in both a printed and online format. The two reports have been edited with specific purposes in mind. In my opinion, KUBOTA has successfully achieved its objectives and published a printed report that focuses on readability and an online report that looks to provide a detailed account of the Company's business and CSR activities. The printed version, in particular, can be commended for striking the right balance between visual design and exhaustive information, including quantitative data of the KUBOTA Group's fundamental activities. I believe that the printed version provides a concise account of the Group's business and sustainability activities and goes a long way toward fulfilling the requirements for integrated reporting set out by the International Integrated Reporting Council. The online version is for the most part structured in the same style as the printed version. In providing a more detailed look at the Group's endeavors, the online version is an excellent tool to enhance the understanding of readers of the printed version.

Advancing the Basic CSR Management Policy

The KUBOTA Group engages in business activities based on a clearly defined basic CSR management policy. In particular, the Group is to be highly commended for its systematic approach toward CSR management. The KUBOTA Group has taken explicit steps to clarify the relationship between its Corporate Principle and Rules of Conduct, its approach toward CSR through its business activities and as a basis for those business activities, and its efforts to provide value to society. Moreover, the manner in which the Group identifies specific areas where it can provide value on an individual stakeholder basis and the emphasis placed on each stakeholder's perspective are also desirable facets of the Group's basic CSR management policy. Looking ahead, I believe that the KUBOTA Group can further integrate its business activities with the promotion of CSR management by building a framework that coordinates this emphasis on contributing to stakeholders with its business activities and identifying an index to measure the level and quality of value.

Promoting Communication with Stakeholders

As an important communication tool, it is vital that the Group works diligently to ensure that as many stakeholders as possible read the KUBOTA REPORT. In the online version of the report, the KUBOTA Group has outlined its efforts to promote increased awareness toward its Corporate Principles and CSR in general across its worldwide network of bases. The Group is to be lauded for the implementation of an employee CSR awareness survey and its endeavors to wide-ranging CSR-related communication with employees. In the future, I recommend that the Group upgrade and expand these activities to other stakeholders. Communicating with stakeholders is an important means by which the Group can gain an insight into the critical issues that it continues to face. This insight can also be used in an analysis of materiality and I strongly advise that the Group consider this as a future pending issue.

In response to the above comments

Kunio Suwa, Executive Officer–General Manager of CSR Planning & Coordination Headquarters, KUBOTA Corporation

We have received comments from Professor Kokubu since 2009. KUBOTA would like to thank him for providing his opinion again this fiscal year.

The KUBOTA REPORT 2014 was created with the desire to further enhance communication with our various stakeholders. The printed version was intended to be a gateway for stakeholders relatively unfamiliar with the KUBOTA Group to get a broader understanding of the Group. The online version was intended to be a tool for each stakeholder to get a deeper understanding of areas that pique their interest.

Through its business activities, the Group will redouble efforts to contribute to solving problems related to food, water and the environment, all of which are essential to the survival of the human race. All employees of the Group around the world share the vision of the Kubota Global Identity and set targets in line with their business activities with the aim of building an acclaimed brand everyone trusts.