



Environmental Report 2015



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(April 1. 2014 - March 31. 2015)

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Basic Policy on the Environment

Management philosophy

Visionary Technology, Reliable Quality, and Meticulous Service

Making use of our greatest strength — our ability to develop our core technology — with interface treatment related to electronics, we will expand our global business activities to help create a rich and wonderful society with the principles of Visionary Technology, Reliable Quality, and Meticulous Service.

Company Motto

“Enjoy your work”

1. Let's always aim to achieve new targets without fear of failure.
2. Let's make improvements with an insatiable curiosity.
3. Let's carry out work with our combined power and a feeling of gratitude and cooperation.
4. Let's make a fun workplace where people pay attention to health and safety.
5. Let's contribute to society.

Based on the above-mentioned management policy, we have established the following environmental policies to guide us in taking our environmental protection activities. In accordance with this policy, we are making efforts to protect the environment and conserve resources and energy, and we will continue to contribute to the creation of a sustainable and rich society in harmony with the global environment.

Environmental policy

In accordance with the environmental management system in compliance with ISO14001, we are promoting environmental protection.

1. Recognizing the environmental aspects in our activities, we will comply with environmental laws and regulations and other requirements, while at the same time striving to continuously improve our environmental management system and increase the management level.
2. In order to make efficient use of resources, prevent pollution and protect the environment, we will carry out the following:
 - Measures to save energy
 - Reduction of waste, promotion of recycling
 - Provision of products that were manufactured while considering the product life cycle
 - Implementation of chemical management
3. We will make this environmental policy well known to all those who work in our company, and also disclose it to the general public.

April 1, 2015
 Kazuo Maeda, CEO & President
 MEC COMPANY Ltd.



Environmental Management System

Acquisition of ISO14001

The Company has established an environmental management system (EMS) that conforms to ISO14001 in order to promote ongoing environmental protection activities. We have obtained ISO14001 certification in all our places in Japan. We will continue working.

Internal audit

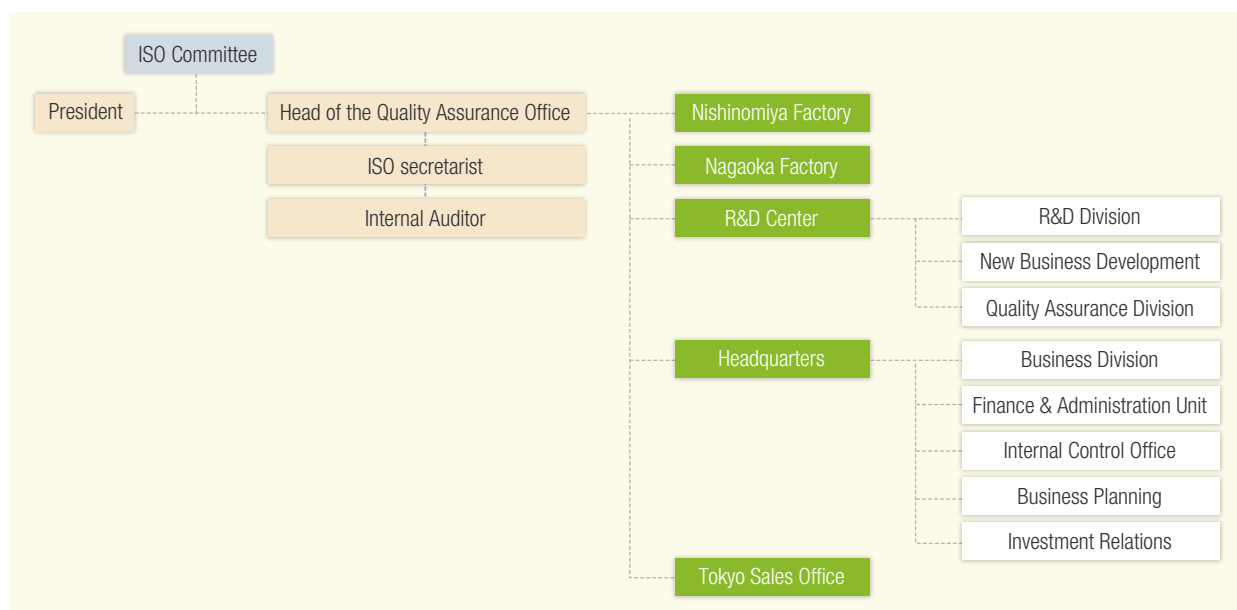
We conducted an internal audit between October and November for FY2014. Mainly, in addition to confirming the progress of the operational status of our environmental management system and improvement activities, we confirmed the status of compliance with laws, regulations and other requirements, and the status of correcting the matters pointed out in the previous external audit and internal audit. Although there were three cases of noncompliance, corrective measures for two of them have already been completed, and corrective measures for one case are being carried out. Moreover, with regards to observations and opportunities for improvement, we are working to improve them according to their degree of importance. We plan to confirm the improvement situation, including one case of nonconformity for which corrective measures are being implemented, in the internal audit for FY2015.

There were three cases of noncompliance pointed out in the external audit of February 2015 but we have completed correcting it and maintained EMS certification.

In FY2014, five people who received the prescribed education were newly certified as internal environmental auditors, and 48 people have been certified as internal environmental auditors as of March 2015.

Environmental promotion

The Company assigns the Head of the Quality Assurance Office as an Environmental Management Officer and positions the ISO Committee, composed of persons with responsibility at the offices, ISO Secretariat, and committee members who are elected from each office, at the center of environmental activities. The Company is grasping and promoting the progress of various activities and improvement targets at each office. We are making efforts to protect the environment, under the following organizational structure. (As of April 2015)





Environmental Targets and Results

The following shows the results of our efforts to achieve major environmental targets for FY2014.

Environmental targets for FY2014

Environmental objectives	Environmental objectives for FY2014	Results for FY2014	Evaluation
Adhere to voluntary drainage standards	We will reduce to one or less the number of cases that deviate from voluntary drainage standards. : (Nishinomiya Plant)	There were two cases of noncompliance with the standard levels. We reported to the Nishinomiya City, and implemented a provisional solution.	×
	We will reduce to two or less the number of cases that deviate from voluntary drainage standards. : (Nagaoka Plant)	There were two cases of noncompliance with the voluntary standard levels. No problem with legal compliance.	○
Improve the level of management of waste water	(Waste water) We will create an emergency manual : (R&D Center)	We established an emergency waste water manual that specifies way of coping strategies, applicable laws and regulations, and the contact point of public institutions.	○
Appropriately manage amounts of chemicals	We will apply the system to manage poisonous substances that was introduced in FY2013 to general reagents. : (R&D Center)	We can now collectively manage movements of all reagents.	○
Improve the efficiency of environmental activities (in the R&D Center)	We will clarify the division of roles so that the transfer of information on activities related to safety, health and the environment can proceed smoothly. : (R&D Center)	We clarified the division of roles and information can now be transferred smoothly.	○
Sell and promote products that help to improve the environment	We will contribute to the environmental improvement of key customers. : Number of cases adopted is up 10% compared with FY2013 (5 cases) (Tokyo Office)	Number of cases adopted: 1 case	×
Carry out green activities	Reduction of power usage : After increasing the range of management, we will reduce power by 10% compared with FY2010 (Head Office)	Down 8%	△
	Ecocap Movement : Vaccine for 15 people (Head Office)	Vaccine for slightly over 12 people	△
	Activities of project to reuse stationery (Masking effective use of stationery, preventing waste generation and giving assistance for educating children in developing countries) : (Head Office)	Made two donations (donated over 300 pencils, etc.)	○

Two cases of a deviation from drainage standards occurred, but we properly reported them and carried out measures to correct them. Thereafter, the similar events did not occur again. We consider that the measures we took were effective.

We will continue working to carry out appropriate monitoring in the future.



Environmental Accounting for FY2014

Environmental accounting is made up environmental conservation costs (expenses) and conservation effects (quantitative).

In FY2014, our environmental conservation costs amounted to 63,123 thousand yen. Of those costs, 41% were research and development costs that were associated with developing products with a low environmental impact.

We are actively engaged in collecting the empty containers after chemicals have been used and our upstream and downstream costs account for 8% of expenses. The main costs are associated with collecting empty containers for 20L plastic containers or 200L plastic drums and outsource container cleaning work (outsource recycling work) for reuse.

[Basis of preparation]

- Data collection period: April 1, 2014 to March 31, 2015
- Scope of data collection: MEC Co., Ltd. only (excluding subsidiaries) (Nishinomiya Factory, Nagaoka Factory, R&D Center, Headquarters and Tokyo Sales Office)
- Environmental costs are only considered if it can be determined that they are clearly related to conservation activities.
- With regards to research and development costs, individual items that can be calculated by each theme are aggregated, and items that cannot be directly calculated are prorated based on the working hours of each theme.
- Costs include depreciation of equipment used for the purpose of environmental conservation, maintenance costs, and personnel costs.

Environmental conservation costs for FY2014

(thousand yen)

Classification		Contents of major initiatives	Amount of investment	Amount of costs
(1) Cost in the business area			0	28,314
Breakdown	(1)-1 Cost of pollution prevention	Maintenance of equipment for wastewater treatment, water pollution prevention, etc.	0	8,713
	(1)-2 Global environmental conservation costs	Measures to save labor and energy	0	0
	(1)-3 Resource recycling costs	Cost of outsourcing the processing of industrial waste	0	19,600
(2) Upstream and downstream costs			0	4,927
(3) Management costs			0	2,044
(4) Research and development costs			0	25,838
(5) Cost of social activities			0	2,000
(6) Environmental remediation costs			0	0
Total				63,123

(thousand yen)

Item	Amount
Total investment amount in the corresponding period	219,639
Total research and development expenses in the corresponding period	877,819
Proceeds from sales of valuable items pertaining to (1)-3	670
Proceeds from sales of valuable items pertaining to (2)	0

2 Environmental Management

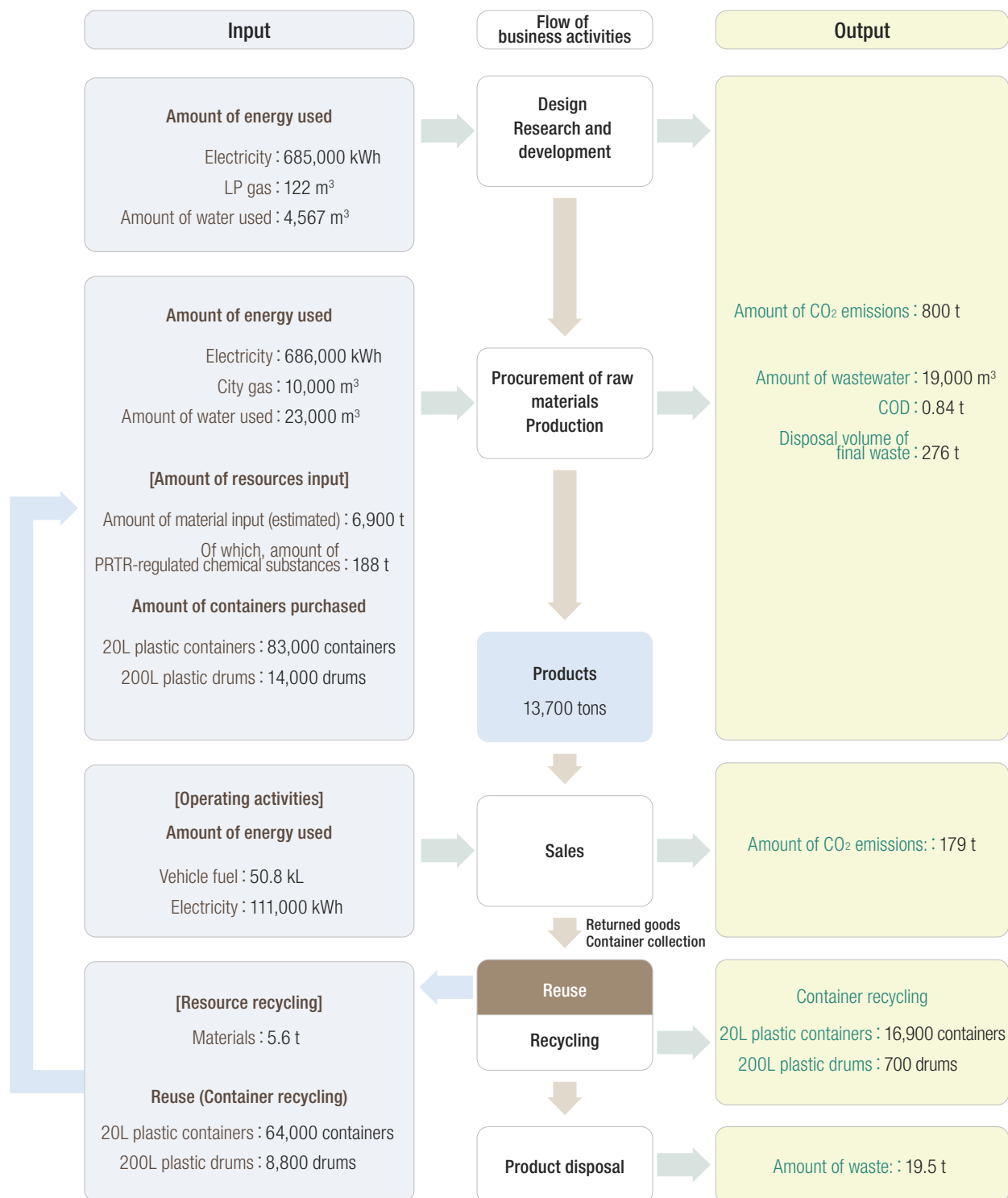
The "environmental conservation effects" are shown as an increase or decrease in absolute amount compared with the previous year (FY2013). For certain indexes, the basic unit that represents the amount for 1t of production volume is also described.

Environmental conservation effects for FY2014

Content of the effect			Index environmental performance			
			Index (amount)	Year-on-year	Index (basic unit)	Year-on-year
(1) Effect corresponds to the business area costs	Effect on resources invested in business activities	Electrical power consumption	1,482,000 [kWh]	-53,000 [kWh]	108 [kWh/t]	-6.2 [%]
		City gas consumption	10,000 [m³]	+1,200 [m³]	0.7 [m³/t]	+ 10.8 [%]
		Water consumption	27,700 [m³]	+1,300 [m³]	2.0 [m³/t]	+ 2.0 [%]
	Effect on the environmental impact and waste emissions generated by business activities	Carbon dioxide emissions	979 [t-CO₂]	-36 [t-CO₂]	71 [kg-CO₂/t]	-6.3 [%]
		COD emissions	0.8 [t]	-0.1 [t]		
		Total emissions of industrial waste	331 [t]	+ 89 [t]		
(2) Effect corresponds to the upstream and downstream costs	Effect on the goods and services generated by business activities	Reuse of containers (Plastic containers)	64,000 [containers]	+100 [containers]		
		Reuse of containers (Plastic drums)	8,800 [drums]	+900 [drums]		



Environmental Impact Associated with Business Activities



The figures above show the entire amount with regards to the business and environmental activities of the Company for FY2014.



Changes in Environmental Performance

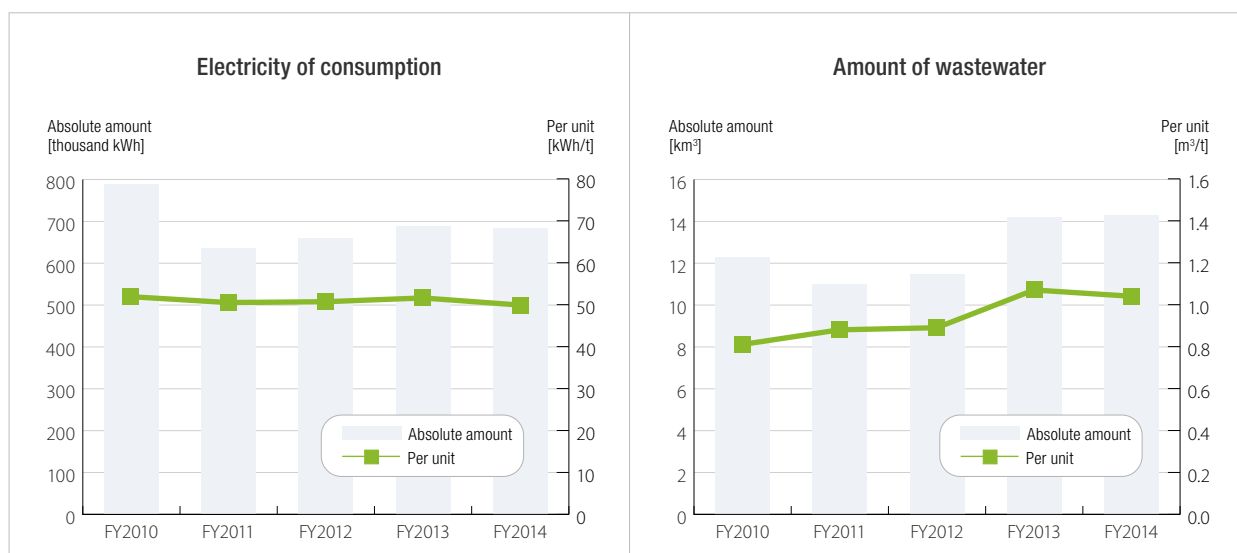
Electricity consumption

In FY2014, the amount of electricity consumed in the plant was 686,000 kWh, a slight decrease of 2,000 kWh compared with FY2013, so there was not much change. Since the production volume has increased slightly, the usage per unit of raw material has also decreased slightly.

Amount of water used

Of the water used in the plant, part of it is used as a raw material. Other than that, a lot of water is used for activities such as cleaning production equipment. Also in order to promote the effective use of water resources, we have been working to improve manufacturing operations, equipment cleaning methods, etc.

The amount of waste water in FY2014 was 14.3 km³, a slight increase of less than 0.1 km³ compared with FY2013, and it can be said that there was no change in this area.



Efforts for reusing containers

We promote the reuse of containers in order to avoid wasting resources and to make effective use of them.

The main containers we use are 20L plastic containers and 200L plastic drums. We outsource work to collect empty containers after the product has been used by our customers, and we separate the recovered containers into those that can and cannot be reused at each Factory. We clean plastic containers ourselves, and we clean some of the plastic drums and outsource the cleaning work for the rest, and we recycle them.

The accompanying graph shows changes in the number of plastic containers and plastic drums that we collected and reused.

In FY2014, the recovery rates for plastic containers and plastic drums were 55.0% and 38.5% respectively, down 0.3% and 3.9% respectively compared with FY2013.



Proper disposal of waste

The amount of waste generated in FY2014 was 331 t, up 37% compared with FY2013. Although the amount of waste generated in the plants increased only slightly, the lines ran for a longer time for substrate processing in the laboratory, and the drainage generated due to this was treated as a waste acid solution. This was a factor for the increase in waste generated.

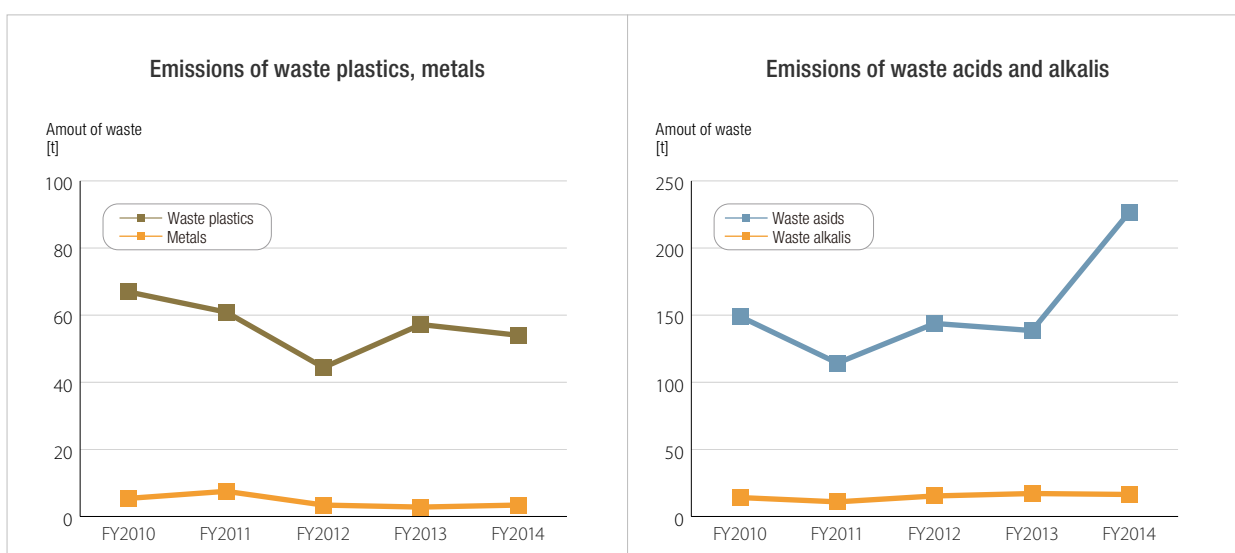
Plastic containers, plastic drums, pallets, etc. that can no longer be reused in the plants have been recycled as plastic since FY2008. In ways like this, we are making efforts to reduce the amount of waste we treat. In addition, we are making efforts to separate metals and sell them as a valuable resource.

Of the amount of waste generated, the amount of recyclable waste was comparable to the amount generated in FY2013.

Other than this, the waste from our offices is separated based on the separation rules of each office.

The final volume of waste disposed of in FY2014 was 276 t, up 52% compared with FY2013. The main factor for this was an increase in waste acid solution that sporadically occurred in the R&D Center.

We will continue making efforts to reduce the amount of waste, while aiming to thoroughly sort any waste generated and strengthen efforts for further recycling, and we will strive to reduce the volume of waste disposed of.





Management of Chemical Substances

Management of chemical

We build a system for the management of chemical substances in order to prevent our products being contaminated by banned substances in all stages of production from the purchase of raw materials to shipment. We are using the Standards for the Management of Chemical Substances in Products that were revised in April 2015 to improve our operations. We will continue to thoroughly implement a system for managing chemical substances and continue to promote sustainable management of chemical substances in products in various locations including our suppliers and factories.

PRTR

Of the substances which we handled in FY2014, the transaction volume of PRTR-listed substances came to 188 t for 18 substances. We always ensure that they are properly managed when using them in Factories and Research & Development.

We recognize that
environmental protection is an important issue,
and we will continue to be actively engaged
in environmental protection activities in the future.



<http://www.mec-co.com/en>

