



Environmental Management

Positioning environmental preservation as an important challenge in management, we establish a mid- to long-term plan that constitutes our action plan every five years, and are promoting activities to achieve compatibility between Monozukuri and environmental preservation.

Enhancing and promoting consolidated environment management

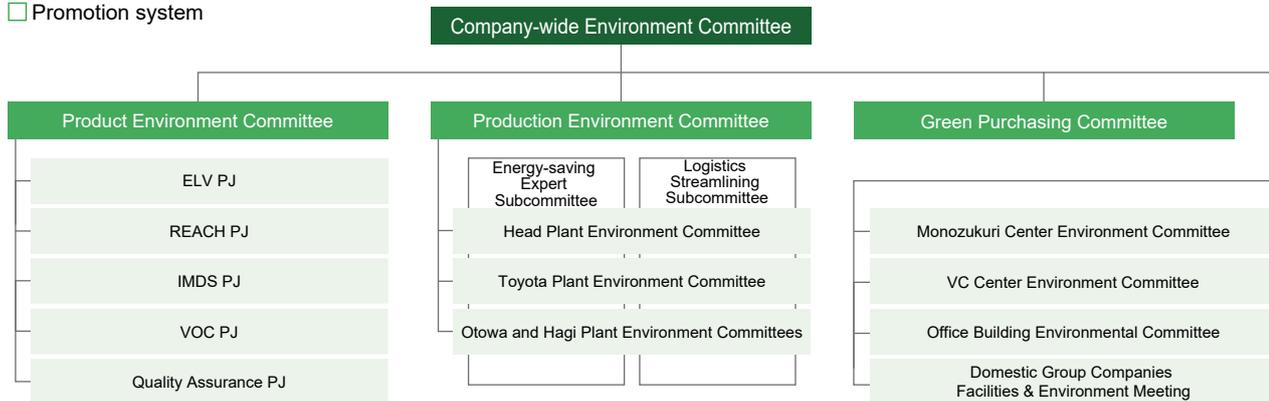
Tokai Rika is pressing forward with the creation of a system for responding to environmental problems that are spreading on a global scale, in cooperation with its domestic and overseas group companies and suppliers.

Promotion system for environmental activities

In the Tokai Rika Group, an environment committee has been organized in order to promote environmental activities systematically. Guidelines/initiatives that are decided on at the company-wide environment committee chaired by the President are shared with the committees/subcommittees of each region,

and worked on continuously by the whole group. Since FY 2014, we have had an Energy Saving Expert Subcommittee in place that focuses on energy saving with regard to production equipment, and have been rolling out activities aimed at reducing energy consumption.

□ Promotion system



Acquisition of ISO14001

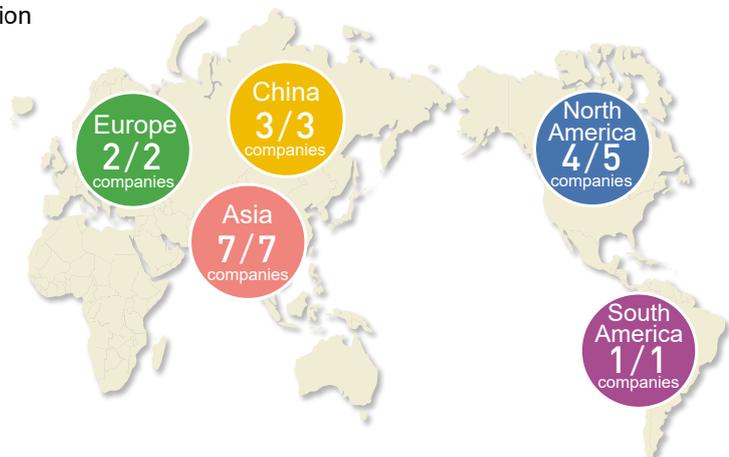
In order to construct/operate an environment management system that has a high degree of objectivity, we are promoting the fully global acquisition of ISO14001.

□ Acquisition of ISO14001

Acquisition rate for overseas production subsidiaries

100%*

* TRMX (Mexico) is currently preparing for acquisition, owing to being newly launched



Environmental accounting

Tokai Rika ascertains the investments/expenses involved in environmental preservation and their effects, and uses them as guidelines to make environmental preservation activities more effective and efficient.

The costs for environmental preservation in FY 2016 were an investment of 89 million yen, an expense of 1,684 million yen, and an economic effect of 1,011 million yen.

Environmental preservation costs (FY 2016)

Investment	Expense	Economic effect
89 million yen	1,684 million yen	1,011 million yen

Costs for environmental preservation

Unit: Million yen

Details of main activities	FY 2015		FY 2016		
	Investment	Expense	Investment	Expense	
In-business-area costs	Costs for pollution prevention	15	255	24	262
	Costs for global environmental preservation	115	495	59	516
	Resource circulation costs	0	141	0	164
Upstream/downstream costs	0	23	0	23	
Management activity costs	12	341	6	223	
Research and development costs	0	444	0	456	
Social activities costs	0	11	0	21	
Environmental damage costs	0	18	0	19	
Total	142	1,727	89	1,684	
		1,869		1,773	

Economic effect

Unit: Million yen

Item	FY 2015	FY 2016
Sales amount for recycled materials	972	963
Cost reduction from energy saving	76	34
Waste disposal cost reduction	(11)	14
Total	1,037	1,011

Effects in terms of quantities

Item	FY 2015	FY 2016
Energy saving effects (t-CO ₂)	1,997	879
Amount of recycled materials sold (t)	8,593	8,399
Waste disposal amount compared to the previous year (t)	41.1	124

Cooperative activities with group companies

We share information on example cases of energy saving improvements, environmental risk management, etc. from each base in and outside of Japan, and are working toward raising levels globally. Furthermore, we hold regular meetings with domestic group companies for the purpose of "mutual study," and, for example, introduce example cases of local improvements and conduct energy-saving patrols.



Domestic Group Companies
Facilities & Environment Meeting



Energy-saving patrols

Topics

"Environmental Activities Award for Excellence" presented to TRCF

TRCF (China) received the "Environmental Activities Award for Excellence" (newly established in FY 2016) from GTMC*, in recognition of initiatives implemented at TRCF (China) such as improvements to the thermal efficiency of the central air conditioning system.

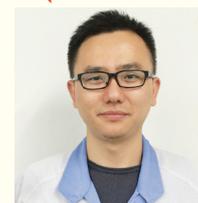


Trophy for the
Environmental
Activities Award for
Excellence

* GTMC: GAC Toyota Motor Co., Ltd.

Voice

We are actively working to achieve energy/resource saving on a daily basis at TRCF under the philosophy of "The environment forms the foundation of production activities," and I am deeply honored that our activities have been recognized in this way. Encouraged by this award, I want to press forward with the activities even further in the future.



TRCF (China)
Management
Division
WenJia He

Environmental Management

Environmental risk management

We conduct trend management by means of environment measurement on a regular basis, by setting voluntary standard values that are stricter than the legal values for each of the management items, such as drainage, soot and smoke, noise, and vibration. Furthermore, as preventive activities, we share example cases of environmental problems and complaints that have occurred to date and perform risk inspections, so as to prevent the occurrence of similar cases with similar equipment.



Measurement of noise/vibration at the site boundary

Response training for anticipated emergencies

Anticipating emergencies caused by problems with or failure of environmentally significant equipment, we have established the "Emergency Response Procedures," and conduct joint training through related departments, in order to be able to respond promptly from occurrence to the completion of countermeasures.



Response training for the event of a drainage problem

Prevention of soil and underground water contamination

At each office, we thoroughly implement appropriate management with regard to chemical substances, oils and fats, and are taking preventive measures against underseepage, such as discontinuing the use of underground tanks, and introducing duplication and visualization of underground pits. Furthermore, with regard to underground contamination by toxic substances such as trichloroethylene that have been used in the past, we are continuing to carry out remediation pumping and monitoring at site boundaries, and are confirming that there is no outflow from the company to the outside.



Excavation and removal of contaminated soil

Countermeasures for purifying contamination at the former Nishibiwajima plant

Soil and underground water contamination had occurred as a result of trichloroethylene and its decomposition products, and soil contamination as a result of hexavalent chromium and fluorine, but decontamination was completed in December 2016 by means of in-situ purification measures such as bioremediation (decomposition and purification by microorganisms). We will continue to monitor the underground water in order to check that there is no contamination.

Soil contamination countermeasures at each plant

Name of business office	Status of countermeasures	
Head Office / Head Plant	There is no soil / underground water contamination	
Toyota Plant	Soil	There is contamination by fluorine, boron and hexavalent chromium, measures for preventing scattering by means of covering have been taken, and the underground water is checked on a regular basis
	Underground water	There is contamination by trichloroethylene and its decomposition products, and remediation pumping is ongoing
Otowa Plant	Underground water	There is contamination by trichloroethylene and its decomposition products, and remediation pumping is ongoing
Hagi Plant	There is no soil / underground water contamination	

Storage status with regard to PCB (polychlorobiphenyl)

We are proceeding with the appropriate processing of PCB (polychlorobiphenyl), which has been designated as a prohibited substance. Processing has been completed with regard to transformers and switches, and for the two capacitors and 586 luminaire ballasts that we currently own, processing is progressing in a planned fashion with the aim of completion in 2020. Until completion, we will continue to conduct appropriate management pursuant to the Act on Special Measures Concerning the Promotion of the Proper Treatment of PCB Waste, in order to ensure that outflow and soil contamination do not occur.

Storage status regarding PCB waste

Plant stored at	Capacitors (Qty)	Ballasts (Qty)	Transformers (Qty)	Switches (Qty)
Head Office / Head Plant	1	0	0	0
Toyota Plant	0	0	0	0
Otowa Plant	1	586	0	0
Hagi Plant	0	0	0	0

* Processing of transformers and switches that were confirmed to contain PCB was completed in October 2015.

Cooperation with suppliers

We are strengthening cooperation with suppliers, and promoting the reduction of environmental loads throughout the life cycle.

Green Purchasing Guidelines

We believe that in order to provide products with less environmental load, the whole of the supply chain needs to construct a cooperative system and respond to the issue together. At Tokai Rika, we have established the "Green Purchasing Guidelines" so that everyone will understand our way of thinking with regard to environmental preservation, and we have been pressing forward with environmental management that also includes the suppliers. In FY 2016, we

revised the Guidelines, adding "Reduction of environmental impact from water use" and "Understanding and initiatives with regard to a society in harmony with nature," and thereby further enhancing our initiatives.



Green Purchasing Guidelines

Activities of the cooperative association

We have organized a cooperative association together with 51 suppliers, and have been rolling out cooperative activities. At a meeting held every month, we share information about revisions to environment-related laws and things like example cases of energy-saving improvements and environmental problems, and promote environmental activities while cooperating with suppliers. In addition, since FY 2015, we have been visiting suppliers sequentially in order to check and study using the Genchi-genbutsu ("actual place and actual

thing") method, with regard to compliance with environment-related laws, the management situation regarding waste, and energy-saving improvements regarding production equipment.



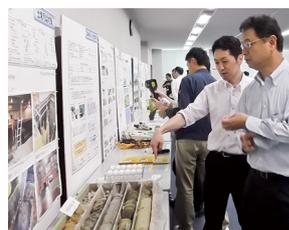
Studying using the Genchi-genbutsu method

Enhancing global employee education / enlightenment activities

Through environmental education and enlightenment activities, we are promoting improvement of awareness of global environmental preservation and the training of environment key persons.

Initiatives during environment month

During the environment month of June, we carry out a variety of events each year, in order to make it a good opportunity for employees to think of the environment as being "their own problem." In FY 2016, we organized an environment exhibition and environment lectures, distributed environment magazines. At each office, we planned and carried out initiatives suited to the distinctive features of the workplace, such as energy-saving patrols, lights-down activities and making green walls.



Environment exhibition



Environment Month Magazine



Green wall

Voice



Otowa Plant Administration Division
Haruki Minami

I have been making green walls every year, hoping that it could be of some help with energy saving. I have grown a lot of plants, but now I grow bitter melons every year, because they are the easiest to grow and good for health. Once I've harvested them, I give out my bitter melons in the company cafeteria, and everybody is delighted to take them.

Outstanding Example Award for CO₂ Reduction

Tokai Rika presents in-house awards for example cases of having contributed to CO₂ reduction. In FY 2016, Toyota Plant's "Measures for retaining heat for resin plating line steam piping" received the award as the most outstanding example, having

achieved significant results as a countermeasure against heat radiation losses, which is a priority issue with regard to CO₂ reduction.



Outstanding Example Award

□ FY 2016 Outstanding Examples

Most Outstanding Example	Toyota Plant	Measures for retaining heat for resin plating line steam piping
Outstanding Example	Head Plant	Reduction in power consumption of wafer inspection devices by adopting simultaneous measurement of two pieces
Outstanding Example	Otowa and Hagi Plants	Discontinuation of the use of air blow for image inspection devices

Environmental education

We conduct human resources development in order to promote environmental preservation by creating educational programs that correspond to rank and the content of the workplace, such as education for new employees, education on compliance with environment-related laws, and training of energy-saving key persons at energy-saving dojos.



Education on compliance with environment-related laws



Education for new employees

Voice

In the education program for new employees, through the Genchi-genbutsu method, I learned about the environmental initiatives the company is conducting, such as energy-saving improvements and greening activities. I was able to get an understanding of the attitude toward environmental preservation in the company I am going to work for, and I want to approach my own work with environmental awareness.



Human Resources Division
Akari Toyota

Topics

Training energy-saving key persons at a global level

To promote energy-saving improvement activities at overseas bases, we train energy-saving key persons at each base, passing on know-how through practical education by providing an energy-saving dojo for local staff. In FY 2016,

staff at TRCZ (Czech Republic), TRT (Thailand), TRI (Indonesia) and TRP (Philippines) attended the energy-saving dojo.



TRCZ (Czech Republic)



TRI (Indonesia)



TRP (Philippines)