

Environmental Initiatives



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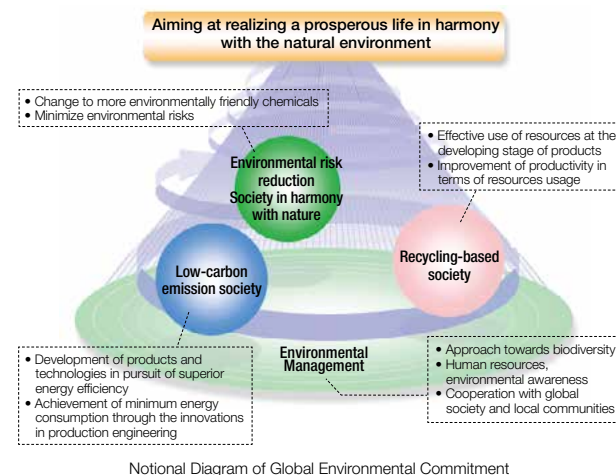
Vision for Environmental Activities

Toyota Industries works with consolidated subsidiaries in and outside Japan to promote environmental activities on a global scale. With regard to our “CO₂ Cancel” initiative, we aim to accomplish its targets in fiscal 2016.

Global Environmental Commitment

As one tenet under our Basic Philosophy, Toyota Industries works to contribute to regional living conditions and social prosperity and also strives to offer products and services that are clean, safe and of high quality. Accordingly, in February 2011, we established the Global Environmental Commitment, a specific environmental action guideline, to be shared and implemented throughout the Toyota Industries Group.

The entire Toyota Industries Group comprising 154 companies in and outside Japan will dedicate concerted efforts to realizing a prosperous life in harmony with the natural environment by carrying out activities aimed at “establishing a low-carbon emission society,” “establishing a recycling-based society” and “reducing environmental risk and establishing a society in harmony with nature” as our way of “promoting environmental management.”



product efficiency and other means. We have adopted this approach as a new environmental target under the Fifth Environmental Action Plan.

Activities for Accomplishing “CO₂ Cancel”

Aiming to accomplish “CO₂ Cancel” in fiscal 2016, we have been undertaking activities accordingly.

In fiscal 2014, our efforts to develop products with improved efficiency led to the successful development and release of engines with considerably less CO₂ emissions and an air-jet loom with lower energy consumption. As a result of concerted efforts to reduce CO₂ emissions from production activities, we made steady progress toward the goal of attaining “CO₂ Cancel” in fiscal 2016.

We will continue to promote our CO₂ reduction activities both in terms of product development and production activities.

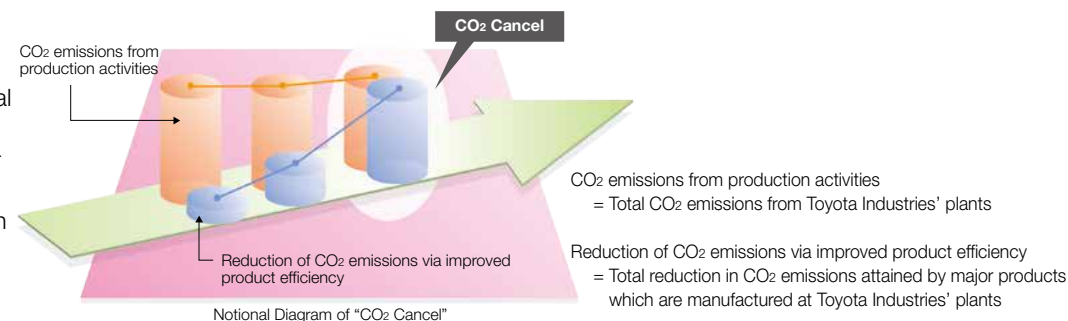
Steps to Accomplishing “CO₂ Cancel”

- 1 Establish parameters to calculate CO₂ reduction volume for each product
- 2 Simulate a timeline to accomplish “CO₂ Cancel”
- 3 Specify targets (including when to accomplish “CO₂ Cancel”)
- 4 Promote activities to achieve these targets
- 5 Accomplish “CO₂ Cancel”
- 6 Define higher targets (e.g., “CO₂ Double Cancel”)

Working toward “CO₂ Cancel”

What Is “CO₂ Cancel”?

We have been promoting initiatives under our original concept called “CO₂ Cancel.” This refers to our aim to offset CO₂ emissions from production activities by reducing CO₂ emissions via improved



Structure to Implement Environmental Management

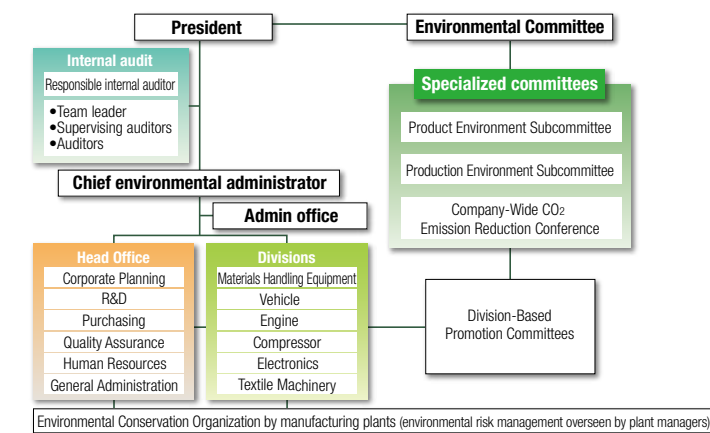
Positioning environmental response as one of its most crucial management issues, Toyota Industries is enhancing its environmentally oriented corporate management on a global basis through the promotion of consolidated environmental management.

Improving Environmental Management System Efficiency

Toyota Industries has positioned environmental response as one of its most crucial management issues. To quickly reflect top management's decisions on business operations, Toyota Industries has established and been operating a Company-wide integrated environmental management system (EMS), with the president at the top.

Since fiscal 2011, we have been consolidating environment-related regulations that had been established separately by each business division with the aim of improving the efficiency of our EMS. In fiscal 2014, we formulated Company-wide standards to identify facilities that must be included in our evaluation of the environmental impact of production activities (evaluation of environmental aspects). These standards helped us to evaluate all facilities that could potentially affect the environment and reduce associated environmental risks. We have also simplified the evaluation process.

Environmental Management Structure



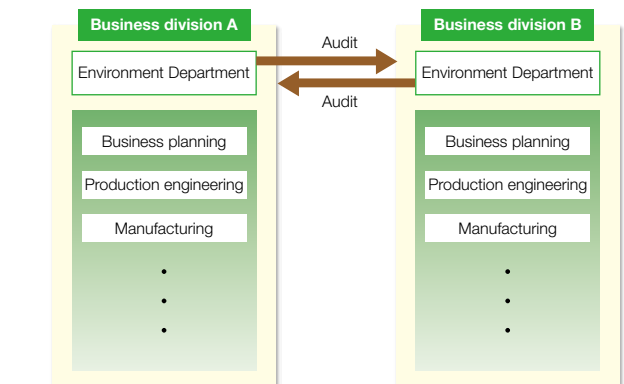
Environmental Audits

Toyota Industries implements annual internal environmental audits as well as external audits carried out by an independent third-party institute.

The external audit conducted in fiscal 2014 revealed one non-conformance. We have already completed measures to correct it and passed on the relevant information to other plants to prevent recurrence.

As for internal audits, we introduced a system of conducting mutual audits among business divisions in fiscal 2013. Under the system, the Environment Department of one business division plays a central role in an internal audit of another business division. By adopting this method, we aim to upgrade the overall capabilities of the Environment Department of each business division. At the same time, in order to improve the capabilities of auditors, they work in pairs when conducting an audit, with one auditor having a high level of expertise teaming up with a less experienced auditor.

System of Mutual Audits



Scope of Group-Wide Environmental Management (As of March 31, 2014)

Non-production companies
Japan: 24
Outside Japan: 93

North America

Production companies: 10
Toyota Industrial Equipment Mfg., Inc. (U.S.A.)
The Raymond Corporation (U.S.A.)
Raymond-Muscantine Inc. (U.S.A.)
North Vernon Industry Corp. (U.S.A.)
Indiana Hydraulic Equipment, Corp. (U.S.A.)
Michigan Automotive Compressor, Inc. (U.S.A.)
TD Automotive Compressor Georgia, LLC (U.S.A.)
Cullman Casting Corporation (U.S.A.)
Cascade Corporation (U.S.A.)
Toyota Industries Compressor Parts America, Co. (U.S.A.)

Europe

Production companies: 6
BT Products AB (Sweden)
Toyota Industrial Equipment, S.A. (France)
CESAB Carrelli Elevatori S.p.A. (Italy)
L.T.E. Lift Truck Equipment S.p.A. (Italy)
TD Deutsche Klimakompressor GmbH (Germany)
Uster Technologies AG (Switzerland)

Asia

Production companies: 7
TD Automotive Compressor Kunshan Co., Ltd. (China)
Toyota Industry (Kunshan) Co., Ltd. (China)
Zhejiang Aichi Industrial Machinery Co., Ltd. (China)
Kiriokar Toyota Textile Machinery Pvt. Ltd. (India)
Toyota Industrial Equipment Vietnam Co., Ltd. (Vietnam)
Nishina Industries Vietnam Co., Ltd. (Vietnam)
P.T. TD Automotive Compressor Indonesia (Indonesia)

Japan

Non-consolidated: 10 plants
Production companies: 13
Aichi Corporation (Saitama)
Nishina Industrial Co., Ltd. (Nagano)
Tokaiseiki Co., Ltd. (Shizuoka)
Altex Co., Ltd. (Shizuoka)
Hara Corporation (Gifu)
Mino Tokyu Co., Ltd. (Gifu)
HANDA Casting Company (Aichi)
Unica Co., Ltd. (Aichi)
IZUMI MACHINE MFG. CO., LTD. (Aichi)
Nagao Kogyo Co., Ltd. (Aichi)
Miduho Industry Co., Ltd. (Aichi)
Iwama Loom Works, Ltd. (Aichi)
Tokyu Co., Ltd. (Aichi)

Fifth Environmental Action Plan

The results of our activities in fiscal 2014 showed steady progress across the board toward achieving respective targets for fiscal 2016.

Progress in the Fifth Environmental Action Plan

With an eye to realizing a prosperous life in harmony with the natural environment through the establishment of a

sustainable society, we have formulated the Fifth Environmental Action Plan for the period from fiscal 2012 to fiscal 2016, promoting activities according to the plan. Through activities undertaken during fiscal 2014, we made steady progress toward achieving respective targets for fiscal 2016.

Product Related

Fifth Environmental Action Plan Targets			FY2014 Achievements
Segments	Action Policies	Specific Actions	
Establishing a Low-Carbon Emission Society	Reduce CO ₂ emissions by 10%*1 from major products to be developed during the period covered by the Fifth Plan		<Automobile-Related Business> • Developed highly efficient electric compressor <Materials Handling Equipment Business> • Improved energy efficiency of diesel/gasoline-powered internal-combustion lift trucks <Textile Machinery Business> • Developed the new JAT810 air-jet loom with lower air consumption
	In the Automobile-Related Business, promote electrification and develop technologies and products that will contribute to reduction of CO ₂ emissions	• Improve energy efficiency of car air conditioners • Develop technologies to respond to electrification of vehicles • Develop technologies to enable weight reduction • Reduce energy loss • Develop new engines	
	In the Materials Handling Equipment Business, develop technologies and products that will contribute to reduction of CO ₂ emissions	• Improve fuel efficiency of internal-combustion lift trucks • Reduce energy loss in electric-powered lift trucks and improve energy efficiency of functional units	
	In the Textile Machinery Business, develop technologies and products that will contribute to reduction of CO ₂ emissions	• Reduce energy use through lower air consumption • Reduce power use through lower load from windage loss • Reduce energy loss	
	In the R&D field, develop technologies for energy efficiency	• Develop new technologies that contribute to improved energy efficiency in automobiles	
Establishing a Recycling-Based Society	Implement initiatives to promote 3R (reduce, reuse and recycle) design for effective resource utilization	• Reduce use of resources through longer product life • Reduce use of resources through standardization, modularization and reduction of components • Reduce use of resources through weight and size reductions • Promote reuse of components and resources	• Developed plastic glazing back window
Reducing Environmental Risk and Establishing a Society in Harmony with Nature	Reduce emissions to improve air quality in urban areas in all countries and regions	• Develop engines that meet future regulations	• Developed lift truck engines compliant with emissions regulations ahead of schedule
	Manage chemical substances contained in products	• Investigate chemical substances contained in products and manage switching over of SVHC*2 and other substances of concern to other substances	• Expanded the scope of substances of concern (investigated substances of concern contained in supplies)

† Targets for FY2016 undisclosed due to confidential information

Production Related

Fifth Environmental Action Plan Targets		FY2014 Achievements					FY2016 Targets
Segments	Action Policies/Specific Actions	Subject	Scope	Control Items	Base Year (FY)	Achievements	Targets
Establishing a Low-Carbon Emission Society	Promote energy reduction and energy conservation through innovative production technologies Reduce greenhouse gas emissions during production processes through energy JIT*3 Promote measures to curb global warming	CO ₂ emissions • Energy-derived CO ₂ • 5 gases*4 • CO ₂ from logistics	Non-consolidated	Total emissions	2006	-13%	-18%
			Global	Eco efficiency*5	2006	1.25	1.27
						1.43	1.47
	Reduce CO ₂ emissions through green logistics	CO ₂ from logistics	Non-consolidated	Total emissions	1991	-30%	-20%
Establishing a Recycling-Based Society	Enhance resource productivity • Reduce use of timber-derived packaging materials • Reduce the volume of discarded materials by taking action at the source, such as improving yields and other measures • Promote internal reuse	Packaging material volume	Non-consolidated	Eco efficiency	2007	4.86	1.09
		Waste generation volume	In Japan	Eco efficiency	2013	1.02	1.01
			Non-consolidated			1.02	1.01
Reducing Environmental Risk and Establishing a Society in Harmony with Nature	Further reduce emissions of substances of concern Minimize environmental risks • Continuously use a preliminary review system • Reduce risks related to wastewater • Appropriately manage chemical substances based on social conditions • Enhance risk communication with relevant organizations and local residents	VOC*6 emissions	Non-consolidated (automobile body)	Emission volume per unit of production	—	24 (g/m ²)	24 (g/m ²)

Promoting Environmental Management

Fifth Environmental Action Plan Targets		FY2014 Achievements
Action Policies	Specific Actions	
Reinforce CO ₂ reduction activities for "CO ₂ Cancel"	• Further reduce CO ₂ emitted from production activities in plants • Aim to cancel out CO ₂ emissions of Toyota Industries by reducing CO ₂ emissions through improved efficiency in newly developed products	• Conducted activities for achievement of "CO ₂ Cancel" (Target: FY2016)
Augment and promote consolidated environmental management	• Build a global environmental management system and promote related activities to: 1) Comply with environment-related laws and reduce environmental risks in each country 2) Achieve the highest-level performance in each country • Aim for efficient and systematic corporate management by integrating and operating environmental management system and quality/safety management systems	• Conducted on-site inspections of environmental risks and confirmed compliance at consolidated subsidiaries in Japan, and conducted interview survey of environmental risks at consolidated subsidiaries outside Japan • Checked the precision of environmental data at consolidated subsidiaries in Japan and provided support for improvement
Enhance and promote environmental education and enlightenment activities	• Develop environmental specialists to lead internal environment-related activities • Strengthen internal environment-related activities and broaden family-friendly initiatives by planning and promoting enlightenment activities that can be carried out at home	• Conducted environmental awareness survey among employees, which scored 3.8 out of 5 points
Improve eco-conscious brand image	• Reinforce environmental activities according to the contents and results of Survey of Environmental Oriented Management Index to pursue higher brand image	• Won Biotope Award in the 5th Biotope Commendation
Augment activities related to protection of biodiversity	• Identify the impact of business activities on biodiversity and reinforce initiatives by defining specific goals • Contribute to biodiversity through conservation of forests and protection of rare species	• Conducted maintenance and management activities at Biotope of the East of Obu Station, which were jointly carried out with the local community
Promote sustainable plant activities	• Build a plant environment in harmony with nature by promoting energy reduction and energy conservation through innovative production engineering, by reducing energy loss and by using renewable energy and other means	• Continually reviewed energy strategy for the medium to long term

† Targets for FY2016 undisclosed due to confidential information

*1: Target products Toyota Industries develops and produces. The CO₂ reduction volume is calculated based on the method Toyota Industries determined using FY2011 levels as the baseline.
*2: Substances of Very High Concern
*3: Just In Time
*4: Greenhouse gases other than CO₂, including methane (CH₄), dinitrogen monoxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF₆)
*5: Eco-efficiency = Production efficiency in subject year / Production efficiency in base year
Production efficiency = Production indicator (Net sales or production volume, etc.) / Environmental impact of production activities
*6: Volatile Organic Compounds

Establishing a Low-Carbon Emission Society

We position the establishment of a low-carbon emission society as one of our most crucial environmental tasks. We are working to reduce CO₂ emissions in our global business activities and at the same time accelerate our efforts to develop more environment-friendly products.

Summary

CO₂ Emissions (Production Activities)

FY2014 Results

Total emissions (non-consolidated)
13% reduction (vs FY06 level)
 FY16 target: 18% reduction (vs FY06 level)

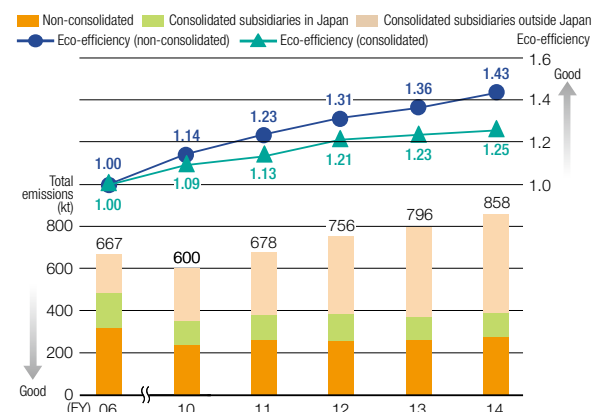
Eco-efficiency (global)
1.25 (FY06 = 1.00)
 FY16 target: 1.27 (FY06 = 1.00)

Under the Fifth Plan, we set out to achieve a target of reducing total non-consolidated CO₂ emissions from production activities by 18% in fiscal 2016 compared with the fiscal 2006 level. We successfully achieved a 13% reduction in CO₂ emissions in fiscal 2014 as a result of our ongoing efforts to save power and reduce peak power load as well as joint activities among the manufacturing, production engineering and environment departments to reduce the amount of air used in production activities.

Our product development activities are based on the keywords of 3Es (Energy, Environmental protection and Ecological thinking), and we focus on developing products that meet the need for increased energy savings, electrification and weight reduction. In this area, we are currently working toward a target of attaining a 10% reduction in CO₂ emissions from primary products by fiscal 2016 compared with the fiscal 2011 level.

Initiatives for Establishment of a Low-Carbon Emission Society

CO₂ Emissions (Non-consolidated/Consolidated subsidiaries in and outside Japan)



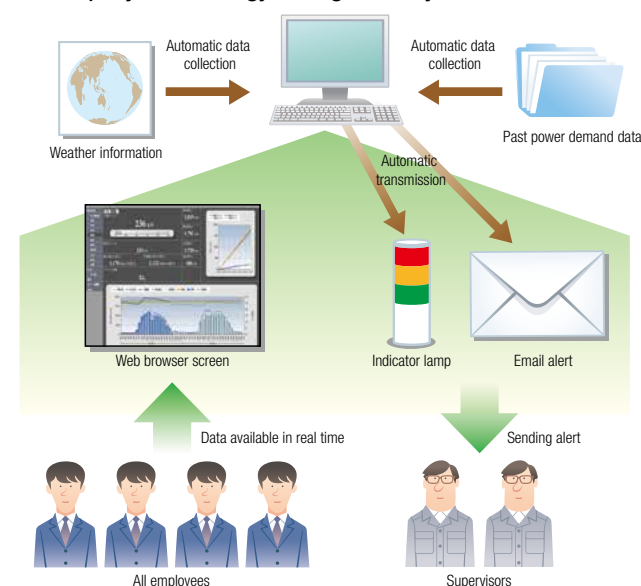
Reinforcing Activities to Reduce Peak Power Consumption by Visualizing Use of Electricity

To help promote activities to lower the upper limit of power consumption during summer and at other occasions, we introduced a new, Company-wide power management system capable of monitoring the usage and demand estimates of electricity in real time. By visualizing data on the usage status of electricity, which had been managed solely by the department responsible for supplying energy, and making the data available to all employees, we worked to raise their awareness for conserving electricity further and reduce our peak power consumption.

This management system enables us to adjust our use of electricity according to power demand estimates. If we are reaching the internal target (upper limit) of power usage, the system notifies supervisors by displaying a message on the screen, sending email alerts and lighting indicator lamps, all of which serve to accelerate the process of reducing peak power load. The result was a 12% reduction in peak power consumption of the entire Company (compared with the assumed power consumption in fiscal 2014 if the system was not introduced).

We will continue to undertake proactive efforts to promote the management of electricity and other forms of energy at plants and contribute to the conservation of the global environment through power- and energy-saving activities.

Company-Wide Energy Management System



In introducing a Company-wide power management system, we needed to consolidate in our servers data on electricity that we receive from a power company, so our first task was to develop a system that can do this easily.

Because we had not accumulated power usage data in the past, we had difficulty analyzing peak power consumption. By saving relevant data in servers at one-minute intervals, the analysis of peak power consumption became possible. In the future, we will incorporate information on the production status and operational plans of each plant into the system to improve the accuracy of power demand estimates. We will also increase email alerts and install more indicator lamps in a wider area as a means of raising the system's effectiveness in reducing power consumption.

Rearranging Boiler Placement to Reduce Steam Transmission Loss

As part of efforts to reduce CO₂ emissions, the Takahama Plant in Aichi Prefecture, which engages in development and production of materials handling equipment, has been working to improve the efficiency of its production facilities since fiscal 2009 with the aim of reducing steam transmission loss in production processes.

Previously, steam was generated in one boiler room within the plant and distributed to each production process. This necessitated steam to be carried over a long distance and thus a considerable amount of heat was lost from piping. In order to shorten the distance of distributing steam, additional boiler rooms were installed close to the steam-consuming production processes located far from the central boiler room. The steam piping system was also modified to enable control of the steam transmission volume according to the seasons or the time of day. As a result, annual CO₂ emissions of the Takahama Plant were reduced by roughly 600 tons.

We will continue to undertake similar improvement activities to further reduce steam transmission loss.

Certification of Environmentally Friendly Products

Toyota Industries has been proactively promoting development and design of eco-conscious products. To certify products that possess exceptionally outstanding environmental performance and meet internal environmental standards, we launched the Environmentally Friendly Product Certification System in fiscal 2007. Up to fiscal 2013, 12 products have obtained certification under this system. In fiscal 2014, we certified another three types of industrial engines as environmentally friendly products.

(Survey by Toyota Industries Corporation)

Toyota 1KD diesel engine (industrial engine)



Eco-conscious features:

- Fitted with a turbocharger developed in-house for downsized displacement, offers greater fuel efficiency and weight reduction
- Capable of greatly reducing emissions of particulate matter (PM) compared with the previous model without using a diesel particulate filter (DPF) and has cleared emission standards*1 of various countries and regions

Fuel consumption: **23% lower**
 (versus previous model)

Displacement: **43% smaller**
 (versus previous model)

*1: This engine has cleared the following emission regulations:
 (1) U.S. Environmental Protection Agency (EPA) Tier 4 emission standards
 (2) EU Stage IIIB standards for non-road engines
 (3) Japan's 2013 Non-road Special Motor Vehicle emission regulation

Toyota 1ZS diesel engine (industrial engine)



Eco-conscious features:

- Optimized the turbocharger mounted on the Toyota 1KD for use in the Toyota 1ZS. Shifted from the previous 4-cylinder engine to 3-cylinder diesel engine, which marks as a first for Toyota Industries, realizing downsized displacement while maintaining high output power and achieving greater fuel efficiency and weight reduction.
- Drastically reduces PM emissions compared with the previous model without using a DPF and passes emission standards of various countries and regions

Fuel consumption: **20% lower**
 (versus previous model)

Displacement: **48% smaller**
 (versus previous model)

Toyota 1FS gas/gasoline engine (industrial engine)



Eco-conscious features:

- Offers greater combustion efficiency resulting from the optimally shaped combustion chamber and central placement of the spark plug within the chamber and achieves both improved output and higher fuel efficiency
- Downsized displacement for realizing weight reduction

Fuel consumption: **10% lower**
 (versus previous model)

Displacement: **18% smaller**
 (versus previous model)

† See page 18 for details.

Establishing a Recycling-Based Society

With a view to establishing a recycling-based society, we have been dedicating considerable efforts to making effective use of resources throughout our entire supply chain.

Summary

Waste Generation Volume (Production Activities)

FY2014 Results

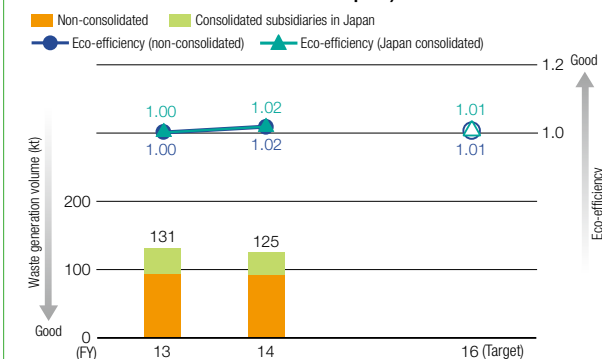
Eco-efficiency (non-consolidated)
1.02 (FY13 = 1.00) FY16 target: 1.01 (FY13 = 1.00)

Eco-efficiency (non-consolidated/
consolidated subsidiaries in Japan)
1.02 (FY13 = 1.00) FY16 target: 1.01 (FY13 = 1.00)

Our fiscal 2016 eco-efficiency targets in the area of waste generation volume under the Fifth Plan are set at 1.01 both on a non-consolidated basis and for Toyota Industries and its consolidated subsidiaries in Japan (fiscal 2013 as the base year). During fiscal 2014, to reduce materials losses we launched activities to make effective use of resources throughout the entire supply chain, extending the scope of our activities to our business partners.

Initiatives for Establishing a Recycling-Based Society

Waste Generation Volume (Non-consolidated/ Consolidated subsidiaries in Japan)



Recovering Cleaning Fluid by a Mechanical Pump

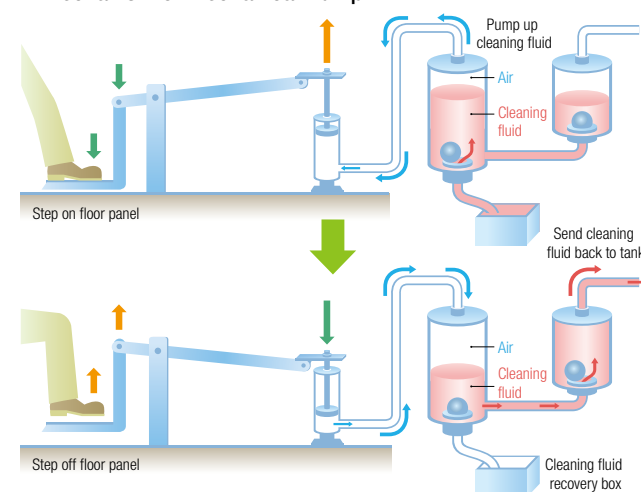
The Hekinan Plant in Aichi Prefecture, which produces diesel and gasoline engines, created a pump for collecting and recycling cleaning fluid.

This pump operates mechanically without using power generated by motors. It is one example of *kaizen* (improvement) utilizing Japan's traditional *karakuri* (simple

mechanical systems).

Previously, cleaning fluid that accumulated in a recovery box outside the facility due to dew condensation was collected and disposed of by operators. To eliminate this loss, the plant installed a mechanical pump to recover the fluid and send it back to the cleaning fluid tank for reuse. This process involves an operator stepping on a floor panel, which is positioned several millimeters higher than the floor, to pump up cleaning fluid in the recovery box. When the operator steps off the panel, the fluid is sent back to the tank. This floor panel is located in an area where operators normally work, thus they operate the pump unconsciously. This mechanism has been successfully adopted in other production processes throughout the Company.

Mechanism of Mechanical Pump



Members of the Facilities Section, Preventive Maintenance Office, Manufacturing Dept. No. 1, Hekinan Plant

The Facilities Section has been proactively undertaking "*kaizen by karakuri*" initiatives, and our efforts have led to a considerable improvement not only for environmental areas but also safety and productivity. "*Kaizen by karakuri*" also has served to raise *kaizen* awareness within the workplace and promote the development of capable human resources. Our abilities are improving on a daily basis.

Reducing Environmental Risk and Establishing a Society in Harmony with Nature

All employees of the Toyota Industries Group are honing their ability to identify environmental risk and promote prevention activities on a global scale.

Summary

VOC Emissions (Production Activities)

FY2014 Results

Emissions per unit of production (non-consolidated/automobile body)
24 g/m² FY16 target: 24 g/m²

Under the Fifth Plan, we set a fiscal 2016 target of attaining emission volume per unit of production below 24 g/m² for volatile organic compounds (VOCs) from the automobile body painting process and undertook activities accordingly. In fiscal 2014, we focused on increasing the recovery rate and enhancing maintenance and management of thinner, a solvent used for cleaning. Consequently, emission volume per unit of production in fiscal 2014 was 24 g/m².

Status of Compliance with Environmental Laws

In fiscal 2014, there were two incidents in which plant effluents exceeded standard values at consolidated subsidiaries within the Toyota Industries Group. These incidents have been reported to the relevant authorities, and corrective measures have already been completed by the subsidiaries concerned. Subsequent confirmations have also been made to ensure that there are no recurrences.

Soil and Groundwater Pollution Countermeasures

Toyota Industries carries out surveys and purification of soil and groundwater contaminated from the past use of trichloroethylene. We regularly report the survey results to local government authorities and provide information at local community meetings. As measures to prevent pollution from substances covered by the Soil Contamination Countermeasures Law as well as from grease and oils, we have drilled observation wells at all plants to conduct regular checks.

Trichloroethylene Readings

Plant	FY2010	FY2011	FY2012	FY2013	FY2014
Kariya Plant	0.67	0.41	0.38	0.26	0.27
Kyowa Plant	0.34	0.41	0.48	0.33	0.31

Weighted average concentration in groundwater (mg/l)

Initiatives to Minimize Environmental Risk

We regard the prevention of environmental irregularities as one of our most important themes and have been promoting activities under the Fifth Plan.

We are identifying facilities and work processes with the risk of leakage of chemical fluid or oils and implementing preventive measures, both mechanical and procedural, following a prioritized list. We seek to minimize environmental risk throughout the Toyota Industries Group by conducting *genchi genbutsu* (go and see for yourself) inspections at consolidated subsidiaries and promoting activities to raise awareness among employees as well as business partners.

Enlightenment Activities Utilizing Environmental AP Cards

To communicate to employees the details of environmental irregularities and potentially serious near-accidents that have occurred in the past and to prevent similar incidents from occurring, we created Environmental AP (Accidental Pattern) Cards, which we use to promote enlightenment activities.

Environmental AP Cards provide an outline of and responsive action and procedures required for each incident along with points to keep in mind during the worst case scenario in which a similar incident occurs. We categorize incidents by type, source, cause and applicable work process and create a list to manage these incidents. Upon the occurrence of a new incident that is not similar to any on the list, we create a new card and distribute it internally.



Environmental AP Cards

Environmental Management

During fiscal 2014, we conducted enlightenment activities simultaneously at production sites using the Environmental AP Cards to raise employee awareness. The head of each department explained the contents of the cards as well as how to prevent similar incidents and how to respond to an incident if it occurs within their department. In addition, we created a collection of written declarations to be observed by employees to prevent incidents.

Going forward, we will expand the scope of our enlightenment activities based on the Environmental AP Cards from production sites to other departments throughout the Company.

Establishment of Award Program to Recognize Risk Reduction Efforts

We established the Environmental Award Program to recognize employees, including temporary and term employees, for early detection of environmental irregularities or potentially serious near-accidents and their subsequent contribution to preventing such incidents from spreading. The program focuses on raising awareness for risk reduction among employees by “recognizing” their efforts to prevent damage from spreading, rather than “blaming” should incidents occur.

The program provides points according to the level of seriousness of an incident or difficulty in detection, and based on the points given, awards prizes such as an award certificate, various incentives and points under our internal eco-point system. The program, launched in January 2014, has recognized eight employees as of the end of March 2014.



Takeshi Hongo

Assistant Team Leader,
Power Section No. 4, Power Office,
Plant Engineering & Environment Dept.

Position and department are as of
March 31, 2014.

I noticed a change in the reading on a meter early and received an award for identifying the cause quickly and preventing damage from becoming serious. I'm glad that my action was effective in preventing damage, and the award is a strong reminder that reducing risk is very important. I will make sure to quickly discover, respond to and report any irregularity, being careful not to miss the smallest change, and work to prevent environmental irregularities before they occur.

Genchi Genbutsu Inspections on Management of Consolidated Subsidiaries' Drainage Systems

With a view to preventing the occurrence of any environmental irregularities or potentially serious near-accidents throughout the Toyota Industries Group, we periodically monitor risk reduction activities of consolidated subsidiaries. In fiscal 2014, we performed *genchi genbutsu* inspections on drainage systems and their management status at 11 bases of seven consolidated subsidiaries in Japan.

Prior to inspection, we created a list primarily of facilities with high risk of external leakage, such as wastewater treatment facilities, grease and oil tanks, effluent pits and piping that connect to the external environment, and inspected how they are managed based on a check sheet. We make suggestions for *kaizen* for any problems found during the inspection and share good examples of *kaizen* throughout the Group.

We also held hearings with consolidated subsidiaries outside Japan using a similar check sheet. In the future, we will raise the level of our risk reduction activities on a global scale by proactively undertaking *genchi genbutsu* inspections.



Genchi genbutsu inspection of a drainage system (consolidated subsidiary in Japan)

In addition to the conservation of biodiversity, Toyota Industries is also undertaking a range of environmental activities at its consolidated subsidiaries in and outside Japan.

Creation of a Biotope Considering Ecological Networks

In September 2012, we created a biotope open to the local community on our idle land in Obu City, Aichi Prefecture. In cooperation with an Aichi prefectural government initiative to promote development of ecological networks, we created an environmental setting that serves as a node to connect isolated areas with green zones and waterways and become a habitat for various living organisms. During fiscal 2014, we conducted maintenance and management activities jointly with local community members. After holding a study session to which we invited an expert on biotope maintenance and management, we cut grass and conducted other maintenance activities on the premises. Participants were impressed that certain ways of cutting grass can create an environment friendly to various living organisms. We will collaborate with local residents in developing this biotope to contribute to the conservation of the region's ecological networks.



Study session on biotope maintenance and management

“No-Car Commuting Day” Event Held by Nagao Kogyo

Nagao Kogyo Co., Ltd., a consolidated subsidiary in Aichi Prefecture engaging in the manufacture of parts for compressors, materials handling equipment and textile machinery, has been holding an annual “No-Car Commuting Day” event since fiscal 2009. At the sixth event held in June 2013, about 55% of employees commuting by car came to work on foot or by public transportation, bicycle or ride-sharing. This result was equivalent to a 221 kg reduction in CO₂ emissions.



Nobukazu Taguchi

Deputy General Manager,
Business Administration Department,
Nagao Kogyo Co., Ltd.

Position and department are as of
March 31, 2014.

We have been holding the No-Car Commuting Day event as part of ISO 14001 activities.

The event encouraged employees living in the same neighborhood to share rides. This not only resulted in less environmental impact but also generated active communication among employees. We will continue to hold this event and raise environmental awareness among employees.

TMHE to Publish its First Social and Environmental Report

In November 2013, Toyota Material Handling Europe (TMHE), the European headquarters for the materials handling equipment business, published a social and environmental report for the first time.

The title of this report, “DUAL IMPACT,” shows TMHE's commitment to minimize the environmental impact of its products and production activities in Europe in support of Europe's ambitious environmental regulations. It indicates how TMHE would focus on both product development and production activities to support customers adhering to new legal requirements.



Tom Schalenbourg in charge of report development

Environmental Impact Flow and Environmental Accounting

In this section, we provide an overall picture of environmental impact resulting from our global business activities and report the results of environmental accounting (environmental conservation cost, environmental conservation benefits and economic benefits of environmental conservation initiatives).

Environmental Impact Flow

INPUT

Energy [consolidated]	
Total consumption	11,006 TJ ^{*1}
Electricity	1,180,108 MWh
City gas	69,181 km ³ N
LPG	4,936 t
Petroleum products	6,156 kl
Coal products	7,001 t
LNG	5,581 t

^{*1}: Terajoule is a unit used to measure heat. 1 TJ = 10¹² joules

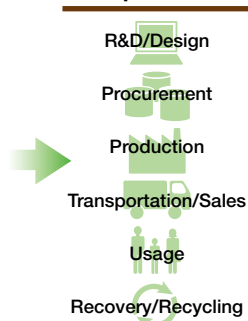
Raw Materials [consolidated]	
Raw material consumption	662,412 t

Water [consolidated]	
Water consumption	3,724 km ³

Chemical Substances [Japan consolidated]	
PRTR law ^{*2} designated substances	1,480 t

^{*2}: Short for Pollutant Release and Transfer Register, the PRTR law is a scheme whereby businesses measure the release and transfer of PRTR designated pollutants and report their performance to the government. The government then compiles this data and releases it to the public.

Environmental Impact Flow



OUTPUT

Into the Air [consolidated]	
CO ₂	857,839 t-CO ₂
Greenhouse gases other than CO ₂	3,130 t-CO ₂
CO ₂ from logistics	48,415 t-CO ₂
SO _x (Sulfur oxides)	563 kg
NO _x (Nitrogen oxides)	145 t
VOC (Volatile organic compounds)	1,608 t

Chemical Substances [Japan consolidated]	
Emissions/transfers of PRTR law designated substances	499 t

Waste [consolidated]	
Waste generation	93,799 t

Into Waterways [Japan consolidated]	
Water pollutants	27 t
Discharge of treated wastewater	2,124 km ³

Environmental Accounting and On-Site Verification

Fiscal 2014 Environmental Accounting^{*3}

Scope of data collection: Toyota Industries Corporation
Period of data collection: April 1, 2013 – March 31, 2014

^{*3}: Environmental accounting data is collected in compliance with the Ministry of the Environment's *Environmental Accounting Guidelines 2005 Edition*.

Category		FY2014		FY2013	
		Investment	Expenses	Investment	Expenses
Business area costs	Pollution prevention costs	585	427	516	761
	Global environmental conservation costs	325	3,192	113	3,167
	Resource recycling costs	144	639	10	514
Upstream/downstream costs		0	343	2	80
Management costs		5	1,219	14	1,219
Research and development costs		28	1,943	0	1,872
Social contribution activity costs		0	456	—	6
Environmental remediation costs		0	43	37	21
Total		1,087	8,262	692	7,640
		9,349		8,332	

Environmental Conservation Benefits	
Environmental Impact	Comparison with Previous Fiscal Year
CO ₂	22,479 t decrease
Generation of waste products	5,197 t decrease
Water	552,672 m ³ decrease

Economic Benefits of Environmental Conservation Initiatives		
(Millions of yen)		
Item	Details	Amount
Revenue	Returns from sale of recycled waste products	4,278
	Energy cost reductions	190
	Cost reduction by resource savings (including reductions in amount of water use and wastewater treatment costs)	71
Total		4,539

On-Site Verification

Every year, Toyota Industries Head Office's Plant Engineering & Environment Department takes the initiative in conducting on-site verification of the accuracy and consistency of environmental data included in the *Toyota Industries Report*. The results for fiscal 2014 are as follows.

On-Site Verification Sites

Toyota Industries Corporation

- Kyowa Plant, Takahama Plant, Higashichita Plant, Higashiura Plant

Consolidated subsidiaries in Japan

- Unica Co., Ltd., Miduho Industry Co., Ltd., Iwama Loom Works, Ltd.

Items to be Verified

1. Adequacy of the scope of data collection; validity of data collection and calculation methods; validity of internal verification
2. Trustworthiness and accuracy of collected/calculated data as well as data reported to the Head Office; accuracy of methods of reporting to the Head Office

Results

1. The verified sites retained original data (evidence) for all statistics, which were confirmed valid as were the scope and method of data collection.
2. All discrepancies found during verification have been corrected after respective causes have been identified.
3. Considerations of improvements will be made for data collected using complex collection methods that may result in calculation errors.