

An Interview with the Chief Environmental Administrator ~The Ideal Approach that Toyota Industries Should Pursue~



Striving to Foster Changes in Values and Actions by Restoring the Chain among Education, Ethics and Morals

Akira Imura
Executive Vice President*¹

Having formulated the Fourth Environmental Action Plan as our medium-term environmental targets, we are undertaking an array of environmental conservation activities under this five-year plan that runs from fiscal 2007 to fiscal 2011. We expect to attain most of the plan's targets in fiscal 2011, the final year of the plan.

Society's concerns about environmental problems are rising in parallel with the Japanese government's announcement of its medium- and long-term CO₂ reduction targets and the convening of the 10th Conference of the Parties to the Convention on Biological Diversity in 2010. Here we ask Akira Imura, Executive Vice President*¹ and chief environmental administrator*¹, how Toyota Industries will reflect various social changes into the Fifth Environmental Action Plan.

*1: As of March 2010

Striving to realize zero CO₂ emissions over the medium and long terms should be the ideal approach taken by companies.

Q Various environmental problems, beginning with global warming, are becoming increasingly serious. What is the fundamental cause underlying these problems?

Let's consider what has changed over the past 50 years. Japanese lifestyles have become more materialistic as people moved from an age of frugality toward the pursuit of prosperity. The rise in standards of living has been accompanied by a corresponding increase in energy consumption. I believe that perhaps the notion that consuming large amounts of energy somehow equates to affluence has become deeply entrenched in people's minds. This kind of attitude has made it necessary to give voice to something so obvious as protecting the environment. I believe the way of thinking predominant during Japan's period of rapid economic growth, which was characterized by the pursuit of convenience and economic efficiency, has remained unchanged and this mindset is responsible for exacerbating environmental problems.

Q Global warming undoubtedly heads the list of today's environmental problems. Could you explain how Toyota Industries will work to curb global warming under the Fifth Environmental Action Plan?

The Japanese government has set the extremely high target of achieving a 25% reduction in greenhouse gases by 2020 compared with the 1990 level. When thinking about attaining these targets and looking beyond into the future, I believe the ideal approach taken by companies over the medium- and long-term should be to realize zero CO₂ emissions.

Toyota Industries is currently formulating various scenarios for its activities aimed at attaining the government's targets for 2020. I believe that first and foremost, continuous and thorough energy-conservation efforts in production activities are the basis of all efforts. We will also proactively introduce reusable energy when the timing is right. Still, we will be unable to realize zero CO₂ emissions by relying solely on these measures.

From the standpoint of protecting biodiversity, we will once again affirm and reinforce efforts focused on activities to curb global warming.

Meanwhile, there is also the concept of carbon offsets. In our Advanced Logistics Division within the Logistics Business, for instance, we provide consulting for improving customers' logistics processes and thus in a broad sense are able to contribute to a reduction in CO₂. We can also make similar contributions by pursuing greater energy efficiency in our products.

Even by implementing these measures, realizing "zero CO₂ emissions" realistically will still be difficult. I believe that our ultimate target should be to establish new businesses, for example, for absorbing CO₂. With a view toward such businesses, we are engaging in R&D on technologies based on the keyword 3Es*² and will further strengthen initiatives in this area in the future.

*2: 3Es stands for energy, environmental protection and ecological thinking. Toyota Industries uses this keyword to express the direction of its future product R&D.

Q Besides global warming, biodiversity has recently attracted a high level of concern as an environmental issue. Could you tell us about the types of initiatives you are taking in this area?

The impact of global warming is considered as one cause underlying the biodiversity problem. From the perspective of Toyota Industries' business operations, I think that carrying out activities aimed at curbing global warming is the best way we can make the most direct contribution to protecting biodiversity at the moment. From the standpoint of protecting biodiversity, we will continue to channel our efforts toward activities aimed at curbing global warming. In tandem, we will undertake tree thinning at *Kaisho-no-Mori* (Kaisho Forest), which was begun in fiscal 2010, as well as participate in new activities such as biotopes in the future. Involvement in these activities has the potential to change the ways employees think about environmental problems.

I believe that changing the values and actions, even if gradually, of each person inhabiting our planet is extremely crucial for solving environmental problems, not just those related to biodiversity. To this end, I would like to focus on reforming the awareness of each employee through a series of activities.

Q You talk about reforming the awareness of individuals. Could you elaborate on its importance?

In carrying out our corporate activities, we cannot attain our targets if each employee does not share a common awareness. This awareness inherently is characterized by a chain of education, ethics and morals that spreads from employees to their families and to local communities. However, it appears that this chain has broken down somewhere in contemporary society.

It is of course crucial that we attain the targets of our environmental conservation activities as a company. On this basis, if each employee can help restore the broken chain and expand the scope of changes in awareness, this will have far-reaching effects. I believe this also represents a type of social contribution and will in turn lead to an acceleration of our environmental initiatives. Reforming the awareness of individuals and strengthening activities as a company is a synergy I would like to create.



I would like to create a synergy by reforming the awareness of individuals and strengthening our corporate activities.

Special Feature (Curbing Global Warming)

Continually Meeting Challenges as a Leading Company that Focuses on Earth- and People-Friendliness through Logistics

The development of the GENEIO-HYBRID diesel-powered internal-combustion hybrid lift truck represents our strategic move for the future in creating environmentally conscious logistics that contributes to the realization of a low-carbon society.

Earth Friendly

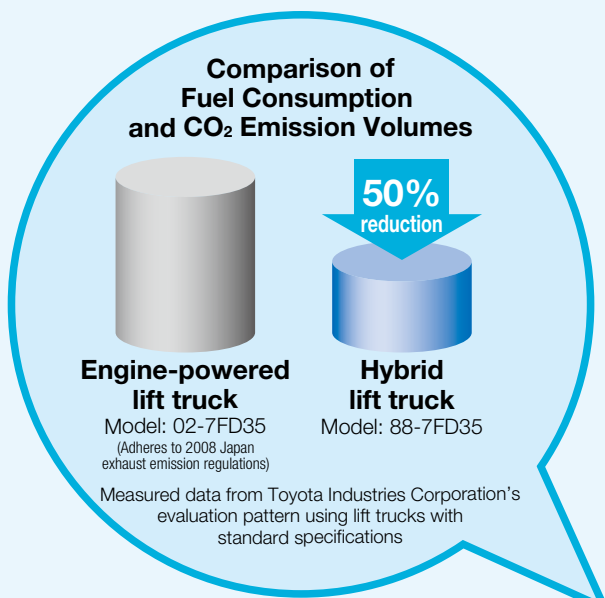
An Earth-Friendly Lift Truck that Halves the Environmental Impact

Making frequent starts and stops while transporting heavy loads, lift trucks require large amounts of energy during driving and loading operations.

Through a hybrid system that combines a diesel engine, an electric motor and a battery, the GENEIO-HYBRID can realize efficient energy usage in accordance with actual operating conditions. Moreover, the adoption of the hybrid system enables a reduction in engine displacement and a more compact engine.

As a result, compared with Toyota Industries' currently available diesel-engine lift trucks in the same class, the GENEIO-HYBRID reduces **fuel consumption and CO₂ emissions by almost 50%**, thereby realizing world-class*1 environmental performance.

*1: Survey by Toyota Industries Corporation as of October 2009



Helping Realize Earth Friendliness by Promoting an Awareness of Eco-Driving during Work Operations

Fuel consumption can fluctuate by up to 10% depending on the way of driving during lift truck operation.

When the GENEIO-HYBRID is operated in a fuel-efficient, eco-friendly manner, the "eco indicator" lights up on the LCD speed indicator display. By confirming the "eco indicator" status, the operator can maintain an awareness of ecological driving and thus improve fuel efficiency.

Speed indicator display



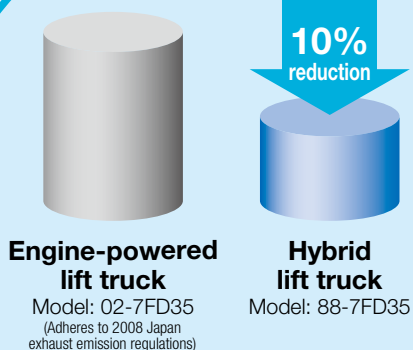
Eco indicator



People Friendly

A People-Friendly Lift Truck that Realizes a Comfortable Work Environment

Noise Comparison



Proportion of values using dB (A) measurement values

Since the engine room of a lift truck is located directly under the driver's seat, noise and vibrations felt by the operator tend to be greater compared with automobiles, thus placing a larger burden on the operator. Through the adoption of a hybrid system, the GENEIO-HYBRID not only realizes a compact engine but also suppresses noise and vibrations by optimally controlling the number of engine revolutions.

As a result, compared with Toyota Industries' currently available diesel-engine lift trucks in the same class, the GENEIO-HYBRID achieves an approximately **10% reduction in noise**, thereby lessening the burden on the operator, while reducing the level of noise audible to people in the surrounding areas.

For load handling, which requires extra power, a motor helps support the operation of the engine, which suppresses the burden on the engine and reduces the emission of black exhaust smoke.

The adoption of these measures has enabled a large improvement in the work environment.

Developing Even More Earth- and People-Friendly Lift Trucks— TMHG Continues to Take on Challenges with a Focus on the Logistics of Tomorrow



Environmentally Friendly Certified Products

The GENEIO-HYBRID has been certified as an environmentally friendly product under Toyota Industries' proprietary Environmentally Friendly Product Certification System*2.



*2: A system for comprehensively evaluating such areas as curbing global warming, recycling natural resources and risk management for substances of concern. This system conforms to the Type II environmental labeling standard (ISO 14021) prescribed by the International Organization for Standardization (ISO).

Developer Comments

Basically, there are no shortcuts leading to a revolutionary breakthrough. Rather, inventions require repeatedly making daily efforts and thorough verifications. The GENEIO-HYBRID represents our best efforts at the moment but is not a final goal.

On the Toyota Industries Website, chief engineer Yoshiyasu Uchida describes the behind-the-scenes efforts leading up to the birth of the GENEIO-HYBRID and explains his thoughts about development.



Yoshiyasu Uchida

Vehicle Engineering Office,
Engineering Department
Toyota Material Handling Company

Access Toyota Industries' Website for details.

GENEIO HYBRID

Search

<http://www.toyota-lf.com/hybrid/> (Japanese only)

Global Environmental Commitment

The Toyota Industries Group will contribute to the compatibility of environmental conservation and economic growth throughout its wide range of business activities, including automobile, materials handling equipment, logistics and electronics.

Basic Policy

- The Toyota Industries Group will continue to set challenging targets aimed at further reducing the environmental impact of its business activities, listening carefully to voices of its stakeholders such as customers, and acting in compliance with the letter and spirit of laws and regulations.
- The Toyota Industries Group will continuously improve its environmental management, placing environmental activities among its highest priorities. In particular, the Company will give priority to the following items.

Curb global warming

Aiming to reduce energy consumption and the output of greenhouse gases through the entire lifecycle of its products, services, and production activities

Use resources more efficiently

Utilizing raw materials, water, and other resources efficiently while working to reduce, reuse, and recycle waste products

Reduce environmental risk factors

Reducing the use and output of substances of concern while evaluating environmental risk factors at the planning stage of business activity in order to prevent pollution

- The Toyota Industries Group will aim to foster greater communication and teamwork within a wide range of partnerships, including those with customers and suppliers, in order to promote sustainable management of the environment. In addition, the Toyota Industries Group will act as an upstanding corporate citizen, taking an active part in the planning of activities that contribute to various regional communities as well as to our global society.

July 2005

Tetsuro Toyota
President



Environmental Management

Implementing an Environmental Management System

Toyota Industries has positioned environmental response as one of its most crucial management issues. To more vigorously undertake environmental response efforts, Toyota Industries reorganized its environmental management system (EMS) previously operated independently at respective plants and adopted a Company-wide integrated EMS, with the president at the top. We obtained certification for this EMS from an external certification body in fiscal 2009. The adoption of this EMS has enabled us to quickly reflect the decisions made by management into our business operations.

In fiscal 2010, we created the EMS Top Page, an internal site for environmental information on our intranet. This site lists trends in environmental performance and best practices in improvement activities, with the aims of promoting

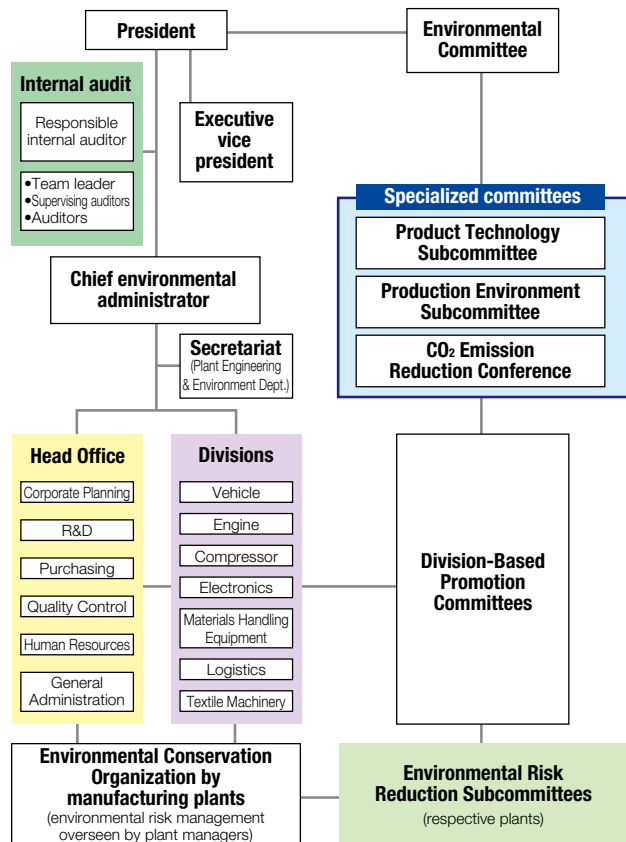
information sharing Company-wide on the status of EMS implementation in each business division and for improving communication internally. By setting up this site, details of outstanding activities can be shared throughout the Company, facilitating the implementation of new initiatives in each business division.

We will further promote the integration of environmental activities and management as we strive to continually raise the level of our environmental management.

Approach to Environmental Education

Based on its belief that manufacturing starts with nurturing excellent personnel, Toyota Industries actively provides environmental education programs and carries out enlightenment activities for its employees. Toyota Industries has clarified the environmental-related knowledge and capabilities required for each job position and rank, and

Environmental Management Structure



accordingly, is building an environmental education program. Specifically, we offer rank-based environmental education, introductory courses for environmental management and environmental audits as well as environmental product education.

Based on the latest environmental trends and effectiveness of education, we intend to review our environmental education programs to continuously nurture personnel capable of making environmental responses.



New employee training

Evaluations of Environmental Audits

Toyota Industries implements annual internal environmental audits as well as external audits carried out by an independent third-party institute. We utilize the results of these audits in our Company-wide EMS in working to reduce environmental risk and continually improve environmental performance.

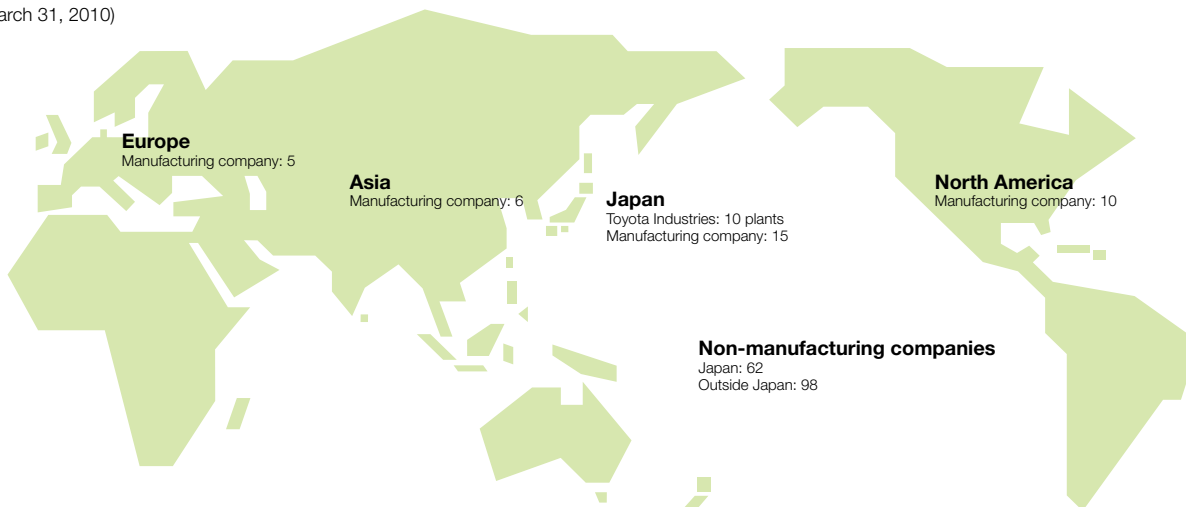
For internal audits in fiscal 2010, we achieved a reduction in the average number of citations from 1.03 in fiscal 2009 to 0.74. Improvement proposals were reported to the president by the Environmental Committee and then underwent a management review*.

In terms of the external audit, we received an evaluation of having “comprehensively satisfied the categories required under ISO 14001, with the EMS being properly implemented and improvements being pursued.” We are now executing corrective actions and making further improvements for one minor non-conformance cited during the audit.

* To ensure the appropriateness, adequacy and effectiveness of the EMS, the president receives a report on the status of environmental activities by the Environmental Committee once a year, and then evaluates the need for changes and improvements to the EMS and gives directions on measures to be taken.

Scope of Group-Wide Environmental Management

(As of March 31, 2010)



Basic Perspective of the Fourth Environmental Action Plan

As one of Toyota Industries' major approaches to the environment, we devise and implement a five-year Environmental Action Plan. In the Fourth Environmental Action Plan (fiscal 2007 to fiscal 2011), curbing global warming, resource utilization, reducing environmental risk factors and

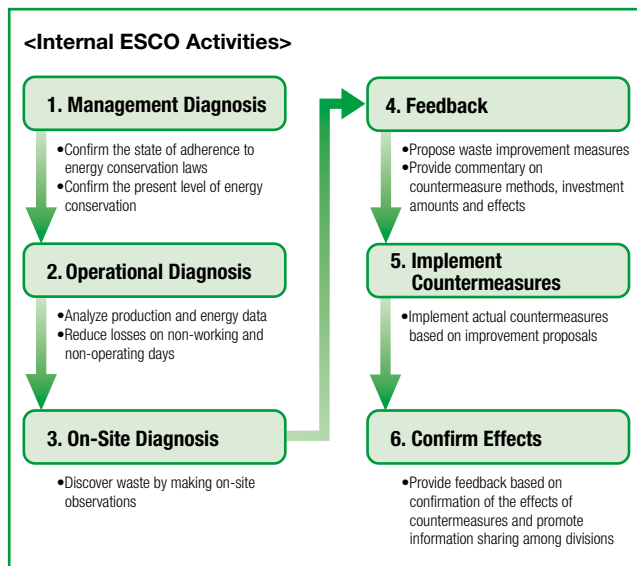
consolidated management are positioned as key areas. Further, specific action items and targets of the Toyota Industries Group are laid out. Target management is measured by the concept of "eco-efficiency," which quantifies the effectiveness of our environmental activities.

Curbing Global Warming

Reducing CO₂ Emissions through Internal ESCO*¹ Activities

In fiscal 2010, Toyota Industries commenced internal ESCO activities with the aims of improving profitability through the reduction of energy costs and reducing CO₂ emissions in each business division. In undertaking these activities, we perform numerical analyses of facility usage conditions and make improvements to reduce CO₂ emissions without compromising production efficiency.

*1: ESCO stands for Energy Service Company. ESCO activities involve providing comprehensive services related to energy conservation and supporting energy conservation activities.



Principal Activities

- Identify losses during times of non-operation
- Investigate air leakages
- Conserve energy in blowers at effluent treatment sites
- Conserve energy by lowering pressure of air compressors

In fiscal 2010, the first year of our ESCO activities, we implemented ESCO activities for 13 projects and on a non-consolidated basis reduced CO₂ emissions by 2,067 tons and energy costs by ¥54 million.

In the future, we will carry out such measures as creating a manual for energy conservation activities and establishing an ESCO *dojo* to develop human resources who can promote energy conservation. Through these initiatives, we will strive to further reduce CO₂ emissions while focusing on firmly establishing our internal ESCO activities.

Promoting Energy Conservation by Shifting Air-Conditioning Energy Sources

At the Hekinan Plant, which produces engines, we have primarily used steam- and gas-operated equipment as energy sources for air conditioning. Along with a recent renewal of aging steam-operated equipment, we implemented comprehensive energy conservation measures that enabled us to almost halve CO₂ emissions. Initiatives to be undertaken include proactively introducing high-efficiency air-conditioning energy sources, promoting the sharing of optimal control systems*² among business divisions and efficiently using exhaust heat.

*2: Forecasting demand for air conditioning based on meteorological information, the system selects optimal energy sources in terms of cost and CO₂ emissions for targeted time periods.

Principal Energy Conservation Countermeasures

1. Raise energy efficiency by shifting from steam-operated equipment to electric equipment.
2. Reduce energy costs and CO₂ emissions by using the best mix*³ of electric power and gas.
3. Reduce the volume of energy usage by introducing facilities that integrate leading-edge technologies (make effective use of cogeneration waste heat through high-efficiency heat pumps; reduce power used in transportation through transportation equipment with high energy efficiency; and optimally operate air conditioning through the use of optimal control systems).

*3: Combining energy sources and supplying the optimal balance of energy

Resource Utilization

[Product-Related] Promoting Resource Conservation through Compact, Lightweight Products

For the ES14 electric compressor fitted on the TOYOTA Prius launched in May 2009, we realized high-speed revolutions and integrated the previously separate inverter that controls revolutions into the car air-conditioning compressor. By doing so, we created a compressor that is more compact and lightweight. As a result, we achieved a significant reduction in raw materials used and approximately 20% reductions*¹ in both cubic volume and weight while maintaining the same level of cooling capabilities compared with the predecessor ES18 compressor.



ES14 electric compressor

*1: Comparison between the ES14 and the ES18, including the inverter

[Production-Related] Reducing Amounts of Sludge Generated

At the Nagakusa Plant, a vehicle assembly plant, we optimized the amount of sludge flocculants used in

wastewater treatment and realized an approximately 26% reduction. As a result, we attained an approximately 34% reduction in the volume of sludge generated.

[Production-Related] Recycling Raw Garbage at MACI

Michigan Automotive Compressor, Inc. (MACI), a U.S.-based subsidiary for manufacturing car air-conditioning compressors, converted some 200kg of raw garbage from employees' lunch into compost and created a small garden, where employees grow flowers and vegetables. The garden also provides a venue for promoting internal communications.



Participating staff with plants grown using the compost

Reduction in Environmental Risk

[Product-Related] Establishing a Company-Wide Management System Capable of Responding to New Chemical Substances Regulations

In January 2009, beginning the operation of a newly rebuilt chemical substances management system (MARSY*²), Toyota Industries is accumulating information on constituent materials as well as chemical substances contained in our products of all divisions. By confirming whether our products contain substances subject to various new chemical substance regulations, we can quickly ascertain the impact of any such regulations on Toyota Industries.

Also, regarding the disclosure of information on whether our products contain SVHC*³ as required by the European REACH*⁴ regulation, we set up an information management structure by establishing the REACH Response Committee as a Company-wide organization.

*2: MARSY stands for MAterial data Research SYstem.

*3: SVHC stands for Substances of Very High Concern.

*4: REACH (Registration, Evaluation, Authorisation and restriction of CHemicals) is a system for the comprehensive registration, evaluation, authorization and restriction of substances of concern prescribed by the EU, and targets parties involved in the manufacture and import of substances of concern within the EU.

[Production-Related] Status of Compliance with Environmental Laws

In fiscal 2010, there were instances of effluents from the plant exceeding standard values at three subsidiaries within the Toyota Industries Group. Each of these subsidiaries has already taken corrective measures and subsequent confirmations have been made to ensure there are no recurrences.

We will work to prevent environmental risks in the future by sharing information throughout the Toyota Industries Group on cases of problems in the past and their countermeasures as well as effective methods of risk management. In addition, we will strengthen our initiatives to minimize the environmental impact should other incidents occur.

Environmental Communication

Environmental Education for Elementary School Children in Local Communities

To help continue preserving the Earth and its abundance of nature, we strive to raise the environmental awareness of children, who are the bearers of the future, by providing them with opportunities to experience Toyota Industries' various environmental activities. As part of these efforts, we hold observation tours of our plants and dispatch staff for environmental classes at schools for elementary and junior-high school children in local communities.



Children participating in hands-on learning at the environmental dojo

In September 2009, fifth graders from an elementary school in Takahama City, Aichi Prefecture, visited the Takahama Plant, which produces materials handling equipment. The children listened to explanations on environmental activities at the Takahama Plant, observed a fuel-cell lift truck, visited a recycling center that recycles fallen leaves on the grounds of the plant into mulch and were given a hands-on learning experience at the environmental *dojo*.

We will continue to communicate to children the importance of protecting the natural environment.



Letters and pictorial diaries written by children

Forest Conservation Activities

Commencing "TICO Ecocoro Tree Thinning Activity to Cultivate the Spirit of Ecology"

As part of its social-contribution activities in local communities, in November 2009 Toyota Industries began participating in the *Kaisho-no-Mori* (Kaisho Forest) Conservation Project*¹ being promoted by the Aichi Kaisho-no-Mori Center. Under the name "TICO Ecocoro Tree Thinning Activity to Cultivate the Spirit of Ecology," Toyota Industries plans to carry out tree thinning at Kaisho-no-Mori (Seto City, Aichi Prefecture) over an area covering 6,000 square meters during a three-year period. We are contributing to the preservation of the forest and park through planning, operation and tree thinning activities carried out mainly by members of the Toyota Industries Team Leader Association*².

For the first activity, actual tree thinning was held following a nature walk and lecture on the current state of the forest and the necessity of tree thinning. The thinned trees are used to build a bridge spanning a stream in the forest and steps. Impressed by the awe-inspiring expansiveness of nature, participants also made such positive comments as "I would like to see even more people become aware of the importance of tree thinning" and "How about using the thinned trees for making benches for use in rest areas at each plant?"

In the future, we plan to further advance these activities including holding woodworking workshops using thinned trees.



Participant Comments

Kiyotaka Sanji

Logistics Section,
Manufacturing Department
Toyota Material Handling Company

I participated in tree thinning activities because I wanted to preserve a rich natural environment for future generations. I now understand the need for tree thinning and the importance of nature. I hope these activities play an important role in raising employee awareness of nature conservation.



Tree thinning activities

*1: Aichi Kaisho-no-Mori Center engages in forest maintenance activities and in the *Satoyama* regeneration initiative with the participation of prefectural residents and companies.

*2: An autonomous Company-wide organization consisting of approximately 1,700 young leaders at manufacturing sites, the organization carries out cleanup and other community activities, promotes interchanges for self-development and holds recreational activities to deepen interaction among members.

Targets and Results of the Fourth Environmental Action Plan

Progress of the Fourth Environmental Action Plan (Product-Related)

Action Policies		Specific Actions	FY2010 Achievements
Curbing Global Warming	Promote technology development for lightweight vehicles	Develop components and materials for attaining compact and lightweight vehicles	<ul style="list-style-type: none"> Developed a plastic glazing quarter window Developed a CFRP crash box
	For non-automobile related products, promote the development of technologies that achieve the best energy efficiency in the industry	Develop technologies for improving lift truck fuel efficiency	<ul style="list-style-type: none"> Developed a diesel-engine hybrid lift truck
	Promote the development of devices for clean energy vehicles	Further improve the performance of devices for hybrid vehicles	<ul style="list-style-type: none"> Developed a DC-DC converter Developed a PCU direct-cooling device Developed charging infrastructure facilities
Resource Utilization	Further promote the use of designs that are based on the Designs for Recycling concept	Steadily increase recycling rate by carrying out recycling rate evaluation in all product fields	<ul style="list-style-type: none"> Developed the ES14 electric compressor
Reducing Environmental Risk Factors	Promote stricter control of and further reduction in the use of substances of concern	Further expand range of control of substances of concern	<ul style="list-style-type: none"> Established a Company-wide management system capable of responding to various chemical substance regulations

Progress of the Fourth Environmental Action Plan (Production-Related)

Action Policies	Specific Actions	Control Items (FY2011 Target)	FY2010 Achievements			
			Target	Result	Assessment	
Curbing Global Warming	Promote energy reduction and energy conservation through innovative production engineering	<ul style="list-style-type: none"> Streamline production processes Optimize supplied energy Promote introduction of alternative energy sources 	Energy-derived CO ₂ emissions			
			Eco-efficiency: 1.30 (Non-consolidated) [vs FY1991]	1.35	1.56	○
	Eco-efficiency: 1.10 (Consolidated) [vs FY2004]	1.08	1.16	○		
	Reduce CO ₂ emissions through green logistics	<ul style="list-style-type: none"> Promote modal shift 	Eco-efficiency: 1.04 (Consolidated) [vs FY2007]	1.03	1.08	○
Resource Utilization	Enhance resource productivity	<ul style="list-style-type: none"> Reduce the volume of discarded materials by taking action at the source, such as improving yields and other measures 	External disposal Eco-efficiency: 1.05 (Non-consolidated) [vs FY2004]	1.09	1.16	○
	Reduce use of groundwater	<ul style="list-style-type: none"> Promote recycling of wastewater Reduce use of water 	Groundwater use 50% reduction (Non-consolidated) [vs FY2004] (Total volume is indicated in parentheses; unit: km ³)	62% reduction (480)	73% reduction (346)	○
	Reduce total environmental impacts of waste disposal	<ul style="list-style-type: none"> Eliminate landfill disposal at all consolidated manufacturing companies 	Landfill volume Less than 1% (Manufacturing sites in Japan consolidated) [vs FY1999] (Total volume is indicated in parentheses; unit: t)	1.37% (140)	0.20% (21)	○
Reducing Environmental Risk Factors	Further reduce emissions of substances of concern	<ul style="list-style-type: none"> Reduce emissions of air pollutants, including volatile organic compounds (VOCs) Reduce emissions of water contaminants 	Environmental impact			
			10% reduction (Non-consolidated) [vs FY2004]	32% reduction	57% reduction	○
			5% reduction (Manufacturing sites in Japan) [vs FY2004]	39% reduction	59% reduction	○

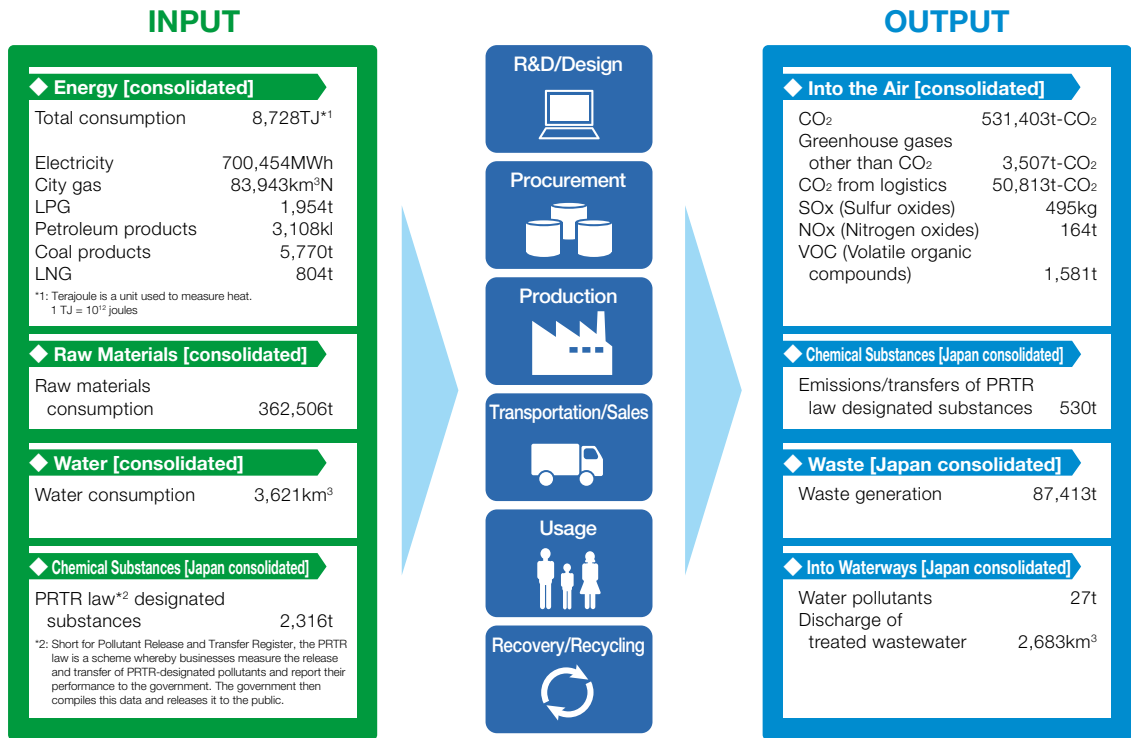
Calculation Formula of Eco-Efficiency **Production-Related**

$$\text{Eco-efficiency} = \frac{\text{Production efficiency in subject year}}{\text{Production efficiency in base year}}$$

$$\text{Production efficiency} = \frac{\text{Production indicator (Net sales or production volume, etc.)}}{\text{Environmental impact of production activities}}$$

Business Activities and Their Environmental Impact

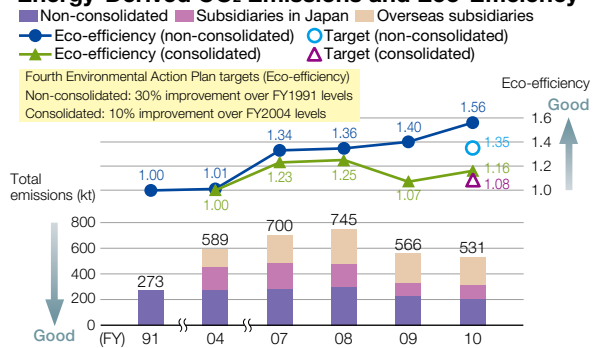
Environmental Impact Flow



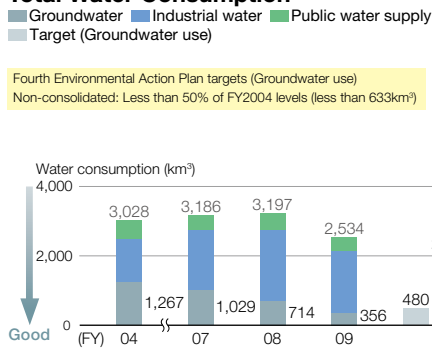
Trends in Environmental Performance

Toyota Industries' principal environmental performance trends are as follows.

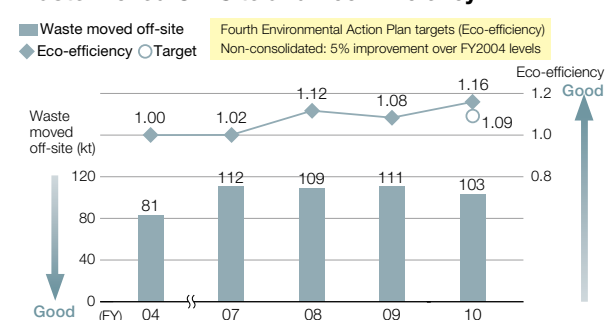
Energy-Derived CO₂ Emissions and Eco-Efficiency



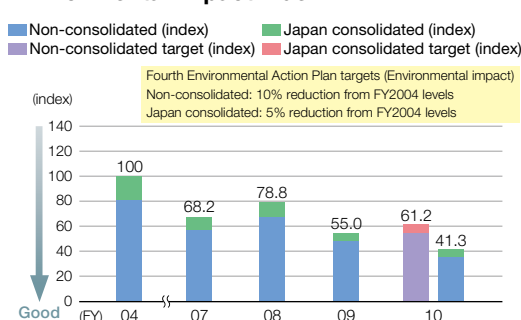
Total Water Consumption



Waste Moved Off-Site and Eco-Efficiency



Environmental Impact Index



Soil and Groundwater Pollution Countermeasures

Toyota Industries carries out surveys and purification of soil and groundwater contaminated from its past use of trichloroethylene as a cleaning agent. We 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 (FY2010)

Plant	Weighted Average Concentration in Groundwater (mg/l)	Current Status
Kariya Plant	0.67	Cleanup in progress
Kyowa Plant	0.34	Cleanup in progress

Environmental Accounting/On-Site Verification

Fiscal 2010 Environmental Accounting*

Scope of data collection: Toyota Industries
TIBC Corporation

Data collection period: April 1, 2009 – March 31, 2010

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

Environmental Conservation Cost (Millions of yen)

Category	FY2010		FY2009		
	Investment	Expenses	Investment	Expenses	
Business area costs	Pollution prevention costs	485	518	330	1,014
	Global environmental conservation costs	33	3,257	1,075	3,665
	Resource recycling costs	5	433	123	1,545
Upstream/downstream costs	–	–	–	–	–
Management costs	39	720	109	1,068	
Research and development costs	3	81	–	393	
Social contribution activity costs	–	6	7	30	
Environmental remediation costs	–	5	–	9	
Total	565	5,020	1,644	7,724	
	5,585		9,368		

Environmental Conservation Benefits

Environmental Impact	Comparison with Previous Fiscal Year
CO ₂	26,961t decrease
VOC	241t decrease
Generation of waste products	25,810t decrease
Water	484,876m ³ decrease
SO _x	0.02t decrease
NO _x	9t decrease
COD (Chemical oxygen demand)	0.16t increase

Economic Benefits of Environmental Conservation Initiatives

(Millions of yen)

Item	Details	Amount
Revenue	Returns from sale of recycled waste products	3,087
Cost Reduction	Energy cost reductions	899
	Cost reduction by resource savings (including reductions in amount of water use and wastewater treatment costs)	81
Total		4,067

On-Site Verification

In fiscal 2010, Toyota Industries Head Office's Plant Engineering & Environment Department primarily conducted on-site verification of the accuracy and consistency of environmental data included in the *Toyota Industries Report* as follows.

[On-Site Verification Sites]

- Hekinan Plant: Manufacture of diesel engines and gasoline engines
- Higashichita Plant: Manufacture of castings and diesel engines
- Hara Corporation: Manufacture and sale of textile machinery and related components

[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 reporting method 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 identified during verification have been corrected.
3. Considerations of improvements will be made for data collected using complex collection methods.