

 TOYODA GOSEI

TOYODA GOSEI REPORT 2017



Technology for a Brighter **G**lobal Future

The Toyota Gosei Group is a leading manufacturer of rubber and plastic automotive parts and LEDs.



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Company Creed

Boundless Creativity and Social Contribution

Our Approach to CSR

Customers

Corporate Principle 1

Customer satisfaction

Customer satisfaction based on solid R&D and first-class manufacturing

Employees / Stockholders / Community / Environment

Corporate Principle 2

Respect for the individual

A vibrant corporate culture with meaningful work

Corporate Principle 3

Good corporate citizenship

Legal compliance and community-based activities

Corporate Principle 4

Respect for the environment

Contributions to a better earth and societies

Corporate Principle 5

Steady growth

A leading global supplier of rubber and plastic automotive parts and LEDs

CSR Priority Areas

Environmental Preservation

We strive in all our business activities to reduce environmental impacts, starting with lightweight automotive parts that contribute to better fuel efficiency.

Development of people and workplaces that support our business

We aim to create a dynamic corporate culture with a strong sense of unity, where all employees can work in safety and health.

Building Livable Communities

As a member of each of the communities where we are located, we engage in various efforts for mutual growth.

Compliance

To continue earning the trust of society as a company of integrity we are strengthening our global efforts for legal compliance and working to instill a strong sense of ethics in our employees.



Contributing to sustainability and growing together with society through our corporate activities

N. Miyazaki
President

Toyoda Gosei is a top manufacturer of rubber and plastic automotive parts and LEDs, with global operations by 67 group companies in 18 countries and regions.

We are undertaking a variety of activities to earn the trust of society, focusing on the four main areas of “Environmental preservation,” “Development of people and workplaces that support our business,” “Building livable communities,” and “Compliance.”

For environmental preservation, we work hard as a manufacturer specializing in the rubber and plastic fields to develop products that contribute to lighter weight vehicles. At the same time, we are promoting efforts for a low energy society through all our business activities, from purchasing to manufacturing and delivery. In February 2016 we established the “TG 2050 Environmental Challenge” as an expression of our commitment to environmental activities now and into the future. The TG 2050 Environmental Challenge sets ambitious targets of reducing CO₂ emissions and water usage in our business activities, ultimately approaching zero. We are also continuing our Plant Afforestation Activities globally to support the earth’s environment. So far, we have planted a total of 290,000 trees in 25 locations worldwide. This effort has been recognized with placement in the top 20 in Japan for 10 consecutive years in the Nikkei Environmental Management Survey.

To develop people and workplaces that support our business, we established the TG Learning Center in January 2017. The TG Learning Center will serve as a focus of

our efforts to develop personnel who can act globally. As our workload increases with the global expansion of our business, we will strive for greater efficiency as one part of reforms to the way we work, utilizing IT tools and eliminating waste from meetings, reports and other activities so that all employees can dedicate themselves to their primary business. We have also established the “Five executive conditions manifesto” for the creation of a culture where all employees can work with vitality and a sense of unity, free to discuss anything with each other. This change will be led by executives and managers. Employee health maintenance is another issue for management, and as a result of strong efforts to promote employee health we were selected as a “2017 Outstanding health management corporation” by the Ministry of Economy, Trade and Industry of Japan.

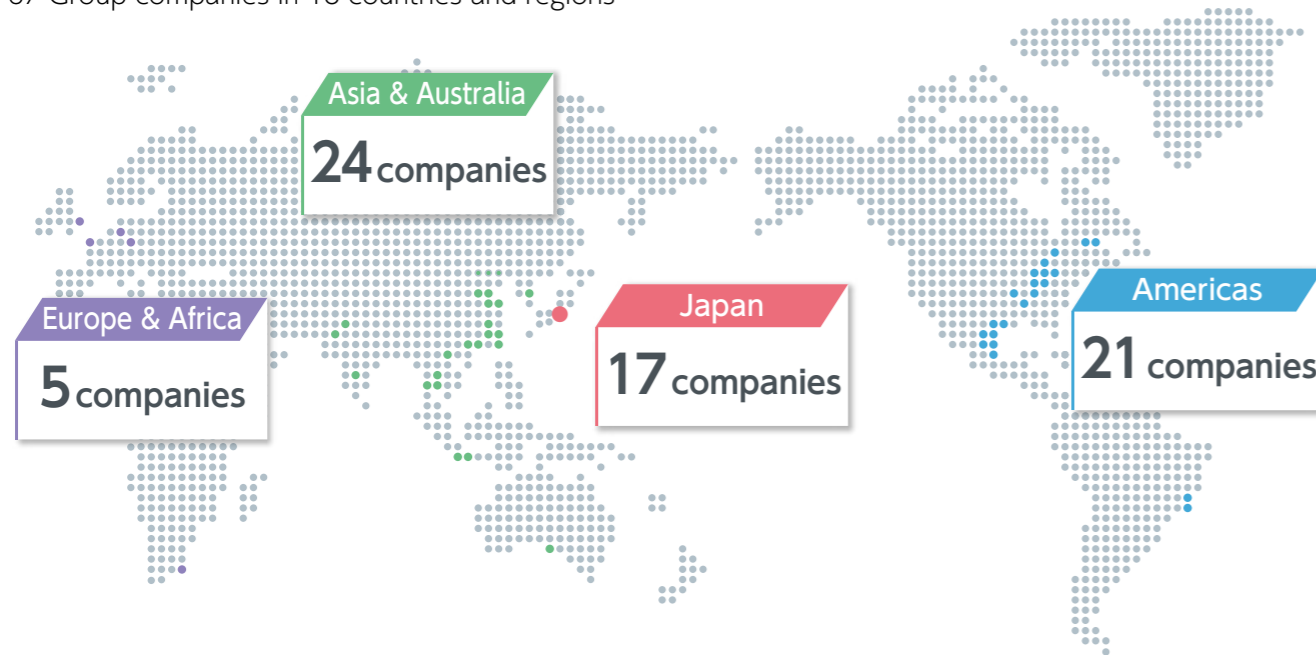
To build livable communities, employees at TG Group companies around the world are making efforts to contribute to their communities and grow together with strong local roots.

The foundation for all of these activities is compliance. To maintain the trust of society as a company of integrity, we believe not only legal compliance but high ethical standards by each and every one of our employees are crucial, and we will continue to educate employees throughout the Toyoda Gosei Group.

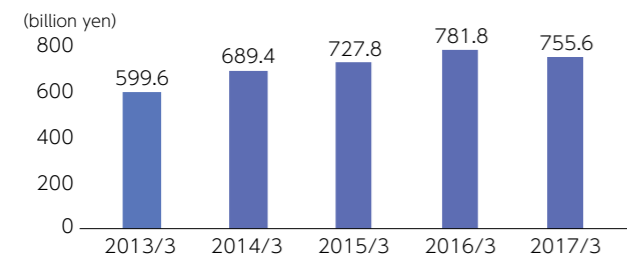
We will do our utmost to contribute to sustainable societies globally through our business activities, and grow together with the societies where we make our home. We look forward to continuing to serve our customers and communities.

Established June 15, 1949 Number of employees 36,679 (as of March 31, 2017, consolidated)
 Capital ¥28 billion Sales ¥755.6 billion (FY2016, consolidated)

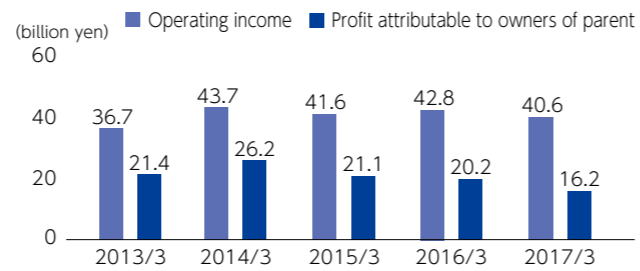
Global Network
 67 Group companies in 18 countries and regions



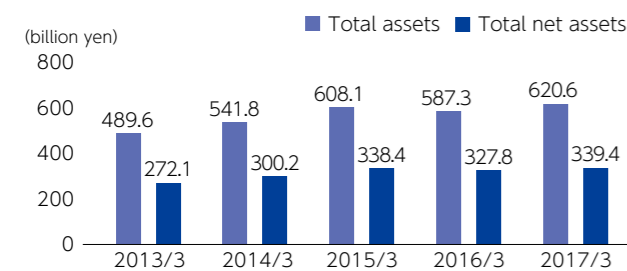
Sales (consolidated)



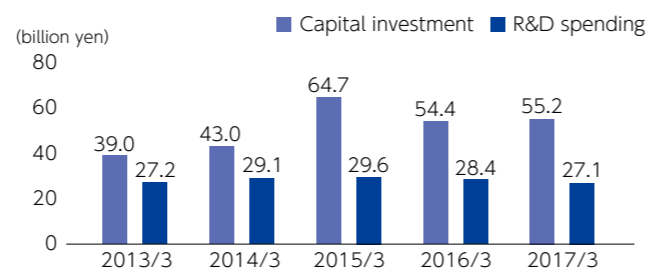
Operating income / Profit attributable to owners of parent (consolidated)



Total assets / Total net assets (consolidated)



Capital investment / R&D spending (consolidated)



Summary of Financial Results

Consolidated Balance Sheet

Item	(Unit : million yen rounded down)		Item	(Unit : million yen rounded down)	
	As of March 31, 2017	As of March 31, 2016		As of March 31, 2017	As of March 31, 2016
Assets			Liabilities	281,237	259,530
Current assets	305,273	281,212	Current liabilities	170,574	162,592
Fixed assets	315,425	306,160	Long-term liabilities	110,663	96,937
Property, plant and equipment	245,666	241,408	Net assets	339,461	327,843
Intangible assets	2,324	2,401	Shareholders' equity	311,127	301,756
Investments and other assets	67,434	62,350	Accumulated other comprehensive income	3,752	2,192
Total assets	620,699	587,373	Minority interests in consolidated subsidiaries	24,582	23,894
			Total liabilities and net assets	620,699	587,373

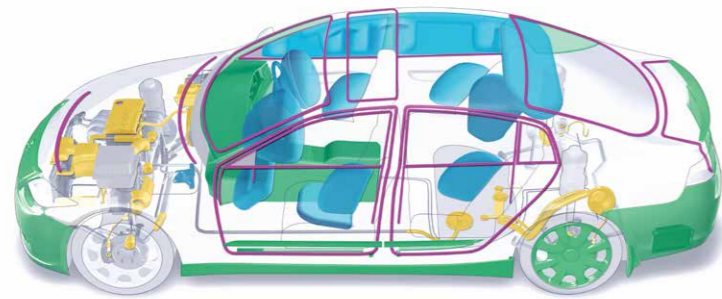
Consolidated Statements of Income

Item	(Unit : million yen rounded down)	
	FY 2016	FY 2015
Net sales	755,601	781,886
Cost of sales	657,946	680,583
Gross profit	97,655	101,303
Selling, general and administrative expenses	56,979	58,479
Operating income	40,675	42,824
Non-operating revenue	4,891	4,916
Non-operating expenses	6,559	6,250
Ordinary income	39,007	41,490
Extraordinary income	—	—
Extraordinary losses	7,718	4,780
Income before income taxes and minority interests	31,288	36,710
Total income taxes	12,274	13,667
Income attributable to non-controlling interests	2,780	2,787
Profit attributable to owners of parent	16,233	20,255

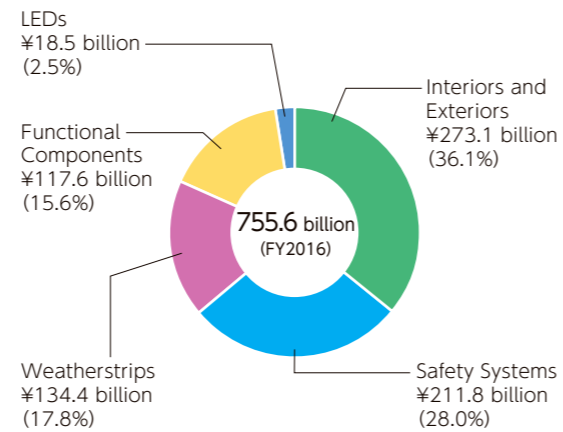
Consolidated Statement of Cash Flow

Item	(Unit : million yen rounded down)	
	FY 2016	FY 2015
Net cash provided by operating income	60,401	77,765
Net cash used in investing activities	△82,131	△56,261
Net cash provided by (used in) financing activities	14,794	△24,736
Effect of exchange rate changes on cash and cash equivalents	△1,350	△3,591
Increase or decrease in cash and cash equivalents	△8,284	△6,822
Cash and cash equivalents at beginning of fiscal year	78,203	85,078
Increase or decrease in beginning cash and cash equivalents with changes in consolidated subsidiaries' accounting terms	—	△52
Cash and cash equivalents at end of period	69,918	78,203

Development and production of rubber and plastic automotive parts and LEDs.



Sales by business segment (sales percentages)



Non-automotive Field

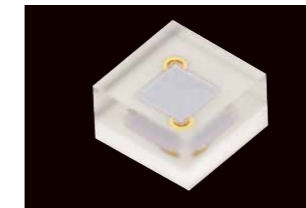
In addition to LEDs with world-class energy efficiency and compactness, we are developing and producing products for air purifiers and other new fields using the technology we have cultivated for automotive parts.

General Industry Products



Air purifiers

LEDs



Glass-encapsulated ultraviolet LEDs (LEDs for industry)

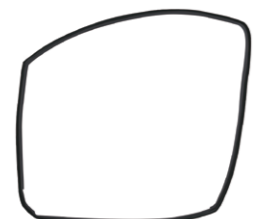


High-efficiency top view package LEDs (LEDs for lighting)

Automotive parts

Weatherstrips

These parts are fitted to door and window frames to block gaps and shut out wind, rain and noise. They are essential to comfortable vehicle interiors.



Opening trim weatherstrips



Door glass runs



Interiors and Exteriors

These parts contribute to comfortable and attractive interior spaces and outer appearance.



Radiator grilles



Console boxes



Instrument panels / component parts

Functional Components

These parts support the basic vehicle functions of running, turning and stopping. We provide high quality for these important safety parts.



Capless fuel fillers



Turbo ducts



Brake hoses



Turbo duct filler pipes

Safety Systems

Toyota Gosei airbags provide full 360° coverage to protect passengers from impacts from every side. Driver-side airbags are housed in our stylish steering wheels.



Steering wheels (with built-in airbags)



Pop-up hood actuators



Airbags

A New Challenge to Minimize Factory CO₂ Emissions for a Low Carbon Society

In-house “Energy Service Company” Set Up to Locate All Kinds of Energy Loss and Make Improvements

The Paris Agreement on climate change was established in November 2016 to urge each country to take measures to reduce carbon emissions. Toyota Gosei Co., Ltd. established its “TG 2050 Environmental Challenge” in February 2016, setting six long-term challenges with a view toward the year 2050. Here we look at one of those challenges, “Minimizing factory CO₂ emissions in 2050,” and our road map and new energy activities to achieve that goal.



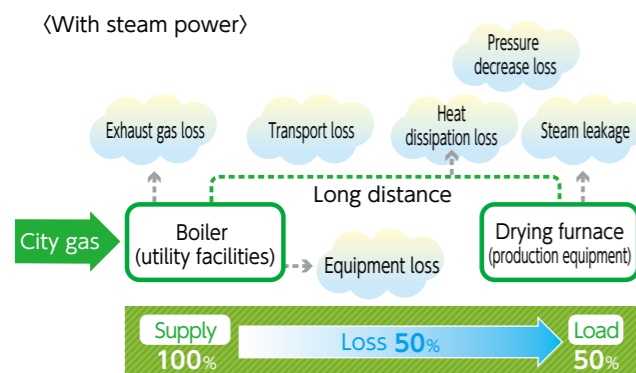
Road map to “Minimizing CO₂ emissions”

Our plan for achieving the very lowest CO₂ emissions from our factories has two stages. In the first stage, we will review the use of energy sources including electricity, gas, heavy oil, air and steam in our existing facilities, and work toward zero energy loss. We will further move toward minimizing the amount of energy needed by upgrading to more efficient equipment and developing and introducing innovative production technologies. In the second stage, we will switch to

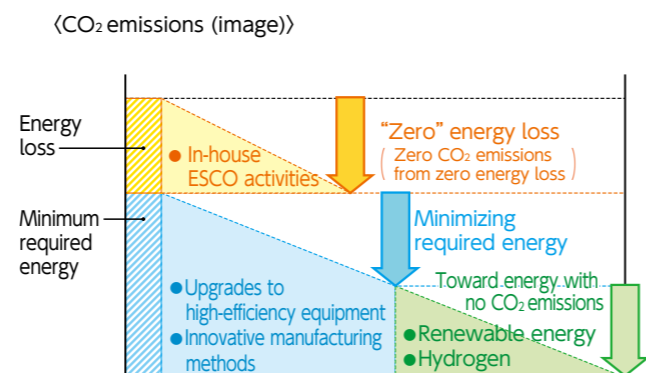
renewable energy or hydrogen sources that do not emit CO₂.

To achieve this plan we have re-examined our utility and production equipment from an energy-saving perspective, and in 2016 formed an in-house energy service company (ESCO), an expert team to make improvements. We will enhance and expand this in-house ESCO over the coming years to play a greater role in minimizing our CO₂ emissions.

Energy loss (image)



Minimizing energy



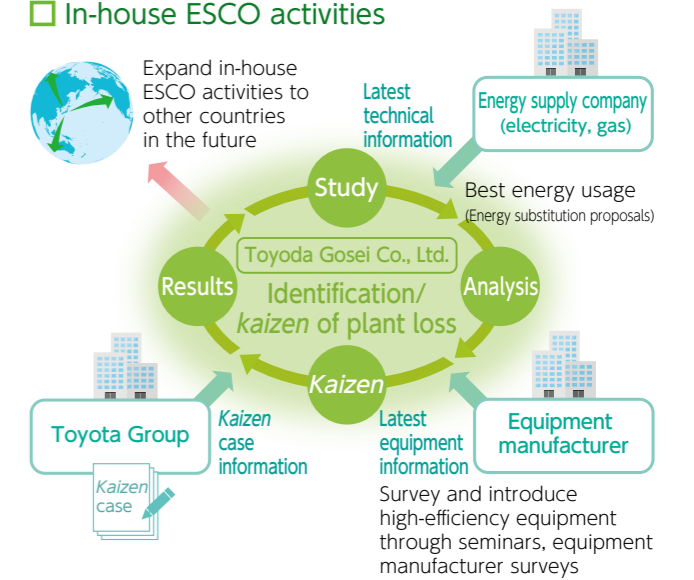
Activities to thoroughly reduce energy usage

In addition to our efforts so far to save energy, which have mainly been daily *kaizen* and switching to high-efficiency equipment and machinery in manufacturing divisions, our new in-house ESCO intensifies energy-saving activities with coordinated action between the Environment and Manufacturing Divisions. We uncover targets for energy savings with *genchi-genbutsu* from the six perspectives of ceasing, turning off, repairing, avoiding, picking up and changing to reduce CO₂ emission volumes.

We are also making improvements by reviewing our entire chain of energy usage from supply to point of use, with information and proposals from sources including *kaizen* examples in the Toyota Group, energy supply companies, and equipment manufacturers.

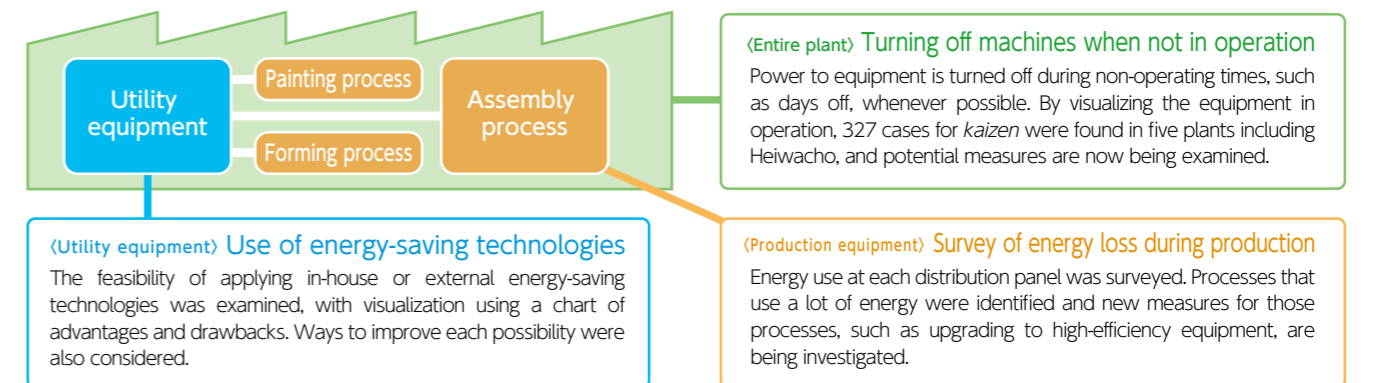
In the coming years we will spread these activities to our overseas operations to reduce CO₂ emissions across the entire Toyota Gosei Group.

In-house ESCO activities



2016 Activities

In fiscal 2016 we began in-house ESCO activities at our Heiwacho Plant. We surveyed the current conditions for the entire plant, utilities equipment and production equipment. Then, based on the findings, we conducted analyses and studied measures for improvement.



TG Voices



Yohei Samura
Environment Division

Energy is essential for manufacturing, but loss occurs depending on the way that energy is supplied and used. Through these activities we are minimizing that loss to contribute to reducing the company's environmental impact and improving its profitability.



Katsuhide Miyake
Environment Division

We searched every corner of the shop floor for any possible source of energy loss. Minimizing that loss and protecting the earth's environment is to the company's benefit, and from here on we intend to conduct in-house ESCO activities throughout the company.

Message from executive in charge



Yasushi Miyamoto
Managing Officer in charge of Environment Division

In-house ESCO activities for sustainable growth

The Toyota Gosei Group aims to grow sustainably together with society while making our operations environmentally friendly. The only way to do that is to greatly reduce the CO₂ emissions, water usage, and waste volume in our business activities. The “in-house ESCO” started in fiscal 2016 is working for significant reductions in these volumes. For these efforts to succeed, however, we will need all employees to join together and do everything they can to resolve each issue. In-house ESCO is an energy-centric activity in which persistent efforts will build on each other and lead to significant results. In the future we intend to spread these activities to reduce water usage and waste volumes to the entire Toyota Gosei Group.

Developing People Who Can Act Globally for Sustainable Growth



Overhauling training for each employee level to develop people who can think and act for themselves and thrive in any country

One of the tasks of the TG Learning Center is to review the level-specific training at Toyoda Gosei. By clarifying the goals of education for each level in office and technical work, and at the same time moving the timing of training forward for each age group, we are trying to raise ability levels and broaden outlooks from a younger age. For the skilled workers who support the manufacturing floor, emphasis is on the training of workers who have the skills to continuously produce good products and the ability to implement and teach *kaizen*. We want to nurture "T-type" workers who also have knowledge of IoT and AI. We aim to raise

motivation by having workers participate in Skills Olympics, holding in-house skills competitions, and establishing an awards system to create a culture that values skill. We are also aiming to develop a "coaching middle" of workers at the group manager level with the coaching ability to draw out the best from subordinates, and strategic leaders at the department general manager and deputy general manager level who have task formation and problem-solving skills and who keep close track of movements outside the company. Another aim is to develop people who can thrive internationally.



Message from the TG Learning Center



We have overhauled our level-specific training programs to provide stepwise training from a young age for better strategic thinking, coaching ability, and independent thought

and action. In FY2017 we have created an image of the kind of person Toyoda Gosei would like to have, and are taking steps to develop those kinds of persons. We are further enhancing our education system with management training for overseas staff and global training with the aim of developing people who can head our international locations.



The type of person we are looking for on the manufacturing floor is a true master technician, who can work well with people from other countries, give process *kaizen* advice, and deal with process changes as technology advances. For that purpose we

cultivate manufacturing personnel from the perspectives of skills improvement and skilled workplace vitalization. In skills improvement, our challenge is to redefine skills and create a skills training environment, hold skills Olympics (punching die work). In skilled workplace vitalization, workers are encouraged to acquire qualifications as motivation to improve their skills, which we think will lead to a companywide culture of valuing skilled work.

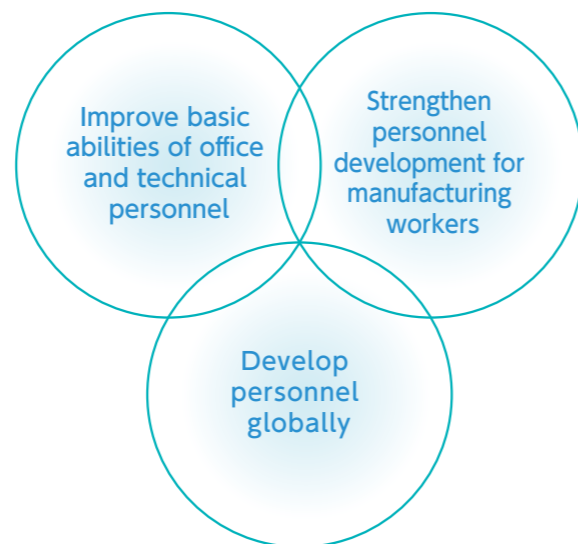
The TG Learning Center was established to play a core role in personnel development

As the business environment undergoes huge changes, it is often said that developing the kinds of people who can support the company in these new environments is essential to surviving the competition in the global marketplace and achieving sustainable growth. For the continuing growth of the company, TG is developing people who can thrive in international settings and specialty fields in the future. As a manufacturing company, it is also important to develop people with the skills to handle future changes in production processes with the spread of IoT and AI technology.

The TG Learning Center was established in January 2017 as a special training organization for Toyoda Gosei and Group employees, focusing on the three areas of improving basic skills in office and technical occupations, strengthening personnel development for manufacturing workers, and promoting personnel development globally. We are working to reform training programs and rebuild skill improvement training with the fundamental aim of developing people who can think and act for themselves—the kinds of people

who are needed for sustainable growth—and creating a company-wide personnel development culture.

Three major areas of personnel development



Message from executive in charge



Toshihiro Yokoi
Director, Managing Officer
Chief of Corporate
Management Headquarters

Our aim is for true globalization in manufacturing with a view toward environmental changes

The TG Learning Center was established as an organization dedicated to the development of TG personnel. Up to this time we have handled shop floor manufacturing with simple on-the-job training, but one of the roles of the TG Learning Center will be to help us adapt to the advances in control and information technology and increasing robotics and automated equipment. In addition to learning new technologies, we are codifying the skills that have been passed to us by our predecessors in order to build a foundation that will enable all skilled workers to acquire these accumulated skills. In a globally expanding business, we need to be a company that prospers together with the people of each country or region, contributes to economic and social progress and happiness, and satisfies our customers. We hope the TG Learning Center will play a central role in creating organizations and cultures in which each person carries the TG spirit to build a TG for each country while learning from the local people.

Contributing to Environmental Preservation Through All Our Business Activities

Message from the Environment Division

Toyota Gosei believes that environmental conservation activities are a key aspect of company management. Last year we announced the TG 2050 Environmental Challenge. We are currently advancing our 6th Environmental Action Plan (2020 targets) in working toward the goals of the TG 2050 Environmental Challenge.



Kazuhiko Nagao
General Manager
of the Environment
Division

As a manufacturer, we work every day to make improvements on our manufacturing floors. In addition to this, we are actively pursuing new initiatives including a new "in-house ESCO" expert team to identify places where we can reduce our environmental impact and a Production Technology Environment Subcommittee to develop environmentally-friendly processes and equipment from a production technology perspective.

Through a survey on employees' environmental awareness and environmental exhibitions we aim to raise the environmental awareness of each employee and develop a culture where each person can take steps on his or her own.

In our plant afforestation program we have planted about 290,000 trees and are also undertaking the unique activity of creating biotopes using plant regulating ponds.

We will continue to actively pursue these efforts with the aim of being "Environmental TG," which both delights our customers and is something we can be proud of for our children.

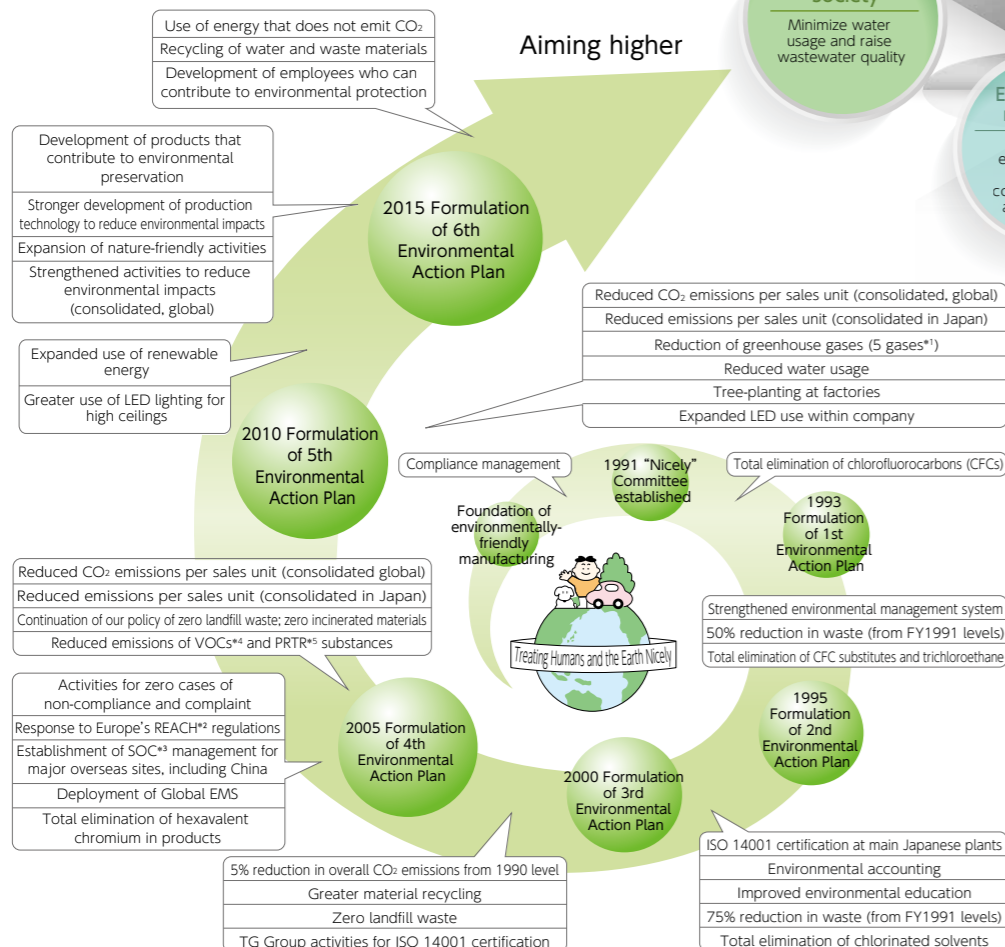
TG 2050 Environmental Challenge —A Greener, Richer World for Our Children

The Toyoda Gosei Group specializes in the field of high polymers—rubber and plastics. Our symbol is the benzene ring, a hexagonal hydrocarbon structure that is the starting point for polymers. Borrowing from the six sides of the benzene ring, the TG 2050 Environmental Challenge sets six challenges to strengthen our environmental efforts with a long-term view to the year 2050.

TG 2050 Environmental Challenge (Six Challenges)



Efforts to date

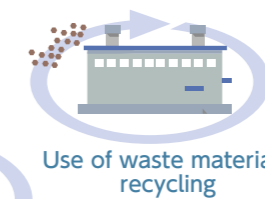
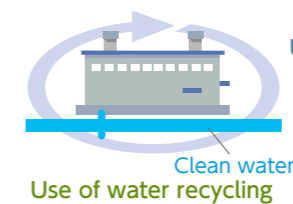


- *1 Hydrofluorocarbons (HFC), perfluorocarbons (PFC), sulfur hexafluoride (SF₆), methane (CH₄), nitrous oxide (N₂O)
- *2 Registration, Evaluation, Authorization and Restriction of Chemicals
- *3 Substances of Concern
- *4 Volatile organic compounds
- *5 Pollutant Release and Transfer Register

- Products that contribute to low-carbon, recycling societies
- Steady movement toward zero CO₂ and waste emissions and water usage in business activities



Use of energy that does not emit CO₂
(solar energy, hydrogen energy)



Development of personnel who can contribute to environmental preservation



Environmental Policy

1 Environmentally-friendly corporate activities

We are keenly aware that all stages of our business relate deeply to the environment, from development, production, and sales activities to end-of-life disposal. The Toyoda Gosei Group, including all internal departments, domestic and international affiliates, and suppliers, conducts all business activities with concern for the environment in cooperation and coordination with customers, government authorities, and others.

2 Good corporate citizenship

As a good corporate citizen, we participate in, support, and cooperate with environmental activities by many groups while also working on environmental activities in the community and broader society. We also provide education for all employees to support them in becoming involved in environmental activities as members of the community and society, and support social contributions and volunteerism.

3 While spreading information on these activities, we listen to the opinions of people at all levels of society and working to improve our activities wherever we can.

Environmental organization

Environmental policy and key action items are discussed and decided by an Environmental Committee headed by the President of Toyoda Gosei. The Environmental Committee consists of three subcommittees for products, production, and

quality. Liaison committees and working groups from these subcommittees act in coordination to promote environmental protection and management from an expert perspective.

Environmental organizational structure



Deployment from the Environmental Committee and subcommittees to plants and other operations is done with the establishment of expert committees in accordance with the ISO 14001 system at each plant.

Sixth Environmental Action Plan Activities and Results (2016-2020)

Our efforts are focused in four areas: building low-carbon societies; building recycling societies; environmental preservation and building nature-friendly societies; and environmental management

Theme	Measures Implemented	Results of Activities in FY2016	Page																					
Building Low-Carbon Societies	1 Reduction of CO₂ emissions Products • Engineering and development of lightweight rubber and plastic parts for improved automobile fuel efficiency and development of automotive LED products • Development of products and technologies in new fields corresponding to new energy trends Production • Daily <i>kaizen</i> in plants • More efficient equipment (LED lighting, upgraded utilities and air conditioning, etc.) • Development and introduction of innovative processes • Energy replacement	▶ Lighter weight products for improved automobile fuel efficiency • Development of pad damper to balance lighter weight and vibration control in steering wheels ▶ Reducing CO ₂ emissions by cutting energy waste during production • Boiler fuel switched from fuel oil to LNG • Heat measures for 2 nd floor of Building 3, Morimachi Plant • Switch to inflator pressure test with an induction heating system to reduce heating energy	P18																					
		<table border="1"> <thead> <tr> <th></th> <th>Item</th> <th>2020 target</th> <th>2016 Achievements</th> <th>Rating^[2]</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Global, consolidated</td> <td rowspan="2">CO₂ emissions per sales unit</td> <td>12% decrease vs. 2012</td> <td>96^[1]</td> <td>4% decrease vs. 2012 ○</td> </tr> <tr> <td>15% decrease vs. 2012</td> <td>87^[1]</td> <td>13% decrease vs. 2012 ×*1</td> </tr> <tr> <td rowspan="2">Japan, consolidated</td> <td rowspan="2">CO₂ emissions</td> <td>17% decrease vs. 2012</td> <td>102^[1]</td> <td>2% increase vs. 2012 ×*1</td> </tr> <tr> <td>17% decrease vs. 2012</td> <td>143,000 t-CO₂</td> <td>7% decrease vs. 2012 ×*1</td> </tr> </tbody> </table>		Item	2020 target	2016 Achievements	Rating ^[2]	Global, consolidated	CO ₂ emissions per sales unit	12% decrease vs. 2012	96 ^[1]	4% decrease vs. 2012 ○	15% decrease vs. 2012	87 ^[1]	13% decrease vs. 2012 ×*1	Japan, consolidated	CO ₂ emissions	17% decrease vs. 2012	102 ^[1]	2% increase vs. 2012 ×*1	17% decrease vs. 2012	143,000 t-CO ₂	7% decrease vs. 2012 ×*1	P18
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		Distribution • Reduction of CO ₂ emissions by improving transportation efficiency	▶ Reduction of CO ₂ emissions by reducing transportation loss	P20																				
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	2 Reductions in 6 greenhouse gases*2 • Magnesium, LED	▶ Reduction of greenhouse gases (6 gases)	P21																					
	<table border="1"> <thead> <tr> <th></th> <th>Item</th> <th>2020 target</th> <th>2016 Achievements</th> <th>Rating^[2]</th> </tr> </thead> <tbody> <tr> <td>Toyoda Gosei</td> <td>Emissions of 6 gases</td> <td>62% decrease vs. 2012</td> <td>4,000 t-CO₂</td> <td>67% decrease vs. 2012 ○</td> </tr> </tbody> </table>		Item	2020 target	2016 Achievements	Rating ^[2]	Toyoda Gosei	Emissions of 6 gases	62% decrease vs. 2012	4,000 t-CO ₂	67% decrease vs. 2012 ○													
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Toyoda Gosei	Emissions of 6 gases	62% decrease vs. 2012	4,000 t-CO ₂	67% decrease vs. 2012 ○																				
	3 Contributions as a manufacturer of environmentally-friendly LEDs • Development and market launch of LED products	▶ Development and spread of LED products • Development (expanded applications) of LEDs similar to sunlight • Development of LED packages for headlamps (high luminance, high efficiency) • Development (expanded applications) of LED ring-like illumination for cup holders	P21																					
Building Recycling Societies	4 Reductions in waste Products • Engineering and technical development of products that are easily recyclable for effective use of resources • Reductions in raw materials with lighter weights Production • Measures against emissions sources by raising yield • Promotion of in-house recycling of rubber, plastic, metal, etc. • Making waste into resources • Japan : Continuation of moving toward zero landfill waste (Other countries: Activities to reduce landfill waste)	▶ Development of product recycling technology ▶ Reduction of waste material during production • Stabilization of mixed compound (rubber) physical properties • Training die maintenance personnel at international locations • Lower volumes of core metal washing wastewater	P23																					
		<table border="1"> <thead> <tr> <th></th> <th>Item</th> <th>2020 target</th> <th>2016 Achievements</th> <th>Rating^[2]</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Japan, consolidated</td> <td rowspan="2">Waste volume per sales unit</td> <td>10% decrease vs. 2012</td> <td>93^[1]</td> <td>7% decrease vs. 2012 ○</td> </tr> <tr> <td>12% decrease vs. 2012</td> <td>107^[1]</td> <td>7% increase vs. 2012 ×*1</td> </tr> <tr> <td>Toyoda Gosei</td> <td></td> <td>6% decrease vs. 2013</td> <td>60^[1]</td> <td>40% decrease vs. 2013 ○</td> </tr> </tbody> </table>		Item	2020 target	2016 Achievements	Rating ^[2]	Japan, consolidated	Waste volume per sales unit	10% decrease vs. 2012	93 ^[1]	7% decrease vs. 2012 ○	12% decrease vs. 2012	107 ^[1]	7% increase vs. 2012 ×*1	Toyoda Gosei		6% decrease vs. 2013	60 ^[1]	40% decrease vs. 2013 ○	P23			
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	Toyoda Gosei		6% decrease vs. 2013	60 ^[1]	40% decrease vs. 2013 ○																			
	Distribution • Reduction in packing materials by reviewing packing and packaging specifications	▶ Reduction of packaging materials during shipping	P25																					
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* 2 Hydrofluorocarbon (HFC), perfluorocarbon (PFC), sulfur hexafluoride (SF₆), methane (CH₄), nitrous oxide (N₂O), nitrogen trifluoride (NF₃)

* 3 Shipping of spare parts increased with the effects of disaster, and the amount of packing material increased.

[1] Figure when the reference value is taken as 100. [2] ○ : Target for year achieved, × : Target for year not achieved

Theme	Measures Implemented	Results of Activities in FY2016	Page																	
Building Recycling Societies	5 Reduction and effective usage of water • Elimination of loss by visualization of water usage • Reduction of water use by recycling, such as reuse of wastewater	▶ Reduction of water usage	P25																	
		<table border="1"> <thead> <tr> <th></th> <th>Item</th> <th>2020 target</th> <th>2016 Achievements</th> <th>Rating^[2]</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Japan, consolidated</td> <td rowspan="2">Water used per sales unit</td> <td rowspan="2">8% decrease vs. 2012</td> <td>86^[1]</td> <td>14% decrease vs. 2012 ○</td> </tr> <tr> <td>98^[1]</td> <td>2% decrease vs. 2012 ×*1</td> </tr> <tr> <td>Overseas affiliates</td> <td></td> <td></td> <td>75^[1]</td> <td>25% decrease vs. 2012 ○</td> </tr> </tbody> </table>		Item	2020 target	2016 Achievements	Rating ^[2]	Japan, consolidated	Water used per sales unit	8% decrease vs. 2012	86 ^[1]	14% decrease vs. 2012 ○	98 ^[1]	2% decrease vs. 2012 ×*1	Overseas affiliates			75 ^[1]	25% decrease vs. 2012 ○	
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Environmental Preservation and Building Nature-Friendly Societies	6 Control/reduction of substances of concern • Promotion of global control	▶ Strengthened management of chemicals contained in products	P26																	
	7 Reduction of VOCs*4 • Substitution of paint, washing thinners • Amounts of these substances were optimized and decreased with new and reconsidered processes	▶ Reduction of substances of concern in production processes	P26																	
		<table border="1"> <thead> <tr> <th></th> <th>Item</th> <th>2020 target</th> <th>2016 Achievements</th> <th>Rating^[2]</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Japan, consolidated</td> <td rowspan="2">VOC emissions per sales unit</td> <td rowspan="2">6% decrease vs. 2012</td> <td>80^[1]</td> <td>20% decrease vs. 2012 ○</td> </tr> <tr> <td>93^[1]</td> <td>7% decrease vs. 2012 ○</td> </tr> </tbody> </table>		Item	2020 target	2016 Achievements	Rating ^[2]	Japan, consolidated	VOC emissions per sales unit	6% decrease vs. 2012	80 ^[1]	20% decrease vs. 2012 ○	93 ^[1]	7% decrease vs. 2012 ○						
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				93 ^[1]	7% decrease vs. 2012 ○															
	8 Reduction of exhaust gases • Adoption of low exhaust vehicles	▶ Vehicles with lower NO _x and SO _x are adopted when vehicles need to be replaced	—																	
	9 Nature-friendly activities with ties to the community • Activities in conjunction with all of Toyota, government agencies, and NPOs • Expansion in the area of natural organism growth in the Toyoda Gosei Group (plant afforestation, biotopes)	▶ Cleaning of Fujimae tidal flats, tree planting at Millennium Hope Hills ▶ Plant afforestation activities at sites worldwide ▶ Biotope creation using a regulating pond at the Heiwacho Plant	— P27 P27																	
	10 Environmental contributions to the community • Contributing to local communities through environmental activities including leading-edge eco plants (Education for local residents, children, others)	▶ Contributing to the creation of livable communities	P46																	
	11 Social contribution activities and support for related projects • Community beautification with a global cleanup • Support for related projects (Toyota Shirakawa-Go Eco-Institute, Japan Business and Biodiversity Partnership)	▶ Contributing to the creation of livable communities	P46																	
	12 Contributions to environmental policy • Contributions to environmental policy and reductions of affiliated organizations (Japan Auto Parts Industries Association, Japan Rubber Manufacturers Association, others)	▶ Participation in the environmental policy of the Japan Auto Parts Industries Association, Japan Rubber Manufacturers Association, others	—																	
Environmental Management	13 Consolidated environmental management • Enhancement of consolidated environmental management activities globally • Strengthened compliance management • Activities to reduce environmental impacts	▶ Environmental activities ▶ Maintenance of environmental management systems with international affiliates ▶ Environmental audits ▶ Strengthened control with compliance/environmental "no defects/complaints" activities ▶ Proper disposal and storage of devices containing PCBs ▶ Soil/groundwater preservation	P28 P28 P29 P29 P29 P29																	
	14 Coordinated environmental activities with business partners • Enhanced activities in coordination with materials and parts suppliers • Enhanced control of substances of concern included in parts, raw materials, and production equipment supplied to Toyoda Gosei • Compliance with environmental regulations at suppliers and requests for voluntary activities to improve environmental performance	▶ Green procurement	P45																	
	15 Stronger employee training and education activities globally • Activities to raise employees' environmental awareness • Systematic environmental education • Environment Month activities spread globally • Information and education through in-house newsletters and other activities	▶ Environmental training ▶ Environmental education	P30 P30																	
	16 Active disclosure of environmental information and enhanced communication activities • Enhanced provision of product environmental technology • Continued publication and enhanced content of the Toyoda Gosei Report (once/year) • Enhanced environmental communication activities • Information disclosure to assessment organizations whenever possible	▶ Issuance of Toyoda Gosei Report 2016	—																	

* 4 VOC : Volatile organic compounds

Environmental data is available on our website. For CO₂ emissions we received third-party verification. <http://www.toyoda-gosei.co.jp/csr/>

Building Low-Carbon Societies

Reducing CO₂ emissions by making lighter weight parts for better automobile fuel efficiency, raising productivity, and creating more efficient logistics.

Reducing CO₂ emissions

Lighter weight products for better automobile fuel efficiency

In FY2014 we began a working group to make lighter weight products. In FY2015 we established a Product Weight Reduction Project in the Research and Development Headquarters to expand and strengthen the activities of this working group. In FY2016 we focused on balancing lighter weight with high functionality. Reducing product weight contributes to lower CO₂ emissions, but it also raises concerns about noise and vibration. Balancing the two is an issue to be solved with materials

technology, engineering, and production technology. We have set the ambitious target of 20–30% weight reductions in plastic parts in instrument panels and interior and exterior parts and rubber products such as weatherstrips and hoses by FY2020.



Example of energy savings

Development of pad damper to balance lighter weight and vibration control in steering wheels

20% lighter

Toyota Gosei has developed a pad damper that inhibits uncomfortable steering wheel vibration while also contributing to lighter weight vehicles. Previously, steering wheels were fitted with internal steering dampers (weights). This controlled uncomfortable vibration but was counter to weight reduction needs. We therefore devised a structure that gives the airbag module a damping function by adding damping rubber in the horn unit, one of the components in driver-side airbag modules. This enabled us to eliminate the previous steering damper, reduce weight by 20%, and improve damping function fourfold by having the airbag module serve as a damping mass. We plan to extend this approach to similar products.



Reducing CO₂ emissions by reducing energy loss

Higher productivity and reduced energy usage results in lower CO₂ emissions. Toyota Gosei has long worked to uncover and take measures against loss through energy-saving measures and visualization of power usage in production processes. In FY2016 we formed an expert team (in-house ESCO) that began searching for ways to reduce energy usage for further reductions in usage. We started a Production Technology Environment Subcommittee to save energy with new equipment and advance the development of more environmentally-friendly production technology. We have made companywide upgrades to air conditioning equipment installed prior to 2000 for greater efficiency, resulting in a 36% reduction in energy usage. External specialists have conducted energy-saving diagnoses at both domestic and international affiliates and we are

making improvements. We have expanded these efforts with the target of using renewable energy equivalent to 1% of total peak purchased electricity by FY2017, and begun using solar energy at Toyota Gosei (Foshan) Auto Parts Co., Ltd. and Tianjin Toyota Gosei Co., Ltd. in China. We are also taking appropriate measures for Scope 1*¹ and Scope 2,*² which require environmental management such as set forth in the Energy Saving Law in Japan, and disclosing relevant data for Scope 3.*³

- *1 Scope 1: Volume of greenhouse gases directly emitted by corporations themselves (fossil fuel, natural gas, etc.)
- *2 Scope 2: Volume of greenhouse gases indirectly emitted (electric power, etc.)
- *3 Scope 3: Volume of greenhouse gases indirectly emitted by corporations in their supply chains (production, transportation, business trips, commuting, etc.)

Percent decrease in CO₂ emissions per sales unit FY2016 (Compared against FY2012)

Global, consolidated Japan, consolidated** Toyoda Gosei Co., Ltd.**

4% decrease **13% decrease** **2% increase**

Percent decrease in CO₂ emissions FY2016 (Compared against FY2012)

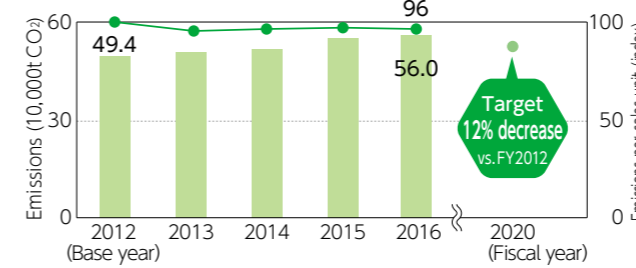
Toyoda Gosei Co., Ltd.**

7% decrease

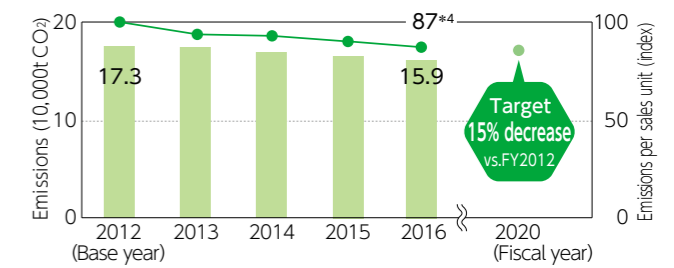
*4 We have set individual targets for each year to achieve the FY2020 targets, but we did not reach the target for FY2016. In FY2017 we are trying to achieve further reductions tracking fluctuations in sales.

CO₂ emissions, CO₂ emissions per sales unit (index)*⁵

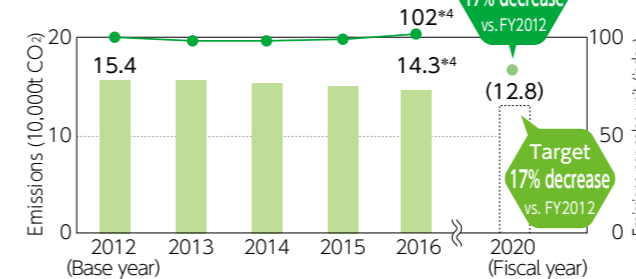
Global, consolidated



Japan, consolidated



Toyoda Gosei Co., Ltd.



*5 Emissions per sales unit (index) is a figure obtained taking FY2012 as 100

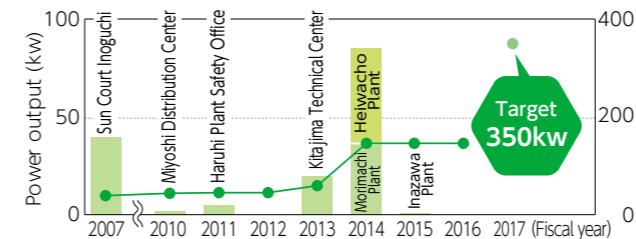
CO₂ conversion factor

The CO₂ conversion factors used for Japan*⁶ are the 1990 Keidanren factors. The CO₂ conversion factors used for other countries are from the GHG Protocol (2001).

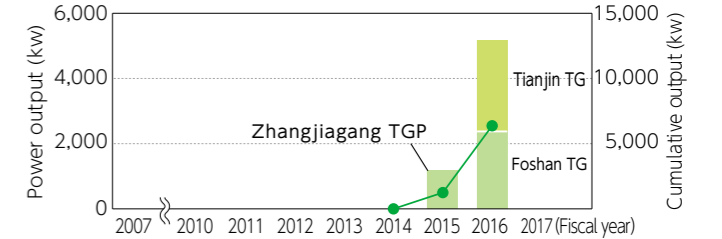
*6 Electricity: 0.3707t-CO₂/MWh, class A fuel oil: 2.69577t-CO₂/kL, LPG: 3.00397 t-CO₂/t, town gas: 2.1570 t-CO₂/1,000 Nm³, kerosene: 2.53155 t-CO₂/kL, LNG: 2.68682 t-CO₂/t, gasoline: 2.36063 t-CO₂/kL (excluding external factors of gas companies' town gas heat conversion)

Solar power generation graph

Japan



Other countries

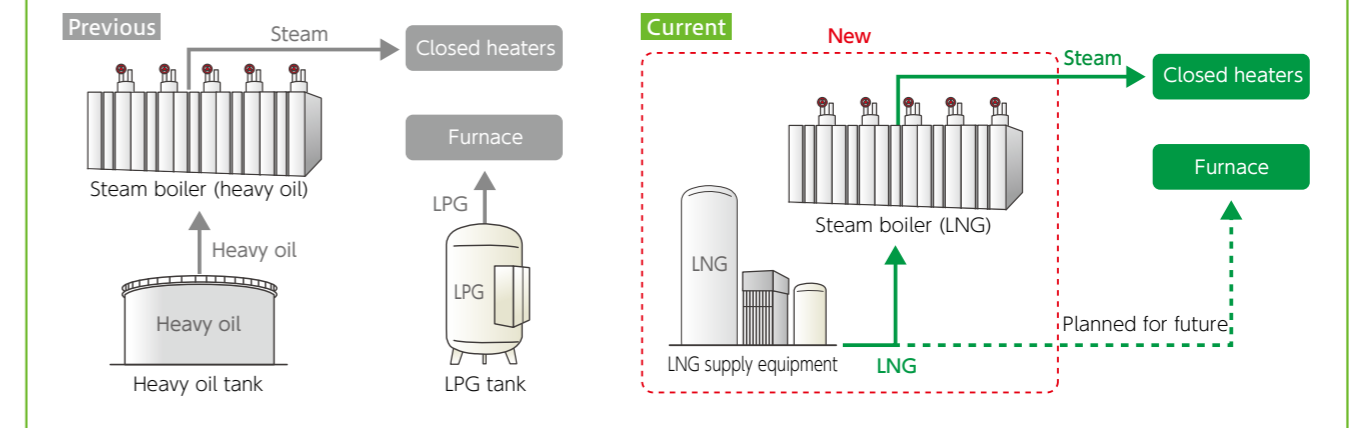


Examples of energy savings

Boiler fuel switched from fuel oil to LNG **2,000t-CO₂/year reduction**

Liquefied natural gas (LNG) was introduced at the Morimachi Plant and the boiler fuel was switched from fuel oil to LNG, saving 2,000 t of CO₂ annually. The steam that has been used in production processes to date was generated in boilers that used heavy oil as fuel, but this was converted to LNG. With

this change CO₂ emissions have been greatly reduced. It has also led to reductions in sulfur oxides (SOx) and nitrous oxides (NOx), which are causes of environmental pollution. A switch to LNG from the liquefied petroleum gas (LPG) used in production process furnaces is also planned.

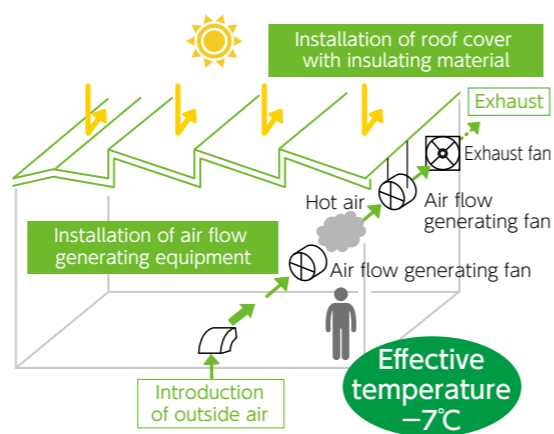


Examples of energy savings

Heat measures for 2nd floor of Building 3, Morimachi Plant

Heat measures taken for the second floor of Building 3 at the Morimachi Plant lowered the summertime room temperature by 7 °C. This floor has a lot of equipment that generates heat, which combined with the sunlight on the roof made the increased temperature in summer an issue. Fans were installed to discharge the heat that accumulated in the upper air layer and to generate air flows in the lower layer (below human height) to circulate air. A roof cover with insulating material was also installed to lower the room temperature, cutting the energy used for air conditioning 30%. The improved work environment also contributed to productivity. Next up are plans to do the same thing for the second floor of Building 2.

30% reduction in energy usage

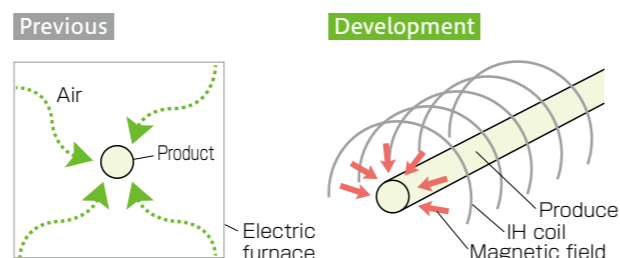


Switch to inflator pressure test with an induction heating system to reduce heating energy

In previous pressure tests for airbag inflators, which are filled with high pressure gas, the inflator was put in a high temperature tank that uses an electric heater. As the tank is heated, the pressure of the gas inside the inflator increases to check its pressure capacity, but this heating took a long time. With adoption into the heating system of induction heating that incorporates new conditions (coil shape, diameter, etc.) that can efficiently and uniformly heat the inflator body, electric furnace heat-up

80% reduction in energy use per inflator

time could be shortened significantly, reducing the energy needed for heating 80%. The equipment is also smaller, so space is also saved.

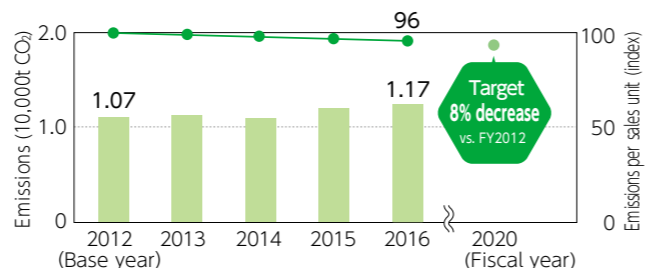


Reducing CO₂ emissions by reducing transportation loss

To reduce CO₂ emissions during transportation, we are improving truck loading efficiency and allocating trucks with the aim of shorter distribution flows. In FY2016, continuing from the previous year, Toyota Gosei Co., Ltd. expanded direct delivery of products from the factory without going through a distribution center. For customers with increasing delivery volumes due to the startup of new products, we obtained consent for direct deliveries from the beginning to reduce transportation loss. We have also worked with quality control departments to increase the number of parts packed in reusable shipping containers where possible to find an optimal number. The result has been a reduction in CO₂ emissions by reducing the total number of reusable shipping containers and the number of truck trips.

CO₂ emissions and CO₂ emissions per sales unit (index)^{*3} in distribution

Toyota Gosei (Scope : Delivery distribution, in-process distribution, procurement distribution)



^{*3} Emissions per sales unit (index) is a figure obtained taking FY2012 as 100

Percent decrease in distribution CO₂ emissions per sale unit FY2016 (Compared against 2012)

Toyota Gosei Co., Ltd.

4% decrease

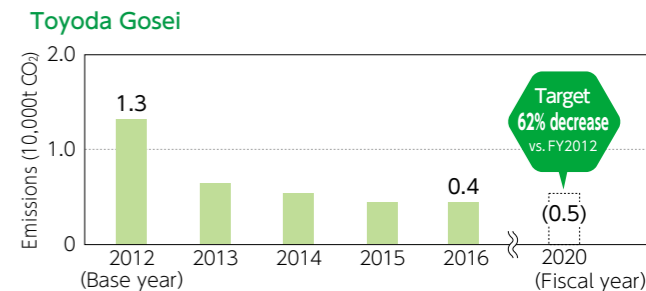
- Three key activities in reducing CO₂ emissions in distribution
 - Increase load efficiency and reduce the number of vehicle trips
 - Change routes and shorten routes with production near customers
 - Explore means of transport with low CO₂ emissions

Reductions in 6 greenhouse gases^{*4}

Activities have continued for the reduction of three greenhouse gases that are used at Toyota Gosei Co., Ltd. Substitution of both the cleaning gas used in LED chip production and the shield gas used in the production of steering wheel core metal was completed by FY2015. The result has been a 67% decrease in greenhouse gases compared with FY2012. We will continue efforts for further reductions.

Percent decrease in greenhouse gas emissions (6 gases) FY2016 (Compared against FY2012) **67% decrease**

Trend in greenhouse gas (6 gases) emissions (CO₂ equivalents)



^{*4} Hydrofluorocarbon (HFC), perfluorocarbon (PFC), sulfur hexafluoride (SF₆), methane (CH₄), nitrous oxide (N₂O), nitrogen trifluoride (NF₃)

Environmentally-friendly LEDs

Development and spread of LED products

The focus in LED products for many years was development of highly efficient LEDs, but in FY2014 we began putting more emphasis on attractiveness. We recently developed a sunlight LED, in which we sought natural color close to that of sunlight that show things such as human skin and commercial products more naturally and beautifully. We attempted to improve the quality of light, moving from simple visibility to light that is beautiful.

To promote the spread of LEDs, we have participated in lighting exhibitions and events in many countries to increase the recognition of our LED technology and the attractiveness of our products. In FY2016 we exhibited our LED

products at shows in Thailand, India, and Indonesia, focusing on the ASEAN area where LEDs are expected to come into wider use. This also led to cooperation with a Thai lighting manufacturer.

We have been switching to LED lighting at Toyota Gosei Group companies in the Americas, China and Europe, and will next begin doing this in the ASEAN area as well to contribute to the global environment.

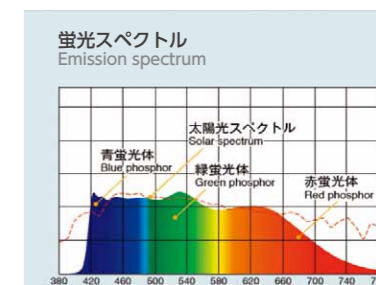
At Toyota Gosei Co., Ltd. we began switching to LED lighting in 2011, and by 2012 had replaced about 70,000 fluorescent lights with LEDs. In FY2016, we began using LEDs for high-ceiling lights in our Bisai and Haruhi Plants, replacing a total of 2,300 lights with LED lighting.



LED example

Development of LEDs similar to sunlight

Toyota Gosei has developed LEDs with a natural color close to that of sunlight. In FY2016, we focused on sunlight LEDs that have better light quality in addition to brightness and efficiency. By optimally mixing the red, green, and blue phosphors that create color and applying them to a purple LED, we achieved a spectrum close to that of sunlight. A joint evaluation with Chiba University demonstrated that these LEDs were the best at reproducing the way objects look under sunlight. These sunlight LEDs are promising for inspection processes and museums where the way things look is very important, and for hospitals and day care facilities that need a pleasant lighting atmosphere.



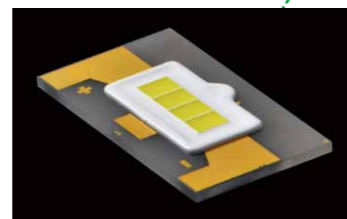
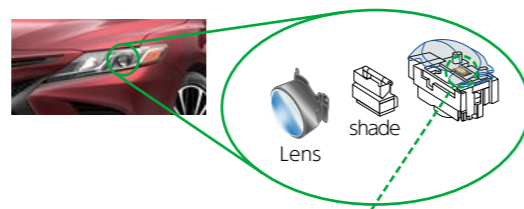
LED example

Development of LED packages for headlamps

A Toyoda Gosei first!

Toyoda Gosei Co., Ltd. has for the first time developed LED packages for headlamps. These products have little color variation and are bright and highly efficient. They consume less than half the energy consumed with halogen headlights. The heat dissipation component of the product could be made smaller by increasing heat dissipation with technology to connect the LED element and substrate with the surface, contributing to smaller overall light size and greater reliability.

We will continue to develop LED packages that are even smaller and more energy efficient, contributing to improved headlamp designability and lighter weight.



Newly developed LED light source of automobiles

Development of LED illumination for cup holders that emit ring-shaped light

Using a single LED light source and ring-shaped light guiding lens, we developed LED illumination that indirectly lights the inside of cup holders. The same luminescent state as in an actual automobile was virtually reproduced with optical analysis of the light, and we used these findings in the design. A uniform ring-shaped light emission was achieved by optimizing the light guide, reflection, and diffusion methods. This increases the convenience of cup holders at night and also contributes to the vehicle cabin mood with a sense of luxury. We will continue working to raise the product appeal of automobile interior lighting.



Building Recycling Societies

We use resources effectively through product design that reduces waste and water usage and makes recycling easier, contributing to a recycling society.

Reduction of waste

Development of product recycling technology

We develop and engineer products and materials that are easily recyclable and develop waste recycling technologies with consideration of the entire lifecycle of automobiles. We have established recycling techniques for products that previously used several kinds of rubber and products that combined rubber and other materials. These recycling efforts were continued in FY2016 for effective use of resources.

Development of technology for end-of-life vehicle parts recycling

Key items	Measures implemented
New recycling	<ul style="list-style-type: none"> Composite material separation technology New recycling technology (high quality material recycling)
Use of recycled materials in vehicles	<ul style="list-style-type: none"> End-of-life vehicle recycling technology Development of applications for recycled materials
Product design for easy recycling	<ul style="list-style-type: none"> Product design for easy dismantling Materials and composition changes for easy recycling

Reduction in waste during production

To reduce waste in production processes, we have been taking measures to combat waste at its source and recycle. In FY2016, reduction activities were conducted based on *genchi-genbutsu* at each plant and item identification by outside experts. The result was less rubber, plastic and liquid waste. Efforts for liquid waste led to a reduction of 5.8% in total discharge. Study sessions were also held to promote waste reduction at both domestic and overseas Group companies.

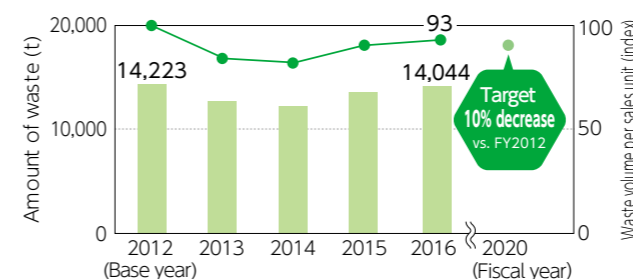
Percent decrease in discarded materials volume per sales unit FY2016 (Compared against FY2012)



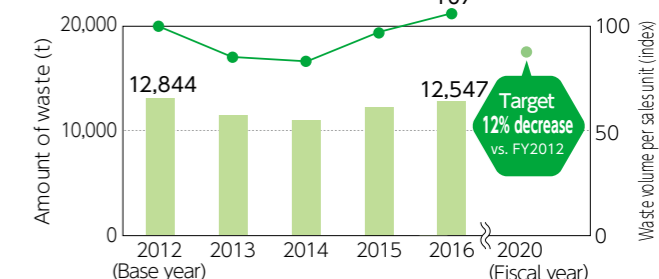
*1 We have set individual targets for each year to achieve the FY2020 targets, but we did not reach the target for FY2016. In FY2017 we are trying to achieve further reductions tracking fluctuations in sales.

Waste volume, waste volume per sales unit (index)*2

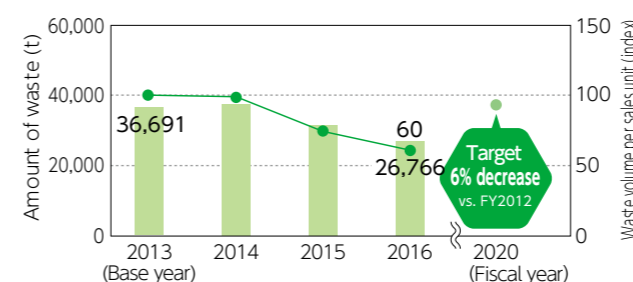
Japan, consolidated



Toyoda Gosei Co., Ltd.

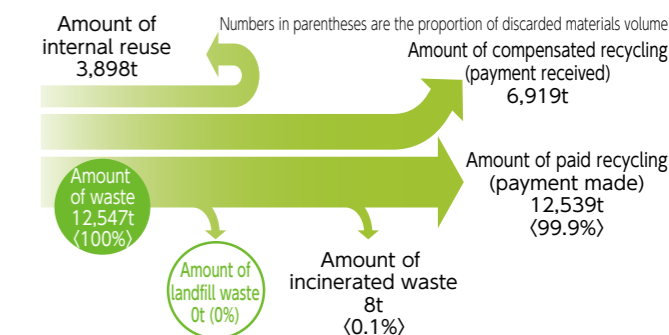


Overseas affiliates



*2 Waste volume per sales unit (index) is a figure obtained taking FY2012 as 100

Amounts of waste generated and disposed of (results for FY2016 : Toyoda Gosei)



Example of waste reduction

Stabilization of mixed compound (rubber) physical properties

Solid material defects were decreased 50% by stabilizing the physical properties of the rubber compounds used in extrusion parts. These compounds are mixed with added chemicals so that they must be used within a certain time. Changes to the physical properties before the use-by date can be inhibited by maintaining a constant room temperature (~20°C) where

compounds are stored. We have reduced defects through measures such as increasing compound storage areas, using air conditioning, and installing fans to circulate the air in production processes so that materials can be supplied to downstream processes while maintaining the same temperature.

Defects reduced **50%**

Training die maintenance personnel at international locations

The product defect rate was decreased 20% by improving the skills of die maintenance personnel. A skill survey of die maintenance personnel at international locations in 2012 revealed inconsistencies between individuals. We opened a dedicated training area in the Nishimizoguchi Plant in 2014 with the aim of developing in-house instructors for various locations. A three-month curriculum was created for the stepwise acquisition of skills. By February 2017, 24 people from 18 overseas locations and three people from two domestic locations had completed this training. Regular maintenance and high-level in-house repair has contributed to prevention of trouble during forming caused by die defects, and to maintaining stable product quality.

Product defects reduced **20%**

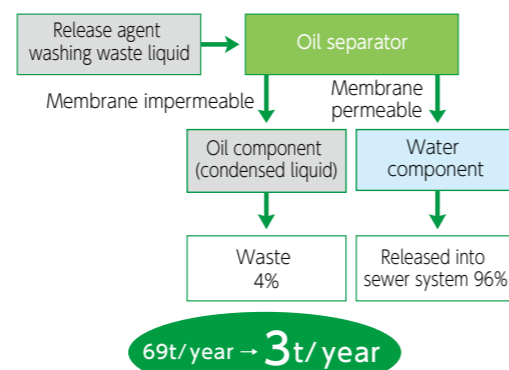


Lower volumes of core metal washing wastewater

Waste water from the washing of release agents*1 in the steering wheel core bar process has been reduced with the introduction of oil separators. This resulted in a 96% decrease in waste material. The waste liquid discharged in this process includes very small amounts of oil, and previously all of this liquid was treated as waste. Now, by filtering this liquid with a membrane that allows water but not oil to pass, oil and water are separated based on the properties of the waste liquid. As a result, only the oil that does not pass through the membrane needs to be treated as waste.

*1 Chemical agents used to smoothly remove products from dies.

Waste reduced **96%**



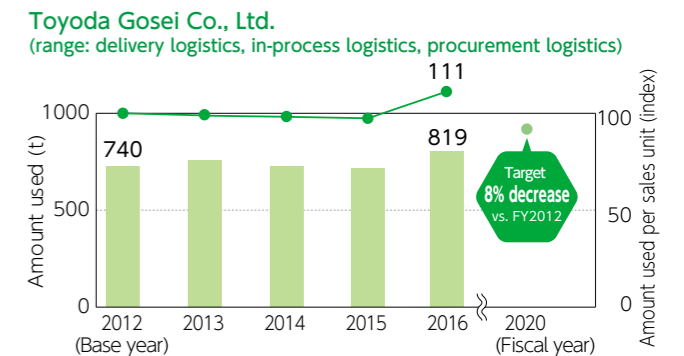
Reduction in product packing material during distribution

Annual reduction targets are set for the amount of packing material used during product transport, and we continue to make improvements. In FY2016, we raised the utilization rate of washing machines for reusable containers to keep these containers clean. This reduced the use of packing materials to protect products from getting dirty. We were also able to reduce the number of containers themselves by increasing the packing density in reusable containers (see p.20), leading to reductions in packing material. We will continue *kaizen* activities that aim to both maintain product quality and reduce waste.

Percentage decrease in the amount of distribution packing material used per sales unit **11% increase** Toyoda Gosei Co., Ltd.*2
FY2016 (Compared against 2012)

*2 Shipping of spare parts increased with the effects of disaster, and the amount of packing material increased.

Amount of distribution packing material used/Amount used per sales unit (index)*2



*3 Amount used per sales unit (index) is a figure obtained taking FY2012 as 100

Decreased water usage and effective utilization

Aggressive efforts are being made to identify loss and make improvements in order to reduce water usage volumes. One such effort was to review the rubber material cooling method in the Haruhi Plant. By installing freezers, we are able to reuse water that was previously discarded, reducing water consumption.

We will continue these efforts with a renewed awareness of the importance of water.

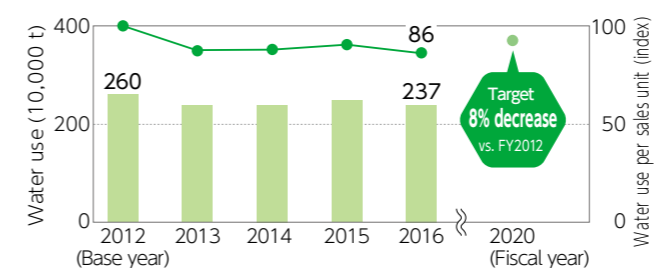
Percent decrease in water usage volume per sales unit FY2016 (Compared against FY2012)

Japan, consolidated **14% decrease** Toyoda Gosei Co., Ltd.*4 **2% decrease** Overseas affiliates **25% decrease**

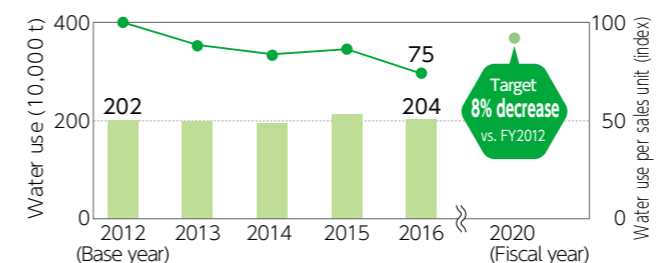
*4 We have set individual targets for each year to achieve the FY2020 targets, but we did not reach the target for FY2016. In FY2017 we are trying to achieve further reductions tracking fluctuations in sales.

Water use and water use per sales unit (index)*5

Japan, consolidated

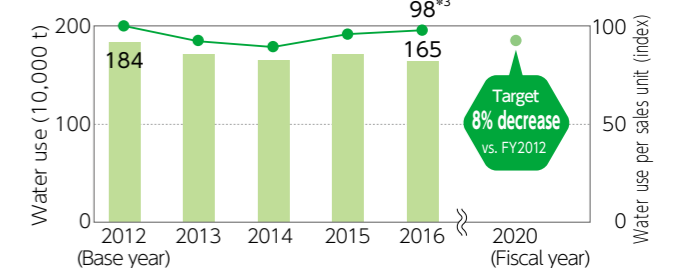


Overseas affiliates



*5 Water use per sales unit (index) is a figure obtained taking FY2012 as 100

Toyoda Gosei Co., Ltd.



Environmental Preservation and Building Environmentally-Friendly Societies

Together with efforts for environmental preservation, we recognize the importance of environmental protection and biodiversity and are working to build a society that lives in harmony with nature.

Control and reduction of substances of concern

Strengthened control of chemicals contained in products

Regulations on chemical substances that impact the environment are becoming stricter each year. One example is the European REACH*1 regulations on the safe use, handling, and application of chemical substances. An increasing number of countries are also establishing new regulations, and automakers are stiffening self-imposed regulations.

Toyota Gosei Co., Ltd. manages about 5,500 chemical substances under domestic and overseas regulations, automakers' own self-imposed regulations, and our own in-house regulations.

In FY2016, we monitored the trends in the 2019

European REACH regulations and EU RoHS*4 Directive so that we will be able to respond quickly when these laws are amended. To respond to demands from automakers in various countries, an expert team has been organized for global comprehensive management of chemical substances, creating mechanisms and developing systems for use in Japan, China, Thailand, Vietnam, and Indonesia. We will continue introducing such mechanisms and systems where they are not yet in place.

*1 Registration, Evaluation, Authorization and Restriction of Chemicals

Chemical substance regulations in each region

Year	~2012	2013	2014	2015	2016	2017	2018	2019	2020
Europe	EU End-of-Life Vehicle (ELV) Directive*2 Annex II revision*3 EU Restriction of Hazardous Substances (RoHS)*4 Directive revision EU REACH regulations	54 additional SVHC 13 additional SVHC	7 additional SVHC 6 additional SVHC	7 additional SVHC 4 additional SVHC	6 additional SVHC 2 additional SVHC	4 additional SVHC			
	14 substances requiring authorization/designation EU CLP Regulation Classification, labeling notification	8 substances requiring authorization/designation	9 substances requiring authorization/designation						
North America	USA EPA Action Plans	Movements for individual state regulations		TSCA revision		Federal law takes priority			
Asia	China / Provisions on Environmental Administration of New Chemical Substances China / Guidelines for Air Quality Assessment in Cars (GB/T)	China / Hazardous Chemical Safety Control Ordinance				China / Air Quality Assessment in Cars revised guidelines			
	China / Compulsory Product Certification regulations	China / ELV management requirement							
	South Korea / Revised ELV and RoHS regulations South Korea / REACH	China / Revised RoHS							
	Taiwan / Toxic Chemical Substance Control Act Japan / Chemical Substances Control Law: Amendment								

*2 Restrictions on the use of substances of concern contained in automobile parts and materials
*3 ELV appendix

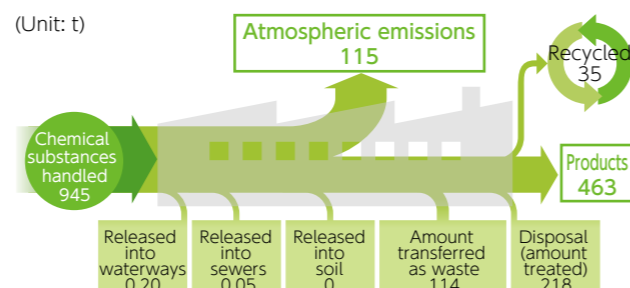
*4 Restrictions on the use of specific hazardous substances contained in electrical and electronic equipment
*5 Substances of high concern

Reduced use of substances of concern in production processes

In production processes, we are switching to water-based paint and release agents, making painting lines more compact, improving coating efficiency, abolishing the acetone that was previously used in washing after LED chip supplier polishing, and reducing substances subject to the Pollutant Release and Transfer Register (PRTR) and volatile organic compounds (VOCs). We are sharing

information on examples of reducing VOCs on site at plants to promote VOC reduction activities.

Volumes and flow of emitted PRTR substances

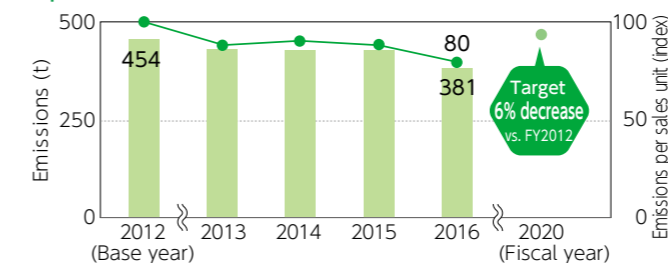


Percent decrease in VOC emissions per sales unit FY2016 (Compared against 2012)

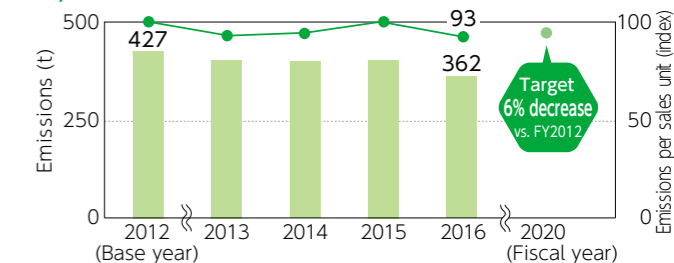
Japan, consolidated: **20% decrease**
Toyota Gosei Co., Ltd.: **7% decrease**

VOC emissions/emissions per sales unit (index)*8

Japan, consolidated



Toyota Gosei Co., Ltd.



*8 Emissions per sales unit (index) is a figure obtained taking FY2012 as 100

Activities for living with nature that build ties with the community

"Plant Afforestation" projects at locations worldwide

Together with local communities, we create environments that coexist with nature. In this program, trees of various species suited to the local environment are planted at high density. They grow through competition, becoming "true woodlands" that are resistant to natural disasters. Employees, their families, and community members participate in the tree planting day and various events conducted on the planting day are organized to foster solidarity among participants. After the tree-planting,

employees continue to manage the planted areas, weeding and recording observations of tree growth. Seedlings grown from seeds in the company are used in planting events. In FY2016, trees were planted at TG Minto Corp. and the Nishimizoguchi Plant in Japan, bringing the total over eight years to approximately 290,000 trees in 25 locations worldwide.

No. of trees (cumulative) (2009-2016)
Approx. 290,000

State of growth



Heiwacho Plant / Japan
November 2009 tree planting



Heiwacho Plant / Japan
May 2016

Tree planting events



TG Minto Corp. / Canada
Tree planting September 2016



Nishimizoguchi Plant / Japan
Tree planting May 2016

Biotope creation using Heiwacho Plant regulating pond

Based on the idea of raising environmental awareness through activities to protect nearby nature and creatures in the local environment, the Miwa Technical Center established a biotope pond in one corner of the plant grounds in FY2014. In FY2015, the Toyota Gosei Group formulated biodiversity guidelines, which are important in conducting nature-friendly activities. Activities are also conducted in conjunction with Toyota Group, government agencies and NPOs. One is the creation of biotopes using factory regulating ponds. Biotope creation began with a survey of the ecosystem around the Heiwacho Plant, and ultimately we are looking to spread this activity to

other companies and plants.

As advance preparation, the current regulating pond was surveyed. Non-native plants were exterminated and fragrant eupatorium were grown to inhibit the propagation of non-native species. Further biological surveys and area development will be done in coordination with the Toyota Group and the Bisai Seibu Ecosystem Network Council.*9

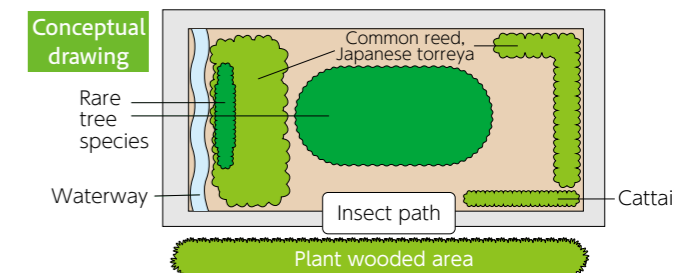
*9 One of nine councils in Aichi Prefecture, established in November 2016. It consists of 45 NPOs, schools and other organizations in western Bisai, and is active in forming ecosystem networks in the western Bisai region.



Elimination of non-native species



Waterway after dredging



Environmental Management

We have ongoing employee training and education programs for environmental preservation.

Strengthening coordinated environmental management

Environmental activities

The entire Toyoda Gosei Group pursues environmental management. We began collecting environmental data from Japanese affiliates in 2001 and from international affiliates in 2003. Based on that data (CO₂ emissions, waste

volumes, water usage volumes, VOC emissions), we set annual targets and carry out reduction activities. In FY2016, Group companies collaborated strongly in conducting these activities.

Production sites targeted for environmental activities

<ul style="list-style-type: none"> ● Haruhi Plant ● Nishimizoguchi Plant ● Seto Plant ● Inazawa Plant ● Bisai Plant ● Kitakyushu Plant 	<ul style="list-style-type: none"> ● Saga Plant ● Morimachi Plant ● Heiwacho Plant ● Kanagawa Plant ● Fukuoka Plant 	<ul style="list-style-type: none"> ■ North America Regional headquarters: Toyoda Gosei North America Corp. ● TG Missouri Corporation ● TG Kentucky, LLC ● TG Automotive Sealing Kentucky, LLC ● TG Fluid Systems USA Corporation ● Toyoda Gosei Texas, LLC ● Waterville TG Inc. ● TG Minto Corporation ● TAPEX Mexicana S.A. de C.V. ● Toyoda Gosei Automotive Sealing Mexico S.A. de C.V. ● GDBR Industria e Comercio de Componentes Quimicos e de Borracha Ltda. 	<ul style="list-style-type: none"> ● Toyoda Gosei South India Pvt. Ltd. ● P. T. Toyoda Gosei Safety Systems Indonesia ● Toyoda Gosei Minda India Private Limited ● Fong Yue Co., Ltd. ● Toyoda Gosei Australia Pty. Ltd.
<ul style="list-style-type: none"> ● Ichiei Kogyo Co., Ltd. ● Hinode Gomu Kogyo Co., Ltd. ● Hoshin Gosei Co., Ltd. ● Toyoda Gosei Interior Manufacturing Co., Ltd. ● Kaiyo Gomu Co., Ltd. ● TG Opseed Co., Ltd. ● TGAP Co., Ltd. ● TS Opto Co., Ltd. ● TG East Japan Co., Ltd. 	<ul style="list-style-type: none"> ■ Overseas Affiliates ● Asia and Oceania Regional headquarters: Toyoda Gosei Asia Co., Ltd. ● Toyoda Gosei (Thailand) Co., Ltd. ● Toyoda Gosei Rubber (Thailand) Co., Ltd. ● Toyoda Gosei Haiphong Co., Ltd. 	<ul style="list-style-type: none"> ■ China Regional headquarters: Toyoda Gosei (Shanghai) Co., Ltd. ● Tianjin Toyoda Gosei Co., Ltd. ● Tianjin Star Light Rubber and Plastic Co., Ltd. ● Toyoda Gosei (Zhangjiagang) Co., Ltd. ● Toyoda Gosei (Zhangjiagang) Plastic Parts Co., Ltd. ● Toyoda Gosei (Foshan) Rubber Parts Co., Ltd. ● Toyoda Gosei (Foshan) Auto Parts Co., Ltd. ● Toyoda Gosei (Tianjin) Precise Plastic Co., Ltd. 	<ul style="list-style-type: none"> ■ Europe and Africa ● Toyoda Gosei UK Ltd. ● Toyoda Gosei Czech, s.r.o. ● Toyoda Gosei South Africa (Pty) Ltd.

● Acquired ISO 14001 certification. New companies and main plants aim to acquire ISO 14001 within three years of starting operation

Establishment of environmental management system for overseas affiliates

Environmental oversight bodies for stricter environmental management were established in the Chinese region in 2010, the remaining Asian region in 2014, and in North America in 2015.

In FY2016, the different regional environmental headquarters were gathered for a mini-summit. Information is also shared through regular teleconferences to enhance coordination.

First environmental mini-summit held

An environmental mini-summit was held at the Kitajima Technical Center and Inazawa Plant in Japan in November 2016. The participants were about 20 people from regional headquarters Toyoda Gosei North America Corp. and Toyoda Gosei Asia Co., Ltd., and Toyoda Gosei Czech, s.r.o representing European locations. To strengthen global management in order to achieve the targets of the 6th Environmental Action Plan and the TG 2050 Environmental Challenge, participants reconfirmed and deepened their understanding of the need for environmental activities and the roles of regional

environmental headquarters. Good examples from various locations were also shared and a plant tour (Inazawa Plant) was held to show examples of decreasing the environmental burden.



Sharing good examples at each location

Site tour showing examples of reduction (Inazawa Plant)

Environmental audits

Audits are conducted to assess whether environmental management systems are properly run

ISO 14001 environmental audit

Internal environmental audits are carried out by audit teams composed of members from business areas outside those being audited in order to raise the independence and objectivity of the audits. Toyoda Gosei Co., Ltd. commissions external reviews by the Japan Quality Assurance Organization (JQA) to assess whether our environmental management systems are run properly in accordance with ISO14001. In 2016 these external environmental audits again found no issues at Toyoda Gosei Co., Ltd. or affiliates in Japan.



External environmental review / Morimachi Plant



Internal environmental audit / Ogawa Industry Co., Ltd.

Overseas environmental audit

Environmental audits were performed and improvements were made from FY2014 to FY2015 at international locations.

In FY2016, voluntary inspections were made at each overseas location and on-site environmental audits were made by international regional environmental headquarters.



Activities to eliminate compliance and environmental violations and complaints

Environmental inspections are made at all of our offices each year for maintenance and management. We also analyze problems that occur at other companies, inspect similar facilities, and take preventive measures at both domestic and international affiliates to make sure that we do not

experience similar problems. In FY2016 inspections were performed by plant general managers and the Environment Division General Manager. Wastewater facilities were a special focus in these inspections, and preventive measures were taken.

Proper disposal and storage of equipment containing PCBs

Law mandates that toxic and persistent polychlorinated biphenyls (PCBs) must be treated by March 2027. Toyoda Gosei Co., Ltd. began outsourcing this treatment in FY2006, and by FY2016 PCB waste from 834 transformers and capacitors had been treated. Treatment of high-concentration PCB waste (725 mercury lamp ballasts and other equipment, 1.6t) was completed in July 2016. This completed the treatment of all high-



PCB treatment

concentration PCB waste at the company. We are continuing efforts to systematically treat low-concentration PCB waste that has not yet been treated.

Category	Type	No. of units treated	Treated weight
High concentration PCB waste material (PCB levels: >5,000 mg/kg)	Ballast, power capacitors, etc.	795 units	6.8 t
Low concentration PCB waste material (PCB levels: 0.5-5,000 mg/kg)	Transformers, power capacitors, etc.	39 units	60.1 t

Soil and ground water conservation

We carefully monitor and treat soil and groundwater contamination from toxic substances such as trichloroethylene, which was formerly used as a cleaning agent. We have established observation wells at each plant, and regularly confirm that there is no soil or groundwater pollution from toxic substances and oils.

Location	Target	Status of corrective measures
Haruhi Plant	Groundwater	Purification in progress (proactive treatment, as contamination from off-site sources is possible)
Inazawa Plant	Groundwater	Because substances we have no history of using have been detected, regular reports to the government contain results of measurements only * Results below reference values since 2010 (government reports concluded in FY2012)

Enhancement of global employee training and education

Environmental education

Toyoda Gosei educates employees on environmental problems including the destruction of nature and environmental pollution, the impacts on the environment of production activities, and compliance with environmental regulations. The

content each year emphasizes understanding and practices based on legal trends, with examples incorporated to create specific and understandable teaching materials.

Environmental education system

Level-specific training

Toyoda Gosei	Affiliate Companies	
	Japan	Overseas
Education for new managers		
Education for those posted overseas		
Education for environmental key persons		
Acquisition of environmental education qualifications		
Education for new employees		

ISO Education

Toyoda Gosei	Affiliate Companies	
	Japan	Overseas
Education for environmental staff		
Education to improve internal auditors' skills		
Education to register internal auditors		
Education for supervising managers		
Education for key environmental facility workers		
Education for general workers		

Education to improve skills of environmental staff

In FY2016, environmental staff from affiliated companies in Japan and other countries were educated on the trends in environmental activities in the world and the content of environmental efforts.

In July 2016, training of local staff was conducted for Toyoda Gosei Asia Co., Ltd., Toyoda Gosei (Thailand) Co., Ltd. and Toyoda Gosei Rubber (Thailand) Co., Ltd. The focus was on raising knowledge related to environmental management work and reducing environmental impacts. Examples were also shared.

Additionally, experts in CO₂ reduction and ISO taught environmental managers from Toyoda Gosei

(Shanghai) Co., Ltd. in August and from Toyoda Gosei North America Corp. in November. In Japan, environmental education was conducted for environmental staff of TG East Japan Co., Ltd. We will continue environmental education centered on staff of regional environmental headquarters.



On-site tour of waste management (Morimachi Plant)

Environmental education activities

Toyoda Gosei conducts mainly participation-based environmental activities to help employees maintain an environmental awareness that can be translated into action.

Educational programs for Environment Month

During Environment Month in June of 2016, we conducted educational activities using posters and in-house bulletins. At the same time, we sought imaginative and original proposals from employees to improve environmental friendliness and gave awards for outstanding improvements. In July we held an "Energy-Saving Exhibition" to show efforts to save energy and reduce waste. The latest items were introduced with environmental improvement activities from inside and outside the company and the help of specialists. Toyoda Gosei Co., Ltd. and affiliates in Japan also conducted on-site "environmental management inspections."



Environmental exhibition



Internal bulletin

Environmental awareness survey

Toyoda Gosei Co., Ltd. conducted its first environmental awareness survey of all employees in Japan. A questionnaire on awareness of environmental trends and Toyoda Gosei's environmental activities found that even though environmental awareness was high, recognition of the company's environmental activities was low. It

was also found that the environmental awareness of employees tended not to be tied to practice. Based on the survey results, we will make more active approaches to general employees and implement measures that will lead to concrete environmental activities. The survey will also be expanded globally.

Environmental contribution awards

Our "Environmental Contribution Award" system promotes environmental awareness and activities, awarding prizes for the most significant results to companies and departments in three divisions: Toyoda Gosei Co., Ltd. plants/offices, production preparation departments, and domestic affiliates.

In 2016, the award in the plant/office division was given to the Nishimizoguchi Plant for visualization of peak electricity and achieving targets for reducing environmental impacts. The award in the production preparation category was

given to the FC Production Engineering Division for innovative techniques and product planning and engineering that effectively reduced environmental impacts in mass-produced products. Among domestic affiliates, Ichie Kogyo Co., Ltd. was awarded for achieving environmental impact reduction targets with companywide environmental activities, while Hoshin Gosei Co., Ltd. was awarded for reviewing contracts with the electric power liberalization and actively pursuing CO₂ reductions utilizing power companies.

Environmental forum

An "Environmental Forum" was held in February 2017 with the aim of raising employees' environmental awareness. Results of the environmental awareness survey were reported and the need for activities to reach environmental targets was emphasized. To raise environmental awareness, a presentation entitled "Trends in expanding renewable energy to achieve a low-carbon society" was given by the president of the Institute of Energy Strategy. A talk was also given by *rakugo* performer Unpei Hayashiya on simple ways to solve environmental problems today from Edo era environmental recycling.



Environmental forum



Rakugo performer Unpei Hayashiya

Green curtains

Goya (bitter melon) and cucumber plants are grown each summer to create "green curtains" that cover the south sides of buildings. The purpose is to both raise employees' environmental awareness and reduce summer energy use. In FY2016, we again held a "Green Curtain Contest" for the best green curtains. Entries were received from five companies/11 locations in the "office category," and from 21 people in the "individual category."

Three offices and three individuals received awards. In August the goya and cucumbers from these curtains were prepared for employees to eat and enjoy.

In the "Aichi Green Curtain Contest" sponsored by Aichi Prefecture, the green curtains at our Heiwacho Plant were selected in the "Office Division Excellence Award," and an award was received from Aichi governor Hideaki Omura.



Heiwacho Plant



Receiving an award from Governor Omura (left)



Goya tasting

Environmental Efforts at Affiliated Companies

TG Fluid Systems USA Corporation

Steady efforts to reduce energy consumption and waste and contribute to environmental protection and the community.



TG Fluid Systems USA Corporation (TGFSUS) manufactures plastic fuel and vapor lines. Its primary facility is located in Brighton, Michigan, a suburb of Detroit, with a secondary plant 15 miles away in Howell. TGFSUS also had a third plant that housed the company's testing lab and some assembly equipment, but those processes were incorporated into the primary facility in May 2017.

To reduce CO₂ emissions, TGFSUS reclaims the heat generated from the compressor house and uses it to heat the plant during the cold winter months, reducing CO₂ emissions by 32% in 2016. TGFSUS is also switching to LED lighting from conventional light sources in many areas within the company, cutting CO₂ emissions from lighting by 87%. The plant consolidation mentioned above will improve material flow and allow the company to reduce logistics loss by reviewing truck routes and allocation, and greater adoption of LED lighting in the company will lead to further reductions in power consumption and decreases in CO₂ emissions.

To reduce waste, TGFSUS has worked with its largest supplier to develop and begin using returnable shipping containers made of plastic instead of cardboard boxes, eliminating the use of cardboard shipping boxes. To reduce scrap in production processes, TGFSUS ensures that all levels of the organization understand where scrap is occurring and seeks employee's ideas to correct issues. TGFSUS is working with Toyota Motor North America OMDD (Operations Management Development Division) to create a model production line to increase efficiency, reduce scheduled downtime and reduce defects. These activities led to the receipt of a Quality Performance Award for the third consecutive

year from Toyota Motor Corporation.

June is Environment Month in the Toyoda Gosei Group, when Group companies undertake activities to raise environmental awareness among employees. TGFSUS displayed posters throughout its facilities encouraging recycling and held an electronics recycling contest in which individual employees brought in electronic goods they no longer needed for proper recycling. It also established its own Green Day on June 23, when employees picked up trash in zones around the plant and conducted various other environmental activities.

TGFSUS contributes to the community through support of the Livingston County United Way, an organization that seeks to elevate the quality of life of all community members, and received a Livingston county United Way Corporate Excellence Award for volunteerism and contributions. Over the past several years the nearby city of Flint has experienced a crisis of water supply contamination, and out of concern for the health of employees living there TGFSUS has provided water filtration purifiers that can be attached to home faucets and set up an onsite filtration system for water that employees can take home with them.

TGFSUS's activities were recognized with an Environmental, Health & Safety Global Supplier Award from major customer Kautex in 2016 and a Work Skills Corporation Employer of the Year award for employment opportunities provided to individuals with disabilities.

This social recognition will serve to motivate further environmental and corporate citizenship activities in production and engagement with the local community.



LED lighting



Cleanup activity



Environmental, Health & Safety Global Supplier Award from major customer Kautex

DATA

- ▶ Location : Brighton Michigan
- ▶ Established : February 2000
- ▶ Capital : USD10 million
- ▶ Business activities : Functional Components
- ▶ ISO14001 certification : April 2004
- ▶ ISO/TS16949 : December 2015 (Transitioning to IATF 16949/ISO 9001 expected Sept. 2017)

Toyoda Gosei Interior Manufacturing Co., Ltd.

Balancing environmental preservation and efficiency with wisdom and ingenuity, this company promotes environmental activities in terms of both systems and structures.



Toyoda Gosei Interior Manufacturing Co., Ltd. is a maker of plastic interior and exterior parts for automobiles located east of Nagoya in Togo, Aichi-gun. Near several Toyota Motor Corporation factories, the company is characterized by direct delivery of nearly all products.

It conducts environmental impact reduction activities with the main focuses on reducing CO₂ emissions and waste in production, while also conducting activities to contribute to society.

In reducing CO₂ emissions its efforts have been focused on effective use of production space. Since increases in processes with production increases leads to increased energy use, they have devised tooling so that multiple product types can be run on a single line. By making general purpose lines, the energy used per unit of space is decreased. The factory roof was painted with a thermal barrier coating in FY2015, lowering the temperature inside by about 2°C. In addition, CO₂ emissions have been cut 5% through efforts to control and minimize the number of compressors in operation depending on the load.

To cut waste, they introduced stricter management of dies in FY2016. The establishment of a dedicated maintenance area and planned maintenance based on a chart prepared for each die or mold has enabled preventive maintenance, and reducing sudden defects has cut the amount of waste 30%. When purchasing new dies, they work with the die manufacturer to check

measures for problems that have occurred in past manufacturing in order to create dies with great precision. Through close examination of the intake of dust, a cause of defects in painting processes, and trial and error for thorough cleaning, they achieved a defect rate at the 1% level. Waste has been reduced 2.4%. These activities are done mainly by employees. A cycle is maintained in which employees work out measures to reduce defects and the transition to execution as they raise each other's awareness. They have also set up an information sharing station, where they communicate problems at the start of shifts. These activities are supported by the environmental awareness that reducing defects is linked to environmental preservation.

In the future they will save energy by moving to electric fork lifts and updating transformers, while systematically increasing factory greenery. At the same time, they will work for a good balance, developing mid- and long-term plans for environmental activities and further raising employees' environmental awareness.

The company contributes to the community by cleanup of nearby roads. This is beneficial both in terms of the environment and society. Employees also stand watch for traffic safety on a school route near the company, and perform other activities for the community.



Mixed product line (using rotating tools)



Information sharing station



Cleanup activity

DATA

- ▶ Location : Togo, Aichi-gun, Aichi Prefecture
- ▶ Established : May 1961
- ▶ Capital : 80 million yen
- ▶ Business activities : Manufacture and processing of automotive plastic parts
- ▶ ISO14001 certification : June 2002
- ▶ ISO 9001 certification : August 2004

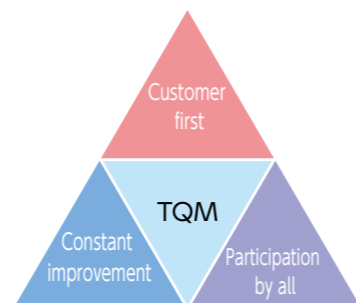
Customer Relations

With priorities on customers and quality, we are working to constantly improve our products and services and our value as a company.

Integrated quality assurance, from development to production

Toyota Gosei ensures quality in all business activities, from development to production, based on our basic quality policy. Every one of our plants has obtained certification in the ISO 9001 (JQA-QM7318/QMA11826/QMA12841) and ISO/TS16949 (JQA-AU124) international standards for quality management systems. Each plant also sets its own quality control goals for production. These goals are based on the principles of Total Quality Management, or TQM—activities designed to enhance the quality of products, work, and management, and increase the dynamism of individuals and organizations, through constant improvement and the participation of all based on the “Customer First” principle. In addition, all Group companies use our Quality System Global Standards, which incorporate quality improvement with rules and know-how to ensure quality.

Fundamental principles of TQM



Monitoring and responding to manufacturing processes and market quality

Defect-free process completion is carried out in production and other processes for parts involved in the basic automotive functions of running, turning, and stopping, as these parts are directly linked to safety. We want the Toyota Gosei name to equal quality in the minds of customers worldwide. For this purpose, we advance quality assurance declaration activities at all production locations. This means that all employees make efforts to improve safety and the people in charge of all manufacturing processes improve quality through the development of people and processes. When a mechanism that can ensure the target quality has been completed and is in place, the manager makes an “assurance declaration” to the president or site manager. The president or site manager then conducts a site inspection. Through “jidoka,” we improve quality by creating processes that do not produce or pass on any defects and developing workers with a high sensitivity to safety and to

avoiding mistakes. We also have full-time auditors who audit and improve processes at all production sites globally.

A system is in place so that whenever a quality problem occurs in the market, we can quickly investigate the causes based on information from automakers and implement prevention measures. When it is difficult to pinpoint the cause of a problem and develop solutions internally, we work with the quality departments of automakers to take precise measures to prevent recurrence based on inspections with test vehicles and other means. In this way we prevent such quality defects from occurring in the next products.



Activities for improving trust in the market

CLOSEUP

Ongoing “Quality Assurance Declaration Activities”

These activities have been conducted since 2012 to improve quality in terms of developing both workers and processes with the aims of cultivating a workplace culture of continuous improvement and building robust shop floors. In FY2016 targets were set for activities from the operators’ perspectives and in accordance with the quality level of each process. Once a target is achieved, the area moves on to the next target in an upward spiral. *Kaizen* is done for work that is difficult to perform and places where quality is inconsistent in each section. When the stage is reached with zero complaints, a declaration of assured quality is made and the executive in charge makes an on-site check of the improvements that have been implemented. The company president or executive in charge shake hands with the supervisor responsible for the manufacturing area to affirm the declaration.



The company president shakes hands with the supervisor who has completed an assurance declaration to express congratulations and affirm continuation of activities.



On-site check by company president

TQM for a stronger, better company

With “Customer First” firmly in mind, we carry out TQM programs globally to raise the quality of products and work to increase individual and organizational dynamism. All employees make continuous improvements from their respective positions. In this way we build stronger, better

corporate structures throughout the Toyota Gosei Group. In FY2016 the first TG Global Small Group Activity Conference was held. Outstanding examples of *kaizen* from TG locations around the world were presented while global TG members studied and learned from each other.

TQM activities at Toyota Gosei

Level	Activities
Managerial	Improving workplace management
Staff	Small group activities Improving statistical quality control (SQC) and quality engineering (QE) capabilities
Line	Small group activities (QC Circles)

Small group activity implementation rate at international locations (FY2016)

78%

(29 of 37 production companies)

CLOSEUP

First “TG Global Small Group Activity Conference” held

The TG Global Small Group Activity Conference was started with the aims of invigorating QC circles and group *kaizen* activities for each workplace in the entire TG Group. Previously presentation conferences were held for each region—Japan, China/Taiwan, Asia, Americas—but for the first global conference executives and employees from a total 13 group companies from Japan, China, Vietnam, India, USA, and the Czech Republic gathered in Japan. About 240 people listened to ten presentations on topics including reducing materials loss and raising productivity in office work. Outstanding examples of activities were shared in the group and participants learned from each other.



Sales activities aligned with customer needs

Toyota Gosei sales and other departments meet the demands of customers around the world, growing sales while building good customer relationships. We collect and analyze data on customers’ needs and the issues they are facing,

and then work with engineering and other relevant departments in the company to present development plans aligned with those needs to provide products that will satisfy them.

CLOSEUP

Global Sales Meeting

Sales executives from Toyota Gosei Co., Ltd. Sales Headquarters and Toyota Gosei Group companies in the Americas, China, Europe, Thailand and India gathered in Japan for a Global Sales Meeting. They shared information on key activities based on issues in each region, and discussed how to move toward greater inter-regional coordination in sales activities for world cars.



Recognition from customers

Our quality improvement efforts have been recognized by global customers.

Quality awards received (FY2016)

Company receiving award	Commending organization	Award
Toyoda Gosei Co., Ltd.	Hino Motors, Ltd.	Quality Management Award
	Suzuki Motor Corporation	Best Partner Award
TG Fluid Systems USA Corporation	Toyota Motor North America, Inc.	Excellent Quality Award
GDBR Industria e Comercio de Componentes Quimicos e de Borracha Ltda.	Toyota Argentina S.A.	Quality, Delivery, Cost Certificate Award
	Honda Automoveis Do Brasil Ltda.	Quality, Delivery Excellent Award
Tai-yue Rubber Industrial Co., Ltd.	Yulon Nissan Motor Co., Ltd.	Superior Manufacturer Award
Tianjin Toyoda Gosei Co., Ltd.	Tianjin FAW Toyota Engine Co., Ltd.	Quality Achievement Award
	FAW Toyota (Changchun) Engine Co., Ltd.	
	Great Wall Motor Co., Ltd.	Quality Improvement Award
Toyoda Gosei (Zhangjiagang) Co., Ltd.	GAC Toyota Motor Co., Ltd.	Quality Excellence Award
Toyoda Gosei (Foshan) Rubber Parts Co., Ltd.	Tianjin FAW Toyota Motor Co., Ltd.	
	Sichuan FAW Toyota Motor Co., Ltd.	
	GAC Toyota Engine Co., Ltd.	
Toyoda Gosei (Foshan) Auto Parts Co., Ltd.	GAC Toyota Motor Co., Ltd.	Quality Cooperation Award
Toyoda Gosei Minda India Pvt. Ltd.	Maruti Suzuki India Ltd.	Improvement in Quality Performance Award
Toyoda Gosei South India Pvt. Ltd.	Toyota Kirloskar Motor Pvt. Ltd.	Appreciation Award for Quality Activities
	Toyota Kirloskar Auto Parts Pvt. Ltd.	Zero Defect Supplies
Minda TG Rubber Pvt. Ltd.	Toyota Kirloskar Motor Pvt. Ltd.	Best Quality Supplier
Toyoda Gosei UK Ltd.	Jaguar Land Rover	Quality Award
Toyoda Gosei South Africa (Pty). Ltd.	Toyota South Africa Motors (Pty) Ltd.	Supplier Superior Award in Quality Management



TG Fluid Systems USA Corporation receives Excellent Quality Performance Award from Toyota Motor North America, Inc.



Toyoda Gosei (Zhangjiagang) Co., Ltd. receives Quality Excellence Award from GAC Toyota Motor Co., Ltd.



Toyoda Gosei South Africa (Pty). Ltd. receives Supplier Superior Award in Quality Management from Toyota South Africa Motors (Pty) Ltd.

Employee Relations

We strive to create secure and inspiring workplaces for employees based on respect for their humanity, with the highest priority on safety.

A global workforce of employees who think and act independently

To raise the collective strength of Toyoda Gosei globally, we are striving to develop people who can contribute to that end and to create workplace environments where each employee can display his or her full abilities.

Three key areas of personnel development



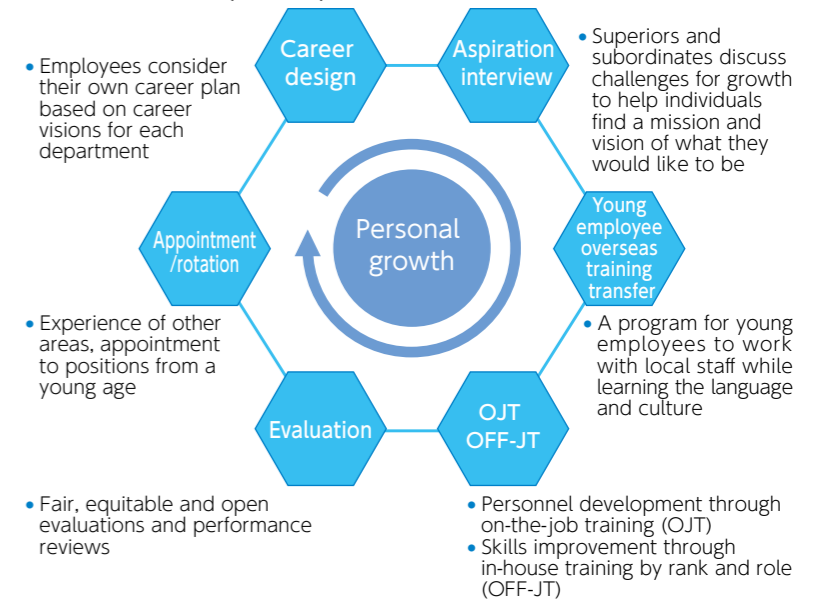
Framework for personnel development that supports growth

In the Toyoda Gosei Group, our personnel management system features aspiration interviews and visualization of mid-and long-term career design for each employee, as well as rotation of young employees so that they experience a wide range of work. We are also enhancing our level-specific and specialty training to give employees opportunities to acquire needed abilities and skills.

Young employee training transfer (FY2016)

17

Personnel development cycle

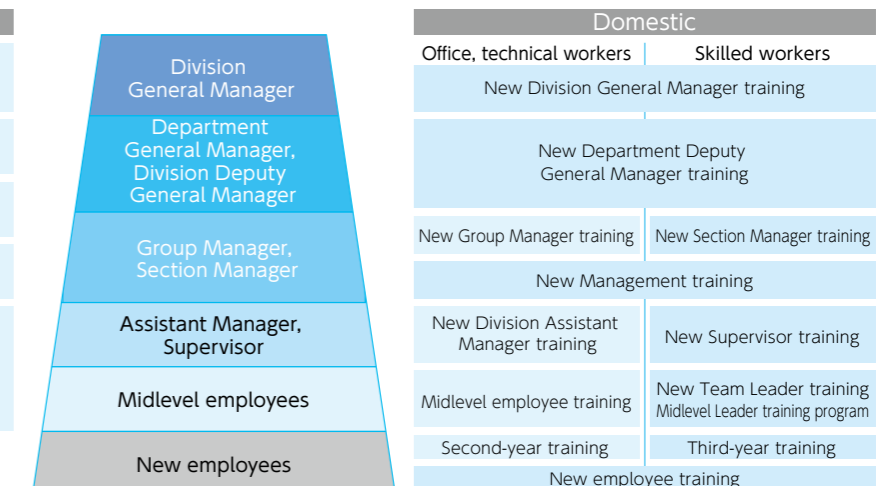


Enhanced training programs, invigorated personnel development

A broad range of efforts based on individual career visions are underway, including measures and study programs in Japan to develop people

who can perform globally and next-generation leaders, and personnel development programs for all global employees.

Level-specific education system



Stepwise support for young people from their start in the working world until becoming leaders of the next generation

New employee education lasts for six months. During this time young people learn the basics of functioning in the working world, their jobs, and practical training on the shop floor. They are provided opportunities to gain the knowledge and

experience needed to perform their work. We also have a “starting off program” until employees’ third year in the company, and a workplace OJT booster system to help them grow and develop from the youth ranks to next-generation leaders.

Improvement of manufacturing techniques and skills

To raise the levels of expertise and skill in technical areas, a company-wide manufacturing technique and skill training program is carried out. We are also working to enhance our manufacturing skills training to improve the abilities required on

the manufacturing floor. Toyoda Gosei Co., Ltd. is also introducing new education and training to improve and transmit the unique skills needed in manufacturing at the company.

Global personnel development

To survive in global competition and grow, we need to cultivate people who can thrive on the global stage. We are endeavoring both to globalize Japanese staff and to develop local staff at international locations. We are advancing

shared education worldwide to educate executives and management level employees at international locations and impart the expert knowledge needed for our work.

CLOSEUP

Enhancing skills education

With the aim of creating strong workplaces that are a source of competitiveness as a manufacturing company, we are enhancing skills training for each employee level and area of specialty on production floors. We are currently holding skills training for about half a year for 57 skilled workers who joined the company in April 2017. After basic manufacturing education including basic shop floor safety (simulations of danger), practical training in die maintenance, fabrication of two-legged walking robots, and disassembling and assembling a bicycle, they then undergo practical training in shop floor manufacturing for 60 days.



Practical training in die maintenance

First Middle Management Training held in Europe

In October 2016, the first middle management training in Europe was held at Toyoda Gosei Czech, s.r.o. Eighteen management level employees from three TG Group companies in Europe participated. The training raised knowledge and skill levels that are essential for managers, including management basics and problem-solving methods. Our aim is to have all managers take this training in all regions of the world by 2020. We will also conduct parallel trainer education in order to continue this training in each region after 2020.



Training culture/TG Czech

Employment

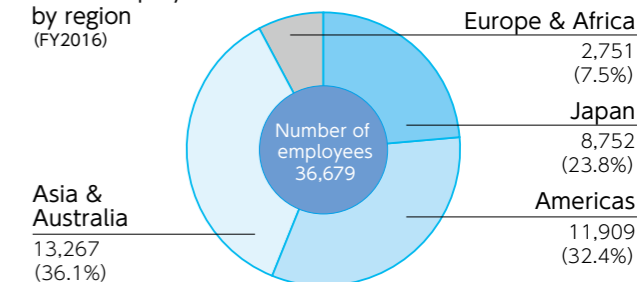
Together with efforts for stable employment, we practice fair and impartial hiring and training with

Toyoda Gosei Co., Ltd. employee composition (FY2016)

	Male	Female	Total
No. of employees	5,803	666	6,469
Average age	42.3 years old	38.7 years old	41.9 years old
Average length of employment	18.5 years	15.1 years	18.1 years

respect for diversity and have strong systems and pleasant working environments for employees.

No. of employees by region (FY2016)



Workplace Management Survey

Through an annual Workplace Management Survey, we try to understand workplace problems and use the survey findings to improve the work climate and strengthen human resources development. These questionnaires are given every year to survey employees’ motivation and their attitudes towards

management and the workplace. Based on the results, we try to systematically improve each division’s weaknesses. Good practices found both inside and outside the company are used to promote improvements and provide support for departments experiencing problems.

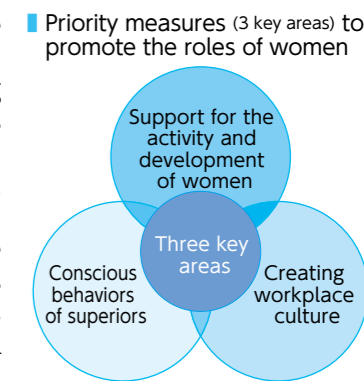
Diversity

Toyoda Gosei is committed to fostering a corporate culture that utilizes the diversity of our employees and enables them to make full use of their individual capabilities, without regard to race, nationality, gender, or age. We have also established a system to enable workers of retirement age or with disabilities to maintain stable employment.

Support for the activity of women

A special organization was established in 2010 to make efforts in the three key areas of (1) support for the activity and development of women, (2) reform of the conscious behaviors of superiors, and (3) creating workplace culture. For example, in a career design forum for female employees attempts are made to raise motivation through exchanges of opinions among participants. In a Conference to Promote the Roles of Women, efforts are made to reform the mutual attitudes of women and superiors, such as introducing specific countermeasures for management issues. These

activities will continue in the future, with the aims of having more than three times the number of women in executive track positions (compared with 2014) and more than 20% female hires for new graduates (office, technical workers).



CLOSEUP

Conference to Promote the Roles of Women

Toyoda Gosei Co., Ltd. held a Conference to Promote the Roles of Women for executive and managerial staff. The aims were to have managerial staff recognize the need for management thinking and efforts to promote the activities of female employees and tie them to attitude and behavioral reform. With a theme of “Management to Promote the Activities of Female Subordinates,” specific workplace examples were introduced and a talk was given by Ms. Tomoko Shibata, career counselor and external instructor in Toyoda Gosei training, as well as representative of JUNO.



Support for work-life balance

Toyoda Gosei Co., Ltd. has systems in place to allow choices in working style with consideration of a work-life balance, and provides support so that employees can work with greater motivation and peace of mind. In addition to things such as Child-Rearing Day and Holiday In-House Childcare, we hold Family-Career Seminars to support the careers of employees who want to work while they are raising children. People who are on or plan to take childcare leave meet to consider their careers after returning to work through presentations by employees who are balancing childcare and work and group discussions. We also provide information on nursing care support



on our company intranet. Toyoda Gosei has been recognized by the Ministry of Health, Labor and Welfare for our various efforts to support the development of the next generation. We will continue our educational efforts to create a workplace environment in which employees feel free to take advantage of our childcare and nursing care support systems.



Holiday day-care



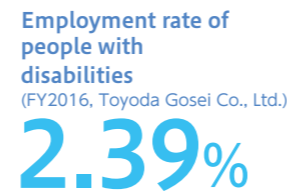
Family-Career Seminar (support for childcare-work balance)

Workplaces that welcome people with disabilities

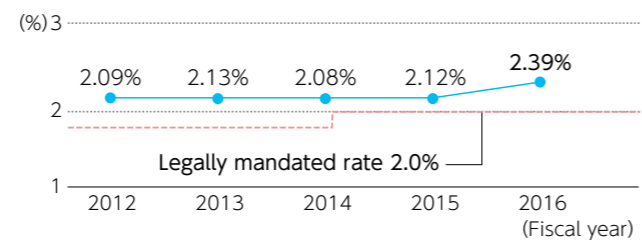
Toyoda Gosei Co., Ltd. actively employs persons with disabilities. The Committee for Employment of People with Disabilities plays a central role in hiring, job assignments, education, establishment of stable positions, and awareness. We place particular emphasis on helping persons with disabilities establish stable positions and improving the work environment with the installation of Braille blocks, elevators, voice guidance, and Carry Dun emergency stair evacuation chairs based on periodic interviews to understand current situations. Work that people with disabilities can perform is identified, and they are systematically hired and placed. In FY2016, 122 people with disabilities were hired (as of January 1, 2017). This was a hiring rate of 2.39%, exceeding our target (legally mandated employment rate ≥2.0%).



Communication with sign language in the workplace



Changes in employment rate for people with disabilities (Toyoda Gosei Co., Ltd.)



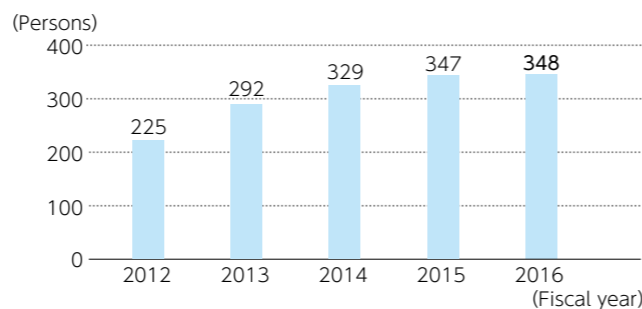
Creation of an environment for stable work after retirement

We have established an environment so that employees can work with assurance after retirement in a post-retirement re-hiring system. Many people can make use of their high levels of skill and experience after they are rehired. A system of reduced working days and working hours supports working styles for a good work-life balance.

Number of people re-hired after retirement (FY2016)



Trend in cumulative number of re-employed retirees



Support for a full second life

So that employees who have worked so hard for the company can enjoy a full second life, we provide compulsory training on asset formation to employees from a young age. Age-matched curricula are provided for employees when they join the company and at age 30, 40, and 55 years, and support is given while enhancing systems that help in systematic asset formation in preparation for life events. Spouses may also participate in the training at 55 years old.

Subscriber premium rate* in defined contribution pension



* The subscriber premium is the premium that can be contributed voluntarily by subscribers themselves on top of the company premium



Support for a full second life

Foster a sense of unity among employees

We are working to create a workplace culture in which employees feel pride and joy

Events are held to deepen workplace unity and ties with families and communities

Toyoda Gosei Co., Ltd. has held companywide *ekiden* races since 2015 with the aim of fostering a sense of unity in the workplace. In 2016 about 400 runners were cheered on by around 1,000 workplace colleagues and family members. While teams wanted a good placement, more than anything their participation raised workplace cohesiveness and communication, and after reaching the goal they were all smiles.



Second companywide ekiden race

The TG Festival and Morimachi Noryo Festival are also held to deepen family bonds and exchanges with the company.

Toyoda Gosei Co., Ltd. owes much to employees' families and the understanding and cooperation of people in the community, and we hold these events with feelings of gratitude and a spirit of hospitality.



TG Festival

Toyoda Gosei Co., Ltd.'s strong sports teams

Toyoda Gosei Co., Ltd. has about 18 culture and athletic clubs for lively activities. Among them, the following three teams are particularly strong. We even have athletes aiming for the 2020 Tokyo Olympics. Toyoda Gosei athletes volunteer to visit local junior high schools and contribute to nurturing young children.



Volleyball team

Main sports team results

"Trefuerza" volleyball team	December 2015 Emperor's Cup champions
	March 2016 V.League champions
	December 2016 Emperor's Cup runner up
"Blue Falcon" handball team	March 2016 Japan league, fifth place
	September 2016 All Japan Non-professional Championship, fifth place
"Scorpions" basketball team	November 2016 Playing in B League B3



Handball team



Basketball team

■ Maintaining and improving mental and physical health

Toyoda Gosei implements measures to maintain and promote employees' mental and physical health.

■ Health education system

General managers	Div. leaders & assist. div. leaders	Group leaders	Team leaders	Section leaders	General employees
Milestone age (35, 45 years old) health education/locomotive syndrome prevention seminar					
Mental health education for management directors					
	Mental health leader education				
Mental health (follow-up) education					

Advance prevention and early detection of mental health disorders

Toyoda Gosei Co., Ltd. provides regular mental health education for workers of each level, with emphasis on managers and supervisors to encourage management with a view to mental health in the workplace and smooth communication. A mental health bulletin is also distributed to all workers once a month to improve self-care abilities. In each place of

business, counseling is provided by in-house occupational health nurses, medical nurses and external counselors to maintain and promote mental health. The decrease in the number of people seeking counseling is evidence of its steady effect.

In 2016, stress checks were conducted for all employees in accordance with revised law.

Enhanced health maintenance and promotion activities

Toyoda Gosei Co., Ltd. has long conducted health education for people at milestone ages and posted various educational materials to prevent lifestyle-related diseases. In 2016 we enhanced these health activities based on the thinking that the mental and physical health of all employees is essential for sustainable growth of the company. New activities include inviting external speakers to provide opportunities for employees to understand and think about health, and holding health and smoking cessation lecture meetings for executives and managers.

Measures to encourage actual healthy behaviors and not just the acquisition of knowledge include health activities in individual workplaces and the prohibition of smoking during

designated working hours.

These activities and other efforts to consider employee health management from the perspective of company operation were recognized in February 2017 with certification as an "Outstanding Health Management Corporation—White 500" by the Ministry of Economy, Trade and Industry and the Nippon Kenko Kaigi.*



* Nippon Kenko Kaigi : An organization formed to conduct effective activities in conjunction with private organizations and the full support of government agencies, in order to increase healthy lifespan and proper medical care for each person in Japan as the population rapidly ages and there are fewer children.

CLOSEUP

First health lecture meeting

Toyoda Gosei Co., Ltd. declared FY2016 the "First Year of Health," strengthening efforts to maintain and improve health by raising the health awareness of each employee and providing opportunities for employees to transfer that awareness to their own activities. Lecture meetings are held for managers in each workplace on topics such as the importance of self-motivated exercise habits, introducing healthy behaviors and activities that can be done in each workplace to prevent lifestyle-related diseases.



Talk by Ms. Sae Moriyama, a practicing nurse and Director of the Lifestyle Research Center, who is dedicated to the prevention of lifestyle-related disease.

■ Aiming for "Zero Accidents"

Toyoda Gosei Co., Ltd. aims for zero accidents through Safe Personnel and Safe Workplace programs, with the president overseeing all efforts as the company's general health and safety manager.

In the FY2016 Safe Personnel program, we found some workplaces where KYT (*Kiken Yochi Training*, the basis of safety education) had been conducted for many years and the purpose had become simply to hold drills. We therefore returned to the starting point of KYT and focused

on improving the "ability to spot danger," which is the first of four rounds, and enhanced educational methods for supervisors to operators.

In Safe Workplace activities, we checked for strict observation of safety measures for machine tools and industrial robots with the aim of eliminating major accidents, providing guidance as needed. In product shipping areas, solid barriers are used to separate workers from forklifts for safety. These types of activities are implemented at Toyoda Gosei Group companies worldwide.

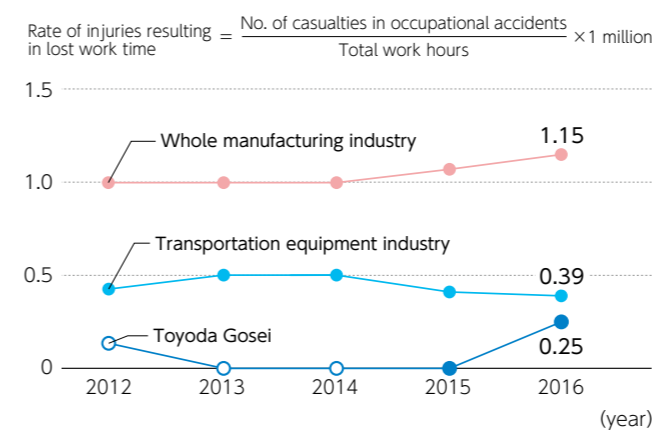


Safety focus activity presentation



Safety KY Dojo

■ Trends in rate of work accidents (rate of injuries resulting in lost work time)



■ Main activities in 2016

	Activities
Safety-Conscious Personnel	<ul style="list-style-type: none"> Building awareness in each individual, improving managers' leadership ability (1) Awareness through safety activities and presentations in each workplace (2) Safety education and competency assessment for managers (3) Work environment training for workplaces that handle organic solvents, other harmful substances
	<ul style="list-style-type: none"> Remembrance/learning from past accidents to prevent recurrence Application of OSHMS to improve safety activity management Basic education in KYT (<i>Kiken Yochi Training</i>), with a return to the starting point
	<ul style="list-style-type: none"> Adherence to safety measures for machine tools and industrial robots that can lead to major accidents. Measures to prevent contact between workers and forklifts in shipping areas Safety management in outsourced construction Workplace safety declaration activities proposed by individuals

■ Creation of energetic workplaces where employees can work based on labor-management trust and mutual responsibility

Based on the basic principle of mutual trust and responsibility in labor-management relations, the company and labor union discuss working conditions with the aim of creating better workplace environments. Central labor-management conferences, division and center labor-management conferences, and departmental

labor-management conferences are held regularly to improve communication between labor and management. In the departmental labor-management conference in particular, department general managers and workplace representatives discuss problems or difficulties in the workplace with the aim of creating more pleasant workplaces.

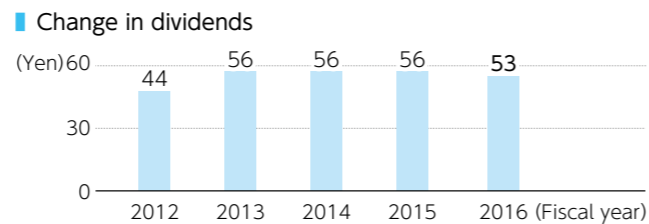
Shareholder Relations

We make every effort to raise corporate value and openly disclose information.

Business results and profits

Sales in this term decreased to 755.6 billion yen (down 3.4% from the previous year), due mainly to the effects of the exchange rate and decreased sales in the optoelectronics business. Although there were increased sales in the automotive parts business in Japan and internationally, and rationalization in the company, profits also declined from the effects of the exchange rate and decreased sales in the optoelectronics business. Operating profits fell to 40.6 billion yen (down 5.0% from the previous year), ordinary income fell to 39.0 billion yen (down 6.0% from the previous year) and net income attributable to parent company shareholders fell to 16.2 billion yen (down 19.9% from the previous year).

Consequently, the annual dividend from surplus distributed this year was 53 yen per share.



Distribution to various shareholders (as of March 31, 2017)

Category	Percentage
Financial product traders	0.77%
Financial institutions	23.88%
Japanese nonfinancial firms, others	48.47%
Foreign investors, others	20.53%
Treasury stocks	0.42%
Individuals and others	5.93%

Disclosure

Toyoda Gosei makes every effort to properly disclose information, issuing regular reports via our website and IR tools (earnings summary, data for financial briefings, etc.), holding financial briefings, and participating in IR events.

Specific measures include biannual earnings presentations and quarterly telephone conferences for institutional investors and securities analysts. Materials from these meetings and other relevant

financial information are published on our website. We also provide information in individual investor meetings and to our many investors in Japan and other countries. Plant tours are held for institutional investors and security analysts to show our technical strengths, while we also participate in investor relation events for overseas institutional investors and hold briefings for individual investors to deepen understanding of our company.

Main IR activities

Targeted persons	IR activities
Domestic institutional investors, securities analysts	Individual discussions, financial briefings, plant tours, telephone conferences
Overseas institutional investors	Individual discussions, participation in IR events
Individual shareholders and investors	<ul style="list-style-type: none"> Briefings for individual investors Plant tours after annual shareholders' meeting Issuance of "Report on Business Results"

● Issuance of the "Toyoda Gosei Report"
● Dissemination of financial and IR information on website



Presentation of financial results, Tokyo



Individual meetings with overseas investors, Tokyo

CLOSEUP

First plant tour for analysts and institutional investors

Toyoda Gosei Co., Ltd. held a tour of the Inazawa Plant for 25 securities company analysts who regularly gather information on our company and institutional investors who possess and manage Toyoda Gosei shares. To provide them a better understanding of our technical abilities and future potential, we showed the latest plating and painting processes for interior and exterior products and our efforts to make compact, automated production lines.



Plant tour

Supplier Relations

We aim to grow and develop while deepening our partnership with suppliers.

Collaboration with suppliers

Our partnerships with suppliers are very important to us for smooth business operations. Every April, Toyoda Gosei Co., Ltd. holds a procurement policy briefing with about 200 suppliers of products, machining processes, materials, facilities, and molds. We inform suppliers of upcoming issues and efforts, including our business environment and direction, and share our procurement policy for the year with regard to safety, quality, delivery, price, technology, global expansion and CSR. We also give awards to show our appreciation to suppliers for achievements in their fields, while encouraging all suppliers to continue making progress. Every quarter, we hold a procurement liaison meeting with about 100

suppliers, where we share production information and information on quality improvements, compliance, safety, earthquake measures, confidentiality, chemical substance control and human resources development.



Procurement policy briefing, Japan



Procurement liaison meeting, China

Support for suppliers

We support strong supplier structures with "genchi, genbutsu" (go-and-see activities), and work for their growth. In addition to standardized work and defect prevention to avoid serious quality problems, and lowering of cost prices for higher competitiveness, we involve suppliers in mold and product design. Through sectional committee

activities we share information necessary for quality improvements with suppliers. We also conduct checks and risk assessment for compliance with Japan's Industrial Safety and Health Act to help support the creation of safe workplaces and prevent fires and disasters.

Green procurement

We do our utmost for environmentally-friendly procurement based on our Green Procurement Guidelines (4th Edition), which consist of three components: establishing environmental management systems; improving regulatory compliance and environmental performance; and managing harmful substances. To reduce environmental impacts, we strive to enhance suppliers' internal organizations and systems and raise the level of their production activities. Positive results have been achieved, such as

acquisition of ISO 14001 certification and reduction of energy consumption and waste. We comply with increasingly strict chemical substance regulations around the world and monitor the chemicals contained in items procured from suppliers. We also coordinate with suppliers in complying with European ELV (end-of-life vehicle) and REACH (Registration, Evaluation, Authorization and Restriction of Chemicals) regulations, and in the management of volatile organic compounds.

CLOSEUP

Management seminar for suppliers

To support suppliers' efforts to improve their business performance, we have begun seminars to raise managers' abilities to ascertain and analyze actual business status. This year, one management level employee from each of 33 suppliers participated and heard a lecture on the topic of "Business management for the continuation of stable business relationships" from certified public accountants Kohei Kariya and Keisuke Ueda.



Involvement with Local Communities

Toyoda Gosei Group companies put down local roots and undertake a wide range of activities to contribute to the communities we call home.

Contributing to the creation of better communities

As an automotive parts manufacturer, Toyoda Gosei contributes to society through traffic safety education and community-focused volunteer activities in the areas of support for the vulnerable, environmental protection, youth development, and community crime prevention. To raise employee awareness and motivation, we have adopted an internal awards system and conduct new employee education and other efforts to grow our circle of volunteer activities with active community involvement by individual TG members.

Each year, TG Group companies worldwide

conduct activities to contribute to their respective communities, striving to create close relationships through volunteer and other community-oriented activities.

We also donate LED security lights manufactured by our company to support the recovery in East Japan with well-lit towns.



Social Welfare



Charity meals

Company cafeterias have introduced "charity meals" that raise 10 yen per meal for charity. Using the collected funds, wheelchairs and rehabilitation aids are purchased and donated to local welfare facilities and schools.



Wheelchair doctors

This volunteer group of employees visits welfare and other facilities in the community every month to repair and adjust more than 500 wheelchairs a year. This program has continued since 1996.



Sales of goods produced by vocational training facilities

To support the independence of people who use vocational facilities for the disabled, we provide places to sell hand-made bread and cookies in our business places. Revenue earned is used to help finance the operation of vocational facilities.



Contributions to the elderly and needy

Tianjin Star Light Rubber and Plastic Co., Ltd. in China donated 5,000 CNY worth of towels, soap and other daily living items to the elderly and needy.



Mangrove planting

Toyoda Gosei Asia Co., Ltd. in Thailand planted mangroves as a measure to counter global warming.



Social contribution training for new employees

Through interactions with people with disabilities, new employees gain a proper understanding of "disabilities" and learn support and consideration. Our aim is to improve their social skills and cooperativeness and expand their perspectives.

Environmental Preservation



Advanced "green factory"

The Heiwacho Plant is an advanced eco plant that invites children from neighborhood elementary schools to participate in hands-on LED and other classes with the aim of raising their environmental awareness.



Community cleanups

In addition to routine cleaning at each facility, we conduct community cleanups twice a year with participation of more than 2,500 people including employees, their families, and local students.



Ichinomiya Boys and Girls Invention Club

This club provides a place for children to enjoy making things and to grow creatively, and we have comprehensively supported its plans and operation since it was established.

Community Safety



Sports support activities

Athletes from our volleyball, handball and basketball teams provide instruction to local elementary and junior high school children for their healthy growth and development.



Neighborhood safety patrols

Employees volunteer to patrol crime prevention areas near our business establishments, looking out for the safety and security of children and the community.



Traffic safety patrols

We conduct educational traffic safety activities aimed at reducing traffic accidents and protecting the elderly. On the 10th, 20th and 30th days of each month, employee volunteers stand along roads at TG facilities to call for traffic safety in the community.

East Japan Reconstruction Support



Traffic safety education

About 50 employees visit 14 nurseries and kindergartens around our facilities to teach children the importance of traffic safety using picture-card shows and videos.



Donations of LED streetlights

We have donated Toyoda Gosei LED security lighting and lamps to earthquake-affected areas since 2012 for use in creating well-lit and safe streets.



Sales of Tohoku products

To support reconstruction even without going to the affected areas, we hold Tohoku product exhibitions of confectioneries and foods popular in the Tohoku region at 13 company cafeterias in Japan.

Governance

We strive to be a socially responsible, trusted company based on a high level of corporate ethics.

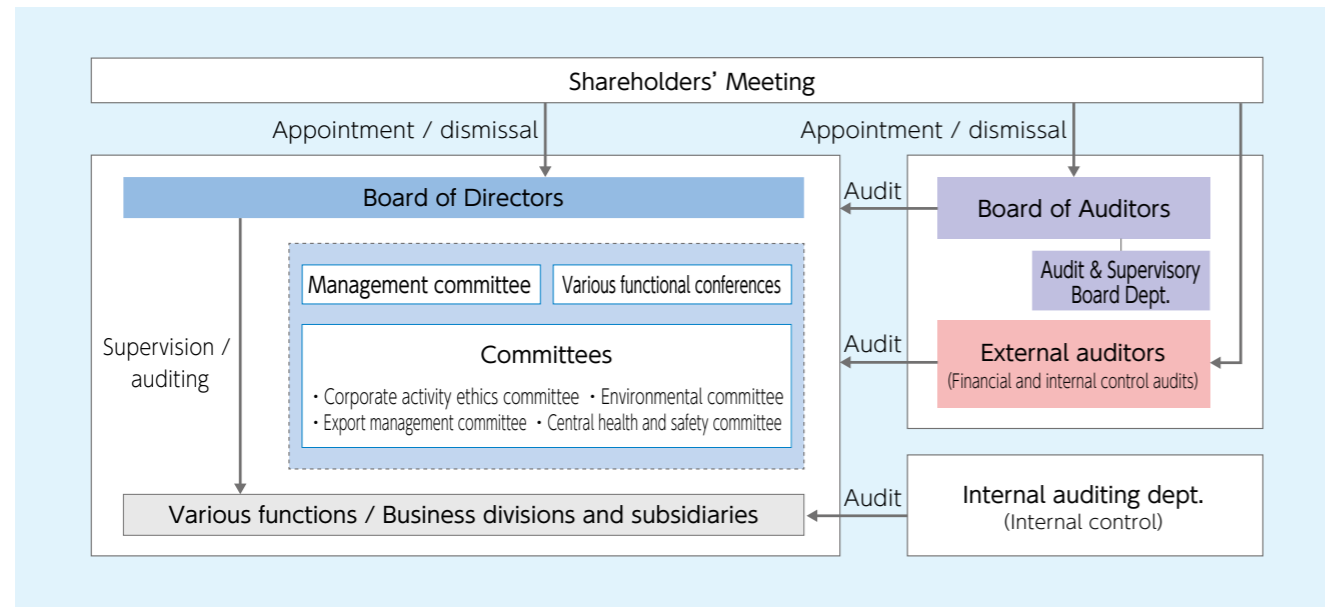
Corporate Governance

Toyoda Gosei aims to grow steadily as a global company, contributing to social development with the values of creativity and service to society in our corporate philosophy. To achieve this, we are strengthening our corporate governance from the perspective of shareholder value. To meet the expectations of stakeholders, we maintain organizational systems that can respond rapidly and appropriately to environmental changes and a sound management system that is both fair and transparent.

Specifically, we have limited directors' terms to one year and appointed corporate officers to

separate business execution from management supervision in order to respond flexibly to changes in the business environment and to clarify management responsibilities. To raise the transparency and health of our operations, we appointed an external director in June 2015 and then increased the number to several external directors in June 2016 to strengthen oversight and supervisory functions of our directors. We have also established deliberative bodies and committees that will be involved in discussing and deciding important matters and checking business execution.

Corporate governance system



Toyoda Gosei appoints five auditors, including three from outside the company, to serve on its auditing system board. This Board of Auditors oversees and audits management status including the execution of directors' duties. Our internal Audit Division discusses auditing plans with the auditors and meets regularly to maintain close coordination and share information. It also coordinates with accounting auditors to strengthen auditing functions. An Audit & Supervisory Board Department under the direct control of the Board of Auditors has also been established to raise the efficacy and independence of audits and ensure that auditing work is

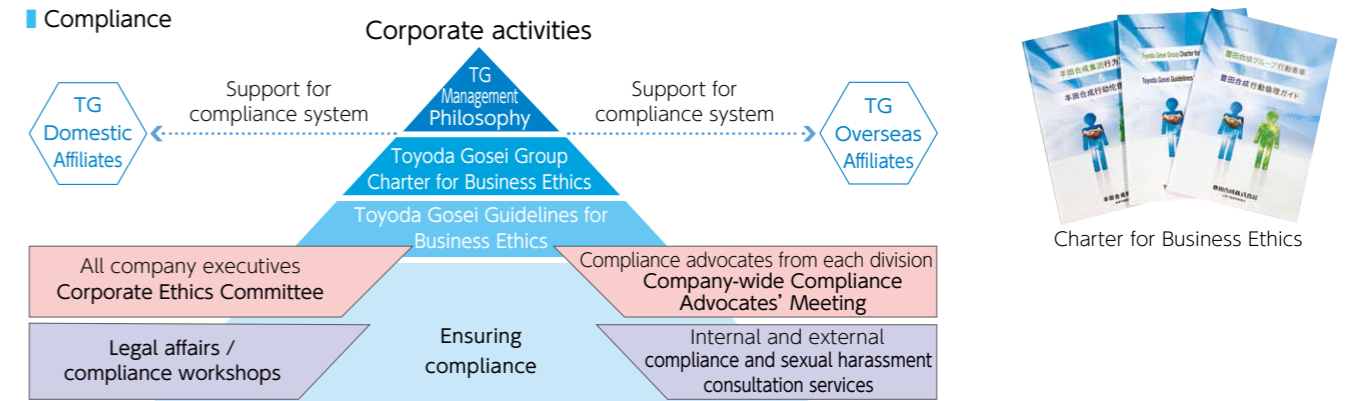
executed smoothly.

As part of our efforts to maintain a healthy internal control environment in Group companies, we share our Corporate Principles and Charter for Business Ethics with all Group companies. While respecting the management autonomy of our subsidiaries, we receive regular business reports and confirm the appropriateness and legality of our subsidiaries' business activities through advance reports and an approval system. We also send nonexecutive directors and auditors to key subsidiaries to observe and monitor their business execution.

Compliance

Toyoda Gosei conducts thorough compliance activities to ensure that employees obey all laws and regulations, and to instill in all employees a keen sense of corporate ethics. The Toyoda Gosei Group Charter for Business Ethics sets forth shared values and behavioral standards for the Group, and all Group companies worldwide incorporate this charter into their own behavioral guidelines. We have also formulated the Toyoda Gosei Guidelines for Business

Ethics and distribute them to all employees. In 1997 we established a Corporate Ethics Committee with the President serving as chairman and all company executives as members. Together with Compliance Advocates in each division, the committee works for thorough compliance with a unified approach by management and worksites. We have also set up internal and external compliance consultation offices for early resolution of them.



Ongoing educational activities

We conduct ongoing educational activities to raise the compliance awareness of all employees. In addition to regular compliance training that targets employees by level in the company and type of risk, we present specific, easily understandable compliance lessons in cartoon format in company newsletters and post descriptions of legal compliance cases on company message boards. Systematic, autonomous compliance education is provided to help people in each department recognize the risks inherent to their work and

prevent infractions. We also conduct annual surveys of employees' understanding of compliance, and make improvements where needed.

Major workshops

Workshop name	No. of times held	Participants
New employee workshop	2 times	134
New manager workshop	1 time	72
Designated legal affairs workshop (for mid-career employees)	6 times	236
Antitrust and anti-bribery training (for overseas base)	4 times	76

Strengthening compliance systems of affiliates worldwide

Toyoda Gosei Co., Ltd. provides support so that each Group company worldwide can independently promote compliance. In Japan we share information in an annual compliance liaison conference and conduct ongoing issue resolution activities in which

each company identifies latent risks and takes preventive measures. In other countries, we promote systematic compliance activities suited to each country and company, and conduct antitrust and anti-bribery training centered on areas of high risk.

CLOSEUP

Compliance training in India

In FY 2016, two Group companies in India held compliance training with total participation by 76 people, including local staff and employees sent from Japan. Indian and Japanese lawyers were invited as instructors, and participants learned key points in laws and regulations as well as things to be careful of in work related to antitrust laws and corruption, for which the risk is rising globally. Participants also deepened their understanding of Indian labor laws, in which each state has its own regulations.



Risk Management

Toyota Gosei implements information security measures to protect corporate information assets

and measures to prepare for the event of a large-scale disaster.

Crisis Management Project in anticipation of large-scale earthquake disasters

Japan is a land of earthquakes, and we have put into place a crisis management system for the event of a massive earthquake based on the principles of human life first, community support, and early recovery. Specifically, we are carrying out a Crisis Management Project to strengthen our ability to deal with disasters, focusing on the two areas of developing and enhancing first responses and clarifying response procedures for quick restoration of production. Since 2013 we have conducted resilience training more than 60 times for directors and members of anti-disaster departments, based on the idea that in addition to infrastructure and system measures, improving the skills of response personnel is essential. We have also established specific procedures for the recovery of affected

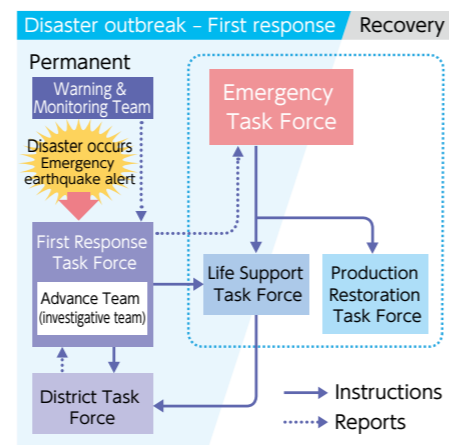
buildings, facilities, and processes and for alternative production in a production recovery system. Recovery training for design drawings and other data is also carried out so that product development can be continued even after disasters.

In FY2016 we held study meetings two times each for affiliates and suppliers to enhance their crisis management. Weaknesses were identified through evaluations using an “anti-earthquake measure implementation status check sheet” and graphing the results. Examples of handling at Toyota Gosei and other companies were introduced and business continuation plans were prepared cooperatively. Disaster handling of delivery boxes and handling procedures for logistics recovery were also put in place.

Efforts to date

Classification	Measures
Facility and equipment measures	<ul style="list-style-type: none"> ● Earthquake resistance measures for buildings and facilities ● Establishment of a disaster prevention center to serve as an operations base for anti-disaster department operations ● Equipping all locations with a multi-channel access radio system (which is used in Japan for various purposes, from daily work to emergency and disaster situations) and satellite phones ● Installment of a crisis management server (earthquake-resistant structure) and emergency power generators ● Operation of a disaster recovery system for restoration of damaged systems and data centers (special facilities equipped with and operating computers, data communications, and other devices)
System measures	<ul style="list-style-type: none"> ● Introduction of site and building safety decisions ● Maintenance of supply chain information ● Teleconference system for multiple locations using tablet computers ● Earthquake bulletin and employee safety information system training ● Employee safety follow-up system incorporating arrival and departure times at company and business trip data ● Preparation of a business continuation plan

Disaster response



CLOSEUP

Resilience training

In resilience training to improve the ability of executives and employees to respond to emergencies, videos and sounds of various disaster situations that occur during emergencies are played for participants to see whether they can respond flexibly and appropriately in situations that are changing moment by moment. Participants' response details and procedures are verified, leading to task resolution and improvement. So far a total of 1,200 executives and employees have participated. Two hundred forty people from 41 suppliers have also participated. In addition, about four people are appointed as “headquarters leaders” in each business location to support headquarters chiefs in taking measures for the district, sharing rules and basic knowledge for emergencies and company issues and response policies through training sessions. *Kaizen* is continuing at each place of business, setting up information organization boards for plant layout, task force organization charts, and disaster situations.



Strengthening information security measures and raising awareness

Toyota Gosei maintains thorough information security measures to strengthen the management of confidential information. Together with annual checks of the compliance status of each division based on company confidentiality management regulations, we conduct onsite audits. Self-inspections are also done at Group companies in

Japan and affiliates in other countries. Confidentiality officers are assigned in all departments, and confidentiality education activities are conducted based on information system security operating standards and a confidential information management manual. Security control education is also conducted for new employees.

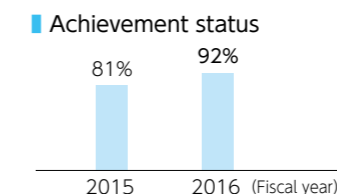
Enhanced measures

Classification		Measures
Prevention of leaks from negligence	Hard	● Printing restrictions with ID card authentication on multifunction machines, dedicated drawing printers
	Soft	● Data encryption of all PCs ● Security measures when sending emails out of the company (CC to superiors, encryption of attached files)
Prevention of malicious unauthorized leaks	Hard	● Increased surveillance cameras ● Installation of wire locks for prevent PC theft
	Soft	● Confidentiality pledge ● Stricter applications for removing items from premises ● Restricted file server access
Educational activities (ethics)		<ul style="list-style-type: none"> ● Restrictions on writing onto external storage media ● System use records ● Strengthened hacking prevention measures (Internet) ● Prevention of unauthorized connection of terminals brought in from outside ● New employee education ● Companywide security control voluntary inspections using check sheets ● On-site checks of each department ● Training in responding to standard email

CLOSEUP

Local security control audits of group companies in Japan

The Toyota Gosei Group conducts voluntary inspections of security control based on shared security guidelines. In FY2016, to check the validity of those assessment results, Toyota Gosei Co., Ltd. representatives visited 11 Group companies in Japan for audits. The voluntary inspection results were compared with documentation and guidance was issued on *kaizen* points and plans for items that need to be reassessed. Confidentiality management intent and target values that cannot be sufficiently conveyed by phone or email are shared through actual visits.



Checking whether the content of each company's provisions and procedures fulfill guideline questions.

Independent opinion



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

Long-term environmental vision

Toyoda Gosei announced the TG 2050 Environmental Challenge, environmental management efforts with an ultra-long-term vision. This is something that is common to Toyota Group companies, but Toyoda Gosei's efforts have unique characteristics such as an emphasis on environmental education and personnel development. The company's 6th Environmental Action Plan, which continues to 2020, establishes detailed targets and its systems and activities are highly regarded. I think the formulation of a specific plan will be the key to how activities will progress after 2020. In formulating these plans, active participation of the young people who will carry the company in 2030 or 2050 is essential. Creating a system that will allow young people to develop future plans and lead activities will be important; it should also lead to edification of environmental awareness in the company.

Expanding environmental preservation activities

Toyoda Gosei is outstanding not only in terms of formulating a long-term vision such as that described above, but also in effective individual environmental preservation activities that have range and depth. Their information disclosure also includes precise, detailed explanations. They are not only moving steadily forward with target management to contribute to low-carbon and recycling societies, but providing many examples that will be useful to other companies and contributing to reducing the environmental impact of society overall. These activities are beneficial not only environmentally but also in terms of cost, and advancing environmental preservation activities with consideration of their economic effect is an important strategy. To effectively spread environmental preservation, the support of a budget is essential and the activity can be continued from the time a benefit is first seen for an investment. I look forward to the company creating such a virtuous cycle. Ongoing plant afforestation and nature preservation activities with links to the community are also important in raising

the company's social value in the community, and I look forward to further enhancement of these activities.

Environmental efforts in the supply chain

Toyoda Gosei emphasizes its relations with suppliers in conducting environmental preservation activities. It is actively expanding these activities—promoting green procurement, awarding suppliers for successes, and conducting seminars for suppliers. Carrying out environmental preservation activities in cooperation with suppliers is a crucial aspect of environmental management in all countries, and Toyoda Gosei's activities are viewed very favorably. In the future, they will create mechanisms to more actively advance these activities through joint work with suppliers, including overseas suppliers. Publication of specific examples of cooperative work with suppliers would be good reference for many other companies. In the future, I hope this will lead to specific reductions in CO₂ with SCOPE 3.

Working for world standards

The level of Toyoda Gosei's environmental preservation activities is very high. Several issues will need to be addressed to improve the Toyoda Gosei Report to the global standard. First, environmental and social activity goals are described separately, but it would be better to unify them with sustainability activities or CSR activities. One effective method of doing this is to refer to GRI*¹ standards. With reference to those standards, I think a materiality analysis that determines social environmental activity priorities and investigation of environmental and social activity KPIs would be good. There are many indicators in existence today, but if representative ones are selected, non-financial KPI are positioned alongside financial KPI, and other index groups are arranged based on them, they should be able to execute more consistent and systematic management. The sustainable development goals (SDGs)*² adopted by the United Nations in 2015 should also be useful in determining priorities. A comparison of the 17 goals and 169 targets of the SDGs and the social and environmental activities of Toyoda Gosei will reveal many points of contact. I hope that will serve as a point of entry to further development of activities.

*1 The Global Reporting Initiative (GRI) is a set of standards for the preparation of sustainability reports. Sustainability reports are spreading internationally.

*2 Goals adopted by the United Nations in 2015 with the aim of creating a sustainable society at the international level. Seventeen goals and 169 targets have been established.

About TOYODA GOSEI REPORT 2017

Editorial policy

This report was compiled with the aim of giving all stakeholders in the Toyoda Gosei Group a better understanding of its CSR activities and earning their greater trust. We tried to make the activities easily comprehensible by prioritizing those things that we most want to communicate to stakeholders.

Period covered by report

April 1, 2016 to March 31, 2017
This report principally covers the period above, but content related to other periods may be included as needed.

Scope

Toyoda Gosei Group
The scope is outlined individually for some items.

Reference Guidelines

"Environmental Reporting Guidelines, 2012 Edition"*
"Environmental Accounting Guidelines, 2005 Edition"
*A comparative table of these guidelines can be found on our website.
<http://www.toyoda-gosei.com/csr/dl/>

Date of Issue

August 2017
(Next publication scheduled for August 2018.
Previous publication June 2016)

The Toyoda Gosei Report 2017 has received the following marks as a printed publication created with consideration of the environment and universal design.



Uses environmentally-friendly FSC® certified paper, which uses wood materials produced from properly managed forests.



Printed with environmentally-friendly, waterless ink that contains no volatile organic compounds (VOCs) and has switched to vegetable oil to eliminate all petroleum solvents.



Printed with a waterless ink system that emits no liquid waste during printing.



Printed with an environmentally-friendly printing process.

TOYODA GOSEI CO., LTD.

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- [P e r i o d] • April, 2016 to March, 2017
 [A i r] • Units are as follows: NOx = ppm, PM (particulate matter) = mg/Nm³ • ND: below the minimum determination limit (not detected)
 • Values shown in the results column are averages of the results of the measurements.
 [W a t e r] • Units are all in mg/L except for pH • pH: hydrogen ion concentration • BOD: Biochemical Oxygen Demand • SS: concentration of suspended solids in water
 • ND: below the minimum determination limit (not detected) • Values shown in the results column are averages of the results of the measurements.
 [Groundwater] • Units are all in mg/L • ND: below the minimum determination limit (not detected).
 [PRTR*Data] • Units are in kg *Values less than 1kg are rounded up if ≥0.5 and down if 0.5. There are some cases in which values for total volume and volume handled are not in agreement.
 [Data for use of resources / volume emitted] • Units are: t/year for waste, t-CO₂/year for greenhouse gas and 10,000m³/year for water.

*Pollutant Release and Transfer Register (the registration system monitoring emissions of substances that pollute the environment and moves/transfers of them)

Data on Main Domestic Plants

Haruhi Plant

1 Haruhinagahata
Kiyosu, Aichi, Japan
452-8564

Main Products

• Functional Parts

Air (Air Pollution Control Law, prefectural regulations, etc.)

Item measured	Regulation value	Result
Dust	Boilers (city gas)	0.1
	Co-generation (city gas)	0.05
NOx	Boilers (city gas)	150
	Co-generation (city gas)	600

Groundwater

Item measured	Environmental Standard	Result
Trichloroethylene	0.03	ND~0.003
Cis-1,2-Dichloroethylene	0.04	ND~0.005

*Refer to Toyoda Gosei Report P.29

■ No violations of laws, etc. ■ No complaints

PRTR Data

Substance name	Substance number (item number)	Amount handled	Volume emitted			Volume moved		Volume recycled	Total removed (processed)	Total consumed (products)
			Into the air	into bodies of water	Into the ground	Volume moved via sewers	Volume moved as waste			
2-Imidazolidin thionate	42	3,075	0	0	0	0	461	0	0	2,614
Toluene	300	1,268	860	0	0	0	194	213	0	0

Data for use of resources/volume emitted

Category	Result	
Waste	Volume generated	1,635
	Volume emitted	1,264
	Final volume disposed	0
Greenhouse gas	CO ₂ emissions	13,200
Water	Volume used	24.9

Water (Water Pollution Control Law, prefectural regulations, etc.)

Item measured	Regulation value	Result
pH	5.8~8.6	7.4
BOD (Biochemical Oxygen Demand)	25	6.1
SS	30	2.0
Oil content	5	0.1
Total nitrogen	120	1.7
Total phosphorus	16	0.6
Thiram	0.06	ND

Morimachi Plant

1310-128
Mutsumi, Mori,
Shuchi, Shizuoka,
Japan
437-0213

Main Products

• Weatherstrips
• Functional Parts

Air (Air Pollution Control Law, prefectural regulations, etc.)

Item measured	Regulation value	Result
Dust	Boilers (heavy oil)	0.1
NOx	Boilers (heavy oil)	150

■ No violations of laws, etc. ■ No complaints

PRTR Data

Substance name	Substance number (item number)	Amount handled	Volume emitted			Volume moved		Volume recycled	Total removed (processed)	Total consumed (products)
			Into the air	into bodies of water	Into the ground	Volume moved via sewers	Volume moved as waste			
Water-soluble compounds of zinc	1	1,508	0	0	0	0	60	60	0	1,387
Antimony and its compounds	31	3,934	0	0	0	0	197	39	0	3,698
2-Imidazolidin thionate	42	4,315	0	0	0	0	173	173	0	3,969
Ethylbenzene	53	9,735	6,542	0	0	0	1,207	1,519	0	467
Xylene	80	11,273	7,592	0	0	0	1,414	1,750	0	516
Disulfiram	259	1,643	0	0	0	0	89	0	0	1,555
Thiuram	268	10,035	0	0	0	0	542	0	0	9,493
Toluene	300	37,635	18,797	0	0	0	6,854	11,007	0	977
Bis (N,N-dimethyl dithiocarbamate) zinc	328	5,247	0	0	0	0	210	210	0	4,827
Phthalic anhydride	413	1,136	0	0	0	0	52	11	0	1,073
Methylnaphthalene	438	13,766	69	0	0	0	0	0	13,697	0
Methylenebis (4,1-phenylene) = diisocyanate	448	3,134	0	0	0	0	313	0	0	2,821
2-Mercaptobenzothiazole	452	36,511	0	0	0	0	1,972	0	0	34,540

Data for use of resources/volume emitted

Category	Result	
Waste	Volume generated	6,012
	Volume emitted	4,669
	Final volume disposed	0
Greenhouse gas	CO ₂ emissions	24,800
Water	Volume used	18.6

Water (Water Pollution Control Law, prefectural regulations, etc.)

Item measured	Regulation value	Result
pH	5.8~8.5	7.5
BOD (Biochemical Oxygen Demand)	25	5.4
SS	50	5.2
Oil content	5	0.2
Thiram	0.06	ND
Zinc	0.5	0.17

Heiwacho Plant

710 Origuchi,
Shimomiyake,
Heiwa, Inazawa,
Aichi, Japan
490-1312

Main Products

- Functional Parts
- Safety System Products
- Optoelectronic Products

■ Air (Air Pollution Control Law, prefectural regulations, etc.)

Item measured	Regulation value	Result	
Dust	Boilers (heavy oil)	0.15	ND
	Boilers (city gas)	0.05	ND
	Co-generation (city gas)	0.05	ND
NOx	Boilers (heavy oil)	140	64
	Boilers (city gas)	120	34
	Co-generation (city gas)	200	155

■ No violations of laws, etc. ■ No complaints

■ PRTR Data

Substance name	Substance number (item number)	Amount handled	Volume emitted			Volume moved		Volume recycled	Total removed (processed)	Total consumed (products)
			Into the air	Into bodies of water	Into the ground	Volume moved via sewers	Volume moved as waste			
2-Aminoethanol	20	22,818	2	0	0	46	22,771	0	0	0
Methylnaphthalene	438	3,353	17	0	0	0	0	0	3,336	0

■ Data for use of resources / volume emitted

Category	Result	
Waste	Volume generated	1,636
	Volume emitted	571
	Final volume disposed	0
Greenhouse gas	CO ₂ emissions	25,900
	PFC emissions	700
	HFC emissions	200
Water	Volume used	25.6

■ Water (Sewerage Law, prefectural regulations, etc.)

Item measured	Regulation value	Result
pH	5~9	7.4
BOD (Biochemical Oxygen Demand)	600	136
SS	600	57.5
Oil content	30	3.4
Total nitrogen	240	32.9
Total phosphorus	32	3.1
Fluorine	8	0.14

Inazawa Plant

1 Komeyasakai,
Kitajima, Inazawa,
Aichi, Japan
492-8542

Main Products

- Interior and Exterior Parts
- Functional Parts

■ Air (Air Pollution Control Law, prefectural regulations, etc.)

Item measured	Regulation value	Result	
NOx	Boilers (city gas)	150	55
	Co-generation (city gas)	600	170

■ Groundwater

Item measured	Environmental Standard	Result
Trichloroethylene*1	0.03	ND
Cis-1,2-Dichloroethylene*1	0.04	ND~0.008

*1 Substances that have no record of being used. * Refer to Toyota Gosei Report P.29

■ No violations of laws, etc. ■ No complaints

■ PRTR Data

Substance name	Substance number (item number)	Amount handled	Volume emitted			Volume moved		Volume recycled	Total removed (processed)	Total consumed (products)
			Into the air	Into bodies of water	Into the ground	Volume moved via sewers	Volume moved as waste			
Ethylbenzene	53	3,212	1,746	0	0	0	533	224	0	707
Xylene	80	5,838	3,285	0	0	0	934	409	0	1,210
Chromium and trivalent chromium compounds	87	5,338	0	43	0	0	4,228	0	0	1,068
Hexavalent chromium compounds	88	5,338	0	0	0	0	0	0	5,338	0
Copper water-soluble salts (excluding complex salts)	272	6,865	0	69	0	0	0	0	6,796	0
Toluene	300	36,550	20,462	0	0	0	6,688	2,559	0	6,842
Nickel metal	308	120,359	0	0	0	0	0	0	120,359	0
Nickel compounds	309	131,445	0	26	0	0	17,062	0	0	114,357
Bis (2-ethylhexyl) phthalate	355	3,081	0	0	0	0	216	0	0	2,866
Water-soluble salts of peroxodisulfuric acid	395	8,525	0	0	0	0	0	0	8,525	0
Boron compound	405	2,183	0	22	0	0	0	0	2,161	0

■ Data for use of resources / volume emitted

Category	Result	
Waste	Volume generated	4,547
	Volume emitted	2,287
	Final volume disposed	0
Greenhouse gas	CO ₂ emissions	21,800
Water	Volume used	57.9

■ Water (Water Pollution Control Law, prefectural regulations, etc.)

Item measured	Regulation value	Result
pH	5.8~8.6	7.1
BOD (Biochemical Oxygen Demand)	25	7.4
SS	30	2.5
Oil content	5	ND
Total nitrogen	120	15.2
Total phosphorus	16	0.85
Hexavalent chromium	0.5	0.003
Total chromium	2	0.16
Copper	1	0.12
Fluorine	15	0.11
Boron	30	5

Bisai Plant

40
Higashishimoshiro,
Meichi, Ichinomiya,
Aichi, Japan
494-8502

Main Products

- Interior and Exterior Parts
- Safety System Products

■ Air (Air Pollution Control Law, prefectural regulations, etc.)

Item measured		Regulation value	Result
Dust	Boilers (city gas)	0.05	ND
	Co-generation (city gas)	0.05	ND
NOx	Boilers (city gas)	150	66
	Co-generation (city gas)	600	145

■ No violations of laws, etc. ■ No complaints

■ PRTR Data

Substance name	Substance number (item number)	Amount handled	Volume emitted			Volume moved		Volume recycled	Total removed (processed)	Total consumed (products)
			Into the air	Into bodies of water	Into the ground	Volume moved via sewers	Volume moved as waste			
Ethylbenzene	53	9,051	5,151	0	0	0	1,456	634	0	1,810
Xylene	80	10,481	5,966	0	0	0	1,685	734	0	2,096
Toluene	300	21,023	12,148	0	0	0	3,376	1,426	0	4,073
I-Bromopropane	384	3,960	0	0	0	0	0	3,960	0	0
Methylenebis (4,1-phenylene) = diisocyanate	448	164,069	0	0	0	0	16,407	0	0	147,662

■ Data for use of resources/volume emitted

Category		Result
Waste	Volume generated	2,994
	Volume emitted	392
	Final volume disposed	0
Greenhouse gas	CO ₂ emissions	17,200
	SF ₆ emissions	3,400
Water	Volume used	11.1

■ Water (Sewerage Law, prefectural regulations, etc.)

Item measured	Regulation value	Result
pH	5.7~8.7	7.1
BOD (Biochemical Oxygen Demand)	300	67.0
SS	300	31.9
Oil content	30	1.4

Seto Plant

141 Sosaku,
Seto, Aichi, Japan
489-0843

Main Products

- Interior and Exterior Parts

■ Air (Air Pollution Control Law, prefectural regulations, etc.)

Item measured		Regulation value	Result
Dust	Boilers (kerosene)	0.2	ND
	Boilers (kerosene)	150	66

■ No violations of laws, etc. ■ No complaints

■ PRTR Data

Substance name	Substance number (item number)	Amount handled	Volume emitted			Volume moved		Volume recycled	Total removed (processed)	Total consumed (products)
			Into the air	Into bodies of water	Into the ground	Volume moved via sewers	Volume moved as waste			
Xylene	80	9,839	733	0	0	0	197	85	8,582	243
1,2,4-Trimethylbenzene	296	9,951	49	0	0	0	0	0	9,902	0
Methylenebis (4,1-phenylene) = diisocyanate	448	79,232	0	0	0	0	7,923	0	0	71,309

■ Data for use of resources/volume emitted

Category		Result
Waste	Volume generated	894
	Volume emitted	243
	Final volume disposed	0
Greenhouse gas	CO ₂ emissions	6,000
Water	Volume used	2.9

■ Water (Water Pollution Control Law, prefectural regulations, etc.)

Item measured	Regulation value	Result
pH	5.8~8.6	7.3
BOD (Biochemical Oxygen Demand)	20	1.4
SS	20	0.4
Total nitrogen	10	0.6
Total phosphorus	4	0.04

Kanagawa Plant

19-5 Suzukawa,
Isehara, Kanagawa,
Japan
259-1146

Main Products

- Interior and Exterior Parts
- Functional Parts

■ No violations of laws, etc. ■ No complaints

■ PRTR Data

Substance name	Substance number (item number)	Amount handled	Volume emitted			Volume moved		Volume recycled	Total removed (processed)	Total consumed (products)
			Into the air	Into bodies of water	Into the ground	Volume moved via sewers	Volume moved as waste			
Toluene	300	1,178	722	0	0	0	143	264	0	49

■ Data for use of resources/volume emitted

Category		Result
Waste	Volume generated	88
	Volume emitted	25
	Final volume disposed	0
Greenhouse gas	CO ₂ emissions	700
Water	Volume used	0.3

Kitakyushu Plant

1-2 Kitahoraoka
Maeda, Yahata-higashi, Kitakyushu, Fukuoka, Japan
805-0058

Main Products

- Interior and Exterior Parts
- Weatherstrips
- Functional Parts
- Safety System Products

■ No violations of laws, etc. ■ No complaints

PRTR Data

Substance name	Substance number (item number)	Amount handled	Volume emitted			Volume moved		Volume recycled	Total removed (processed)	Total consumed (products)
			Into the air	Into bodies of water	Into the ground	Volume moved via sewers	Volume moved as waste			
Ethylbenzene	53	3,107	1,797	0	0	0	471	217	0	621
Xylene	80	4,294	1,988	0	0	0	593	1,111	0	601
Chromium and trivalent chromium compounds	87	4,461	0	0	0	0	3,569	0	0	892
Hexavalent chromium compounds	88	4,461	0	0	0	0	0	0	4,461	0
Toluene	300	25,438	11,734	0	0	0	3,513	6,690	0	3,502
Nickel	308	34,386	0	0	0	0	0	0	34,386	0
Nickel compounds	309	34,386	0	0	0	0	4,471	0	0	29,915

Data for use of resources / volume emitted

Category		Result
Waste	Volume generated	3,030
	Volume emitted	2,467
	Final volume disposed	0
Greenhouse gas	CO ₂ emissions	8,300
Water	Volume used	3.0

Fukuoka Plant

2223-1 Kurahisa, Miyawaka, Fukuoka, Japan
823-0017

Main Products

- Interior and Exterior Parts
- Functional Parts
- Safety System Products

■ No violations of laws, etc. ■ No complaints

Water (Water Pollution Control Law, prefectural regulations, etc.)

Item measured	Regulation value	Result
pH	5.8~8.6	7.4
BOD (Biochemical Oxygen Demand)	10	1.03
SS	25	0.6
Oil content	2	ND

PRTR Data

Substance name	Substance number (item number)	Amount handled	Volume emitted			Volume moved		Volume recycled	Total removed (processed)	Total consumed (products)
			Into the air	Into bodies of water	Into the ground	Volume moved via sewers	Volume moved as waste			
Ethylbenzene	53	3,471	2,000	0	0	0	534	243	0	694
Xylene	80	3,930	2,264	0	0	0	605	275	0	786
Toluene	300	18,890	10,884	0	0	0	2,906	1,322	0	3,778

Data for use of resources / volume emitted

Category		Result
Waste	Volume generated	1,292
	Volume emitted	155
	Final volume disposed	0
Greenhouse gas	CO ₂ emissions	3,400
Water	Volume used	1.7

Saga Plant

9966-9 Kawako, Wakaki, Takeo, Saga, Japan
843-0151

Main Products

- Optoelectronic Products

Air (Air Pollution Control Law, prefectural regulations, etc.)

Item measured	Regulation value	Result
Dust Boilers (city gas)	0.1	ND
NOx Boilers (city gas)	150	36

■ No violations of laws, etc. ■ No complaints

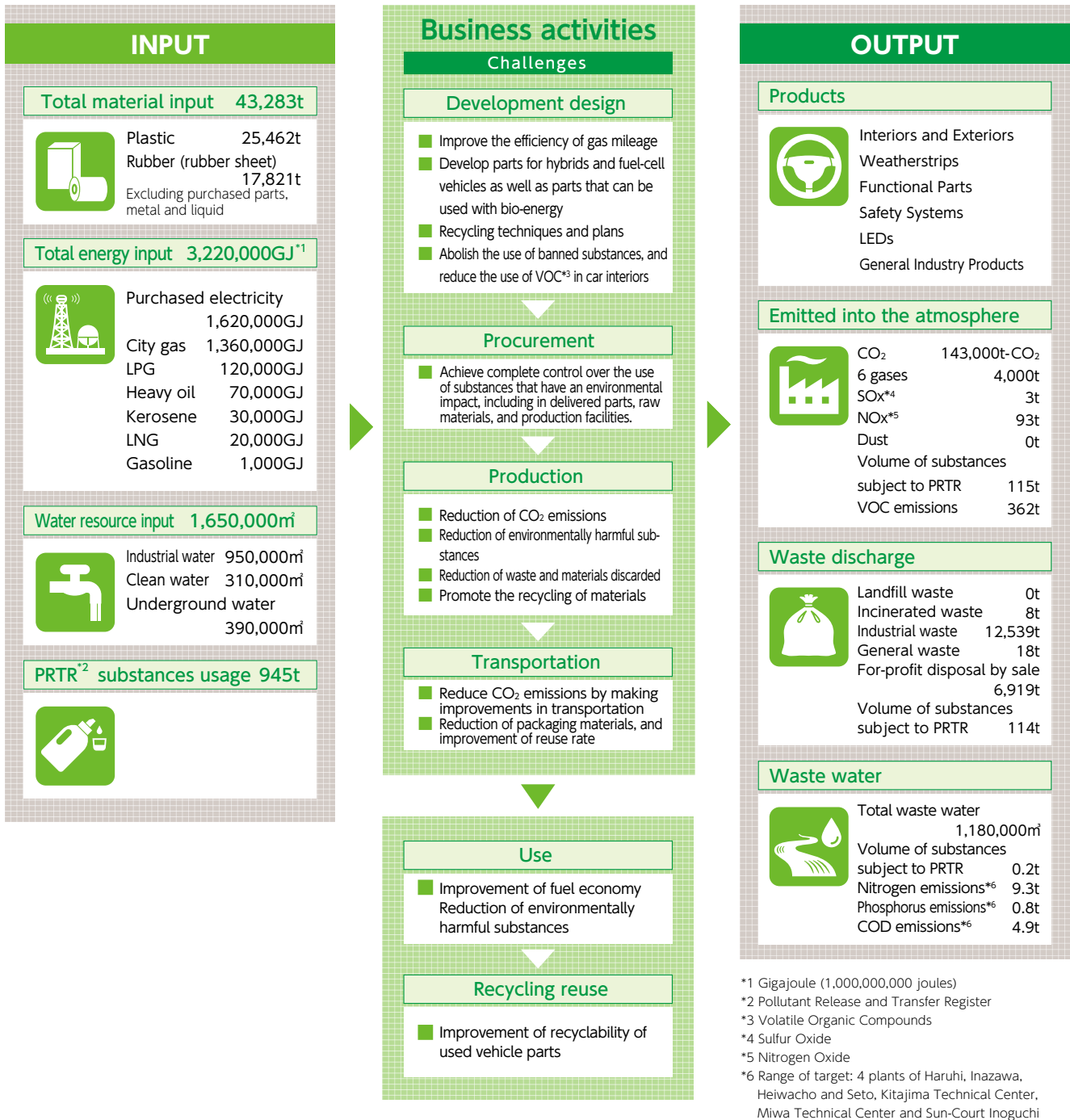
Data for use of resources / volume emitted

Category		Result
Waste	Volume generated	92
	Volume emitted	19
	Final volume disposed	0
Greenhouse gas	CO ₂ emissions	3,900
	PFC emissions	0
Water	Volume used	4.0

Water (Water Pollution Control Law, prefectural regulations, etc.)

Item measured	Regulation value	Result
pH	5.8~8.6	7.3
BOD (Biochemical Oxygen Demand)	20	2.4
SS	50	0.3
Oil content	5	ND

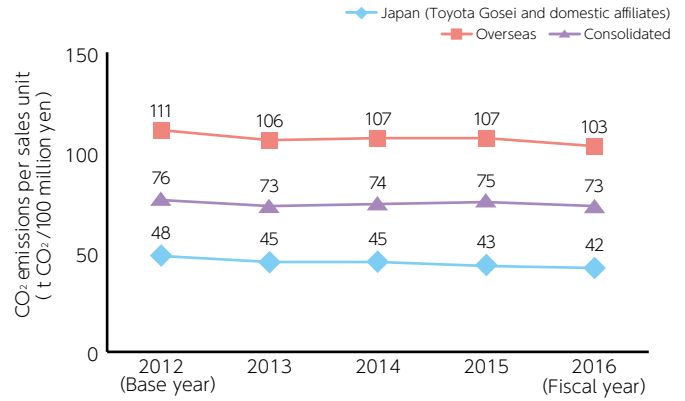
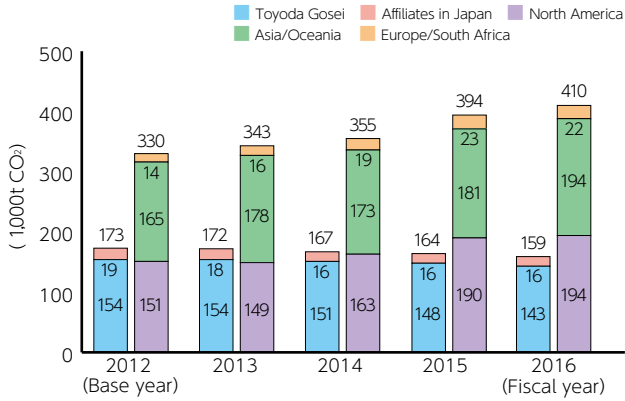
Resource Input and Output to the Environment in Business Activities in Fiscal 2016



■ Data on Greenhouse Gases, Emissions Volumes and Water Resource Usage

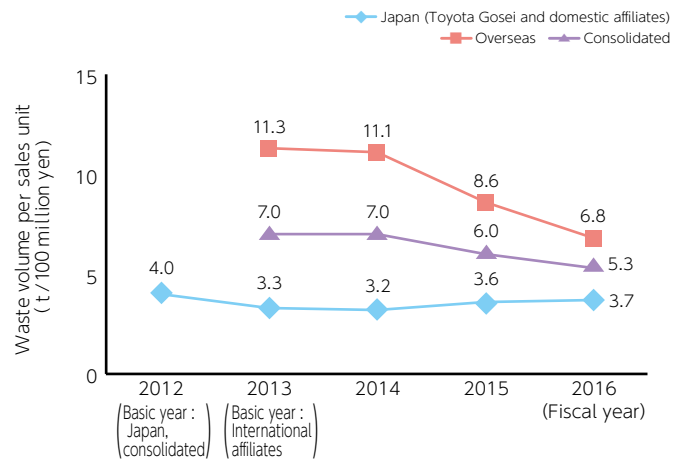
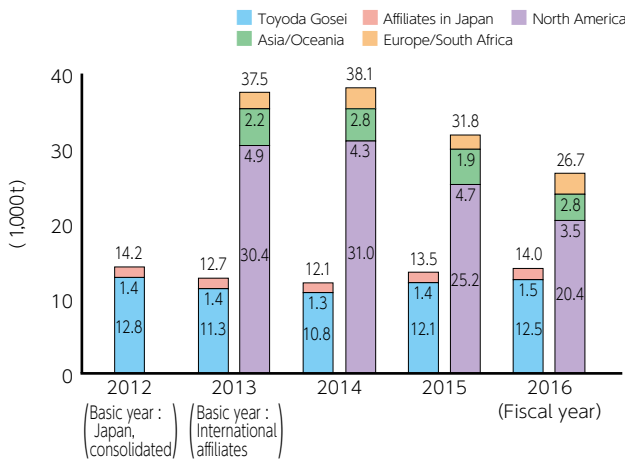
These data may differ in parts from the data in the Toyota Gosei Report, as they include data from a larger number of companies

■ CO₂ emissions/CO₂ emissions per sales unit trends (attributable to energy)

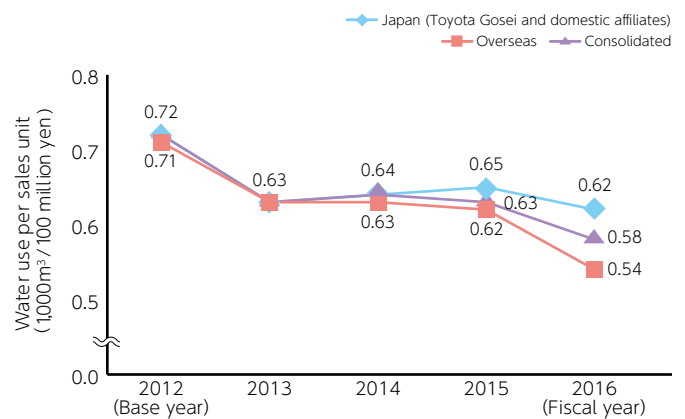
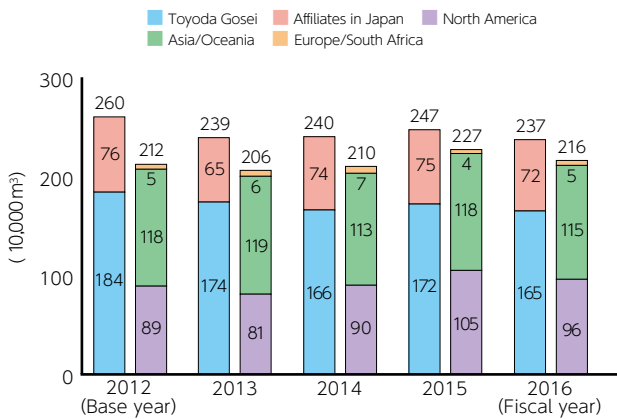


• CO₂ conversion calculation: International locations GHG Protocol (2001)
Locations in Japan 1990 Keidanren factor fixed value

■ Waste volume / Waste volume per sales unit trends



■ Water use / Water use per sales unit trends



Chemical Substance Handling and Emissions Volumes (Japanese and Overseas Affiliates)

The Toyota Gosei Group manages chemical substance handling volumes, emissions volumes, movement volumes, and VOC emissions volumes based on the laws of each country at our affiliates worldwide.

Affiliates in Japan

Japan, 1 company

Applicable regulations: Laws related to improved monitoring and management of the amounts of specified chemical substances released into the environment (Unit : t/year)

Name of chemical substance	Substance number (item number)	Amount handled	Volume emitted			Volume moved	
			Into air	Into water	Into ground	Volume moved via sewers	Volume moved as waste
Thiram	268	1.6	0	0	0	0	0.05

International affiliates

USA, 1 company

Applicable regulation: Toxic Release Inventory

(Unit : lbs/year)

	(8.1a) Own company landfill	(8.1b) Other own company emissions (air, water, etc.)	(8.1c) Another company landfill	(8.1d) Other emissions in another company (air, water, etc.)	(8.2) Own company heat recovery	(8.3) Another company heat recovery	(8.4) Own company recycle	(8.5) Another company recycle	(8.6) Own company disposal	(8.7) Another company disposal
Chrome	0	0.01	0	45,299	0	0	0	292,592	0	0
Copper	0	0.15	0	15,612	0	0	0	317,704	0	0
Manganese	0	0.02	0	613	0	0	0	180,490	0	0
Nickel	0	0.19	0	23,870	0	0	0	947,130	0	0
Nitric acid	0	172.6	0	0	0	0	0	0	0	9,407
Styrene	0	0	0	0	0	0	0	0	0	0
ammonia	0	0	0	1,453	0	0	0	256	0	0
Diisocyanate	0	0	0	0	0	3,850	0	0	0	0

8.1a : Total on-site disposal to Class I Underground Injection Wells, RCRA Subtitle C landfills, and other landfills.

8.1b : Total other on-site disposal or other releases.

8.1c : Total off-site disposal to Class I Underground Injection Wells, RCRA Subtitle C landfills, and other landfills.

8.1d : Total other off-site disposal or other releases.

8.2 : Quantity Used for Energy Recovery Onsite.

8.3 : Quantity Used for Energy Recovery Offsite.

8.4 : Quantity Recycled Onsite.

8.5 : Quantity Recycled Offsite.

8.6 : Quantity Treated Onsite.

8.7 : Quantity Treated Offsite.

Canada, 1 company

Applicable regulations:

National Pollutants Release Inventory (Unit : t/year)

VOC emissions	56
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Taiwan, 1 company

Applicable regulations:

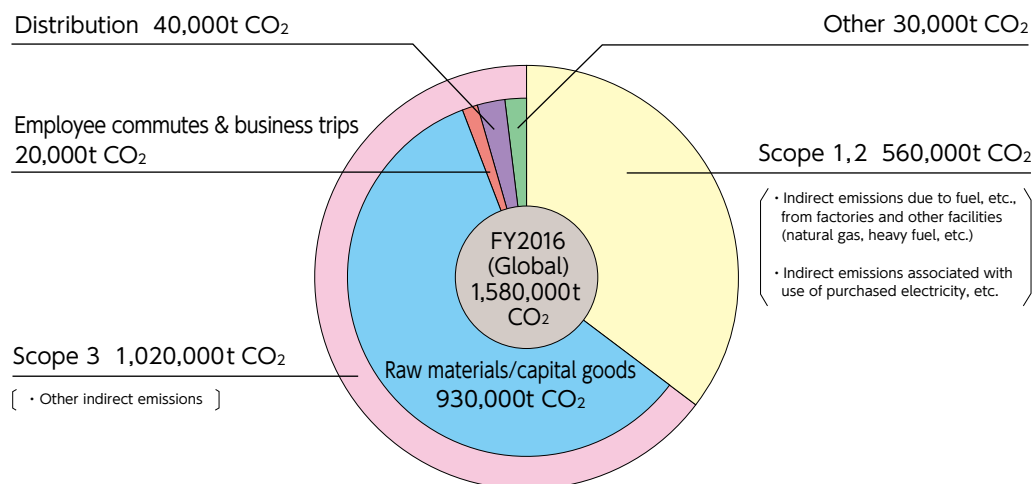
Air Pollution Control Act (Unit : t/year)

VOC emissions	55
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Chemical substance reduction targets

We are working toward a target of totally eliminating phthalic acid by 2019 based on overseas law.

CO₂ Emissions by Scope Level



Environmental Protection Costs

Environmental Protection Costs (Unit: ¥100 million)

Type of cost	Toyoda Gosei	Affiliates in Japan, total
Research and development costs ^{*1}	8.2	—
Costs within business areas ^{*2}	20.4	1.7
Management activity costs ^{*3}	1.3	0.2
Social activity costs ^{*4}	3.0	0.1
Costs for environmental measures ^{*5}	0.1	0
Total	33.0	2.0

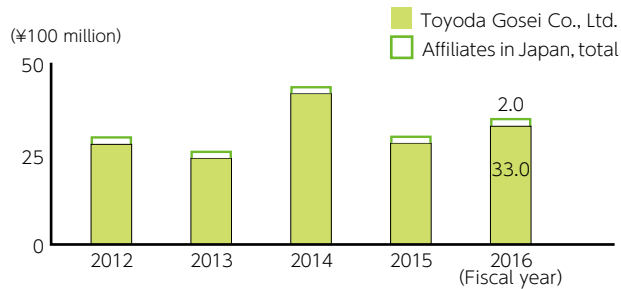
*1 Costs for research and development of products that reduce environmental impact.

*2 Costs to reduce environmental impacts from production, including pollution control, reduced energy consumption, and waste disposal.

*3 Costs for management, including education, maintenance of the environmental management system, and measurements.

*4 Costs for such measures as tree-planting and beautification.

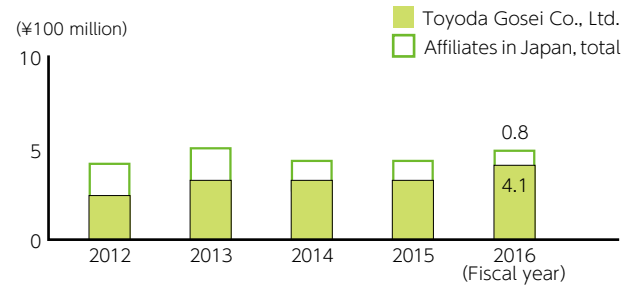
*5 Costs for dealing with environmental impacts from business operations.



Economic effect^{*6} (Unit: ¥100 million)

Item	Toyoda Gosei	Affiliates in Japan, total
Energy expenses	2.5	0.3
Waste-processing expenses	1.6	0.5
Total	4.1	0.8

*6 The economic effects calculated here are those that can be ascertained based on solid evidence.



Quantitative effect^{*7}

Item	Effect
Global warming prevention (CO ₂ reduction)	8,966t-CO ₂
Waste reductions (amount reduced)	716t
Legal compliance	Posted on Toyoda Gosei Report 2017 page29 Japan plant data described on page1-4

*7 Amounts are calculated for Toyoda Gosei alone.



Verification Statement

26 October 2017

Toyoda Gosei Co., Ltd.

Objective

SGS Japan Inc. (hereinafter referred to as "SGS") was commissioned by Toyoda Gosei Co., Ltd. (hereinafter referred to as "the Organization") to conduct independent verification based on Criteria of Verification (ISO14064-3: 2006 and the SGS verification protocol) regarding the data prepared by the Organization on the scope of verification (hereinafter referred to as "the GHG assertion"). The objective of this verification is to confirm that the GHG assertion in the Organization's applicable scope has been correctly calculated and reported in the GHG assertion in conformance with the criteria, and to express our views as a third party.

Scope

The scope of verification is limited to the assertion at the domestic plants, Head office, technical centers, distribution center and overseas plants.

GHG emissions included in this performance data are Scope 1 and 2: CO₂ emissions from energy consumption, excluded the vehicles which run outside of the sites, and Scope 3: category 7.

The period subject to report is from 1 April 2016 to 31 March 2017.

Procedure of Verification

The assertion was verified in accordance with Criteria of Verification, and the following processes were implemented at a limited level of assurance:

- Verification of the calculation system: Interviews on the measurement, tabulation, calculation and reporting methods employed by the Organization as well as review of related documents and records
- Verification of the assertion: On-site verification, review of vouchers at Morimachi Plant and Nishimizoguchi Plant, and analytical procedures and interviews carried out at Kitajima Technical Center included in the scope of verification at all works.

The criteria for this review is based on the calculation procedure of CO₂ emissions specified by the Organization and Basic Guidelines on Accounting for Greenhouse Gas Emissions throughout the Supply Chain Ver. 2.2.

Conclusion

Within the scope of the verification activities employing the methodologies mentioned above, nothing has come to our attention that caused us to believe that the Organization's the GHG assertion (Scope1 : 133,636 t-CO₂, Scope2 : 410,743 t-CO₂, Scope3 : 17,778 t-CO₂) was not calculated and reported in conformance with the criteria.

SGS Japan Inc. affirms our independence from the organization, being free from bias and conflicts of interest with the Organization.

For and on behalf of SGS Japan Inc
Senior Executive & Business Manager
Certification and Business Enhancement

Yuji Takeuchi

Signed:

