

Sixth Environmental Action Plan Activities and Results

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 FY2017																														
Building Low-Carbon Societies	1 Reduction of CO₂ emissions Products <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> Daily kaizen in plants More efficient equipment (LED lighting, upgraded utilities and air conditioning, etc.) Development and introduction of innovative processes Energy replacement 	<ul style="list-style-type: none"> Lighter weight products for improved automobile fuel efficiency <ul style="list-style-type: none"> Large plastic roof panels for fuel cell buses Reducing CO₂ emissions by cutting energy waste during production <ul style="list-style-type: none"> Switch to LNG from heavy oil as boiler fuel and liquefied petroleum gas (LPG) as heating furnace fuel Utilization renewable energy <ul style="list-style-type: none"> Solar power generation system in our Bisai Plant Wind power system and geothermal air conditioning system at the Inabe Plant 																														
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Building Recycling Societies	2 Reductions in 6 greenhouse gases*1 <ul style="list-style-type: none"> Magnesium, LED 	<ul style="list-style-type: none"> Reduction of greenhouse gases (6 gases) 																														
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3 Contributions as a manufacturer of environmentally-friendly LEDs <ul style="list-style-type: none"> Development and market launch of LED products 	<ul style="list-style-type: none"> Development and spread of LED products <ul style="list-style-type: none"> Development of air conditioner register with LED lighting 																															
Building Recycling Societies	4 Reductions in waste Products <ul style="list-style-type: none"> Engineering and technical development of products that are easily recyclable for effective use of resources Reductions in raw materials with lighter weights Production <ul style="list-style-type: none"> 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) 	<ul style="list-style-type: none"> Development of product recycling technology <ul style="list-style-type: none"> Waste reduction from design of airbag pads that can be easily taken apart Reduction of waste material during production <ul style="list-style-type: none"> Novelty products using leather scraps 																														
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Distribution <ul style="list-style-type: none"> Reduction in packing materials by reviewing packing and packaging specifications 	<ul style="list-style-type: none"> Reduction of packaging materials during shipping 																															
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* 1 Hydrofluorocarbon (HFC), perfluorocarbon (PFC), sulfur hexafluoride (SF₆), methane (CH₄), nitrous oxide (N₂O), nitrogen trifluoride(NF₃)
 * 2 We have set individual targets for each year to achieve the FY2020 targets, but the amount of packing material used has increased with the increased shipments of spare parts due to the 2016 Kumamoto earthquake and the flooding in northern Kyushu in 2017, as well as the larger size of parts.

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

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Building Recycling Societies	5 Reduction and effective usage of water <ul style="list-style-type: none"> Elimination of loss by visualization of water usage Reduction of water use by recycling, such as reuse of wastewater 	<ul style="list-style-type: none"> Reduction of water usage <ul style="list-style-type: none"> Reduced water use in cafeteria dishwashing Reduced water usage with the use of rainwater 																							
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Environmental Preservation and Building Nature-Friendly Societies	6 Control/reduction of substances of concern <ul style="list-style-type: none"> Promotion of global control 	<ul style="list-style-type: none"> Strengthened management of chemicals contained in products 																							
	7 Reduction of VOCs*3 <ul style="list-style-type: none"> Substitution of paint, washing thinners Amounts of these substances were optimized and decreased with new and reconsidered processes 	<ul style="list-style-type: none"> Reduction of VOCs in production processes 																							
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	8 Reduction of exhaust gases <ul style="list-style-type: none"> Adoption of low exhaust vehicles 	<ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> 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) 	<ul style="list-style-type: none"> Cleaning of Fujimae Tidal Flat (Aichi), tree planting in Millenium Hope Hills (Miyagi), eradication of Lance-leaved Coreopsis (Aichi), ecosystem preservation activities in Lake Izunuma-Uchinuma (Miyagi) Plant afforestation activities at sites worldwide Biotope creation using a regulating pond at the Heiwacho Plant 																							
	10 Environmental contributions to the community <ul style="list-style-type: none"> Contributing to local communities through environmental activities including leading-edge eco plants (Education for local residents, children, others) 	<ul style="list-style-type: none"> Contributing to the creation of livable communities 																							
	11 Social contribution activities and support for related projects <ul style="list-style-type: none"> Community beautification with a global cleanup Support for related projects (Toyota Shirakawa-Go Eco-Institute, Japan Business and Biodiversity Partnership) 	<ul style="list-style-type: none"> Contributing to the creation of livable communities 																							
12 Contributions to environmental policy <ul style="list-style-type: none"> Contributions to environmental policy and reductions of affiliated organizations (Japan Auto Parts Industries Association, Japan Rubber Manufacturers Association, others) 	<ul style="list-style-type: none"> Participation in the environmental policy of the Japan Auto Parts Industries Association, Japan Rubber Manufacturers Association, others 																								
Environmental Management	13 Consolidated environmental management <ul style="list-style-type: none"> Enhancement of consolidated environmental management activities globally Strengthened compliance management Activities to reduce environmental impacts 	<ul style="list-style-type: none"> 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 																							
	14 Coordinated environmental activities with business partners <ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Green procurement 																							
	15 Stronger employee training and education activities globally <ul style="list-style-type: none"> Activities to raise employees' environmental awareness Systematic environmental education Environment Month activities spread globally Information and education through in-house newsletters and other activities 	<ul style="list-style-type: none"> Environmental training Environmental education <ul style="list-style-type: none"> Environmental awareness survey Updated environmental symbol Environmental contribution awards Environmental booth at TG Festival Environmental forum Green curtains Environment Month(Environmental exhibit, Eco tour, Eco senryu, etc.) 																							
16 Active disclosure of environmental information and enhanced communication activities <ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Issuance of Toyoda Gosei Report 2017 																								

* 3 VOC : Volatile organic compounds

For CO₂ emissions we received third-party verification.