Pursuing high-efficiency manufacturing that simultaneously reduces environmental impacts and costs.

Major Results for FY2017

Mitigation of Climate Change	• Total GHG emissions: **1.27** million t-CO_2
Efficient Use of Resources	• Waste volume: **37,000** tons • Amount of water received per unit production (Compared to FY2013 level): **89**%
Management of Chemicals	• Total amount of chemicals discharged per unit production (Compared to FY2013 level): **79**%

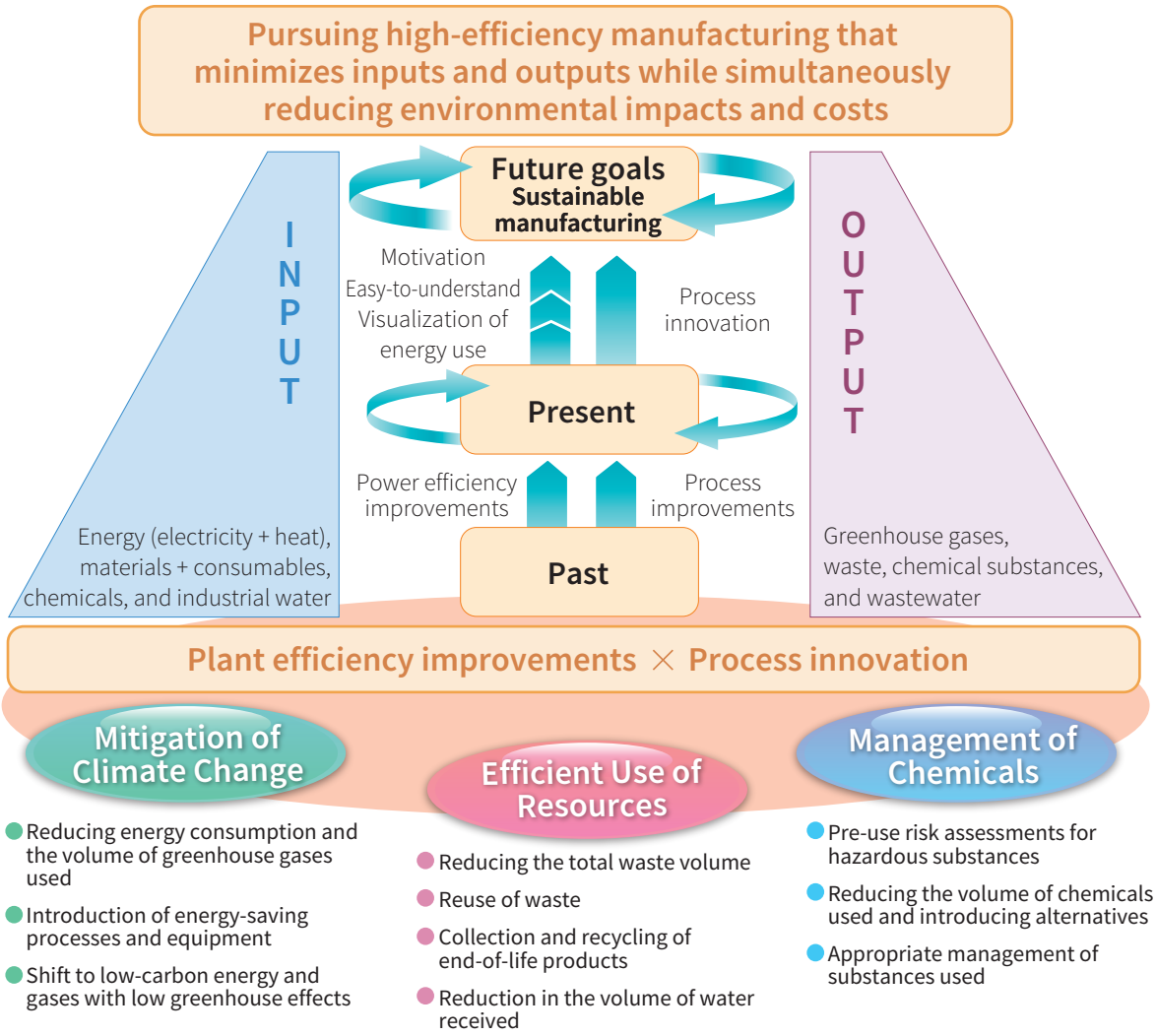
Basic strategies

Toshiba Group is pursuing high-efficiency manufacturing that minimizes resource inputs in production processes in Japan and abroad, eliminates unnecessary tasks in manufacturing processes, and reduces to minimum emissions into the atmosphere and waters, thus simultaneously reducing environmental impacts and costs.

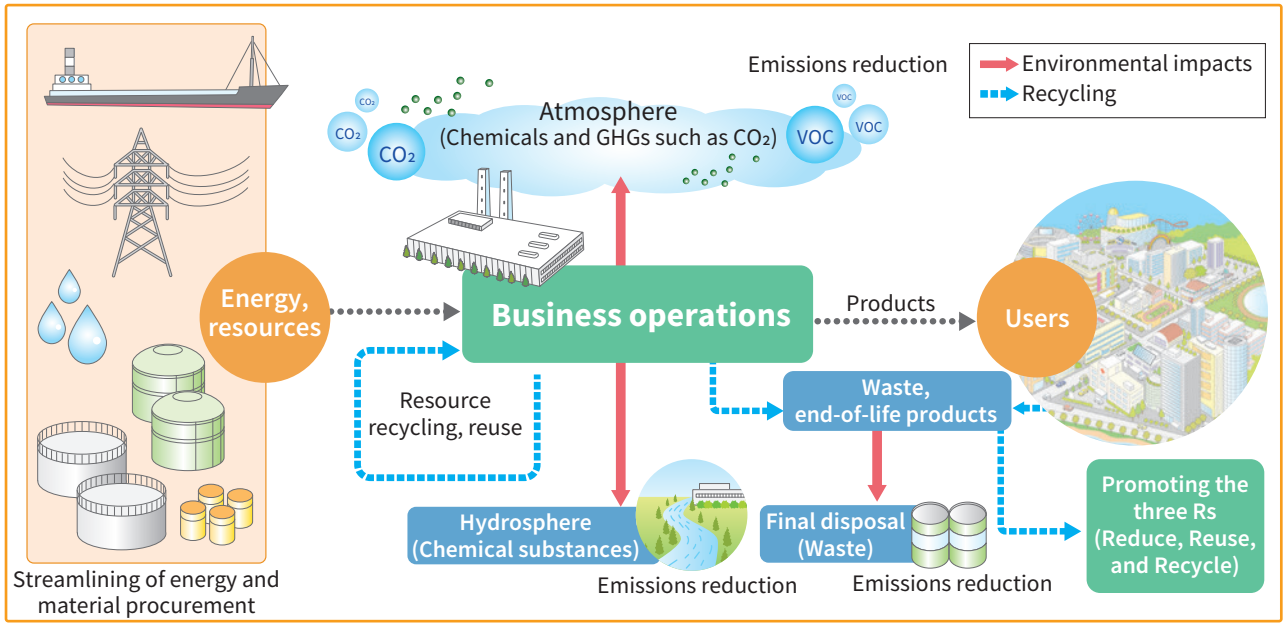
We aim to contribute to resolving climate change and other environmental issues by promoting the following two initiatives: "improvement of plant efficiency," which refers to efforts to grasp energy consumption appropriately in order to ensure effective improvement of equipment operation and introduce high-efficiency equipment, and "process innovation," which aims to achieve sustainable manufacturing in collaboration with all involved divisions.

In terms of mitigation of climate change, Toshiba Group is actively taking energy-saving measures on a company-wide scale to reduce emissions of greenhouse gases, including CO_2 and perfluorocarbons (PFCs). In terms of efficient use of resources, we will continue our efforts to reduce the total volume of waste generated through 3R activities as well as strive to use water resources efficiently by reusing and recycling. As for management of chemicals, we make efforts to reduce environmental impacts mainly through the introduction of alternative substances and process improvements.

■ High-efficiency manufacturing



■ Environmental impacts of business operations



Mitigation of Climate Change

Reducing total GHG emissions

Toshiba Group proactively installed systems to collect and/or remove sulfur hexafluoride (SF_6), which is used to insulate heavy electric machinery, and perfluorocarbons (PFCs), which are used to produce semiconductors. By means of this effort in FY2010, the Group succeeded in reducing the total amount of GHG emissions* by nearly 40% compared to the FY1990 level, and in subsequent years GHG emissions continued to decrease as the Group steadily took measures to improve its production processes. To reduce energy-derived CO_2 emissions resulting from use of electricity, we continuously make efforts to proactively adopt energy-saving measures at our production sites, including those overseas, to improve production efficiency, as well as to introduce renewable energy.

* Carbon dioxide (CO_2), methane (CH_4), dinitrogen oxide (N_2O) (= nitrous oxide), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3)

●Results of FY2017

Toshiba Group is working to reduce GHG emissions other than energy-derived CO_2 emissions mainly by installing PFC removal equipment and due to this effort emissions have remained almost constant since FY2010. Meanwhile, energy-derived CO_2 emissions were affected by deterioration in the CO_2 emission coefficient for electricity due to the effects of the Great East Japan Earthquake, but the Group reduced energy consumption compared to the FY2010 level by taking proactive conservation measures, including making capital investments.

●Future initiatives

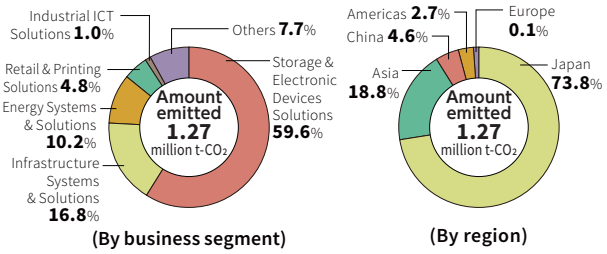
The CO_2 emission coefficient for electricity will continue trending higher in the future, but Toshiba Group will continue to make steady efforts to reduce total GHG emissions by investing proactively in high-efficiency equipment. The Group's goal is to reduce total GHG emissions to 1.66 million tons or less by FY2020.

■ Total GHG emissions

FY2017 target	FY2017 result	FY2018 target	FY2020 (Final fiscal year) goal
1.46 million tons	**1.27 million tons**	1.54 million tons	1.66 million tons

Note:The power receiving end coefficient (in Japan: 5.31t-CO_2/10,000kWh) is used as the CO_2 emission coefficient for electricity in the calculation of CO_2 emissions. Overseas electricity is based on the GHG Protocol data.

■ Breakdown of total GHG emissions (FY2017)



Reducing energy-derived CO_2 emissions

●Results of FY2017

In FY2017, energy-derived CO_2 emissions amounted to 1.09 million tons. As a result of initiatives to reduce power consumption mainly through energy-saving investments and production adjustments, Toshiba Group was able to reduce energy-related CO_2 emissions per unit activity to 97.8% of the FY2013 level, exceeding the initial target. by 0.2 percentage points.

●Future initiatives

In order to meet growing market demand, Toshiba Group plans to introduce more facilities. Therefore, energy-derived CO_2 emissions are likely to increase in the near future. The Group will continue its efforts to reduce CO_2 emissions per unit activity by 8% compared to the FY2013 level in FY2020 by adopting a variety of energy-saving measures, including investing in energy-saving facilities.

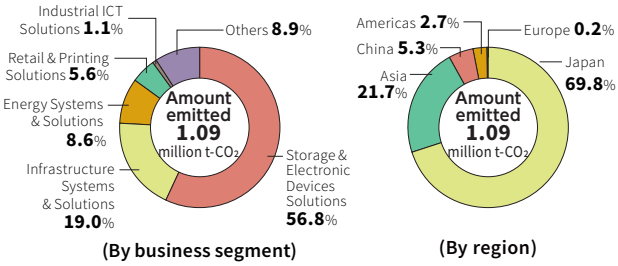
■ Energy-derived CO_2 emissions and those per unit activity

	FY2013 (Benchmark year) result	FY2017 target	FY2017 result	FY2018 target	FY2020 (Final fiscal year) goal
Amount emitted	1.18 million tons	—	**1.09 million tons**	—	—
Per unit production*	100%	98%	**97.8%**	96%	92%

Note:The power receiving end coefficient (in Japan: 5.31t-CO_2/10,000kWh) is used as the CO_2 emission coefficient for electricity in the calculation of CO_2 emissions. Overseas electricity is based on GHG Protocol data.

* Values related to the energy consumption required for manufacturing (nominal production amounts, number of products manufactured, number of persons, total floor area, etc.) are used.

■ Breakdown of energy-derived CO_2 emissions (FY2017)



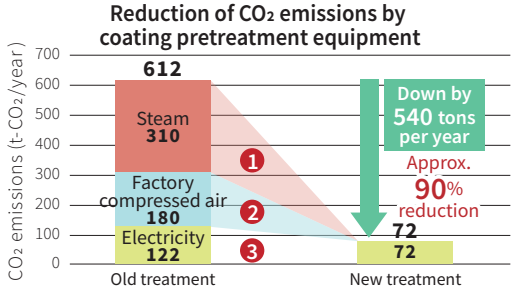
Efficient Use of Resources

Case 1 Introduction of a circular heating heat pump for compressor coating pretreatment

Toshiba Carrier Corporation

In our pretreatment process for coating of compressor line, we apply degreasing and chemical conversion coating* as a treatment for the coating surface. In these degreasing and chemical conversion coatings, the degreasing liquid and chemical treatment liquid must be used after heating. Previously, we utilized steam generated from a factory boiler by the heat source. By installing our "CAONS 140 circulated heating heat pump system" to convert the heat source and discontinue the use of steam, we succeeded in reducing CO_2 emissions by 310 tons per year. By also introducing various energy-saving measures, we succeeded in achieving a reduction of CO_2 emissions by 540 tons per year for the entire coating pretreatment.

* Treatment to form a coating film on the surface of the material by chemical reaction



CAONS140

Case 2 Energy-saving for air conditioning equipment in semiconductor clean rooms

Refer to page 19

Reducing Waste Volumes

Toshiba Group is working to reduce waste generation by minimizing the volume of waste generated per unit production, which indicates business process efficiency improvement, as well as by reducing the total volume of waste to a level below the Earth's environmental capacity.

●Results of FY2017

The volume of waste (excluding that of objects with value) totaled 37,000 tons, which is 8,000 tons lower than the initial target. The total volume of waste generated per unit production was 86% compared to that of FY2013, achieving the initial target.

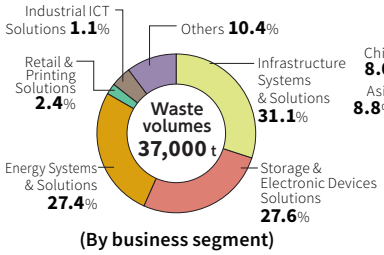
●Future initiatives

We will work to reduce the amount of generated waste and increase sales of objects with value from waste, with the goal of reducing waste volume by 52,000 tons and improving the total volume of waste generated per unit production for FY2020 by 4% compared to the FY2013 level.

■ Waste volume and total volume of waste generated

	FY2013 (Benchmark year) result	FY2017 target	FY2017 result	FY2018 target	FY2020 (Final fiscal year) goal
Waste volume	—	45,000 tons	**37,000 tons**	48,000 tons	52,000 tons
Total waste volume	108,000 tons	—	**96,000 tons**	—	—
Total waste volume per unit activity	100%	99%	**86%**	98%	96%

■ Breakdown of the waste volume (FY2017)

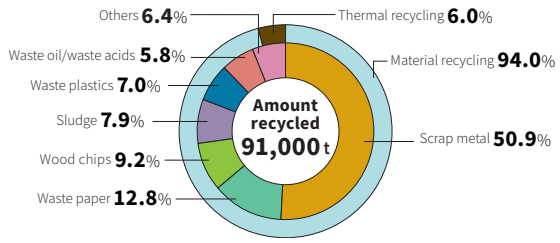


Efficient Use of Resources

Promoting recycling

In FY2017, Toshiba Group recycled 91,000 tons of resources. 95% of the total volume of waste generated was reused effectively as various resources. The recycled resources consisted mainly of scrap metal, waste paper, and wood chips, and 94% of them were used effectively for material recycling (recycled into materials for products), and the remaining 6% for thermal recycling (heat recovery). In the future, Toshiba Group will continue to increase the total volume of resources recycled and at the same time will strive for higher quality recycling chiefly by increasing the percentage of resources recycled into materials.

■ Breakdown of the volume recycled (FY2017)

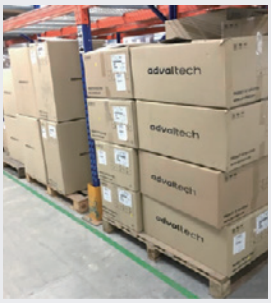


Case 1 **Wooden pallet reduction project**

TOSHIBA TEC SINGAPORE PTE LTD

At TOSHIBA TEC SINGAPORE PTE LTD, reducing wooden pallets that had been disposed of as waste was an issue for concern. Previously, parts for printer manufacturing delivered from suppliers were packaged in cardboard boxes and stacked on wooden pallets, and such pallets that were no longer necessary after shipment were disposed of as waste. Therefore, TOSHIBA TEC SINGAPORE created platform trucks that can be reused as alternatives to wooden pallets and requested suppliers to continuously use these platform trucks for delivery. As a result of this improvement, the company reduced the waste volume of wooden pallets by approximately 10 tons per year. This activity was also recognized elsewhere and received the Distinction Award and Gold Award in the FY2016 Singapore Packaging Agreement Award.

Before



After

Reducing the Amount of Water Received

In response to a global increase in concerns regarding water problems, Toshiba Group is promoting sustainable water resource management. Each of our production sites has incorporated reducing the amount of water received into its annual plan in order to develop specific strategies and conduct follow-up surveys on an ongoing basis. We are promoting wide-ranging initiatives including recycling the wastewater generated in sites and introducing systems for using rainwater.

●Results of FY2017

The total amount of water received in FY2017 was 19.4 million m^3 and the amount of water received per unit production was 89% of the total for FY2013, exceeding the initial target by 10 percentage points.

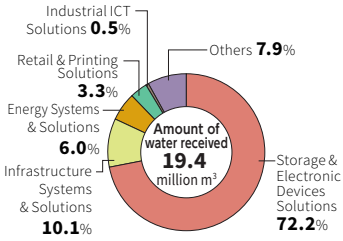
●Future initiatives

We will promote recycling wastewater and using rainwater and aim to improve the amount of water received per unit production by 4% of the FY2013 level in FY2020.

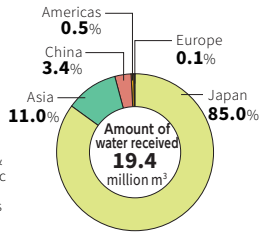
■ Amount of water received per unit production

	FY2013 (Benchmark year) result	FY2017 target	FY2017 result	FY2018 target	FY2020 (Final fiscal year) goal
Amount of water received	21.2 million m^3	—	**19.4 million m^3**	—	—
Per unit production	100%	99%	**89%**	98%	96%

■ Breakdown of the amount of water received (FY2017)



(By business segment)



(By region)

Case 2 **Environmental Impact Reduction Measures at Toshiba Subsidiaries in India**

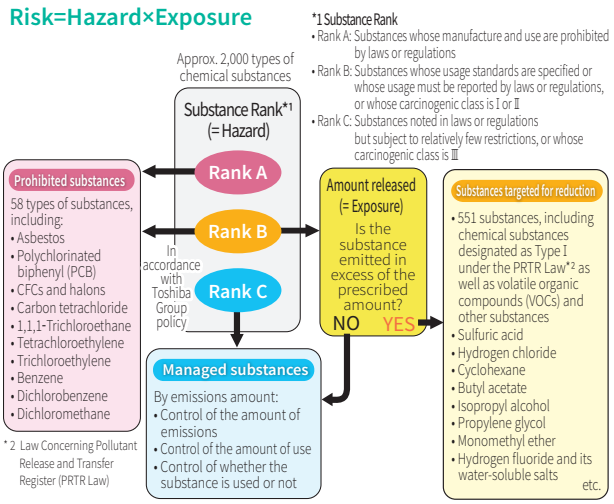
Refer to page 16

Management of Chemicals

Managing Chemical Substances by Ranking

Toshiba Group classifies standards for the handling of chemical substances into the three categories of prohibition, reduction, and control, and manages chemical substances according to the regulations for each category. The relationship between substance ranking and management classifications, which shows the concept underlying this initiative, is indicated in the figure below. Approximately 2,000 types of chemical substances are classified into three ranks (hazard level A, B, and C) based on the regulatory levels set by environmental legislation, data on carcinogenic chemicals, and other factors. The classifications of prohibition, reduction, and control are determined by judging risks for each chemical substance using the ranking of the substance equivalent to hazard levels and emissions equivalent to exposure to the substance.

■ Substance ranking and management classifications



Reducing Emissions of Chemical Substances

Toshiba Group strives to reduce the consumption of chemical substances by designating substances that have large direct impacts on the environment as those targeted for reduction. By business segment, Storage & Electronic Devices Solutions and Infrastructure Systems & Solutions account for approximately 80% of the total emissions of such substances, and by region, approximately 80% of such emissions originate from Japan.

●Results of FY2017

In FY2017, Toshiba Group took measures for solvents used in cleaning and resin processing, which ranked high among such emissions, and promoted initiatives such as using alternative substances, starting operation of combustion detoxifying devices, and improving powder coating and other manufacturing processes in order to reduce the use of raw materials as well as reducing the amount of VOC evaporation by enhancing chemical management. As a result, the Group reduced emissions of substances targeted for reduction by 128 tons (19%) compared to the 2013 level. The amount of chemical substance emissions per unit production was 79% of the FY2013 level and we therefore achieved our target.

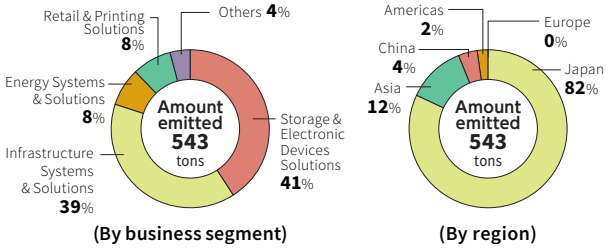
●Future initiatives

In the Sixth Environmental Action Plan, Toshiba Group aims to reduce emissions from substances per unit production in FY2020 to less than the FY2013 level. It plans to use alternative substances and increase material efficiency by improving processes as an incoming countermeasure and to expand usage of emission removal and collection equipment as an outgoing countermeasure.

■ Emissions of substances targeted for reduction and those per unit production

	FY2013 (Benchmark year) result	FY2017 target	FY2017 result	FY2018 target	FY2020 (Final fiscal year) goal
Amount emitted	671 tons	—	**543 tons**	—	—
Per unit production	100%	99%	**79%**	98%	96%

■ Breakdown of emissions of substances targeted for reduction (FY2017)



Case Global deployment of a chemical substance management system used in the manufacturing processes

Toshiba Carrier Corporation

Today, regulations on chemical substances are being made stricter in Japan and around the world and chemical substances used in manufacturing processes are required to be managed speedily and meticulously. We have therefore developed "TOCACHEF*1" to reliably deal with the increase in regulated substances and improve efficiency in reporting to the administration in compliance with laws such as PRTR Law. The system provides an electronic approval workflow feature to circulate applications for registration of a material within our company's internal departments concerned, which allows them to conduct and record assessments of such an application. Also, by registering all the chemical substances contained in the materials, the system allows you to automatically count and manage the amounts of such substances that are being used and transferred.

*1 TOCACHEF: Toshiba Carrier Chemical Control system for Future

The operation of this system has commenced at Toshiba Carrier Group manufacturing sites in China and Thailand as well as Japan, and we are trying to minimize environmental and safety risks and sharing materials across the entire Group by jointly using history data.