Reduction in Environmental Impact from our Corporate Activities

Environmental Performance*

TOK conducts daily quantitative and qualitative evaluation of the effects that its corporate activities have on the environment, and takes various initiatives to minimize their impact.

* Environmental performance: Environmental performance evaluation is a method of evaluating, in qualitative and quantitative terms, environmental activities and results achieved by an organization in accordance with its environmental policy, objectives and goals.



			•	
INPUT		OUTPUT		
Total energy consumed	14,527kL crude oil equivalent	CO ₂		29,000t-CO2
Electric power	40,220,000kWh (10,135kL crude oil equivalent)	S0x*1		1.3t
Petroleum (heavy oil)	945kL (953kL crude oil equivalent)	BOD*2		0.4t
Gas	2,880,000m ³ (3,340kL crude oil equivalent)	General administrative waste		34t (Recycling rate: 42%)
Used water	366,000m ³		General industrial waste	1,830t (Recycling rate: 34%)
Chemical substances (Class 1 Designated Chemical Substances under the PRTR Law)	1,300t	Industrial waste	Specially controlled industrial waste	2,150t (Recycling rate: 82%)
	^J * January 2018 to D	ecember 2018		

* January 2018 to December 2018 (Chemical substances: April 2018 to March 2019)

*1 Sulfur oxides (SOx): Produced from the combustion of fossil fuels containing sulfur. These are considered to be the causative substances of acid rain.

*2 Biochemical oxygen demand (BOD): BOD refers to the volume of oxygen required when pollutants in the water (organic substances) are turned into inorganic substances or gases through the action of microorganisms. BOD is a major indicator used when evaluating the degree of contamination of rivers and other water bodies. A higher value for BOD means that the water involved is more contaminated.

Please follow the URL below for more detailed data on environmental impact by site. Data on environmental impact by site https://www.tok.co.jp/eng/csr/env-activity/load_data.html



Emissions of Greenhouse Gases

As climate change has become more serious in recent years, companies are expected to measure their greenhouse gas emissions from not only their own properties, but also across their entire value chain. The TOK Group measures and calculates its greenhouse gas emissions based on the Ministry of the Environment's Basic Guidelines on Accounting for Greenhouse

Gas Emissions throughout the Supply Chain within the context of emissions from business activities (Scope 1, Scope 2) and indirect emissions from non-business activities (Scope 3). TOK will advance initiatives toward the realization of a

sustainable society, identifying issues throughout its value chain where its corporate activities can have an impact.

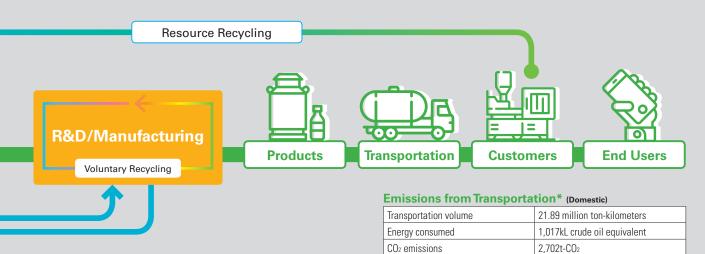
Scope 1	9,285t-CO2	Scope 2	20,091t-CO2

Scone 3 Emissions by Category

Scope 5 Emissions by Category			
Purchased goods and services	30,206t-CO2	Upstream leased assets	—
Capital goods	Not applicable	Downstream transportation and distribution	Domestic: 2,702t-CO ₂
Capital goods	Not applicable		Overseas: 3,308t-CO2
Fuel-and energy-related activities not included in Scope 1 or 2	—	Processing of sold products	Not applicable
Upstream transportation and distribution	Not applicable	Use of sold products	Not applicable
Waste generated in operations	6,588t-CO ₂ End-of-life treatment of sold products		Not applicable
Business travel	843t-CO2	Downstream leased assets	Not applicable
Employee commuting	572t-CO2	Franchises	Not applicable
Employee commuting		Investments	Not applicable

* January 2018 to December 2018 (Waste generated in operations: April 2018 to March 2019)

* Excludes people seconded to other companies.



* January 2018 to December 2018

Emissions from domestic transportation are based on the Ministry of Economy,

Trade and Industry's Fiscal 2018 Specified Shippers Periodical Report.

Environmental Accounting*

TOK has been using environmental accounting since 2000. This allows the Company to conduct environmental management while monitoring the expenses and effects of environmental

programs. In 2018, environmental conservation expenses totaled ¥565 million, mainly for the prevention of pollution and recycling of resources.

* Environmental accounting: A system for understanding environmental conservation related investments made by, and expenses incurred by, businesses and other organizations, as well as the effects of such investments, in quantitative terms (currency or physical quantity) and communicating such information to stakeholders.

				(Millions of yer
Category		Key Initiatives	Investment	Cost
Business area	Pollution prevention cost	Air, water and other pollution prevention equipment and its renewal, operation, maintenance and management	0	97
cost	Global environmental conservation cost	Energy conservation activities	73	15
	Resource circulation cost	Melting, waste processing	0	177
Upstream/Downstream cost		Green purchasing, collection of used products	0	8
Administration cost		Approach to environmental management system	0	75
R&D cost		Research and development related to environmental conservation (costs for chemical substances screening)	0	84
Social activity cost		Cleanup activities around the production plants	0	1
Environmental remediation cost		Processing of polluted soil from new building construction	0	35
Total			73	492

* January 2018 to December 2018

Environmental Conservation Cost

Investments refer to the accounting for equipment associated with environmental conservation and improvement. Expenses are the sum of depreciation, personnel and other operating expenses associated with environmental conservation. Personnel expenses are computed based on a basic unit cost.

Economic Benefits Associated with Environmental Conservation Measures

Figures are calculated based on internally realized benefits from the sale of materials having value and from the reduction of costs.

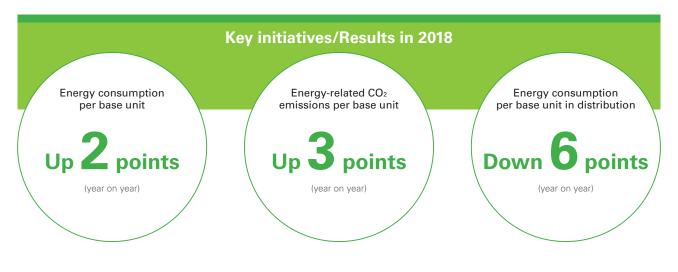
		(Millions of yen)
Effects		Amount
Revenue	Gains on the sale of recycled products	19
Cost savings	Cost savings Reduction in disposal costs through reduction in the volume of waste	
Total		105

* January 2018 to December 2018

*1 Scope of environmental accounting covers production facilities in Japan and distribution centers, excluding the headquarters and marketing offices. Reference used is the Environmental Accounting Guidelines 2005, published by the Ministry of the Environment.

*2 Amounts of less than one million yen have been rounded down.

Address Climate Change Issues



Basic Concept

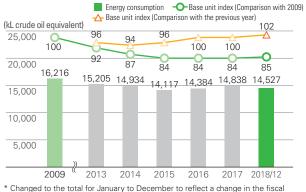
The TOK Group quantitatively measures the environmental impact of its value chain, and works to reduce environmental burden with a full understanding of the impact our production activities have on the environment. We aim to achieve sustainable development alongside society through the development of products that help conserve resources and energy.

Improve Energy Consumption per Base Unit and CO₂ Emissions

TOK strives to reduce its environmental impact by improving product manufacturing processes, work efficiency, and facility operations, upgrading to high-efficiency equipment, and enhancing and maintaining heat insulation around steam pipes.

In 2018, the amount of energy used, such as electricity and city gas, decreased 2% year on year to 14,527kL crude oil equivalent, as a result of the installation of more efficient equipment and efforts to improve work efficiency, despite factors that increase energy usage, including an increase in operating hours alongside greater production volume at our sites, the installation of new inspection equipment and the completion of a new building.

Energy Consumption

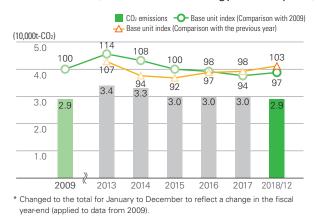


vear-end (applied to data from 2009).

* Errors have been corrected in data for 2016 and 2017.

Energy consumption per base unit increased 2 points compared with the previous year, falling short of the target for the year, owing to a temporary decline in energy efficiency due to reconstruction at the Sagami Operation Center. However, we achieved our medium-term target of reducing energy consumption per base unit by 10 points by 2019 compared with the 2009 level, achieving a reduction of 15 points.

Energy-related CO_2 emissions per base unit increased by 3 points year on year, missing the target for the year, owing to an increase in operating hours for heavy oil power generators alongside expansion in production volume. Moreover, we did not reach our medium-term target for a 9-point reduction compared with the 2009 level, having only achieved a 3-point reduction.



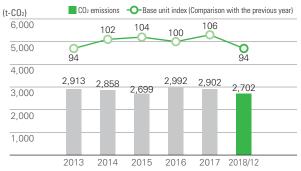
CO₂ Emissions (Converted from Energy Consumption)

Improve Energy Consumption per Base Unit in Distribution

In the distribution department and distribution functions at each plant, TOK is taking steps to reduce energy consumption in distribution by examining the use of lighter product containers and packaging materials, mixed loading of raw materials, intermediates and finished products on transportation trucks to reduce the overall number of trucks, and to improve loading efficiency.

In 2018, transportation ton-kilometers increased 5%, reflecting higher product shipments to overseas locations and greater movement of intermediate materials to overseas subsidiaries. However, fuel consumption declined 6% due to improvements in loading efficiency. In terms of base units, transportation ton-kilometers decreased 6 points year on year, owing to a greater percentage of trucks with high loading efficiency.

CO₂ Emissions in Distribution

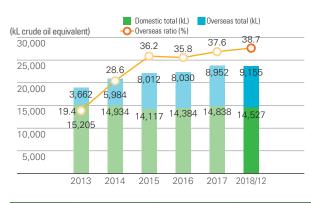


* January 2018 to December 2018

Measures to Prevent Global Warming at Overseas Manufacturing Sites

The overseas ratio of energy consumption increased again in 2018, owing to expansion in production facilities and growth in items produced at overseas sites. For this reason, TOK will engage in production activities with a focus on energy conservation through a PDCA cycle for environmental management systems.

Energy Consumption Ratio of Overseas Sites (%)



Year	Domestic total (kL)	Overseas total (kL)	Overseas ratio (%)		
2014	14,934	5,984	28.6		
2015	14,117	8,012	36.2		
2016	14,384	8,030	35.8		
2017	14,838	8,952	37.6		
2018	14,527	9,155	38.7		

*1 January 2018 to December 2018

*2 Errors in CSR Report 2018 regarding data for 2016 and 2017 have been corrected.

Future Issues and Initiatives

Climate change has become an urgent issue that threatens the safety and well-being of people all over the world, in both industrialized or developing countries. The TOK Group is tackling this issue by aggressively working to reduce greenhouse gases through the efficient use of energy, aiming to increase the ratio of renewable energy and use low-carbon energy sources by converting fuel from coal and heavy oil to natural gas.

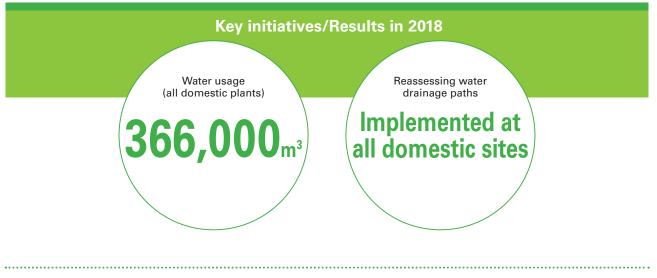


Assistant Manager, General Affairs Office, Gotemba Plant

Reducing Not Only \mbox{CO}_2 Emissions but Also Risk and Costs by Switching to Natural Gas Boilers

The Gotemba Plant switched from heavy oil boilers to natural gas boilers in August 2018 as a part of activities to reduce energy-related CO_2 emissions of the Company. The modernization of large-scale air conditioning systems in May 2017 resulted in a 7% year-on-year reduction in CO_2 emissions corresponding to the reduction in electricity used, contributing to the overall decrease in CO₂ emissions. Underground storage tanks were removed as a result of switching to natural gas boilers and reduced the risk of leaks and management costs. We aim to increase the operational efficiency of our equipment and contribute further to reducing our environmental impact.

Promotion of Resource Recycling: Initiatives to Address Water Risk



Basic Concept

The Group must use pure water in its products and manufacturing processes, and therefore makes a concerted effort to minimize the amount of water consumed by production activities and to maintain and improve the quality of wastewater. We aim to contribute more in this regard through business activities that consider the issue of virtual water^{*}.

* Virtual water is an estimated amount of water consumed in the production and distribution of agricultural and industrial products, as well as the water resources necessary if imported products were instead produced in the importing country.

Water Usage Volume

Water usage volume changes when manufacturing processes and output change. TOK works to reduce usage by constantly monitoring the state of industrial water and city water usage, and reviewing related equipment.

In 2018, water usage volume in Japan decreased by 39,000m³ year on year to 366,000m³, despite an increase in production volume, thanks to efforts at recycling water in the manufacturing process for pure water that is used to manufacture other products. Overseas, even though production volume expanded, water usage declined by 91,000m³ year on year to 539,000m³, reflecting the switch to more efficient operating methods at Chinese site.

Domestic total Overseas total -O-Overseas ratio (%) (1.000m³) 60.9 59.6 1,200 630 46.0 900 41.0 38.7 0 341 280 254 600 402 404 400 404 300 2014 2015 2016 2017 2018/12

Water Usage Volume at Domestic and Overseas Sites

* Changed to the total for January to December to reflect a change in the fiscal year-end (applied to data from 2014).

Water Risk Management

Water risk is widely recognized as a serious worldwide risk, ranking among the three largest risks since 2012 in the Global Risks Report published by the World Economic Forum. To better understand water usage volume at all of its sites around the world, the TOK Group has clarified risks at each stage of water supply, raw materials supply, manufacturing processes, and wastewater emissions from plants.

Reduce Water Pollution Risks by Reassessing Water Drainage Paths

In 2018, TOK surveyed the state of water usage at all domestic sites. The Company reviewed operational methods at each stage of water usage, and attached covers for the purpose of preventing leaks, with the objective of mitigating risks at sites identified as having pollution risks in their wastewater. We will continue carrying on efforts to reduce risks.



Cover for preventing leaks

Worldwide Water Risk (0–100%) Projections for 2030

In a business-as-usual (BAU) scenario, the map shows water usage as a percentage of water supply in each region, assuming both economic growth and higher CO_2 emissions.

The higher the percentage, the more severe the competition for water as more people fight over fewer water resources.

- Low risk (under 10%)
- Low to medium risk (10–20%)
- Medium to high risk (20–40%)
- High risk (40-80%)
- Extremely high risk (over 80%)
- Water shortage

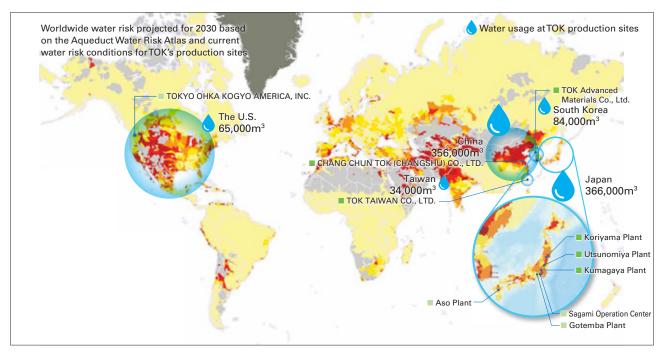
Overall Water Risk

The current degree of exposure to water risk at TOK's production sites, based on a comprehensive evaluation of Physical Risk Quantity, Physical Risk Quality, and Regulatory & Reputational Risk

- Low risk (0–1)Low to medium risk (1–2)
- Medium to high risk (2–3)
- High risk (3–4)
- Extremely high risk (4–5)

Business-as-Usual (BAU) scenario (RCP8.5)

The BAU scenario is one of four scenarios for representative concentration pathways outlined in the Intergovernmental Panel on Climate Change's Fifth Assessment Report. This scenario assumes no further efforts are made to suppress emissions after already introduced or currently planned measures to reduce emissions. This scenario assumes maximum emission volume among projected greenhouse gas emissions as of 2100.



Aqueduct Water Risk Atlas

Aqueduct is an interactive website tool for mapping water risk provided for free by the World Resources Institute (WRI), a thinktank in the U.S. that researches water and other natural resource problems.

Aqueduct provides data on water risk at the production sites of companies. The website also offers detailed information about natural resource problems in various regions of the world.

Future Issues and Initiatives

An assessment of the risk level of the TOK Group's manufacturing sites resulted in a "medium" risk level being identified. TOK is focusing efforts on reducing water risk while considering the balance with water usage, by examining in more detail its water usage (transfer to products, transfer to the atmosphere via evaporation, transfer to wastewater and effluents, and transfer as household wastewater).

TOK's Human Resource



Toshiya Takagi (left) Section Manager, EHS Office, EHS Div. Taiji Shigematsu (right) Section Manager, Facilities Office, Manufacturing Dept.

Advancing Initiatives to Reduce Water Usage Volume

The Company's initiatives to address water risk have in the past mainly focused on managing water usage volume while reducing the risks related to wastewater and leakages. In 2018, the Company confirmed a 30% year-on-year reduction in water usage in the pure water production equipment thanks to the introduction of a prototype recycling system, in addition to ascertaining the water balance at each domestic plant. We intend to gather more data about water budgets and refocus on activities to reduce water usage, while setting a future target for company-wide reduction. Since equipment performance is a major determining factor in the ability to reduce water usage volume, we will work with facilities departments in charge of energy conservation activities to strike the right balance in overall water usage.

Promotion of Resource Recycling: Reducing Industrial Waste Emissions and Landfill Disposal



Basic Concept

We conduct 3R activities (reduce, reuse, recycle) for effective use of limited natural resources. By restricting the volume of waste generated, thoroughly sorting the waste by type and increasing the volume that's recycled, we are working to make more effective use of resources. We strive to maintain zero emissions* by working to reduce landfill disposal volume by processing waste products through combustion or crushing, called intermediate treatment, and through stabilization and volume reduction initiatives.

* Zero emissions: Landfill disposal volume (direct or after intermediate treatment) of less than 1% of industrial waste discharged by business activities

Reduce Industrial Waste Emissions

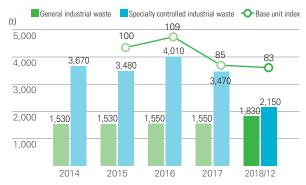
In 2016, TOK set a new medium-term target for reducing industrial waste (per base unit) by 5 points by 2020 compared with 2015 (reduction of 1 point annually). With this target in mind, TOK has been advancing activities to reduce various industrial waste, such as by refining and reusing process effluents, internal effluent processing, internal recovery, and converting waste into items of value.

In 2018, the Company proactively refined and reused process effluents, and converted into items of value, resulting in a 17-point reduction compared with 2015 and a 2-point reduction compared with the previous year.

Maintain Zero Emissions

In 2018, industrial waste subject to landfill disposal after intermediate treatment stood at less than 1% of total waste, so we have achieved zero emissions for five consecutive years.

Volume of Industrial Waste*1, *2



- * Changed to the total for January to December to reflect a change in the fiscal year-end.
- *1 The base unit index is calculated after adding general industrial waste and specially controlled industrial waste.

*2 We are committed to reducing the amount of industrial waste generated, and our goal is to reduce this amount by 5 points (1 point per year) by 2020, taking the index for 2015 as the base unit.

Effectively Utilizing the Earth's Resources by Repeating Basic Techniques

 Resource
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 Takahiro Sasaki
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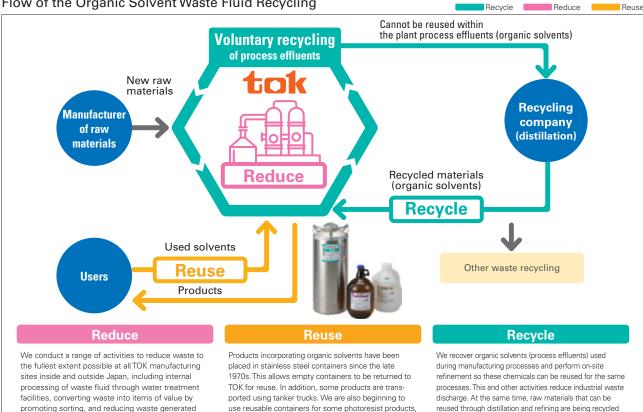
 Assistant Manager,
 raw mate

 General Affairs Office, Aso Plant
 Effluent:

At the Aso Plant, we have committed to the 3Rs as the never-ending slogan for a production plant. Our efforts are focused on reducing and reusing effluents emitted from production processes and effectively utilizing them as a source of energy, for example. By precisely sorting effluents by solvent type, it is possible to recover raw materials through superfractionation. Effluents can also be processed into fuel after making adjustments in the plant for the processor companies. In these and other ways, we have improved our recycling rate. Plastic waste is a global concern that has an impact on ecosystems, and we are stepping up efforts to sort plastic waste and turn it into a raw material again. We will continue to improve our processes and raise awareness about the environment among employees in a bid to further reduce waste.

TOK's

Human



Reduce: This refers to reducing the volume of waste material generated. Reduction involves minimizing the volume of materials in products in order to minimize the volume of materials that is eventually discarded Reuse: This refers to the use of manufactured goods, containers and other products repeatedly in order to reduce the volume of waste materials generated and conserve resources. Recycle: Recycling is the use of waste materials as a resource rather than burning these materials or sending them to a landfill. Recycling thus conserves resources and prevents pollution.

chiefly those used in the manufacture of LCD panels

Techniques for Recycling Organic Solvent Effluents

through modifications of manufacturing processes.

TOK makes concerted efforts to effectively use waste emitted from its own plants. Waste oil is sorted by each type of recyclable solvent, a rating for impurities is assigned, and is analyzed whenever it is emitted. By strengthening management in this way, we are able to reuse waste oil that was previously treated as industrial waste and disposed. Waste oil with a mixture of organic solvents is blended with other waste oil of differing calories and water content to create combustion improvers. TOK will continue efforts to reduce emissions of industrial waste by effectively utilizing resources.

Developing an In-house Recycling Ecosystem

As a new initiative to reduce its environmental impact, TOK is cooperating with research institutions (companies/universities/ public entities, etc.) to proactively develop new technologies. One of these initiatives is an in-house recycling ecosystem that uses new technology to process in-house waste and extract energy from this waste. This recycling ecosystem has proven itself to be cleaner than a regular combustion system in terms of gas emissions. The recycling ecosystem is still in the testing stages, and we are working hard so it can help solve the issue of climate change.

with the help of trusted partners (recycling companies).

TOK's Stake-



Mr. Shoichiro Abe (right) Director General Manager Kyusyu Yozai Co., Ltd.

Mr. Takashi Shoji (left) Manager, General Affairs Department Kyusyu Yozai Co., Ltd.

Starting Communication about Further Evolving Activities

Our main business is to supply recycled materials to raw material manufacturers like TOK. We receive effluents and used solvents from companies in the electronics industry and refine them for reuse through a distillation process. These efforts contribute to the development of a recycling-based society by reducing emissions of industrial waste.

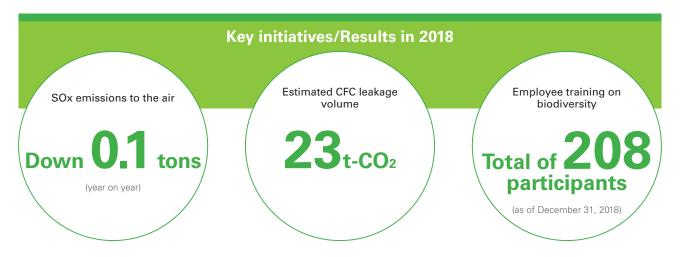
In recent years, the electronics industry has started to demand the reduction of impurities in products as measured in the ppt level*¹. To meet these stricter customer requirements, we are focusing our energies on working with TOK to regularly exchange information and cross-check quality. Recently, we have started a conversation about further evolving these activities, such as examining measures to reduce waste volume through the distillation and refining of effluents.

As an associated company*2, we aim to contribute to maintaining zero emissions, reducing environmental impact, and the recycling of resources for the TOK Group, while receiving guidance from TOK and sharing knowledge between the two companies.

*1 1ppt = 1 part per trillion

*2 An associated company not accounted for by the equity method

Air, Water and Soil/Biodiversity



Basic Concept

The Group takes steps to lighten its environmental impact through reductions in greenhouse gases* and chemical substance emissions by upgrading equipment, switching fuels, and reviewing manufacturing processes to preserve the air, water, and soil environments upon which our livelihoods depend. Also, we formulated the TOK Biodiversity Protection Declaration and are working to raise employee awareness of the issue.

* Greenhouse gas: Gas in the atmosphere that allows sunlight to pass through but absorbs infrared rays emitted from the ground and sea. These gases are believed to cause global warming.

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Prevent Air, Water and Soil Pollution

• Reducing emissions of air-polluting substances

TOK has been converting its boilers to use natural gas to reduce emissions of sulfur oxide (SOx) and nitrogen oxide (NOx) that are major contributors to air pollution. In 2018, boilers at the Gotemba Plant were converted to natural gas boilers. This marks the completion of the conversion of boilers to city gas boilers at all of our plants, with the exception of two plants without access to city gas supplies.

In 2018, SOx emissions related to business activities were reduced by 0.1 tons year on year to 1.3 tons, thanks to the conversion to natural gas boilers at the Gotemba Plant. NOx emissions increased by 2.3 tons year on year to 10.1 tons, reflecting longer operating hours of electric power generators.

• Monitoring soil pollution

The TOK Group manages the risk of soil and underground water pollution with the recognition of concerns that such pollution could threaten the safety and health of local residents and employees. In the event that surveys discover soil or underground water pollution, the Company will rapidly disclose information and take remedial actions to ensure the health and safety of local residents. The Company will also report to relevant government agencies the status of pollution and measures being taken to prevent the pollution from spreading. To prevent soil and underground water pollution from spreading to nearby areas, we will continue activities to avoid pollution risk by properly conducting soil surveys in accordance with laws and regulations.

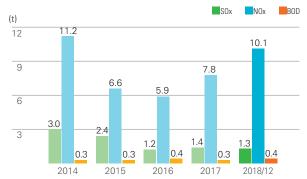
Reducing emissions of water-polluting substances

TOK has set its own management standards for treating wastewater from its sites that are stricter than regulations in laws and local ordinances for purifying wastewater, such as activated sludge processing, at its process wastewater treatment facilities. Only water that satisfies standards for cleanliness is released into the public water system.

The Company also periodically evaluates water quality for compliance with its own standards as well as laws and regulations. In 2018, there were zero incidents where water quality did not meet its own standards or required values set by laws and regulations. TOK will continue its efforts to reduce emissions by maintaining and managing its process wastewater treatment facilities so water can be released after satisfying applicable standards.

BOD emissions in the water discharged into public waters in 2018 were approximately 0.4 tons. This was the same level as in the previous year.

SOx/NOx/BOD Emissions



* Changed to the total for January to December to reflect a change in the fiscal year-end

Countermeasures against Ozone-depleting Substances

The TOK Group uses ozone-depleting chlorofluorocarbons, such as CFC-11 and CFC-12, as coolants for refrigerators and freezers. The entire Group is working diligently to reduce CFC volume and switch to alternative coolants. The revised Act on Rational Use and Proper Management of Fluorocarbons mandates regular inspections and reporting leakage volume, and TOK is updating its environmental system for the proper management, filling and disposal of CFCs. As a result of taking appropriate measures, TOK's estimated leakage of CFCs in 2018 was approximately 23t-CO₂ based on the Act.

TOK will continue to conduct group-wide inspections such as periodically replacing fire extinguishing equipment that uses ozone-depleting substances with the aim of further strengthening management to prevent any noncompliance with laws and regulations.

* Data collection period: April 2018 to March 2019

Comply with PRTR Law

Under the Japanese Pollutant Release and Transfer Register (PRTR) Law, companies are obligated to manage and report to the government the production, release and transfer of designated chemical substances. To accurately calculate and report these figures, TOK relies on its chemicals and PRTR management system.

Of the Class I Designated Chemical Substances, a list of 462 substances defined by the PRTR Law, TOK handled 41 substances (a total of 1,300 tons) in 2018, and the Company estimates 2 tons were released into the atmosphere and public water systems. TOK works to measure emissions of VOCs and harmful air-polluting substances through PRTR surveys with the Japan Chemical Industry Association, of which it is a member.

* Data collection period: April 2018 to March 2019

Future Issues and Initiatives

Tadao Sato

Assistant Manager, General Affairs Office, Aso Plant

Preserve Biodiversity

The TOK Biodiversity Protection Declaration guides the TOK Group's activities to preserve biodiversity. A total of 208 employees have participated in biodiversity training so far. In 2018, six employees were dispatched to help with afforestation projects alongside local residents through the Kanagawa Trust Midori Foundation. We will continue to conduct these basic activities to preserve biodiversity with the intention of starting a ripple effect inside and outside the Company, spreading them throughout society.

Preserve biodiversity

TOK Biodiversity Protection Declaration

- We will position biodiversity protection as one of management's highest priorities and strengthen protection activities for the global environment.
- We will work to continually reduce our environmental impact through our production activities, our development and provision of products and services, and in coordination with the supply chain, thereby working to protect biodiversity.
- We will strive to enhance activities by educating employees on a regular basis and facilitating recognition and a correct understanding of the importance of biodiversity protection.
- We will continually conduct social contribution activities for environmental protection to earn the esteem and trust of society.
- 5. We will announce the results of initiatives and promote communication with the general public.

Examples of Activities

- Develop green processes and green products
 Improve energy efficiency and promote resource recycling and
- 3R activities > Assess environmental impact in new plant construction or
- extension plans and take measures
- Reduce environmental impact through activities to reduce waste
 Control diffusion into the environment of substances that readily accumulate and do not easily biodegrade through appropriate management of chemical substances

TOK has engaged in a variety of activities to reduce emissions of air-polluting substances, cut emissions of water-polluting substances, and mitigate ozone-depleting substances. A common refrain in all of these categories is that unless we operate the equipment correctly on a constant basis, the installation of high-performance equipment is meaningless. With the belief that properly maintaining and managing the facilities and equipment is just as important, we will carry on with activities to preserve air, water and soil environments.

TOK's Human Resource

Unique Initiatives to Preserve the Magnificence of the Natural Environment

The Aso Plant is located inside the Aso-Kuju National Park in Kumamoto Prefecture, which extols the benefits of living next to abundant water resources. Its production activities take place in a magnificent natural environment. To preserve such bounty in the natural environment, we have prioritized activities to reduce the risk of environmental accidents as much as possible, such as by installing shutoff valves in water drainage paths and other unique initiatives, with the objective of preventing damage from spreading when a leak of harmful substances occurs. When discharging wastewater from oil retaining walls and catch basins with pits for piping, we only release water after analyzing the water for hazardous substances and confirming zero problems will occur. In these and other ways, we make our utmost effort to reduce the risk of environmental pollution, and will continue carrying on activities to protect the environment.