

Environment



SANKI Engineering Group Environmental Policy

Established April 1, 2022

The Sanki Engineering Group strives to conserve the global environment in all our business activities, including the supply chain, with the intention of realizing a decarbonized society, recycling oriented society, and society in harmony with nature.

1. We will promote energy-saving and the use of renewable energy in all our business with a view toward carbon neutrality.
2. We will strongly promote the SANKI YOU Eco Contribution Point system, whereby we conduct environmental conservation activities according to the amount of CO₂ emissions reduction from our facilities and contribute to decarbonization of our clients.
3. We will aim to realize a recycling oriented society by thoroughly controlling the generation of waste, recycling resources, and proper disposal of waste.
4. As we recognize that biodiversity is an important foundation for a sustainable society, we aim to realize a society in which nature and humans can coexist in harmony by working toward preserving biodiversity.
5. We will disclose information on conservation of the global environment in a timely and appropriate manner.
6. We will continue to consider the impact of our business activities on climate change and biodiversity, prevent environmental pollution, comply with environment-related laws and regulations, and actively promote global environmental conservation activities.

Environmental Management System

Environmental Management System

Under our system for implementing environmental management, headed by the president, each division reports on the status of its activities, and decisions on action plans are made during ISO Promotion Meetings and Company-wide QMS and EMS secretariat meetings.

Initiatives for Environmental Management

We pursue our activities by having each section set environmental goals aligned with their respective operations. In fiscal 2021, we began using the Environmental Aspects Assessment List at our overseas subsidiaries to expand the scope of application. No issues were reported regarding noise, dust, or odor at construction sites.

In May 2019, Sanki Engineering Co., Ltd. and Group company Sanki Chemical Engineering & Construction Co., Ltd. were found to have unlawfully altered the measured values at two incineration facilities constructed by Sanki Engineering. We addressed this by providing an explanation at a meeting with local residents organized by the relevant regulatory body. Furthermore, the ISO 9001 certification of the Environmental Systems Administration Division at Sanki Engineering and the ISO 14001 certification of Sanki Chemical Engineering & Construction were temporarily suspended from September to October 2019. In March 2020, we implemented corrective work, verified the performance of the relevant facility, and received approval from a third-party institution and the owner of the facility. We have since maintained appropriate management for the operation of these facilities. The Sanki Engineering Group has sought to prevent a recurrence by continuously bolstering its management system. This includes educating employees on compliance and environmental management and conducting internal audits.

Assessment and Response to Environmental Risks and Opportunities

We use the JOB Environmental Aspects Assessment List consisting of 10 aspects and around 60 items to identify environmental issues that are unique to each construction site, bylaws governing site location, regional agreements, and more. Prior to the start of construction, we seek appropriate action by conducting an environmental risk assessment for each project to address differences in the type, scope, and regulatory requirements with respect to environmental risks, depending on the project type, such as medical institutions and commercial facilities, and the surrounding environment, community, and nature of the work.

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Quality and Environmental Management System

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Initiatives for Ensuring Quality

Environmental Aspects Assessed under the JOB Environmental Aspects Assessment List

1. Use of resources and energy
2. Reduction and proper disposal of waste
3. Abnormal situations and outflow of contaminants
4. Consideration for areas surrounding construction sites
5. Consideration for unique environmental needs
6. Natural disasters
7. Legal compliance
8. Other local bylaws
9. Temporary materials and equipment, and office and other supplies
10. Other aspects

Addressing Climate Change toward a Decarbonized Society

Information Disclosure Based on TCFD Recommendations

We endorsed the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) in November 2021 and disclose information on risks and opportunities related to climate change in accordance with the disclosure framework. With the information disclosed at this time, we will do our utmost to achieve carbon neutrality and realize a decarbonized society.

Governance

In November 2021, the Sanki Engineering Group established the Sustainability Committee, chaired by the president and composed of members of the Board of Directors, to address climate change and sustainability issues in general. The Sustainability Committee meets twice a year to discuss and decide on key issues and actions for realizing sustainability management. In fiscal 2021, it discussed the Sustainability Policy, materiality, and Sanki's Carbon Neutral Declaration, which were submitted to the Board of Directors for decision. The Sustainability Promotion Council, established as a subordinate body of the committee and composed of persons in charge of the related practical matters in each department, also discusses and promotes decarbonization throughout the Group. In addition, we manage risks associated with climate change, which we recognize as impacting our business, under the Risk Management Committee, which consists of representatives from all departments of the Group, and the Climate Change Risk Subcommittee, a subordinate body of the Risk Management Committee.

Each committee reports on the content of their deliberations and decisions to the Management Meeting, and the Board of Directors conducts an audit of the status of initiatives for addressing the climate-related issues reported to the Management Meeting.

Risk Management

The Risk Management Committee, which oversees business-related risks, identifies and categorizes the risks, determines the subcommittees in charge and content of control plans, assesses the risks by quantifying their impact and frequency insofar as possible, formulates and implements priorities and response policies, and conducts periodic reviews.

With regard to climate-related risks, the Climate Change Risk Subcommittee examines the assessments and control plans and reports to the Risk Management Committee. The decided measures are submitted to the Sustainability Committee, Management Meeting, and Board of Directors for deliberation and further decision, depending on the relative importance of the assessed risk, and are then implemented by all the departments of the Group in cooperation with the Sustainability Promotion Council. Measures included in the Medium-Term Management Plan are incorporated into the execution plans of each division to manage their progress.

Scenario Analysis

Scenario analysis is conducted to gain an understanding of the medium and long-term impact of climate change on business. We analyzed a scenario in which it is expected that the average global temperature increase will be kept down to less than 2 degrees C higher than the level of the days of the industrial revolution and another scenario in which the temperature rises by approximately 4 degrees C, in terms of relations to policies and market trends, and also analyzed physical changes engendered by events such as disasters. For each scenario, causes of group-wide risks and opportunities have been identified and their degree of impact on business verified and assessed in three stages: High, medium and low. "Climate-related policies and legislation" and "rising temperatures and abnormal climate" have been identified as high risks to business and "markets,



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Sustainability Promotion System

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Framework of the Risk Management System

products and services” and “resilience” as opportunities.

Policies to handle identified risks and opportunities are incorporated into Phase 3 of the medium-term management plan “Century 2025” and deployed and implemented in the executive plans of each division.

*1 Acronym for International Energy Agency. This is an international organization that covers overall energy policies under the auspices of the OECD (Organisation for Economic Co-operation and Development), a body with energy safety and security as its goal.

*2 Acronym for Intergovernmental Panel on Climate Change, an organization established in 1988 by the World Meteorological Organization (WMO) and United Nations Environment Programme (UNEP) with the goal of comprehensive assessment of climate change, impact, adaptation and mitigation policies.

Designated Scenarios	Reference Scenarios
Less than 2°C scenario Stringent measures against climate change are taken, and the temperature increase in 2100 is limited to less than 2°C from the level of the Industrial Revolution	<ul style="list-style-type: none"> ● IEA*1: Sustainable Development Scenario (SDS) ● IPCC*2: Representative Concentration Pathways (RCP2.6)
4°C scenario Stringent measures against climate change are not taken, and the temperature increase in 2100 is around 4°C from the level of the Industrial Revolution	<ul style="list-style-type: none"> ● IEA: Stated Policies Scenario (STEPS) ● IPCC: Representative Concentration Pathways (RCP8.5)

Risks and Opportunities

	Transition Risks		Physical Risks	
	Category	Climate-related policies and regulations	Rise in temperatures and extreme weather events	
Risks	Possible event	<ul style="list-style-type: none"> • Rise in construction costs due to carbon pricing • Restrictions on business due to CO₂ emissions regulation • Heightened demand for disclosure of climate change-related information 	<ul style="list-style-type: none"> • Greater impact of rising temperatures on working conditions • Increased severity and frequency of extreme weather events 	
	Impact	Well below 2°C scenario Major 4°C scenario Minor	Well below 2°C scenario Minor 4°C scenario Major	
	Timeline	Medium to long term	Medium to long term	
	Risks and opportunities for the Sanki Engineering Group	<ul style="list-style-type: none"> • Surge in construction costs due to growing demand for suppliers to introduce carbon neutral technologies • Rise in the cost of purchasing environmental value for realizing carbon neutrality, including a shift to green electricity and renewable energy certificates • Decline in corporate reputation and brand due to insufficient information disclosure 	<ul style="list-style-type: none"> • Increased risk of occupational accidents, such as heat stroke • Risk of suspensions or delays in construction due to extreme weather events • Delays in procurement of materials and equipment 	
	Response	<ul style="list-style-type: none"> • Strengthen procurement capabilities based on electronic procurement systems and centralized purchasing • Extend capital investment for advancing carbon neutrality at Sanki Engineering • Promote activities for reducing emissions across the supply chain • Proactively disclose information 	<ul style="list-style-type: none"> • Enhance technology for preventing occupational accidents and problems during construction • Develop alternative robotic technologies for the construction site to improve the labor environment • Construct and operate BCMS for maintaining effective BCPs • Utilize DX to balance improvements in quality and productivity with reduced work hours • Continuation of the Smile Project (work style reforms), led by top management • Promote application of BIM 	
Opportunities	Category	Markets, products, and services	Resilience	
	Possible events	Rise in demand related to energy-conservation and renewable energy	Expansion in demand for technologies that strengthen resilience	
	Impact	Well below 2°C scenario Major 4°C scenario Medium	Well below 2°C scenario Major 4°C scenario Major	
	Timeline	Short to medium term	Medium to long term	
	Risks and opportunities for the Sanki Engineering Group	<ul style="list-style-type: none"> • Rise in demand for ZEB projects and energy-saving projects led by growing need for energy conservation • Rise in demand for renewable energy business 	<ul style="list-style-type: none"> • Increase in demand for renewal projects • Increase in demand for resilience-related services 	
Response	<ul style="list-style-type: none"> • Promote development of new technologies for realizing a decarbonized society • Strengthen the SANKI YOU Eco Contribution Point system, which combines reductions in CO₂ emissions by customers based on energy-saving proposals with donations to environmental preservation activities • Promote open innovation (collaboration with other business sectors, universities, and venture companies) • Develop energy creation businesses such as renewable power generation • Extend growth investments for the next generation, including decarbonization technologies (energy conservation, energy creation, and others) • Further development of automation and labor-saving markets • Promote application of BIM 	<ul style="list-style-type: none"> • Strengthen the total integration business of building ICT • Promote our LCE Business (stock-based business) • Expand onsite information and communication infrastructure business • Expand consulting service offerings • Strengthen system to quickly respond to energy-saving technology and customer needs 		

Indicators and Targets

In February 2022, we established the Sanki Carbon Neutral Declaration as a long-term goal. We will address the climate change issue by focusing on reducing greenhouse gases based on the following indicators.

List of Targets

Initiative	Base Year	FY2025	FY2030	FY2050
Scopes 1, 2	FY2020	40% reduction	Carbon neutrality	Carbon neutrality
Scope 3	FY2020	10% reduction	—	Carbon neutrality
Reductions through the SANKI YOU Eco Contribution Point system	FY2018–FY2020 (average)	30% increase	—	—

Greenhouse Gas Emissions

Scope/Category	Applicable Activities	FY2020 emissions (t-CO ₂)	FY2021* emissions (t-CO ₂)
Scope 1 (direct emissions)	Direct emissions from businesses owned or controlled by the Company	1,658	1,722
Scope 2 (indirect emissions from purchased energy)	Indirect emissions caused by use of purchased electricity or heat	6,403	6,127
Scope 3 (other indirect emissions)		6,161,990	5,005,392
Category 1	Emissions from the manufacturing of products and services purchased	344,460	345,217
Category 2	Emissions from the construction, manufacturing, and transportation of capital goods purchased	7,419	5,518
Category 3	Emissions from the extraction, production, and transportation of fuels, electricity, and heat purchased	1,006	1,336
Category 4	Emissions from the distribution and transportation of products purchased to the Company	819	1,123
Category 5	Emissions from the transportation, disposal, and treatment of waste generated by business activities	1,481	1,744
Category 6	Emissions from the transportation of employees for business-related activities	332	401
Category 7	Emissions from transportation used for employee commuting	658	965
Category 11	Emissions from the use of goods and services sold	5,800,139	4,643,385
Category 12	Emissions from the waste disposal and treatment of products sold	1,483	1,381
Category 13	Emissions from the energy used by leased assets	4,193	4,322
Total		6,170,051	5,013,241

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Scope: Sanki Engineering Group
 * We have obtained third-party assurance for the FY2021 results.
 Note: Categories 8, 9, 14, and 15 are not applicable.

Independent Third-Party Assurance Report

https://www.sanki.co.jp/csr/environment/tcfd/doc/assurance_report.pdf (Japanese only)

● Initiatives for Emissions Reduction (Scope 1 and 2)

To reduce emissions at our plants, offices, and construction sites, we have been thoroughly implementing energy conservation activities by effectively operating facilities at each location. At the Sanki Techno Center and Yamato Product Center, we have installed several energy-saving systems to reduce energy, including those that apply our proprietary technologies. Sanki Techno Center has switched to electricity derived from renewable power sources to meet its electricity needs since April 2022. Looking ahead, we will consider installing solar photovoltaic panels and converting Company vehicles to EVs.

■ Energy Consumption

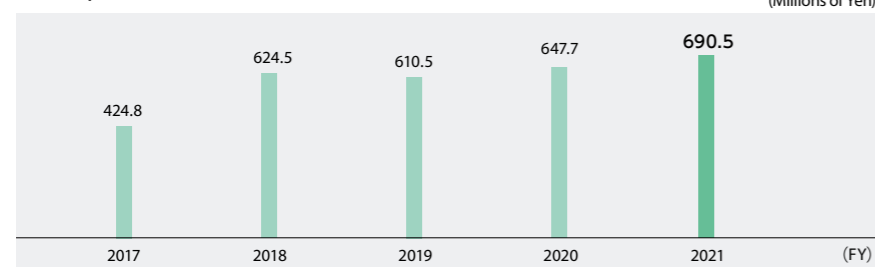
FY2021	
Energy consumption	22,474

(MWh)

● Contribution to Reductions through Our Business Activities (Scope 3)

The Sanki Engineering Group seeks to help customers save and generate energy to reduce CO₂ emissions and cut lifecycle costs through its business activities by enhancing the functionality and comfort offered by the technologies and products of each of its businesses. In our LCE Business, we seek to reduce environmental impact across the entire product lifecycle, from planning and design in facilities construction to operational maintenance after completion and also renovation. This assists in shifting to a decarbonized, zero-waste society as well as environmental preservation. We will continue to expand business contributions to save and create energy, such as biomass power generation plants, and pursue resource circulation through wastewater treatment facilities and waste treatment facilities.

■ R&D Expenditures Related to Environmental Preservation



● Registered ZEB Planner

Sanki Engineering is a registered ZEB Planner, which seeks to promote the widespread introduction of ZEBs* introduced by Japan's Agency for Natural Resources and Energy, under the Ministry of Economy, Trade and Industry. As a ZEB Planner, we act as the contact point for customers planning to adopt ZEB in construction projects and play our part in developing a decarbonized society by supporting ZEB planning.

● SANKI YOU Eco Contribution Point System

The Sanki Engineering Group's SANKI YOU Eco Contribution Point system contributes, along with our partners, to preventing global warming and realizing a sustainable society. Under the system, when we propose an energy-saving solution that reduces CO₂ emissions to a customer and that proposal is adopted, the amount of the achieved emissions reduction is converted to Eco Contribution Points, which are used to support environmental conservation activities.

In fiscal 2021, customers adopted 263 of our proposals, resulting in reductions of 35,848 tonnes of CO₂ emissions, which raised the overall total to 267,310 tonnes, with

Energy-Saving Systems Installed at Sanki Engineering Facilities

- **Sanki Techno Center**
 - EcoSearcher® real-time heat source optimization system (proprietary technology)
 - selFort® smart HVAC system for offices (proprietary technology)
- **Yamato Product Center**
 - Periloop thermal stratification HVAC system (proprietary technology)
 - Solar photovoltaic panels

Scope: Sanki Engineering Group
* We have obtained third-party assurance.

Independent Third-Party Assurance Report

https://www.sanki.co.jp/csr/environment/tcfid/doc/assurance_report.pdf
(Japanese only)



Trans-Heat Container for delivering thermal energy



Woody biomass gasification plant

* Net-Zero Energy Buildings maintain comfortable environments while reducing annual energy consumption to as close to zero as possible by enhancing energy-saving performance using solar power generation and other measures.



over 19,000 trees planted.

Under the Medium-Term Management Plan "Century 2025" Phase 3, we aim to bolster this system as a measure for reducing Scope 3 emissions.

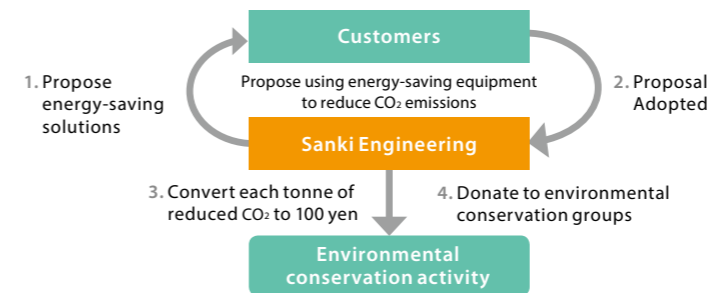
We will continue to actively develop proposals for reducing CO₂ emissions and offer an even greater contribution to environmental conservation activities.

■ Proposals for CO₂ Reduction and Outcomes

(CO₂ Reduction Unit: t-CO₂)

	FY2018		FY2019		FY2020		FY2021	
	Numbers	CO ₂ reduction	Numbers	CO ₂ reduction	Numbers	CO ₂ reduction	Numbers	CO ₂ reduction
Proposals								
Consolidated	411	50,072	405	45,685	379	68,810	431	134,399
Non-consolidated	370	45,531	377	44,756	352	68,243	367	112,550
Orders received								
Consolidated	183	20,699	181	27,624	214	28,430	263	35,848
Non-consolidated	163	16,608	163	27,221	200	28,296	218	14,355

■ SANKI YOU Eco Contribution Point System



● Developing Environmental Leaders

We encourage employees to acquire environment-related qualifications in response to regulatory changes.

■ Number of Employees with Environment-Related Qualifications (as of April 1, 2022)

Qualification	Non-consolidated	Consolidated
Certified environmental measurer	8	9
Supervisor of management of industrial waste subject to special control	188	205
Pollution prevention manager (cumulative total)	79	104
Qualified person for energy management	90	93

Contributing to a Zero-Waste Society

● Current State of Industrial Waste

With respect to industrial waste discharged at our construction sites, we seek to understand the current status by compiling data on waste discharged at sites where Sanki Engineering is the prime contractor.

We have maintained the recycling and reduction rate for industrial waste, excluding waste disposed at final landfill sites, at high levels above 90%, and the rate was 94.8% in fiscal 2021. We will continue to promote proper disposal by monitoring and analyzing the discharge of industrial waste. In fiscal 2021, the waste disposal cost for construction sites was 532,647,000 yen. Furthermore, we have been properly disposing waste CFC and



The logo of the SANKI YOU Eco Contribution Point system expresses our aspiration to contribute to social development and create harmony with the natural environment.
ECO2: We reduce CO₂ emissions through our contribution to ecology.

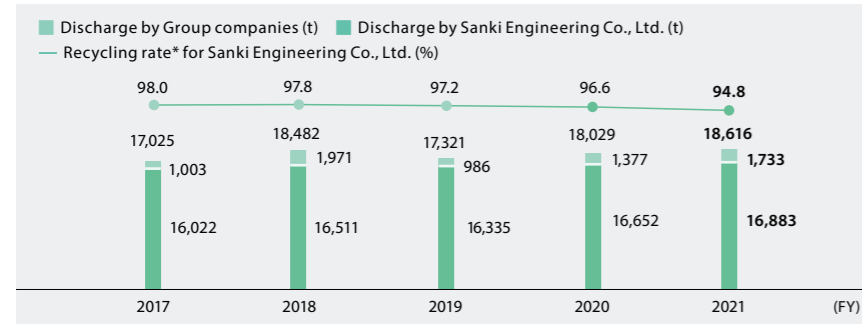


Explanation for handling CFC during HVAC inspections

halons, the cost of which was 41,529,000 yen in fiscal 2021.

We work to reduce emissions of waste plastics and promote the recycling of plastics in accordance with the Plastic Resource Circulation Act.

Waste Discharged at Sites where Sanki Engineering is the Prime Contractor and at the Sanki Techno Center



Proper Disposal of Hazardous Substances

We properly dispose of hazardous substances in accordance with the laws and regulations while informing our employees about proper methods of managing these substances. We have created and distributed posters to inform them of the revisions in storage and disposal procedures for mercury-laced waste in accordance with the revision of the Waste Management and Public Cleansing Act*. Regarding asbestos, we prepare a flow chart for the proper disposal of asbestos at construction sites for renovation work. Also, in accordance with the Air Pollution Control Law, we will properly report the presence or absence of asbestos-containing building materials at construction sites during demolition and renovation work.

Introduction of a Digital Manifest

With the aim of ensuring the proper disposal of industrial waste, in fiscal 2018 we completed a system for introducing digital manifests, which is now available to all departments. The rate of introduction of digital manifests was 98.7% on a non-consolidated basis in fiscal 2021. To comply with regulatory revisions obligating the use of digital manifests, we will continue to reinforce our system for accurately monitoring the status of disposal and recommend that business partners who have yet to connect to the digital manifest system do so.

Limiting Water Use

At each site where facilities are owned by the Sanki Engineering Group, we regularly monitor water use and continuously consider ways to improve the efficiency of our water resources to reduce water use.

Water Use (m³)

	FY2021
Water use	37,065
Tap water	10,540
Well water	26,525

*Target rate: 90% or higher

*Waste Management and Public Cleansing Law



Poster: "How to handle mercury-laced industrial waste"

Scope: Eight sites including the Sanki Techno Center, Yamato Product Center, Nasu Techno Station, and field offices.

Realizing a Society in Harmony with Nature

Our Response to Biodiversity

We expressed our support for the Keidanren Declaration of Biodiversity and Action Policies in 2020 and established the Sanki Engineering Group Action Guidelines on Biodiversity in April 2022. Under the action guidelines, we will further strengthen our activities for planting and nurturing trees and promoting environment-related facilities.

Tree-Planting and Raising Activities

In addition to the tree-planting and nurturing activities launched in 2010 under the SANKI YOU Eco Contribution Point system, we created the Sanki Forest in Kai City, Yamanashi Prefecture, to commemorate the 90th anniversary of our founding, and a Kansha-no-Mori to commemorate the 10th anniversary of the SANKI YOU Eco Contribution Point system. We donate to reforestation projects that take full advantage of the diversity of local vegetation and tree-planting activities that lead to enriching the bounties of the sea, and also engage in environmental conservation activities that include employee participation.

In fiscal 2021, we held a lecture by the Silva Association, our partner in tree-planting projects, and educated our employees on preserving the forest and contributing to the natural environment.

We also facilitated donations to two projects by three organizations in fiscal 2021 to support environmental conservation activities for forest management under the SANKI YOU Eco Contribution Point system.

Donation History for Tree-Planting Projects

Project	Recipient	Location
Planting trees in the Hikobae Forest on Mt. Yagoshi	NPO Mori wa Umi no Koibito	Ichinoseki City, Iwate Prefecture
Planting trees in a forest surrounding Shonan Village	Silva Association, Shinwa Gakuen	Yokosuka City, Kanagawa Prefecture
Kansha-no-Mori forestation to commemorate the 10th anniversary of the SANKI YOU Eco Contribution Point system	NPO Environmental Relations	Kai City, Yamanashi Prefecture
Creation of the Sanki Forest to commemorate the 90th anniversary of our founding	NPO Environmental Relations	Kai City, Yamanashi Prefecture
Creation of the Kijimadaira Beech Forest	NPO The Life style Research Institute of Forests	Kijimadaira Village, Nagano Prefecture
Creation of the Present Tree Forest	NPO Environmental Relations	Takayama City, Gifu Prefecture, Miyako City, Iwate Prefecture, Sanmu City, Chiba Prefecture

Spreading Our Sewage Treatment Technology Overseas

We provide sanitary water resources through our sewage treatment technology, based on the DHS method and suitable for use in temperate regions. We have also been participating in demonstration experiments conducted by the Japan Sewage Works Agency in Thailand. The validity of our technology was confirmed by the results of a demonstration experiment*1 at a sewage treatment plant in Khon Kaen City and a demonstration experiment*2 in Bangkok City, and we obtained a technology certificate. We will continue to provide our technology to Southeast Asia and other regions where sewage treatment has not yet been widely adopted, and we will contribute to the preservation of the natural environment in those regions as well.



Keidanren Initiative for Biodiversity Conservation



Clearing undergrowth at the Sanki Forest



*1 With the cooperation of Khon Kaen City and Khon Kaen University in Thailand, Sanki Engineering participated along with NJS Consultants Co., Ltd. (currently NJS Co., Ltd.), Tohoku University, and Nagaoka University of Technology in the Wonder Of Wastewater Technology Of JAPAN (WOW TO JAPAN) overseas sewage technology verification project conducted by the Ministry of Land, Infrastructure, Transport and Tourism of Japan.

*2 Data provided by the National Institute for Environmental Studies, Japan.