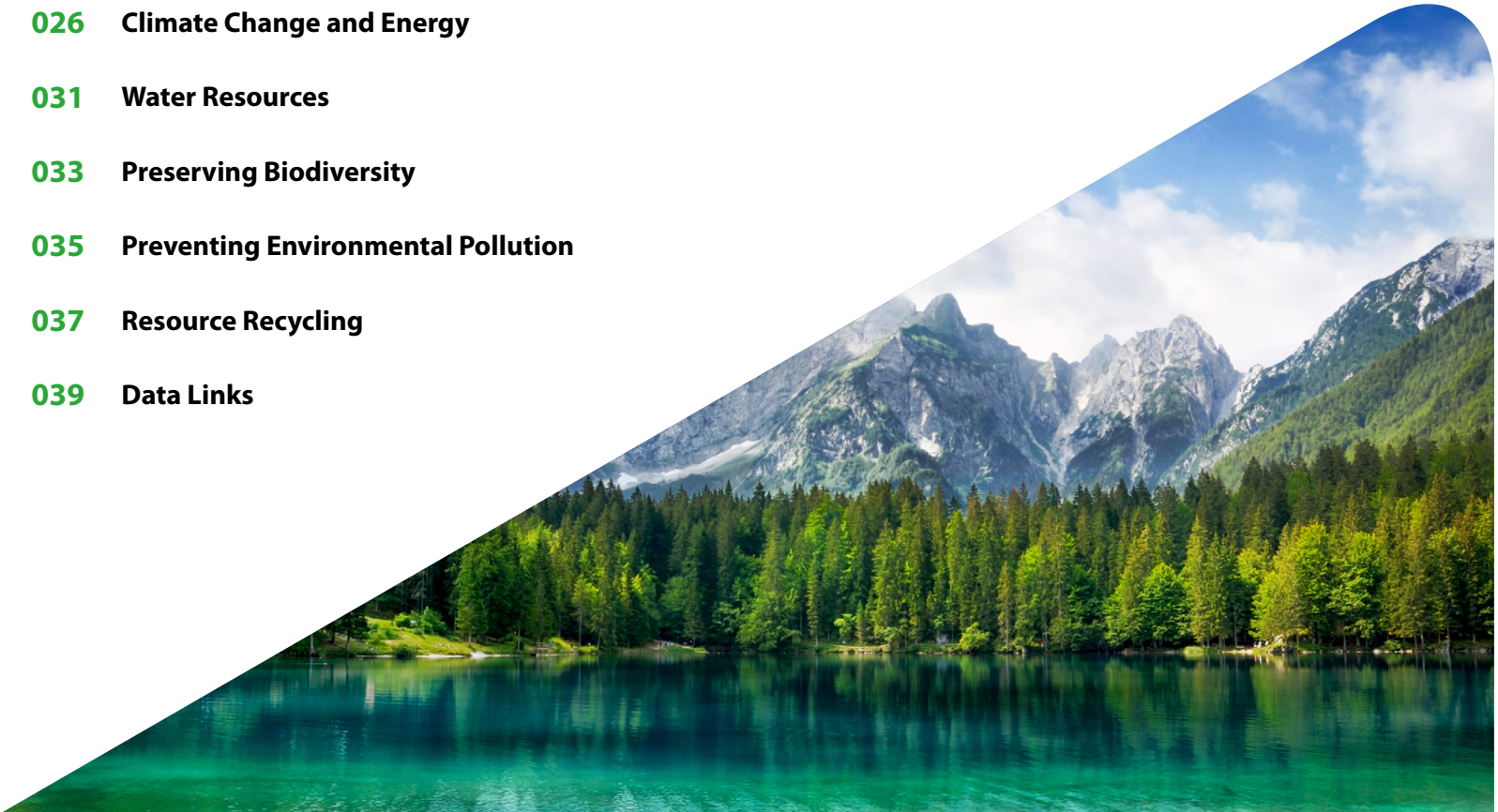
Environment



Boundary of Global Environmental Protection

While the boundary of global environmental protection extends to the entire Anritsu Group, in principle the reporting boundary for numerical data, such as environmental impact, encompasses Anritsu Corp. and the following Group companies.

Group Companies in Japan

Anritsu Infivis Co., Ltd.,
Tohoku Anritsu Co., Ltd.,
Anritsu Customer Support Co., Ltd.,
Anritsu Devices Co., Ltd.,
Anritsu Networks Co., Ltd.,
Anritsu Engineering Co., Ltd.,
Anritsu Kousan Co., Ltd.,
AT Techmac Co., Ltd.,
Anritsu Pro Associe Co., Ltd.

Group Companies Outside Japan

Anritsu Company (U.S.A.)
Anritsu Ltd. (U.K.)

Notes:
Within the Anritsu Group, the Hiratsuka site refers to the facilities of AT Techmac Co., Ltd. in Hiratsuka City, Kanagawa Prefecture; the Tohoku site refers to those of Tohoku Anritsu Co., Ltd. in Koriyama City, Fukushima Prefecture; and the Atsugi site refers to the Anritsu Corporation and those of other Group companies in Atsugi City, Kanagawa Prefecture.

Anritsu Networks Co., Ltd., Anritsu Engineering Co., Ltd., and Anritsu Pro Associe Co., Ltd. were absorbed and merged with Anritsu Corp. as of April 1, 2020.

Contributing to environmental protection through climate change mitigation efforts in our business operations

Akio Takagi
Senior Executive Officer, Chief Environment and Quality Officer

Almost every year, we experience a lot of heartbreaking news about occurrences of devastating disasters such as typhoons and torrential rains. We can hardly deny such disasters are most probably caused by global warming. To address the issue of climate change, Anritsu has formulated a plan for reducing CO_2 emissions and obtained approval from the SBT Initiative. Furthermore, under the leadership and firm determination of the Group CEO, we have formulated the Anritsu Climate Change Action PGRE 30, which sets long-term targets for increasing the ratio of private power generation from renewable energy such as solar power. Through these efforts we contribute to SDGs Goal No.7 and No.13. In addition, influences from destructive logging as well as marine and soil pollution to biodiversity are becoming increasingly serious. We will therefore continue our sincere effort through our business activities with considerations such as climate change countermeasures, resource recycling, and pollution prevention hence contributing to the conservation of biodiversity and protection of the global environment.

Environment

Environmental Management

Stance on Social Issues

Recently, ESG (environmental, social, governance) and the SDGs (Sustainable Development Goals) have come to play critical roles in corporate activities. Protection of the global environment is considered particularly important as it directly impacts the goal of creating a sustainable society, and companies are expected to actively tackle this issue.

Anritsu has been ensuring that our business activities, employee awareness and behavior strictly comply with environmental policies. We have also been working on reducing the environmental impact of our products, which leverage our measurement technologies and connect societies together. Through these efforts, we are contributing to the resolution of climate change, creating a recycling-oriented society, and preventing environmental pollution. In addition, we are focused on administering an environmental management system that integrates environmental activities into our business expansion and appropriately disclosing information.

Policy

Note that this policy is applicable to all items in the "Environment" section.

Anritsu's Environmental Policy consists of Environmental Principles and Action Guidelines.

Environmental Policy

Environmental Principles

Anritsu strives to give due consideration to the environment in both the development and manufacture of our products. Through sincerity, harmony, and enthusiasm, we will endeavor to foster a prosperous society at one with nature.

Action Guidelines

We create "Eco-Offices", "Eco-Factories", and "Eco-Products" based on the "Eco-management" of our company and the "Eco-Mind" of every one of us.

1. Over the whole life cycle of a product, from design and development, to procurement, manufacturing, marketing, distribution, and usage by customers, through disposal, we conduct environmentally conscious business activities.
2. We have set up an organizational and operational structure to perform environmental management activities, and have established and maintain an environmental management system that we continuously improve.
3. We comply with legal and regulatory controls and make every effort to continuously improve the environmental performance to meet the requirements from stakeholders.
4. In order to contribute to the prevention of global warming and conservation of biological diversity, we promote energy saving, the 3Rs (reduce, reuse, and recycle), and environmental pollution risk reduction in all of our offices and factories.
5. We provide Eco-Products by saving energy, saving resources, and reducing hazardous substances.
6. We cultivate Eco-Minds by providing appropriate environmental education and training.

*The Action Guidelines apply only to the Domestic Anritsu Group

In addition, Anritsu has stated its intent to "contribute to the preservation of the global environment by promoting environmental management for the coexistence of people and nature" in our Sustainability Policy.

WEB Environmental Policy

P.001 Sustainability Policy

Structure

What we refer to as a "Structure" is applicable to all items within the "Environment" section.

Anritsu has established deliberating bodies, chaired by an Environmental Management Executive Officer (Anritsu Corporation, the Chief Environment Officer), to promote environmental management. The Environmental Management Executive Officer is responsible for reporting any environment-related matters, such as risks and issues, to the Management Strategy Conference and during Board of Directors.

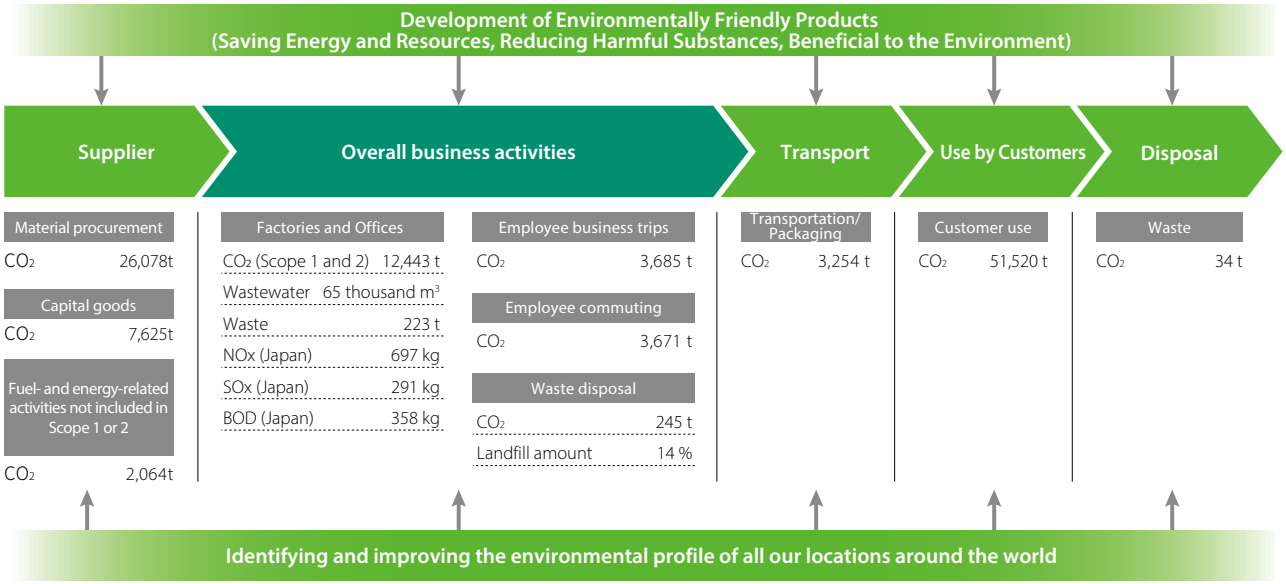
Deliberating Body	Objectives and Members
Global Environmental Management Meetings	Address challenges that Anritsu Group must tackle as a single global entity Members: Responsible officers from the three major locations of Japan, the United States and the United Kingdom
Environmental Management Committee	Promote the environmental management system of the Domestic Anritsu Group Members: Officers responsible for the environment at each division* of the Domestic Anritsu Group, and the officers responsible for the Internal Control Department, Legal Affairs Department, and Sustainability Promotion Center
Promotion of RoHS Group Meeting	Promote the development and production of products that do not contain hazardous substances such as those banned under the RoHS directive of Europe Members: Representatives from the Development Department, SCM Department, IT Department, and Environment Department

*Environmental management activity unit

Goals

2020 VISION: Building an environmental brand by pursuing global environmental management throughout the entire value chain

As part of its environmental management, Anritsu has set out its 2020 VISION goal as, "Building an environmental brand by pursuing global environmental management throughout the entire value chain." In order to achieve the goal of establishing a world-class environmental brand, we are striving to develop and produce environmentally friendly (energy-saving, resource-saving, and hazardous substance-free) products on a global scale and also to understand and improve the environmental impact of all of our bases throughout the entire product value chain.

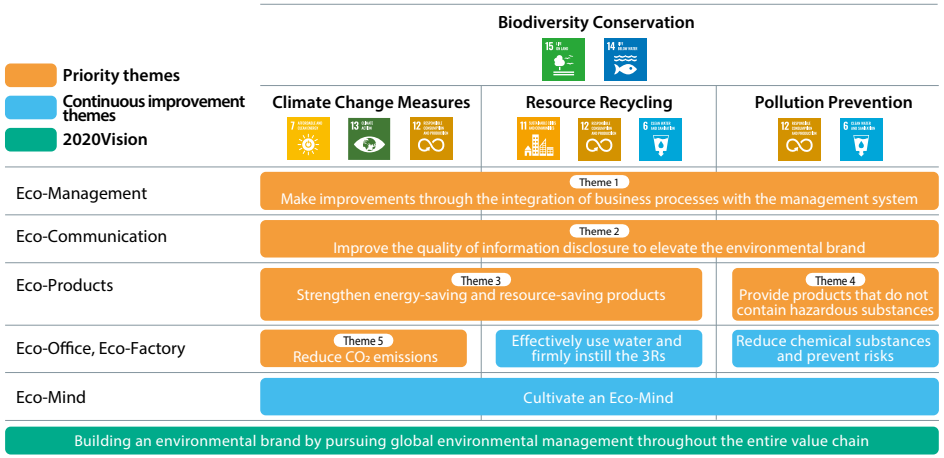


Figures are calculated in accordance with the "Basic guidelines on calculating greenhouse gas emissions in the supply chain." The figures listed here are those for fiscal 2019.

WEB Environmental Impact Across the Entire Value Chain

GLP2020 Environmental Initiative

Anritsu is currently undertaking the GLP2020 Environmental Initiative, its three-year mid-term business plan and the final stage for achieving its 2020 Vision, that began in fiscal 2018.



Objectives and Progress toward Objectives by Priority Theme in the GLP2020 Environmental Initiative

GLP2020 Environmental Initiative has largely progressed as planned. Remaining issues will continue to be addressed.

Priority theme	Fiscal 2020 Objectives	Fiscal 2019 Progress
Theme 1	In departments involved in product realization processes, the management system (MS) is integrated into their business processes. Targets related to quality and environment are set and managed through the integrated MS.	△: Quality management systems (QMS) and environmental management systems (EMS) have been identified as in-scope for the integrated internal audit. Integrated MS internal audits were scheduled for two departments in fiscal 2019, although the audits will actually be conducted in fiscal 2020.
	Construct and administer a mechanism to review compliance with environment-related laws and regulations globally	○: • Environment officers from our offshore offices have conducted environmental internal audits in parts of our domestic organizations. • The environmental internal audit checklist used by our offshore counterparts was shared. • Checklist for Anritsu Infivis (Thailand) was implemented.
Theme 2	Address SDGs, transition to GRI Standards, continue participating in the Ministry of the Environment's "Environmental Reporting Platform Development Pilot Project" and revitalize communication with investors	○: • Nikkei's SDGs Management Survey: Ranked in the top 34 corporations • CDP's Climate Change Survey: B Rank assessment (management level)
Theme 3	Reduce CO_2 emissions related to products (Scope 3*1 Category 1 and 11*2, 3	○: • Established emission targets for 2030*4 for Scope 3, Category 1 and 11, and received SBT Initiative's*5 approval. • Explained to our suppliers about our initiatives to reduce Category 1 emissions and requested their cooperation. • Calculated how much of a reduction in product power consumption is needed for each business unit to achieve the target of Category 11 emission reduction and formulated target reduction scenarios.
Theme 4	Address additional and revised product and environmental regulations, such as RoHS in Europe, and continue to provide products that do not contain hazardous substances	○: • Installed equipment that analyze and detect four new substances that were added to the list of substances prohibited by the RoHS Directive. • Started implementing measures for the ten substances in the RoHS Directive for development of new products which fall under Category 9*6 of the directive. • Implemented and launched an internal system to manage information regarding Europe's RoHS Directive.
Theme 5	Reduce Scope 1 and 2*7, 8 CO_2 emissions by 2% per year compared with fiscal 2015 (26% reduction by fiscal 2030)*7	○: Reduced emissions by 17.6% compared with fiscal 2015.
	Set long-term CO_2 emissions target for 2030 and 2050	○: Established long-term emission targets*9 (Scope 1 and 2) for 2030 and received SBT Initiative's approval. In addition, set provisional long-term emission targets*10 for 2050.

*1 Scope 3: Indirect CO_2 emissions from non-energy sources
*2 Scope 3, Category 1: Purchased products and services
*3 Scope 3, Category 11: Use of sold products
*4 Emission Target for 2030 for Scope 3, Category 1 and 11: achieve 30% reduction from fiscal year 2018 by fiscal 2030 in emissions from purchased products and services and use of sold products.
*5 SBT Initiative: a partnership between the World Wildlife Fund, the old Carbon Disclosure Project, the World Resource Institute, and the UN Global Compact, which helps companies scientifically determine how much they must cut emissions to achieve the goal of limiting the increase in the global average temperature to below 2 degrees above pre-industrial levels (likely to reduce further to 1.5 degrees)
*6 European RoHS directive Category 9 products: monitoring and control equipment as defined by European RoHS Directive
*7 Scope 1: Direct CO_2 emissions
*8 Scope 2: Indirect CO_2 emissions from energy sources
*9 Target for 2030 for Scope 1 and 2: 30% reduction from fiscal 2015 by fiscal 2030
*10 Target for 2050 for Scope 1 and 2: 60% reduction from fiscal 2015 by fiscal 2050

Activities / Achievements

Environmental Audit

In fiscal 2019, the Anritsu Group's main production bases in Japan and the U.S. were subject to periodic external audits for ISO 14001:2015, conducted by an external certification body, and were recertified as being compliant.

In July, the Domestic Anritsu Group examined the conformance, effectiveness, and environmental performance of our environmental management system in an internal environmental audit. In October, we conducted an internal audit focused on verifying the status of legal compliance. In November, we invited environmental officers from our offshore offices to conduct internal audits in parts of our domestic organizations. As a result, no non-conforming items were discovered.

Opportunities for improvement indicated by external audits and observations pointed out by internal audits are reported to the Environmental Management Committee and shared horizontally across all management organizations. Each management organization takes the necessary remediation actions, which are then checked during the internal audit conducted in the following fiscal year.

Environmental Education for Employees

To raise the environmental awareness of each employee and encourage them to actively engage in environmental activities, we provide general education every year for all employees in the Domestic Anritsu Group as well as environmental education programs designed for each job type and rank. These programs are also attended by the suppliers.

General education in fiscal 2019 included the topic of plastic waste. There were 2,744 participants in the course, including 2,642 who attended Web-Based Training.

Environmental Educational Programs		
New employee education	Internal auditor training program	Internal auditor follow-up education
General education	Education for technology departments	Education for sales departments
Onsite consignment worker education	High-pressure gas handler courses	Chemical substances manager training

Environmental Awards System

The Domestic Anritsu Group gives awards to employees who have obtained environment-related qualifications, groups that have carried out environmental projects in the AQU Innovation Activities* and employees who have offered proposals for improvement.

In fiscal 2019, 22 Group projects and 56 proposals were recognized with environmental awards.

*Activities undertaken by the Domestic Anritsu Group to improve operational efficiency, quality, and other aspects.

Environmental Communications

Anritsu actively communicates with stakeholders inside and outside the Company using various platforms.

The Domestic Anritsu Group has implemented many ways to respond to environment-related inquiries from its stakeholders. We publish its Integrated Report and Sustainability Report, place advertisements about the environment, and release environment-related news features. We also provide environmental information tailored for each group of stakeholders, including publishing "Anritsu Environment News" for customers and the quarterly publication of "Eco Club" environmental magazine via the Intranet for employees as well as its English version of "Global Eco Club" for overseas employees starting fiscal 2019.

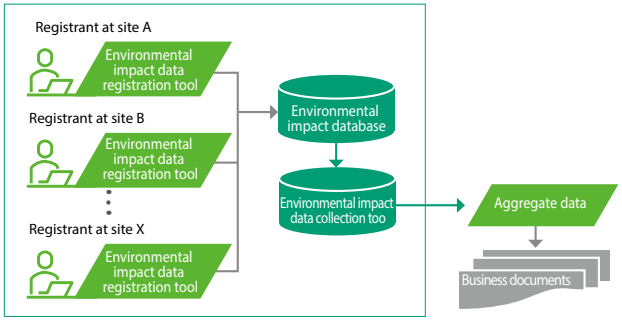
In addition, as in previous years, Anritsu continued to participate in the Ministry of the Environment's Environmental Reporting Platform Development Pilot Project.

We will make every effort to ensure prompt and effective communication with our stakeholders by disclosing our environmental information, responding to environmental surveys, and exchanging opinions.

Framework for Collecting Environmental Impact Data

The Anritsu Group has developed a framework and is administering a collection of environmental impact data such as electricity usage from its business sites including those overseas. The environmental impact data collected from business sites is stored in a database and used in aggregate data and to create business documents.

■ Framework for Collecting Environmental Impact Data



Development of Environmentally Friendly Products

The Anritsu Group actively promotes the development of environmentally friendly products to be certified as Excellent Eco-Products or Eco-Products by conducting global product assessments of every product under development. This responds to customer demand for products that save energy and resources and are free of hazardous substances. They also meet stakeholder expectations for reducing environmental impact. Moreover, this helps us to manage risks and identify new opportunities. Environmentally friendly products accounted for about 88%, and Excellent Eco-Products, the highest rank in environmentally friendly

products, about 80% of sales of measuring instruments for fiscal 2019.

In addition, the Domestic Anritsu Group calculates environmental preservation costs associated with designing environmentally sound products as well as the associated economic benefits. In fiscal 2019, the total environmental preservation cost was 16.1 million yen with associated economic benefit expected to be 171.2 million yen.

WEB Global Product Assessment, Environmentally Friendly Products, Excellent Eco-Products

Adaptive Gateway NN4000 Series (Eco Product)

The Adaptive Gateway NN4000 series is for IP converter of analog leased lines to Long-Term Evolution (LTE) lines using analog infrastructure.

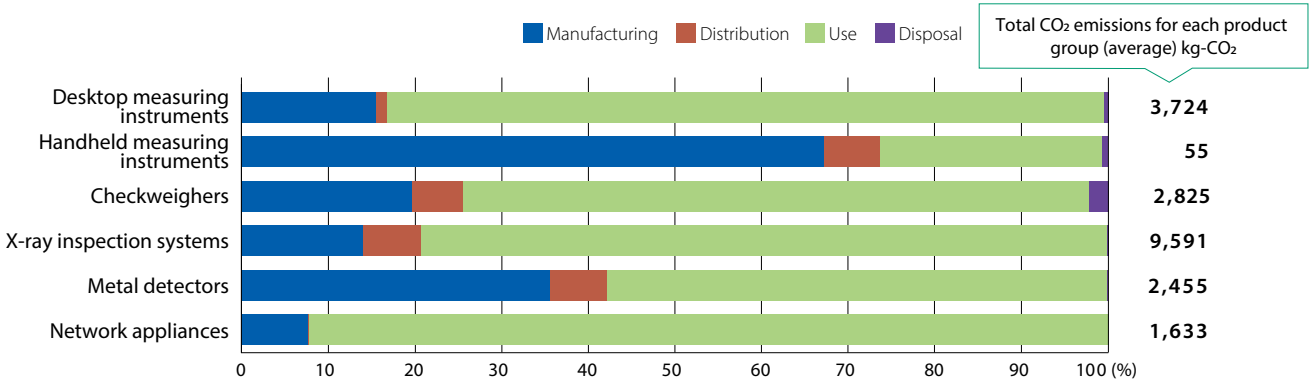
These converters are typically installed inside outdoor boxes and therefore require many design considerations, such as size, ease of installation, electricity requirements and operating temperature. To address these issues, we designed the product to be small, energy-efficient and operable over an extended temperature range. We successfully reduced the size of the printed circuit board and reduced power consumption by selecting energy efficient electrical parts with a wide operating temperature range. We also positioned the redundant antenna in its optimal position and designed the AC power source as a separate unit. In addition, we designed the casing and the heat-dissipating part in aluminum and integrated them, which resulted in reduced size and weight and a wider operating temperature range (from -20°C to +60°C).

Compared to conventional products with the same functionalities, the N4004A is 83% smaller, 71% lighter and consumes 66% less electricity.

CO_2 Emissions Across the Life Cycle of Our Products

The Domestic Anritsu Group conducts product life cycle assessments to monitor the CO_2 emissions at each stage of the product life cycle.

■ CO_2 Emissions and Breakdown across the Life Cycle of Product Groups (Fiscal 2019)



Environmental Considerations in Supply Chain Management

The provision of environmentally friendly products requires the use of parts and materials that reduce environmental impact. The Anritsu Group upholds environmental considerations in supply chain management through green procurement and conducts research on the chemical substances in the parts it purchases, in accordance with the Basic Rules of Procurement.

P.055 Supply Chain Management

Compliance with Environmental Laws and Regulations

The Domestic Anritsu Group confirms the status of environmental regulatory compliance through internal audits and at Environmental Management Committee meetings. In fiscal 2019, Anritsu did not receive any complaints or citations for violations of laws and regulations related to the environment.

ISO 14001 Certification Acquisition Status

The Anritsu Group has acquired environmental management system ISO 14001:2015 certification for our core development and manufacturing bases in Japan and the United States. The coverage rate of the system is approximately 70% when based on the number of Anritsu Group employees.

Anritsu Corporation (The Domestic Anritsu Group)

- **Certification Date:** August 1998
- **Updated:** February 2019
- **Certification Organization/Number:** Japan Quality Assurance Organization/JQA-EM0210

- Anritsu Corporation (Includes all sales centers)
- Anritsu Infivis Co., Ltd.
- Anritsu Customer Support Co., Ltd.
- Anritsu Networks Co., Ltd.
- Anritsu Engineering Co., Ltd.
- Anritsu Kousan Co., Ltd.
- AT Techmac Co., Ltd.
- Anritsu Pro Associe Co., Ltd.
- Anritsu Devices Co., Ltd.
- Tohoku Anritsu Co., Ltd.

Anritsu Company (U.S.A.)

- **Address:** 490 Jarvis Drive, Morgan Hill, CA 95037
- **Certification date:** March 2007
- **Updated:** May 2018
- **Certification organization/number:** AMERICAN GLOBAL STANDARDS, LLC/AGS-USEMS-051618-1

WEB Anritsu Corporation ISO 14001 Certification (English)

WEB Anritsu Company (U.S.A.) ISO 14001 Certification

Environmental Impact Mass Balance*1 (Fiscal 2019)

WEB Environmental Impact Mass Balance Data

Input

Electricity	Electric power used in factories, offices, etc.	30,472 MWh	(7.2%)
Gas	City gas, LPG, and natural gas used as energy in factories, offices, etc.	206,924 m³	(0.8%)
Fuels	Heavy oil, diesel, and gasoline used in factories, offices, and vehicles, etc.	399 kℓ	(-5.5%)
Water	Municipal water, groundwater (excluding recycled water)	79,588 m³	(9.4%)
Chemical substances	Greenhouse gases such as HFC, PFC, SF_6, N_2O	152 kg	(93.2%)
Chemical substances	Chemical substances that are regulated by laws in Japan*2,3	10 t	(33.1%)
Chemical substances	PRTR	2 t	(-10.2%)
Paper	Copy paper used in factories and offices	25 t	(-16.3%)
Packaging material	Packaging material for transportation of products	364 t	(2.7%)

Output

CO_2*4	CO_2 emitted as a result of using electricity, gas, fuel or other greenhouse gasses	12,443 t	(-2.3%)
NOx*5	Nitrogen oxides generated as a result of using gas and fuels	697 kg	(-46.6%)
SOx*5	Sulfuric oxides generated as a result of using gas and fuels	291 kg	(-42.9%)
Wastewater	Wastewater discharged from manufacturing sites and offices	64,978 m³	(11%)
BOD	Biochemical oxygen demand in wastewater	358 kg	(37.3%)
General waste in Japan	Waste other than industrial waste that is generated as a result of business activities (such as kitchen waste and waste paper)	37 t	(3.8%)
Industrial waste in Japan	Waste generated as a result of business activities, that is regulated by the 'Waste Disposal and Public Cleaning Law' such as sludge, waste plastics, waste acid, and waste alkali	80 t	(19.5%)
Waste outside Japan	All waste generated by business activities	106 t	(-7.3%)
Recycle ratio		85 %	(3%)
Non-recycle ratio		15 %	(-14.4%)

*1 Environmental impact mass balance: Environmental impact expressed in the form of a balance sheet in which substances entering the company are identified and listed by name and mass in one column and substances and mass exiting the company are identified and listed in the other column to more clearly display the relationship between business activities and environmental impact. Percentage figures in parentheses in the input and output tables indicate year-on-year changes.

*2 Substances regulated by law include toxic, deleterious and hazardous substances, organic solvents, and specified chemical substances.

*3 A heavy oil used as fuel is not included.

*4 Calculated using the "Emissions factor by electric utility" under the Ministry of the Environment's "Greenhouse Gas Emissions Accounting, Reporting, and Disclosure System" for electric power in Japan; the emissions factor reported by electric companies for electric power in the United States; the emissions factor from the BEIS GOVERNMENT GHG CONVERSION FACTORS FOR COMPANY REPORTING for electric power in the United Kingdom; and the emissions factor under the Ministry of the Environment's "Greenhouse Gas Emissions Accounting, Reporting, and Disclosure System" for energy other than electric power in Japan and outside of Japan. Data include the CO_2 conversion values for greenhouse gases other than CO_2.

*5 For NOx and SOx, annual emissions are calculated based on values measured annually.

Environment

Climate Change and Energy

Stance on Social Issues

Intense climate-related disasters cause major damage nearly every year. In 2019, the Japanese government designated two typhoons, the Reiwa 1 Boso Peninsula Typhoon and the Reiwa 1 East Japan Typhoon, as Extremely Severe Disasters. As the impact of climate change caused by global warming becomes more serious and pronounced, companies are expected to do more to reduce the emissions of greenhouse gasses in their business operations and take action to address natural disaster damage.

Recognizing climate change as the biggest issue in environmental management, the Anritsu Group is focused on reducing CO_2 emissions throughout its value chain and offering products and solutions that mitigate damage associated with natural disasters.

We proactively publicize our countermeasures to climate change and disclose related financial information according to recommendations that the Task Force on Climate-related Financial Disclosures (TCFD)* published in June 2017.

*An international initiative launched by the G20 Financial Stability Board (FSB) in 2015 to improve the disclosure of information related to the financial impact stemming from climate-related risks and opportunities.

Our Response to TCFD Recommendations

Information Disclosure in Accordance with the TCFD Framework

The Anritsu Group's initiatives for addressing climate-change, summarized below, are disclosed in accordance with TCFD's recommended framework.

Governance

Climate-change related risks are managed by the executive officer in charge of environmental activities under the supervision of the Group CEO. The executive officer oversees the Environment and Quality Promotion Department, which plays a vital role in the Anritsu Group's business, and chairs the Global Environmental Management Meetings and the Environmental Management Committee in Japan. This structure ensures that risk management is given due consideration, planned, executed, and consistently managed across the global organization. Major risks associated with the Anritsu Group's business and management are appropriately reported during the Management Strategy Conference and Board of Directors. In addition, risk management items, plans, status, and reports of the annual management cycle are also presented to these entities.

P.075 Promotion of Risk Manaegement: Structure

Strategy

Anritsu has analyzed risks and opportunities related to climate change in view of the 2 Degree Celsius (2DS) scenario. The analysis revealed that, under the scenario, we may face changes in regulation and experience physical impacts in short-, mid-, and long-term timeframes. This represents a major risk not only to our own business but also to our entire value chain, and we have therefore positioned climate change as our most critical issue and defined science-based targets (SBTs). To achieve these, we will invest in renewable energy generation facilities and expand our capability for consuming the energy we generate. This will directly impact the rising volume of electricity generated using renewable energy sources, and we strongly believe this is the most direct way to address climate change.

Risk Management

Under the Basic Risk Management Policy, to ensure the effective management of risks across the entire Company, the Environment and Quality Promotion Department creates an inventory of potential risks, including those related to climate change, from sources such as the results of the annual environmental impact assessment conducted by each business division and Group company, the Environmental Management Committee, and during Global Environmental Management Meetings. Each identified risk is assessed and its business impact is evaluated based on legal and regulatory requirements as well as global trends. The division creates a finalized list of risks and opportunities related to climate change from this inventory. As deemed necessary, the list is reported during the Management Strategy Conference and Board of Directors. The risks and opportunities on the finalized list are assigned for remediation to the related business division or to the Environment and Quality Promotion Department if an item is understood to impact the entire Company. Currently, the Group is in the process of identifying emerging risks in 2030 and 2050, which will be included within the scope of the GLP2020 Environmental Initiative.

Indicators and Targets

In December 2019, the Science Based Targets initiative (SBTi) approved the Anritsu Group's greenhouse gas emissions reduction targets as science-based targets under the 2DS scenario.

- **Scope 1 and 2:** By fiscal 2030, reduce greenhouse gas emissions by 30% compared to the fiscal 2015 level.
- **Scope 3:** By fiscal 2030, reduce greenhouse gas emissions resulting from the purchased goods and services as well as the use of sold products by 30% compared to the fiscal 2018 level.

The Anritsu Group established the "Anritsu Climate Change Action PGRE 30" plan as one measure for reducing greenhouse gasses and also began to expand its capability to generate renewable energy.

P.028 Established Anritsu Climate Change Action PGRE 30

Risks and Opportunities (2 Degree Celsius Scenario)

Examples of Transition Risks

A portion of the climate-related investment budget, approximately 800 million yen (deemed as 1/10 of the overall budget), was invested to build a new global headquarters building (ZEB Ready*) as the initial step for the Scrap-and-Build initiative in the Atsugi head office area. The investment made to renewable energy through the solar power generation facilities is expected to pay off in approximately 10 years, with some variation depending on the installation environment and conditions. In regard to the Paris Agreement and recent global trends, we expect that energy-related laws and regulations, including the Act on the Rational Use of Energy, will tighten and that additional measures such as carbon taxes will be introduced. There will be a need to cut back even further on our energy consumption and greenhouse gas emissions. In order to respond to these risks, it is vital that we diligently execute our energy-saving measures, replace and rebuild aging equipment and buildings to improve energy efficiency, and install renewable energy facilities.

*ZEB refers to a Net Zero Energy Building. ZEB Ready is a progressive building that incorporates the necessary features for achieving ZEB status. It is well insulated, equipped with highly efficient energy-saving equipment, and achieves more than 50% energy savings in primary energy consumption, excluding non-renewable energy sources.

Examples of Physical Risks

The Anritsu Group procures parts and materials from locations around the world, and floods and major typhoons brought on by climate change mean that there is some risk of suppliers in affected regions being unable to supply necessary parts and materials. In response, the procurement department has mapped the main manufacturing and sales locations of our suppliers and formulated a system in which we can grasp potential damage immediately. The system also allows the Anritsu Group to make purchases from several companies. The first factory of Tohoku Anritsu Co., Ltd., in Koriyama City, Fukushima Prefecture, is another example. It is located near the Abukuma River, which is at high risk of flooding during torrential rains. To mitigate flood risk, the company built its second factory in a flood-free zone within city limits in 2013. Major production lines were moved to the new location, and the remaining production lines in the first factory were moved to the second floor. As a result, even though the first factory suffered from flooding during the Reiwa 1 East Japan Typhoon, and the water level rose up to 1.5 meters on the first floor, the company was able to resume operations and shipments within two weeks.

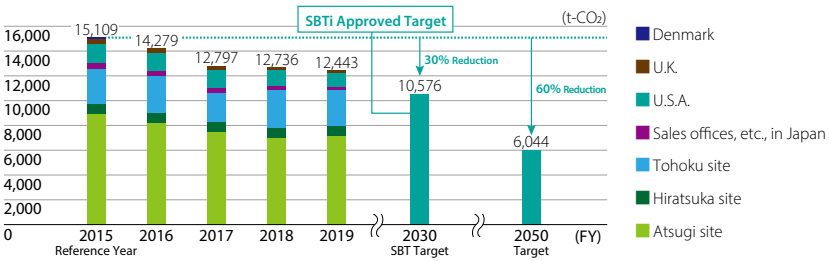
Goals

Fiscal 2020 Targets	Fiscal 2019 Progress
Reducing Scope 1 and 2 CO_2 emissions by 2% per year compared to the fiscal 2015 level (26% reduction by fiscal 2030)	○: Reduced by 17.6% compared to the fiscal 2015 level.
Setting long-term CO_2 emissions reduction targets for 2030 and 2050	○: Established 2030 long-term reduction targets for CO_2 emissions (Scope 1 and 2) and received approval of the SBT Initiative. Established 2050 long-term targets.
Reducing product-related CO_2 emissions (Scope 3, Category 1 and 11)	○: • Established emissions targets for 2030 for Scope 3, Category 1 and 11, and received SBTi's approval. • Explained to our suppliers about our initiatives to reduce Category 1 emissions and requested their cooperation. • Calculated how much reduction in product power consumption is required for each business unit to achieve the target of Category 11 emissions reduction and formulated target reduction scenarios.

Targets	Fiscal 2019 Progress
SBT Scope 1 and 2: By fiscal 2030, reduce greenhouse gas emissions by 30% compared to the fiscal 2015 level	Reduced by 17.6% compared to the fiscal 2015 level.
Scope 1 and 2: By fiscal 2050, reduce greenhouse gas emissions by 60% compared to the fiscal 2015 level*1.	
SBT Scope 3: By fiscal 2030, reduce greenhouse gas emissions resulting from the purchased goods and services and the use of sold products by 30% compared to the fiscal 2018 level.	Reduced by 4.4% compared to the fiscal 2018 level.
Anritsu Climate Change Action PGRE 30 Using the Anritsu Group's energy consumption*2 in fiscal 2018 as a reference, invest in solar panels and increase the share of private renewable energy generation from 0.8% of its energy consumption to about 30% by around 2030.	Share of private renewable energy generation reached 0.9% In January 2020, installed an additional 57 kW in solar power generation facility in the Atsugi area. Also, a 1,100 kW solar power generation facility is being built in the Anritsu Company and scheduled for completion in October 2020. We expect the ratio of private renewable energy generation to reach 4.3% in FY2020.

*1 SBT Initiative's evaluation has not been requested.
*2 Excluding AT Techmac Co., Ltd. power consumption, which is not applicable to the wholly owned subsidiary.

■ CO_2 Emissions and Reduction Targets in Scope 1 and 2 (Market-based)



Activities / Achievements

Established SBT

The Anritsu Group has established targets for reducing greenhouse gas emissions* to be achieved by 2030. These were approved by the SBT Initiative in December 2019 as scientific-based targets for achieving the Paris Agreement's goal of limiting the increase in the global average temperature to less than two degrees above pre-industrial levels.

SCIENCE BASED TARGETS
DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

*Scope 1 and 2: By fiscal 2030, reduce greenhouse gas emissions by 30% compared to the fiscal 2015 level.
Scope 3: By fiscal 2030, reduce greenhouse gas emissions resulting from the purchased goods and services, as well as the use of sold products, by 30% compared to the fiscal 2018 level.

Established Anritsu Climate Change Action PGRE 30

We established the Anritsu Climate Change Action PGRE 30* plan (PGRE 30) as an additional measure for achieving the reduction target for greenhouse gas emissions (Scope 1 and 2). Using the Anritsu Group's energy consumption in fiscal 2018 as a reference, the plan is intended to invest in solar power generation facilities (a renewable energy source) and increase the private renewable energy generation ratio from 0.8% to about 30% by around 2030. The goal of PGRE 30 is to install and commission over 6 MW (6,000 kW) in solar power generation facilities across our main business sites, the Atsugi site, the Tohoku site, and the Anritsu Company in California, U.S.A. According to data from the Agency of National Resources and Energy, the ratio of energy generation using renewable sources in Japan in 2018 was 16.9%, 6.0% of which was from solar. These numbers are extremely low compared to those of other countries. We view our target of supplying about 30% of our energy requirement with a proprietary solar power generation system to be extremely high compared to the current Japanese standard, and we wanted to contribute directly to expanding renewable energy offerings. For this reason, we chose not to rely solely on purchasing renewable energy certificates but instead to install our own renewable energy generation facilities.

In fiscal 2019, we expanded the generation capability in the Atsugi site and added 57 kW in solar power generation facility. We are also in the process of building a 1,100 kW solar power generation facility at the Anritsu Company. We will continue to advance toward achieving the 2030 reduction target for greenhouse gas emissions.

*"PGRE" stands for Private Generation of Renewable Energy, and "30" refers both to the approximate target year 2030 for achieving the goal and to the target ratio of about 30%.


Solar power generation facility, currently under construction (U.S.A.)


Solar power generation facility (Atsugi site)


Solar power generation facility (Tohoku site)

■ Renewable Energy (Annual Electrical Output)

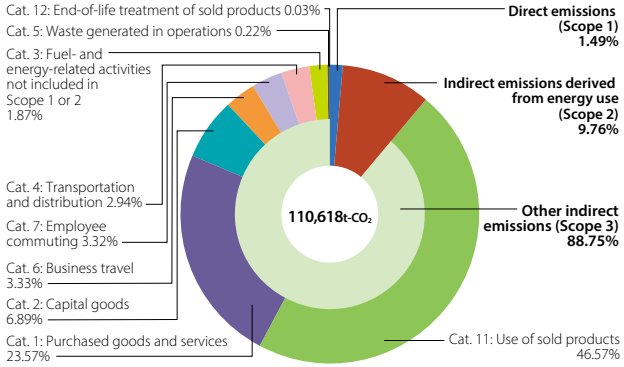
(MWh)

	FY2015	FY2016	FY2017	FY2018	FY2019
Solar energy	241	227	233	241	246

*Amount of renewable energy generated was reviewed by a third party.
*The Koriyama Second Factory was installed in fiscal 2013. The global headquarters building was installed in fiscal 2015 and expanded in fiscal 2019.

CO_2 Emissions Throughout the Entire Value Chain

■ Value Chain CO_2 Emissions by Scope (Fiscal 2019)



(t-CO_2)

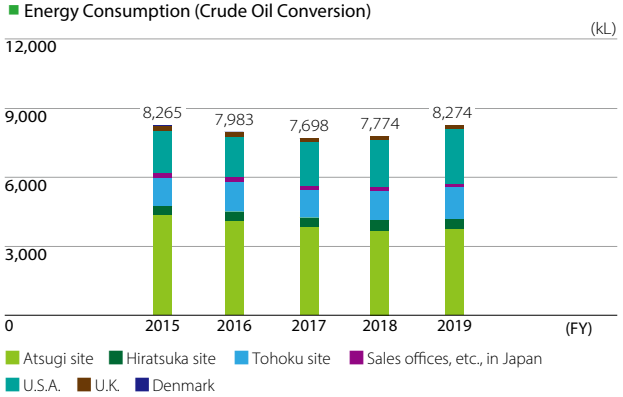
CO_2 emissions volume	FY2015	FY2016	FY2017	FY2018	FY2019
Total CO_2 emissions volume*1	162,957	141,906	138,683	110,258	110,618
Scope 1	1,722	1,698	1,591	1,574	1,649
Scope 2 (Market-based*2)	13,387	12,581	11,206	11,162	10,794
(Location-based*3)	15,310	14,741	12,354	11,991	11,804
Scope 3*4, 5, 6, 7	147,848	127,626	125,885	97,522	98,175
Category 1	80,332	69,608	73,008	29,057	26,078
Category 2	17,606	5,806	5,737	4,996	7,625
Category 3	1,068	1,022	989	998	2,064
Category 4	2,645	2,184	1,702	2,791	3,254
Category 5	34	19	127	145	245
Category 6	2,829	2,621	3,554	4,002	3,685
Category 7	3,879	3,743	3,434	3,404	3,671
Category 11	39,358	42,590	37,304	52,096	51,520
Category 12	96	33	31	33	34

*1 The calculated value of actual emissions was verified by a third party. Total CO_2 emissions volume is calculated as the sum of CO_2 emissions volumes from Scope 1, 2 (market-based), and 3.
*2 Market-based refers to a calculation method that reflects emissions according to specific electricity providers.
*3 Location-based refers to a calculation method that reflects the average emissions of grids through which energy is consumed.
*4 We revised the calculation method for Category 1 data beginning in fiscal 2018.
*5 We revised the lifetime usage period in the Category 11 calculation beginning in fiscal 2018.
*6 Category 8, 10, and 13–15 are not applicable to the Anritsu Group's business activities and have therefore been excluded from the calculation.
*7 The calculation for Category 9 is extremely difficult, and therefore no calculation was made.

Energy-saving Activities at Factories and Offices

We have mainly focused our efforts on reducing energy consumption, as more than 98% of Anritsu Group CO_2 emissions (Scope 1 and 2) are from energy consumption. In fiscal 2019, the Anritsu Group's energy consumption (crude oil equivalent) increased by 6.4% compared to the fiscal 2018 level. This was due to an increase in the number of overtime hours worked, a result of increased demand for measuring equipment, triggered by the arrival of 5G. In the Domestic Anritsu Group as well, energy consumption increased by 2.9% compared to the fiscal 2018 level. However, we implemented a raft of measures that included a review of the operation status of our air conditioning equipment and the new installation of high-efficiency air conditioning equipment, which contributed to an approximately 1.2% reduction in energy consumption (crude oil equivalent).

■ Energy Consumption (Crude Oil Conversion)



Other Targets of the Domestic Anritsu Group	Results for Fiscal 2019
Improving the basic unit of energy by 1% every year toward fiscal 2020 (program promoted by the electric and electronics-related industries in Japan for establishing a low carbon society)	15.8% improvement from the base year (fiscal 2012)
Achieve annual reductions of at least 1% in the basic unit of energy consumption per real sales for the past five years under the Act on the Rational Use of Energy	7.2% improvement

Reducing CO_2 Emissions from Purchased Goods and Services

Anritsu is working to reduce CO_2 emissions related to the purchased goods and services (Scope 3, Category 1), particularly those with a high ratio of CO_2 emissions across our entire value chain. This is in line with our overall goal of achieving the SBTi-approved Scope 3 target. It is imperative that we collaborate with suppliers to reduce Category 1 emissions. So that the results of our collaboration are accurately reflected in our reports, we directly collect CO_2 emissions data from suppliers. In fiscal 2019, our CO_2 emissions were reduced by approximately 10% compared to the fiscal 2018 level. We will also continue to discuss with our suppliers at a forum for the exchange of information regarding reducing Category 1 emissions and request their cooperation.

Reducing CO_2 Emissions from the Use of Sold Products

Anritsu is working to reduce CO_2 emissions related to the use of sold products (Scope 3, Category 11), which has the highest percentage of CO_2 emissions across the entire value chain. This is in line with our overall goal of achieving the SBTi-approved Scope 3 target. In fiscal 2019, although the sales volume of energy-intensive products in the Measurement Business increased, the CO_2 emissions factor was lower, and overall CO_2 emissions were reduced by 1.1% compared to the fiscal 2018 level. In addition, we have calculated the level of reduction in product power consumption that is needed for each business unit to achieve the Category 11 emissions reduction target and formulated target reduction scenarios. In the coming years, we will continue our efforts to reduce CO_2 emissions under these targets and scenarios.

■ Reduction in Energy Consumption and CO_2 Emissions during the Use of Sold Products[*1,2]

	FY2015	FY2016	FY2017	FY2018[*5]	FY2019
Reduction in Energy Consumption (GJ)[*3]	27,748	36,713	31,241	71,744	85,847
Reduction in CO_2 Emissions (t-CO_2)[*4]	1,611	2,162	1,604	3,569	3,978

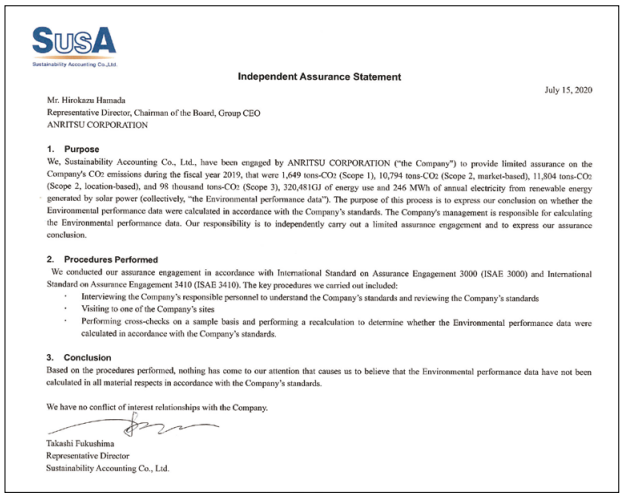
*1 Conversion coefficient × time spent in operation over one year × sales volume × reduction in power consumption when compared to a conventional product functioning and performing at the same level.
*2 Hardware products developed by the Domestic Anritsu Group, for which product assessments have been conducted
*3 Source for conversion coefficient: Act on the Rational Use of Energy
*4 Source for conversion coefficient: national average coefficient based on the Law Concerning the Promotion of Measures to Cope with Global Warming
*5 Reflects revisions regarding annual use, implemented beginning in fiscal 2018

Reducing CO_2 Emissions from Transportation

The Domestic Anritsu Group is actively working on reducing CO_2 emissions from the transportation and distribution (Scope 3, Category 4) by promoting a modal shift from trucks to railway transportation and reviewing and optimizing loading methods, among other measures.

Third-party Verification of CO_2 and Other Emissions

In order to ensure the reliability of the report, we sought and received third-party verification from the Sustainability Accounting Co., Ltd. regarding our CO_2 emissions (Scope 1, 2, and 3), annual renewable energy power generation and total energy consumption.



SuSA
Sustainability Accounting Co.,Ltd.

Independent Assurance Statement

July 15, 2020

Mr. Hirokazu Hamada
Representative Director, Chairman of the Board, Group CEO
ANRITSU CORPORATION

1. Purpose

We, Sustainability Accounting Co., Ltd., have been engaged by ANRITSU CORPORATION ("the Company") to provide limited assurance on the Company's CO_2 emissions during the fiscal year 2019, that were 1,649 tons-CO_2 (Scope 1), 10,794 tons-CO_2 (Scope 2, market-based), 11,804 tons-CO_2 (Scope 2, location-based), and 98 thousand tons-CO_2 (Scope 3), 320,481GJ of energy use and 246 MWh of annual electricity from renewable energy generated by solar power (collectively, "the Environmental performance data"). The purpose of this process is to express our conclusion on whether the Environmental performance data were calculated in accordance with the Company's standards. The Company's management is responsible for calculating the Environmental performance data. Our responsibility is to independently carry out a limited assurance engagement and to express our assurance conclusion.

2. Procedures Performed

We conducted our assurance engagement in accordance with International Standard on Assurance Engagement 3000 (ISAE 3000) and International Standard on Assurance Engagement 3410 (ISAE 3410). The key procedures we carried out included:

- Interviewing the Company's responsible personnel to understand the Company's standards and reviewing the Company's standards
- Visiting to one of the Company's sites
- Performing cross-checks on a sample basis and performing a recalculation to determine whether the Environmental performance data were calculated in accordance with the Company's standards.

3. Conclusion

Based on the procedures performed, nothing has come to our attention that causes us to believe that the Environmental performance data have not been calculated in all material respects in accordance with the Company's standards.

We have no conflict of interest relationships with the Company.

Takashi Fukushima
Representative Director
Sustainability Accounting Co., Ltd.

Climate Change Survey Results by CDP

The score for Anritsu's response to the CDP questionnaire on climate change for fiscal 2019 was "B: Management level," which is the same score as fiscal 2018. This means that the Company is taking action to mitigate climate risk and its impact.

We will continue our efforts to enhance the reliability of our information disclosure and reduce CO_2 emissions throughout the entire value chain to prevent global warming.

Related Data

■ Scope 1 and 2 CO_2 Emissions Volume per Sales (Market-based) (t-CO_2/100 million yen)

	FY2015	FY2016	FY2017	FY2018	FY2019
Scope 1 and 2 CO_2 Emissions Volume per Unit (Sales)*	15.8	16.3	14.9	12.8	11.6

* Scope 1 and 2 CO_2 emissions (market-based) / sales

■ Energy Consumption*1 and Reductions*2, 3, 4 by Energy Type (GJ)

Type of energy*5, 6	FY2015	FY2016	FY2017	FY2018	FY2019	Reductions
Total energy consumption in the Organization	320,197	309,232	298,178	301,108	320,481	-285
Subtotal for non-renewable energy Sources	23,713	25,927	24,066	24,364	23,539	173
Class A heavy oil*7	5,202	6,830	5,476	5,018	4,439	763
Light oil*7	285	262	223	224	165	120
Gasoline*7	9,925	10,165	9,113	9,098	8,926	999
Kerosene*7	969	969	969	932	859	110
City gas*8	2,216	2,409	2,824	2,750	3,054	-838
LPG*9	189	158	146	115	78	110
Natural gas*7	4,927	5,134	5,315	6,227	6,018	-1,091
Purchased electrical power*7	296,076	283,304	274,112	276,744	296,942	-866
Regional heating*10	408	—	—	—	—	408

*1 Method for calculating energy consumption: volume purchased × conversion coefficient
*2 Method for calculating reduced energy consumption: 2015 energy consumption – 2019 energy consumption
*3 Base year for reduction comparisons is fiscal 2015
*4 Reason for choosing the base year: 2015 was chosen as this was the year the global headquarters building was completed, in March, subsequently ushering in major changes in the use of energy-saving equipment.
*5 There was no consumption of air conditioning, steam, sold energy, or renewable energy sources.
*6 Energy consumed outside the organization was not included due to the difficulty of documentation.
*7 Source for conversion coefficient: regulations in line with the Act on the Rational Use of Energy
*8 Source for conversion coefficient: Agency for Natural Resources and Energy: Act on the Rational Use of Energy, Procedure for periodic reports under Articles 15 and 19 (2) (revised March 30, 2018)
*9 Source for conversion coefficient: Agency for Natural Resources and Energy: Act on the Rational Use of Energy, Procedure for periodic reports under Articles 15 and 19 (2) (revised March 30, 2018) 50.8 x (1/458) (propane/butane m^3 equivalent).
*10 Source for conversion coefficient: reports from operations in Denmark

■ Energy Consumption per Sales (GJ/100 million yen)

	FY2015	FY2016	FY2017	FY2018	FY2019
Basic unit of energy consumption (sales)*	335	353	347	302	299

* Total energy consumption/sales

Environment

Water Resources

Stance on Social Issues

Water is irreplaceable for us to lead our daily lives and for conducting economic activities. Yet today water resource depletion and water conflicts have emerged as major issues around the world due to factors such the rising global population, economic growth of developing countries, and climate change. Although Anritsu does not require large quantities of water for its businesses, we are engaged in major development and manufacturing sites in high water risk areas, including the Anritsu Company (U.S.A) in the state of California, U.S.A., and we are therefore no exception in the global situation. That is why Anritsu believes that efforts to use limited water resources efficiently and appropriately are important.

Goals

Fiscal 2020 Targets	Fiscal 2019 Progress
Maintain Domestic Anritsu Group water consumption at less than 60,000 m³ (about the level consumed in fiscal 2017)	×: 62,161 m³. An increase of 5.9% compared with fiscal 2017.

Activities / Achievements

Reducing Water Consumption

Most of the Anritsu Group's water usage is in toilets, for the washing of hands and so on. The Domestic Anritsu Group has reduced water consumption through efforts such as leakage inspections, upgrading to water-saving toilets, and the use of circulated water in production facilities. The Hiratsuka site uses alkaline washing agents to degrease metallic materials, and the rinsing water used by the facility in this process is reused by circulating it through filters and ion-exchange resins, which reduces annual water consumption by approximately 40 m³.

In the Domestic Anritsu Group, in fiscal 2019 water usage increased by 4.1% compared with fiscal 2018 due to an increase in the overtime hours worked in the development and manufacturing departments as a result of increased sales.

Water Risk Regional Evaluation

We have evaluated the water risk associated with the Domestic Anrisu Group Companies, Anritsu Company (Morgan Hill, California, U.S.A.) and Anritsu Ltd. (Luton, U.K.), that serve as our main bases for development and manufacturing, using Aqueduct, a water risk evaluation tool developed by the World Resource Institute. The results of our review of what is called an "Overall Water Risk" for these sites were "Low (0–1)" and "Low-Medium (1–2)." However, despite the fact that Anritsu Company is in what is referred to as a "Low" risk region according to the tool, we still believe we are exposed to high water risk since we adhere to rules and regulations governed by the state of California, which is subject to a high risk of drought. In fact, the state experienced record-breaking droughts from 2011 to 2017, and in 2015 all residents were asked to reduce their water use by 20%.

Water Resources in Regions Experiencing Water Shortages

The Anritsu Company was able to reduce its water consumption by about half from fiscal 2013 to fiscal 2015 through efforts such as replacing a water-intensive lawn with plants that can withstand dehydration and introducing water-saving toilets. In fiscal 2019, however, water consumption increased significantly. A newly introduced production process increased water consumption, and as California's drought rules were relaxed, the Company resumed watering plants to maintain its grounds.

Consideration for Water Resources

Anritsu Group draws on two sources of water. We use underground water for flushing toilets at the Atsugi site, and we use city water, which in turn uses surface water drawn from rivers for its source, at all our facilities.

At the Atsugi site, we have reduced our use of groundwater to about a quarter of the volume, compared to the level about 15 years ago, by upgrading to water-saving toilets. Meanwhile, at the global headquarters building, we installed a rainwater permeation basin to facilitate the penetration of rainwater into the ground for groundwater recharges and preventing flooding caused by heavy rainfall.

■ Efforts to Protect Water Resources

Details of our efforts	Atsugi Site	Hiratsuka Site	Tohoku Site	U.S.A.
Introduced a body detection sensor for men's toilets	○		○	○
Introduced water-saving toilets	○		○	○
Introduced automatic faucets	○		○	
Used groundwater for flushing toilets	○			
Reuse of rinse water from the metal degreasing unit		○		
Installed a rainwater permeation basin	○			
Installation of Valves to Conserve Water	○			○
Installed a sound emulator, "Otohime," for toilets	○			
Conducted leakage inspections	○	○	○	
Upgraded to high-efficiency water heaters				○
Replanted plants that can withstand dehydration				○
Replaced to a drip water supply system				○
Cessation of Watering in Rainy Season				○
Introduced a waterless method for cleaning windows				○
Arranged an inspection of a water supply facility by external institutions				○
Participated in Mt. Fuji Green Fund Afforestation Efforts	○	○		
Participated in a cleanup of the Sagami River (River cleanup activities)	○			

■ Amount of Water Intake by Type*, Wastewater by Type, and Recycled Amount (m³)

		FY2015	FY2016	FY2017	FY2018	FY2019
Total Amount of Water Intake		82,794	80,352	70,837	72,777	79,588
City Water Intake	Subtotal	65,207	63,382	54,371	55,774	61,585
	Atsugi site	37,320	34,798	30,277	30,181	31,695
	Hiratsuka site	805	750	716	700	659
	Tohoku site	12,353	11,888	11,203	11,363	11,711
	Sales offices, etc., in Japan	66	69	47	476	93
	U.S.A.	14,011	15,477	11,858	12,858	17,312
	U.K.	421	401	270	196	116
	Denmark	232	—	—	—	—
Groundwater Intake	Atsugi site	17,587	16,970	16,466	17,003	18,003
Total Wastewater Amount		71,570	65,741	58,373	58,530	64,978
Amount Deposited to Sewers	Subtotal	59,217	53,853	47,170	47,167	53,267
	Atsugi site	48,191	45,004	40,935	41,364	44,364
	Hiratsuka site	805	750	716	700	659
	Sales offices, etc., in Japan	66	60	47	476	93
	U.S.A.	9,530	7,639	5,202	4,431	8,036
	U.K.	394	401	270	196	116
	Denmark	232	—	—	—	—
Amount Deposited to Rivers	Tohoku site	12,353	11,888	11,203	11,363	11,711
Recycled Amount	Hiratsuka site	40	40	40	40	40
Recycled Rate (%)	Hiratsuka site	5	5	5	5	6

*City water and groundwater are our only two sources for water intake.

Environment

Preserving Biodiversity

Stance on Social Issues

Biodiversity provides natural resources that are essential for daily life and business activities. If it is lost, human survival would be threatened, posing a major risk to corporate sustainability.

Throughout the Anritsu Group's value chain, from the procurement of raw materials to the disposal of a product, there are factors in business operations that affect biodiversity such as the discharge of waste and chemicals and the consumption of energy. We therefore have an obligation to work on biodiversity conservation and have a basic policy to reduce environmental impact, while also engaging in social contribution activities for protecting the natural environment.

Policy

The Anritsu Group has analyzed the relationship between the Company's business activities and biodiversity and concluded that we have no specific business activities that have a direct impact on biodiversity. Our basic policy for preserving biodiversity is therefore focused on activities aimed at reducing environmental impacts and is centered on the following three areas.

- Global warming prevention to mitigate climate change
- Resource-saving and recycling to manage overexploitation and habitat loss
- Control chemical substance usage and releases as well as other risk mitigations to manage pollution and habitat loss

In addition, as part of our social contribution activities, we are actively participating in tree planting, local clean-ups, and other activities that help to preserve biodiversity.

For information on our goals for "Promotion of Global Warming Prevention," "Promotion of Resource-saving/ 3R's," and "Reduction in Chemical Substance Usages/Releases and Promotion of Risk Mitigating Measures" based on our Biodiversity Conservation Basic Policy, please refer to each relevant item under "Environment."

Activities / Achievements

In addition to environmental impact reduction activities in line with the Biodiversity Conservation Basic Policy, we actively participate in social contribution activities, such as greening and cleanup activities, to expand the global environment's ability to regenerate itself. In the initiative to green Company premises, we are planting species that best match the climate and soil of the site as potential natural vegetation.

Joined the Declaration of Biodiversity by "Keidanren" Promotion Partners

The Domestic Anritsu Group has endorsed Nippon Keidanren's Declaration of Biodiversity and participates as a promotion partner to exercise leadership in creating a society that values and supports biodiversity.

Acquired FSC™ CoC Certification

In January 2020, the printing department in Anritsu Kousan Co., Ltd. acquired FSC™ CoC certification*, which contributes to achieving the SDG 15 "Life on Land." As well as using recycled paper, the team uses FSC™-certified paper for printing and producing catalogs, reports and other materials.

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The mark of responsible forestry

*The Forest Stewardship Council™ (FSC™) is a global, not-for-profit organization dedicated to the promotion of responsible forest management worldwide. FSC™ defines standards based on agreed principles for responsible forest stewardship that are supported by environmental, social, and economic stakeholders. To learn more, visit www.fsc.org

Supporting the Kanagawa No Plastic Waste Declaration

A dead blue whale calf was found washed up on the shores of Yuigahama beach in Kamakura, Kanagawa prefecture in 2018. A later autopsy found a store of plastic garbage in the calf's stomach. Kanagawa Prefecture considers itself a "SDGs Future City" and views this incident as a "message from the whales." In line with the SDG for creating a sustainable society, the prefectural government issued the Kanagawa No Plastic Waste Declaration with the aim of working toward a solution for the issue of marine pollution, which is becoming increasingly severe, especially in regard to the problem of micro-plastics. Anritsu is not only a supporter of this activity, but also conducts clean-up activities in the areas around its Atsugi and Hiratsuka sites, works to prevent plastic pollution in rivers and the ocean through participation in Sagami River clean-up activities, and works to educate its employees through general environmental programs and the quarterly publication of "Eco Club" environmental magazine.

かながわプラごみゼロ宣言

私たち一人ひとりの行動が、未来につながる。
SDGs 未来都市　神奈川県

Participation in the Nijyu-maru Project (Double 20 campaign)

The Domestic Anritsu Group in fiscal 2017 pledged its contribution toward achieving the Aichi Biodiversity Targets as part of the Nijyu-maru Project*, which is being run by the International Union for the Conservation of Nature – Japan (IUCN-J).

*Project that seeks citizen groups, companies, local governments, etc., to declare their intention to join the effort to achieve the 20 Aichi Targets agreed at the 10th Ordinary Meeting of the Conference of the Parties to the Convention on Biological Diversity (COP10).

Activity Name	Actions	Aichi Targets
Participation in the Mt. Fuji "Forest fund-raising" greening project	This project has been active since 2000 and focuses on reviving forests cleared by the 1996 typhoon over a span of 80 years. Anritsu has been a participant since 2006.	Habitat destruction Preserving vulnerable ecosystems Ecosystem servicing
Greening when constructing a new building	We planted trees and vegetation appropriate to the climate and soil of the area on the grounds and surrounding area of the Anritsu global headquarters building, for which construction was completed in March 2015.	Habitat destruction Ecosystem servicing

Thinning trees as part of the Mt. Fuji "Forest fund-raising" greening project

Environment

Preventing Environmental Pollution

Stance on Social Issues

Toxic chemical pollutants in the air, water and soil adversely affect human health and the environment and also trigger global warming. The list of laws and regulations focused on the handling and discharge of chemical substances is extensive and becoming stricter.

In its product development and manufacturing, Anritsu handles chemicals, and if they were not properly managed, they would seriously affect the surrounding environment. For our sustainable business activities, it is critical that we maintain appropriate control over the use and discharge of these chemicals. We will continue to focus on pollution prevention toward creating a sustainable society while achieving our corporate growth.

Goals

Fiscal 2020 Target	Fiscal 2019 Progress
Maintain zero excess of the voluntary management limit for industrial wastewater (Atsugi site)	○: Zero excess maintained.

We will work to maintain zero excess of the voluntary management limit.

Activities / Achievements

Regulatory Compliance

The Domestic Anritsu Group is working to prevent environmental pollution by establishing voluntary management standards that are stricter than laws and regulations for wastewater quality, air and noise.

The voluntary management standards for wastewater quality are based on historical data, and the limit for the amount of pollutants in wastewater is about half of that of the regulatory requirement.

WEB Wastewater quality data for the Domestic Anritsu Group

WEB Air quality data for the Tohoku site

WEB Noise data for the Domestic Anritsu Group

Wastewater Management

The Atsugi site operates an industrial wastewater treatment facility to detoxify industrial wastewater containing acids and alkali and wastewater discharged from small boilers used to adjust humidity inside cleanrooms. We upgraded the facility, modifying the structure to incorporate a breakwater to prevent any leaks of raw water, intermediary wastewater, or chemicals used for treatment from the tanks. We are working to reduce risks by, introducing a double monitoring system to ensure that water exceeding the permitted pH limit would not be discharged into the surrounding environment. In addition, we manage the quantity of heavy metals by running simple analysis on a weekly basis and calling in third party specialists every three months to analyze other check items as agreed with the government.

At the Hiratsuka site, we degrease and wash metal materials using alkaline washing agents, and the degreasing solution is collected in batches. Since the water used for rinsing is circulated, this is not released as process wastewater. While there are no specific facilities that discharge industrial wastewater at the Tohoku site, we have installed a pH monitor and emergency cutoff valve to address the risk of water exceeding the permitted pH limit being discharged from boilers and septic tanks in the event of malfunction.

Each site has developed response procedures to address the potential leakage of chemical substances due to human error or natural disaster. Regular equipment inspections and training are also conducted, and necessary revisions are made to prepare for unexpected accidents.

Chemical Substances Management

In regard to chemical substances, the Domestic Anritsu Group applies unique standards for determining banned or restricted chemical substances considering such factors as environmental regulations, hazardousness, safety and health, and disaster prevention. Expert evaluators, each assigned to specific categories, assess the chemical substances in question and determine whether they can be used in the company.

We also inventory all chemical substances used by Domestic Anritsu Group divisions and employ a chemical substances management system that makes a record of the amount of chemical substances purchased, used, and disposed of every three months. We use this database to assess the amount of substances subject to the Pollutant Release and Transfer Register (PRTR) Law, calculate the total stored amount of hazardous materials as designated by the Fire Service Act, calculate as greenhouse gas emissions, and monitor designated chemical substances in line with revisions to laws and regulations. We also consider replacing substances as necessary with alternatives that are safer and have a lower environmental impact. Moreover, we conduct risk assessments when using chemical substances that are subject to the reporting requirements of the Industrial Safety and Health Law.

In fiscal 2019, the handling volume at the Tohoku site of methylnaphthalene, a substance found within the Class-A heavy oil used in boilers, exceeded 1 tonne again. As this substance falls under the PRTR Law, we calculated the transfer amount and submitted reports to the appropriate regulatory authorities. Methylnaphthalene is burned in boilers and very little is released externally, but we will still work to reduce handling volume moving forward.

■ Regulated Chemical Substances in Manufacturing by the Anritsu Group

Banned substances	7 Groups of substances: CFC (chlorofluorocarbons), halon, tetrachloromethane, 1,1,1-trichloroethane, HBFC (hydrobromofluorocarbons), bromochloromethane, methyl bromide
Suppressed substance	7 Groups of substances: HCFC (hydrochlorofluorocarbons), trichloroethylene, tetrachloroethylene, dichloromethane, HFC (hydrofluorocarbons), PFC (perfluorocarbons), SF_6 (Sulfur hexafluoride)

Measures for Regulated Toxic Chemical Pollutants of Products

Analyzing phthalates

The European Union published Directive (EU) 2015/863 in 2015 adding 4 phthalates (DEHP, BBP, DBP, and DIBP) to the list of restricted substances in the EU's RoHS Directives. We had already taken the necessary precautions for Category 3 products related to our IT and communication devices in the Information and Communications business before the restrictions came into force at the end of July 2019. Our main products, measuring equipment and products in the PQA business, fall under Category 9, and we will implement the necessary measures as the restrictions come into force in July 2021. To reduce the risk of discharging chemical substances into distribution, we have been using fluorescent X-ray analyzers to selectively examine purchased components for the presence of hazardous substances, particularly the original six substances that are restricted in the RoHS Directives. In fiscal 2019, we started selective testing on the presence of four additional phthalates with newly introduced analyzers. In addition, since phthalates can migrate, we also check surfaces that come in contact with the products during manufacturing.

Groundwater Management

In regard to organochlorine substances, we completely eliminated the use of trichloroethylene at the Atsugi site in 1970 and 1,1,1-trichloroethane in 1993, though we continue to voluntarily analyze and monitor the five designated organochlorine substances in groundwater at regular intervals. While levels of tetrachloroethylene were higher than permitted under environmental standards, this substance has never been used by the Anritsu Group. The results of the soil survey showed that Anritsu was not responsible for trichloroethylene contamination. This data suggest that the source of contamination originated upstream from Anritsu's location, which the local government also agrees with. We will continue to conduct regular analysis and monitoring of the site.

WEB Groundwater data for the Domestic Anritsu Group

PCB Management

In respect to condensers of high concentration PCB waste at the Atsugi site, which account for a significant portion of PCB waste, processing at the Japan Environmental Storage & Safety Corporation (JESCO) Tokyo Facility was completed in fiscal 2016. Our analysis also revealed that pressure-sensitive copying paper came under the category of low-concentration PCB waste, therefore we contracted a government-certified treatment company to properly complete processing of the waste and confirmed completion in fiscal 2016. We also outsourced the treatment of low-concentration PCB transponders, which were completed in fiscal 2018. With regard to the remaining ballasts containing a high concentration of PCB, we are in the process of outsourcing waste processing to the JESCO Hokkaido Facility, with completion expected in fiscal 2020. And we regularly report storage status to the Kanagawa Prefectural government based on our strict management guidelines, which comply with the storage standards for specially controlled industrial waste.

Anritsu does not store PCB waste outside of the Atsugi site.

Environment

Resource Recycling

Stance on Social Issues

The volume of waste is increasing as the world's population grows while a culture of mass production, mass consumption and disposables becomes wider spread, resulting in shortages of natural resources and placing a heavy burden on the environment. To address this, companies around the world are expected to manage and dispose of their waste properly and reduce the amount of waste generated.

It is our social responsibility to contribute toward tackling the waste issue. To this end, we properly handle the waste generated by our plants and offices as well as our products when they reach the end of their life. In addition, we aggressively practice the 3Rs (reduce, reuse, and recycle) while also reducing the amount of waste we generate and using environmentally friendly materials.

Goals

Fiscal 2020 Target	Fiscal 2019 Progress
Maintain zero emissions*1 at the Domestic Anritsu Group	○: Maintained zero emissions.
Maintain industrial waste volume at the Domestic Anritsu Group at 67 tons or lower	×: Exceeded industrial waste volume of 67 tons (68.3 tons*2 in fiscal 2019)
Maintain general waste and put at the Atsugi site at 36 tons or lower	○: Maintained general waste output below 36 tons (33.4 tons in fiscal 2019)

*1 Zero emissions is defined as achieving a directly landfilled and burned disposal rate of less than 0.5%

*2 Excluding irregular disposals resulting from layout changes, etc.

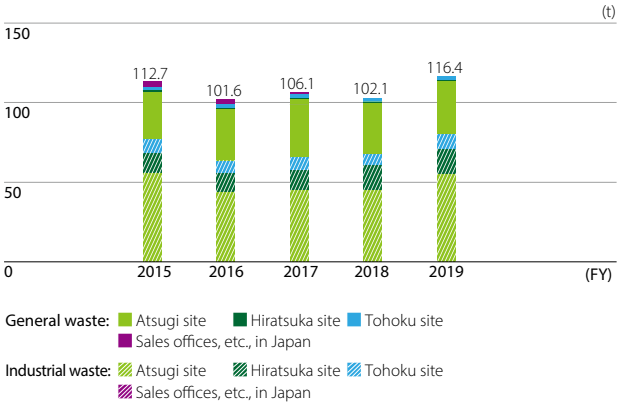
Activities / Achievements

Waste Reduction

The Domestic Anritsu Group is promoting 3R activities and the separation of waste in our offices and production lines. For example, we have reduced waste wood by replacing special wooden frames used to ship components produced abroad to Japan with rented reusable plastic frames, and we have also improved the recycling method for part of our waste solvent from thermal to material recycling.

In fiscal 2019, our industrial waste volume exceeded our target. This resulted from a few one-off scenarios including the use and disposal of wood by a department that typically does not use wood and the use and the disposal of packaging materials for research and experiment activities. We will continue to promote the 3Rs and work to reduce waste further.

■ Change in Volume of Waste (Domestic Anritsu Group)



■ Volume of Waste Generated by the Domestic Anritsu Group by Treatment

(t)

Treatment Method	Type	FY2019
Material recycling	Waste metal	156.1
	Waste paper	95.2
	Waste oil	2.8
	Waste glass and ceramic	2.2
	Waste plastics	1.6
	Sludge	1.1
Thermal recycling	Waste plastics	43.7
	Animal and plant residue	36.8
	Waste oil	16.2
	Waste wood	10.4
	Sludge	3.6
	Waste paper	2.4
	Waste alkali	1.3
	Waste acid	0.6

Environmental Considerations in Packaging

The Domestic Anritsu Group seeks to reduce the volume of packaging materials. Together with our packaging subcontractors, we have completely discontinued the use of shock-absorbing material for packaging made of urethane foam produced by using a liquid concentrate containing Methylenebis (4,1-phenylene) diisocyanate, which is designated as a Class I Designated Chemical Substance under the PRTR Law. For the substitute packaging method, we assess and introduce suitable materials and methods to each product to strive for environmentally friendly packaging.

■ Eco-friendly Packaging Efforts at the Domestic Anritsu Group

Packaging Method	Target Product Group	Action	Result
Polyethylene foam packaging (PEF packaging)	Desktop measuring equipment and handheld measuring equipment shipped overseas*1	Adopted polyethylene foam as a cushioning	Material Reduction in packaging material waste volume (waste material is polyethylene foam)*2 Volume reduction of 40% (compared to film packaging)
Film packaging	Desktop measuring equipment shipped overseas*3	Adopted method where product is held between two layers of elastic film	Reduction in packaging material waste volume (waste material is elastic film)*2
H160 Air-based cushioning materials	Unit components and small measuring equipment shipped overseas	Adopted air-based cushioning material that can withstand atmospheric pressure changes in air transport	Reduction in packaging material waste volume (waste material is air film)*2
Cardboard as a cushioning material packaging	Handheld measuring equipment for domestic and overseas locations	Adopted cardboard as a cushioning material in packaging Package standard attachments and optional parts in the open spaces within the cardboard cushioning material	Reduction in packaging material waste volume (waste material is cardboard)*2 Volume reduction of 40% (compared to when Access Master equipment is packaged using urethane foam
Eco-logistics	Products shipped domestically (mainly calibration instruments)	Adopted reusable boxes for delivery and pickup (cushioning material is also reusable) Simplified product packaging (Packaging with protective polyethylene)	Reduction in waste volume by 94% compared to regular packaging*4.
No packaging	Large products shipped domestically (mainly Anritsu Infivis products)	Adopted method in which product was wrapped in stretchable film and put in a reusable pipe container	Achieved zero waste emissions through a shift from disposable crates to reusable pipe frames.

*All packaging materials must protect the product from shock and vibrations while in transport.
*1 Desktop measuring equipment and handheld measuring equipment being developed and shipped overseas from fiscal 2016 is, in principle, shipped using PEF packaging.
*2 Reduction in packaging material based on a comparison of urethane foam waste with waste when item in parentheses is used
*3 Used for large measuring equipment and measuring equipment with a shape for which PEF packaging is problematic
*4 Assuming eco-logistics boxes are reused 20 times

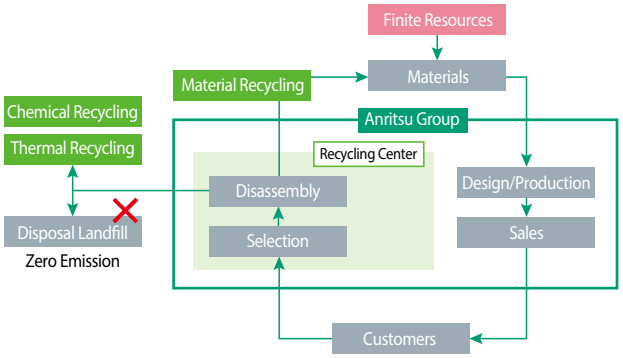
Recycling Center

Anritsu led the measuring instrument industry in establishing the Recycling Center at Anritsu Kousan Co., Ltd., as a division in 2000. Anritsu Kousan obtained a license to engage in the industrial waste disposal business in 2002 and started operating in fiscal 2003. The center is primarily engaged in treating used products received from customers.

In fiscal 2019, the Center received 108 tons of used products and equipment generated by the Anritsu Group and recycled nearly 100% of the waste after disassembling and sorting, shipping 92.3% of the resultant material as valuable resources.

Anritsu Kousan also promotes the refurbishment of used products. A selection of equipment used in demonstrations is reconditioned and calibrated by Anritsu and then delivered with a one-year guarantee, thus extending the lives of the products.

■ Recycling System for Used Products



Environment

Data Links

Reporting Theme	Content	Title	Format	Page in this Report	Website
Environmental Management	Environmental policy	Environmental Policy	Text document (HTML)	020	https://www.anritsu.com/en-us/about-anritsu/sustainability/environment
	Environmental impact summary encompassing the entire value chain	Environmental Impact Encompassing the Entire Value Chain	Historical data by year (Excel)	021	https://dl.cdn-anritsu.com/en-en/about-anritsu/environment/environmental-data/lca.xlsx
	List of excellent Eco-products	Excellent Eco-products	List (HTML)	024	https://www.anritsu.com/en-us/about-anritsu/sustainability/environment/eco-products
	CO_2 emissions across the life cycle of our products	CO_2 Emissions and Breakdown across the Life Cycle of Product Groups	Graph of fiscal 2019 data	024	—
	Eco-friendly procurement guidelines	Anritsu Group Global Green Procurement Specification	Booklet (PDF)	055	https://dl.cdn-anritsu.com/ja-jp/about-anritsu/environment/environmental-supplier-information/Guide-Eg.pdf
	Environmental management system certifications	Anritsu Corporation ISO 14001 Certification (English)	Certificate (PDF)	025	https://dl.cdn-anritsu.com/en-en/about-anritsu/environment/iso14001/jqa-em0210-en.pdf
		Anritsu Company (U.S.A.) ISO 14001 Certification	Certificate (PDF)	025	https://dl.cdn-anritsu.com/en-en/about-anritsu/environment/iso14001/ems-certificate.pdf
	Input/output data	Environmental Impact Mass Balance	Spreadsheet of historical data by year (Excel)	025	https://dl.cdn-anritsu.com/en-en/about-anritsu/environment/environmental-data/mass-balance.xlsx
Climate Change/ Energy	Greenhouse gas emissions	CO_2 Emissions & Reduction Targets in Scopes 1 and 2 (Market-based)	Graph of historical data and target by year	027	—
		CO_2 Emissions Across the Value Chain per Scope	Graph of fiscal 2019 data	028	—
		CO_2 Emissions Across the Value Chain per Scope	Spreadsheet of historical data by year	028	—
		Scopes 1 and 2, and CO_2 Emission Volume per Sales (Market-based)	Spreadsheet of historical data by year	030	—
	Renewable energy generated	Renewable Energy (Annual Electrical Output)	Spreadsheet of historical data by year	028	—
	Energy consumption	Energy Consumption (Crude Oil Equivalent)	Historical data by year	029	—
		Consumption and CO_2 Emission during the Use of Sold Products	Spreadsheet of historical data by year	029	—
		Energy Consumption and Reductions by Energy Type	Spreadsheet of historical data by year	030	—
		Energy Consumption per Sales	Spreadsheet of historical data by year	030	—
Water Resources	Efforts to protect water resources	Efforts to Protect Water Resources	List	032	—
	Water consumption	Amount of Water Intake by Type, Wastewater by Type and Recycled Amount	Spreadsheet of historical data by year	032	—
Preventing Environmental Pollution	Wastewater quality	Wastewater Quality Data for the Domestic Anritsu Group	Spreadsheet of historical data by year (Excel)	035	https://dl.cdn-anritsu.com/en-en/about-anritsu/environment/environmental-data/water-quality.xlsx
	Air quality	Air Quality Data for the Tohoku site	Spreadsheet of historical data by year (Excel)	035	https://dl.cdn-anritsu.com/en-en/about-anritsu/environment/environmental-data/air.xlsx
	Noise	Noise Data for the Domestic Anritsu Group	Spreadsheet of historical data by year (Excel)	035	https://dl.cdn-anritsu.com/en-en/about-anritsu/environment/environmental-data/noise.xlsx
	Groundwater	Groundwater Data for the Domestic Anritsu Group	Spreadsheet of historical data by year (Excel)	036	https://dl.cdn-anritsu.com/en-en/about-anritsu/environment/environmental-data/groundwater.xlsx
Resource Recycling	Waste emission	Change in Volume of Waste (Domestic Anritsu Group)	Graph of historical data by year	037	—
		Volume of Waste Generated by the Domestic Anritsu Group by Treatment Method and Waste Type	Spreadsheet of fiscal 2019 data	038	—
	Environmental considerations in packaging	Eco-friendly Packaging Efforts at the Domestic Anritsu Group	List	038	—