

Message

We are contributing to the creation of a sustainable society while protecting the global environment.

People cannot do anything to prevent large-scale natural disasters. While this powerlessness is known all too well, we must make every effort to mitigate natural disasters, even a little, by improving our business and lifestyle activities to lessen the impact of climate change. Among the SDGs selected by the United Nations, climate change is regarded as one of the most important issues that must be addressed. As our lifestyles change around the world, there are direct and indirect environmental issues that can influence climate change, such as reducing CO₂ emissions, effectively using water, managing waste, and recycling resources. Anritsu has set related goals in its business activities to guide management and improvement initiatives.

While enhancing the ratio of renewable energy use, we are contributing to the realization of a robust and sustainable society through innovation in technological development.



Senior Executive Officer, Chief
Environment and Quality Officer
Akio Takagi

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. (UK) | |

* 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, and the domestic sales offices.

Environmental Management

Social issues as a background

Recently, our investors and other stakeholders have shown greater interest in ESG (Environmental, Social, Governance) and SDGs (Sustainable Development Goals). Description of Social Issues Companies are being called upon to get actively involved in the balancing act of protecting the global environment, developing a sustainable society, and growing the economy.

In order to contribute to the sustainability of society and realize beneficial sustainable growth, Anritsu has been working to firmly instill environmental compliance related to our business activities and products, address climate change, create a recycling-oriented society, and prevent environmental pollution. In addition, we believe that administering an environmental management system that contributes to business and disclosing information in a manner that is easy for all of our stakeholders to understand in lock-step with business are also key challenges.

Environmental Management

Policy

* The "Policy" shares all the same items as "Environment" hereinafter.

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

* The "Action Guidelines" apply only to the Domestic Anritsu Group

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.

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 (p. 6).

Structure

* The "structure" shares all the same items as "Environment" hereinafter.

Anritsu has established a deliberating body with the executive officer of environmental management (Anritsu Corporation, Executive in charge of environmental activities as chairperson to promote environmental management.

| Deliberating Body | Deliberating Body Objectives | Group Members |
|--|---|---|
| Global Environmental Management Meetings | Address challenges that Anritsu Group must tackle as a single global entity | Responsible officers from the three major locations of Japan, the United States, and the United Kingdom |
| Environment Management Committee | Promote the environmental management system of the Domestic Anritsu Group | 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 | Representatives from the Development Department, SCM Department, IT Department, and Environment Department |

*Environmental management activity unit

■ ISO 14001 Certification Acquisition Status

The Anritsu Group has constructed an environmental management system and has acquired ISO 14001:2015 certification for our core development and manufacturing bases of Japan and the United States.

The coverage rate of the environmental management system is 70% when based on the number of Anritsu Group employees.



Anritsu Corporation (Head Office)

[Certification Date] August 1998 [Update] February 2016
[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 [UPDATE] MAY 2018
[CERTIFICATION ORGANIZATION/NUMBER] AMERICAN GLOBAL STANDARDS, LLC/AGS-USEMS-051618-1

Details (WEB)

Anritsu Corporation
ISO 14001 Certification
(English)

Details (WEB)

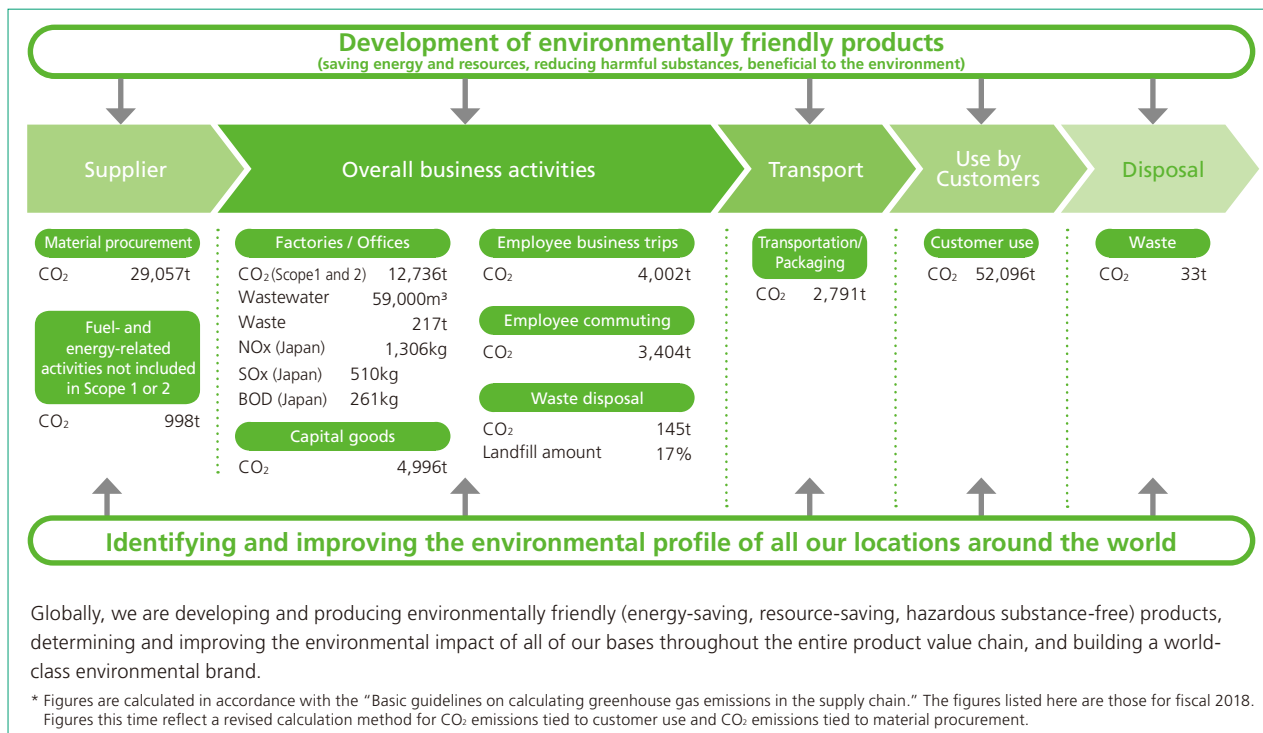
Anritsu Company (USA)
ISO 14001 Certification
(English)

Environmental Management

Medium- to long-term goals

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

Anritsu promotes environmental management toward realizing its 2020 VISION goal of “Building an environmental brand by pursuing global environmental management throughout the entire value chain.”













Details (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, the final stage for achieving its 2020 Vision, that began in fiscal 2018.

| | Biodiversity conservation | | |
|---|--|--|---|
| Priority themes | <div></div> | | |
| Continuous improvement themes | | | |
| 2020Vision | | | |
| | Climate Change Measures | Resource recycling | Pollution prevention |
| | <div></div> | <div></div> | <div></div> |
| Eco-Management | Make improvements through the integration of business processes with the management system [Theme 1] | | |
| Eco-Communication | Improve the quality of information disclosure to elevate the environmental brand [Theme 2] | | |
| Eco-Products | Strengthen energy-saving and resource-saving products [Theme 3] | Provide products that do not contain hazardous substances [Theme 4] | |
| Eco-Office, Eco-Factory | Reduce CO ₂ emissions [Theme 5] | Effectively use water and firmly instill the 3Rs | Reduce chemical substances and prevent risks |
| Eco-Mind | Cultivate an Eco-Mind | | |
| Building an environmental brand by pursuing global environmental management throughout the entire value chain | | | |

Environmental Management

Objectives and Progress Toward Objectives by Priority Theme in GLP2020 Environmental Initiative

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

| Priority theme | Fiscal 2020 objectives | Fiscal 2018 progress |
|----------------|---|--|
| Theme 1 | In departments involved in product realization processes, the Management Systems (MS) is integrated into business processes, targets related to quality and the environment are set, and management is implemented through the integrated MS. Construct and administer a mechanism to review compliance with environment-related laws and regulations globally | ○: Launched the Integrated MS Examination Committee and confirmed the applicable scope of current Quality Management Systems (QMS) and Environmental Management Systems (EMS). Also examined items on the integrated MS internal audit checklist. ○: Worked to ascertain laws and regulations for bases with significant environmental impact. |
| 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 | ○: <ul style="list-style-type: none"> As an SDG initiative, provided general education about the environment to all employees of the Domestic Anritsu Group. Reviewed the content of the Sustainability Report 2018 to prepare for core compliance with GRI Standards. Disclosed information about ongoing participation in the Ministry of the Environment's "Environmental Reporting Platform Development Pilot Project." Received the 22nd Environmental Communications Awards. |
| Theme 3 | Reduce CO ₂ emissions related to products (Scope 3* ¹ categories 1 and 11* ² * ³) | △: <ul style="list-style-type: none"> In initiatives to reduce category 1 emissions, we are revising the calculation method and creating a system that can collect actual data for use from our suppliers and allow us to work in cooperation with them to reduce CO₂ emissions. In initiatives to reduce category 11 emissions, we are analyzing the power consumption status of each product, making revisions to more appropriate calculation methods, and considering further reduction plans. |
| 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 | ○: For category 3 products* ⁴ , responded to addition of four substances to RoHS directives in Europe. |
| Theme 5 | Reduce Scope 1 and Scope 2* ⁵ * ⁶ CO ₂ emissions by 2% per year compared with fiscal 2015 (26% reduction by fiscal 2030)* ⁷ Set long-term CO ₂ emissions target for 2030 and 2050 | ○: Reduced emissions by 15.7% compared with fiscal 2015 level ○: Published the Sustainability Report 2018 with preliminary objectives for 2030. Sent a commitment letter for the SBT Initiative in March 2019. Currently drawing up long-term objectives based on SBT* ⁸ standards. |

*1 Scope 3: Indirect CO₂ emissions from non-energy sources

*2 Scope 3 category 1: Purchased products and services

*3 Scope 3 category 11: Use of sold products

*4 European RoHS directive category 3 products: Information technology (IT) and electronic communications equipment as defined by European RoHS directive

*5 Scope 1: Direct CO₂ emissions

*6 Scope 2: Indirect CO₂ emissions from energy sources

*7 Preliminary objectives until long-term objectives are set for 2030 and 2050

*8 SBT (Science Based Targets): Targets for reducing greenhouse gases that conform with scientific knowledge about keeping the temperature of the earth from rising more than 2°C compared with temperatures before the industrial revolution (likely to be strengthened to 1.5°C or less)

Activities / Achievements

■ Environmental Audit

In fiscal 2018, the Anritsu Group's main production bases in Japan and the U.S. were recertified as compliant with ISO 14001:2015.

In addition, the Domestic Anritsu Group conducted internal environmental audits in July for the purpose of reviewing the conformance, effectiveness, and environmental performance of our environmental management system, and again in October for the purpose of reviewing legal compliance. In fiscal 2018, a focused audit was conducted on the drafting of action plans. As a result, there were no non-conforming items.

Environmental Management

Opportunities for improvement indicated by external audits and observations pointed out by internal audits are reported to the Environment Management Committee and shared and rolled out throughout all management organizations. Improvements are made for issues faced by each management organization and confirmed 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 through Web-Based Training (WBT) every year for all Anritsu Group employees in Japan as well as environmental education programs designed for each job type and rank. These programs are also attended by the suppliers. With the goal of further entrenching understanding of SDGs, general education for all Anritsu group employees in Japan in fiscal 2018 included the theme of environmental management and SDGs. There were 2,673 participants in the course.

| 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 2018, 24 Group projects and 138 proposals were recognized with environmental awards.

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

■ Environmental Communication

Anritsu actively communicates using various platforms both inside and outside the Company with a firm belief in the vital importance of raising stakeholder awareness of our environmental activities and gaining their support for our efforts to protect the global environment.

The Domestic Anritsu Group has created a system for responding to inquiries about the environment from its many stakeholders. Anritsu publishes its Integrated Report and Sustainability Report, and places advertisements about the environment and releases 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 “Eco Club” via the Intranet for employees.

Our Sustainability Report issued in fiscal 2018 was updated with information in preparation for core compliance with GRI Standards. As a result, Anritsu received the 22nd Environmental Communications Awards for a second time for its environmental reporting from the Ministry of the Environment and the Global Environmental Forum.

Anritsu continues 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.



Environmental Management

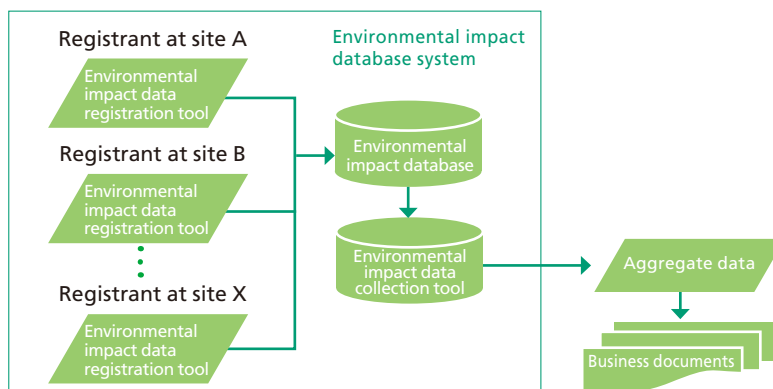
■ Climate Change Survey Results by CDP

The score for Anritsu's response to the CDP questionnaire on climate change for fiscal 2018 was "B: Management level," the same score received in fiscal 2017. This means that the "Company has considered the concrete impacts of climate change that are in line with its own businesses."

We will continue our efforts to enhance the reliability of our information disclosure and reduce CO₂ emissions throughout the entire value chain to prevent global warming.

■ System for Collecting Environmental Impact Data

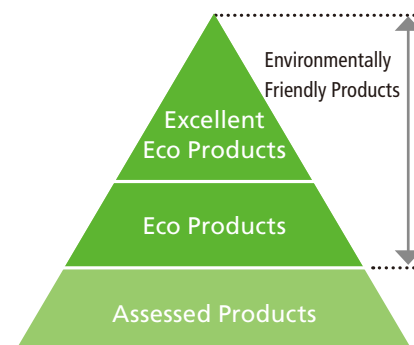
The Anritsu Group has been gathering data on its environmental impact after developing a system for collecting environmental impact data, such as electricity usage, from its business sites, including those overseas. The environmental impact data collected from business sites is stored in a database and used in aggregate data and to create business documents.



■ Global Product Assessment and Environmentally Friendly Product Certification Program

Anritsu is promoting environmental efforts across the product life cycle from parts/materials procurement and manufacturing to shipment, customer use, and recycling/disposal, and conducts global product assessments that evaluate the effects of environmental impact reduction from the early design stage of every product's development. Evaluation items in the global product assessment cover basic factors such as improvements in volume, mass, and power consumption against a reference product (an existing product that is similar in function and performance to the product being assessed). Additional items for evaluation include resource savings and the reduction of harmful substances and overall environmental impact throughout production, distribution, use, and disposal. The assessment is conducted during the three stages of target setting, design review, and evaluation.

We have established an environmentally friendly product program that certifies products as Excellent Eco-Products* and Eco-Products based on the global product assessment scoring results. Environmentally friendly products accounted for about 84% and Excellent Eco-Products for about 76% of Anritsu's sales of measuring instruments for fiscal 2018.



* Top ranking products in the industry that meet the environmentally friendly standards independently established by Anritsu. These products are indicated in catalogs and such with the Excellent Eco Product mark. This mark is categorized under international standard ISO 14021 Environmental labels and declarations — Self-declared environmental claims (Type II environmental labelling).

Details (WEB)
List of Excellent
Eco-products

Environmental Management

TOPICS

Development of MT8000A Radio Communication Test Station



The MT8000A Radio Communications Test Station is used to test 5G mobile terminals, chipsets, and other devices under development. One unit can effectively handle both RF measurement and protocol testing operations. Development was based on the concept of constructing a single unit with the processing capabilities equal to the multiple existing testers currently required for 5G NR (New Radio) measurement instruments. The equipment was realized through the use of highly efficient power supply devices and low-power, highly integrated devices.

Field Programmable Gate Array (FPGA) devices consume more power the higher the temperature, even when performing the same computation. The power consumption of FPGAs can therefore be controlled by efficiently dissipating heat by spreading out heat sources within the casing.

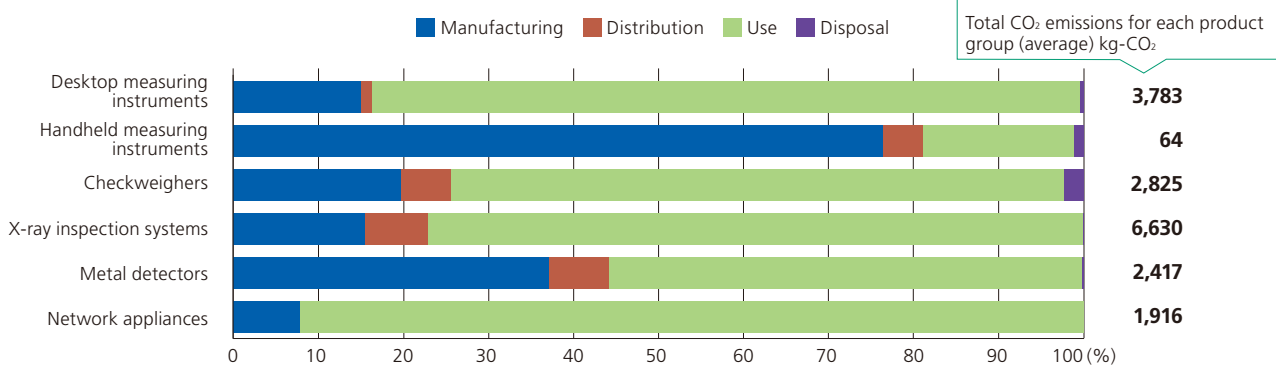
Compared to conventional products processing at the same levels, we decreased the model's volume by 80% and mass by 74%, with power consumption reduced by a substantial 75%.



CO₂ Emissions Across the Life Cycle of Our Products

The Domestic Anritsu Group is aware of the CO₂ emissions at each stage of the product life cycle.

CO₂ Emissions and Breakdown across the Life Cycle of Product Groups (fiscal 2018)



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 environmentally friendly 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. For more information, please see "Supply Chain Management" on page 49.

Compliance with Environmental Laws and Regulations

In fiscal 2018, Anritsu did not receive any complaints or citations for violations of laws and regulations related to the environment.

Climate Change / Energy

Social issues as a background

Torrential rainfall occurred in western Japan in July 2018, and typhoon No. 21 made landfall in the Kinki region in September 2018. These two natural disasters caused extensive damage to buildings, power outages, cutouts in water supply, and forced operations to halt. The impact of climate change caused by global warming has become more serious and pronounced. Stakeholders have become more aware of climate change. For example, in June 2017, the Task Force on Climate-related Financial Disclosures (TCFD)* published recommendations for companies regarding the disclosure of financial information related to the climate so that investors could make informed investment decisions.

Natural disasters caused by climate change and the tightening of related regulations present a risk in business activities, but also opportunities for Anritsu to contribute to measures that prevent climate change through its business activities. The Company recognizes climate changes as the biggest issue in environmental management, and aims to strengthen measures to counter climate change.

* The Task Force on Climate-related Financial Disclosures (TCFD) is an international initiative launched by the Financial Stability Board (FSB) in 2015 to improve the disclosure of information related to the financial impact stemming from climate-related risks and opportunities.

■ Risks and Opportunities from Climate Change

• Risks and opportunities driven by changes in regulation

Energy-related laws and regulations, including the Act on the Rational Use of Energy, are being tightened in line with the Paris Agreement and efforts to counteract climate change. We also believe there will be an increased need going forward to cut the absolute level of energy consumption. In order to respond to such risks, it will be vital to replace or rebuild aging equipment and buildings. It will also likely require the installation and purchasing of renewable energy. Regarding the provision of environmentally friendly products, the product assessment methods and LCA (Life Cycle Assessment) evaluations that Anritsu was among the first to adopt in the industry have become commonplace. Using these methodologies, Anritsu sets objectives for the development and provision of energy-saving products. We believe this system is effective for addressing customer needs to conserve energy.

• Risks and opportunities driven by changes in physical climate parameters

The Anritsu Group procures parts and materials from locations around the world and floods and hurricanes 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 has formulated a system in which we can grasp potential damage immediately and globally. The system also allows the Anritsu Group to make purchases from several companies.

The No. 1 facility at Tohoku Anritsu's plant in Koriyama City, Fukushima Prefecture is located near the Abukuma River, which has a high risk of flooding during torrential rains. The facility has endured flooding on its first floor in the past. Learning from this experience, the company built its second facility in a flood-free area within the city limits in 2013 and moved the major production lines to the new location. The company also built a flood barrier at the entrance of the first facility, which serves to limit damage to the first floor should flooding again occur.

• Other Risks and opportunities

The Anritsu Group produces products and solutions that help society adapt to and mitigate the effects of climate change, including the SightVisor series, which provides video surveillance of water levels and flooding rivers. The Company also provides information and communications infrastructure measurement technology that is used to assess electric power demand and supply, including home energy management systems (HEMS) for smart grid. For details, please see page 13 "Solving Social Issues Through Business."

Climate Change / Energy

Medium- to long-term goals

| Fiscal 2020 Targets | Fiscal 2018 Progress |
|---|---|
| Reducing Scope 1 and Scope 2 CO ₂ emissions by 2% per year compared with fiscal 2015 (26% reduction by fiscal 2030)* | ○: Reduced 15.7% compared with fiscal 2015. |
| Setting long-term CO ₂ emissions reduction targets for 2030 and 2050 | ○: We disclosed the provisional targets for 2030 in <i>Anritsu Sustainability Report 2018</i> . We submitted a commitment letter to the Science Based Targets (SBT) Initiative in March 2019 and are currently formulating long-term goals based on the SBT criteria. |
| Reducing product-related CO ₂ emissions (Scope 3 category 1 and 11) | △ : <ul style="list-style-type: none"> In our Category 1 reduction efforts, we are revising the calculation method and creating a system that can collect actual data for use from our suppliers and allow us to work in cooperation with them to reduce CO₂ emissions. In our Category 11 reduction efforts, we are analyzing the power consumption status of each product, making revisions to more appropriate calculation methods, and considering further reduction plans. |

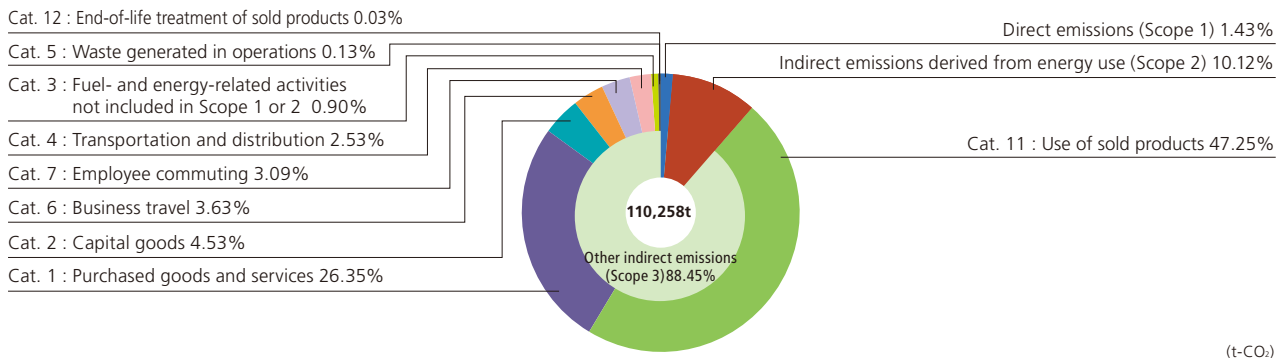
* Provisional target until planning for the long-term targets for 2030 and 2050 have been finalized

Activities / Achievements

■ CO₂ Emissions Throughout the Entire Value Chain

We have calculated CO₂ emissions throughout the Anritsu entire value chain. The calculated emissions value has received third-party verification.

Scope 3 category 1 and category 11 data has been revised using a more reasonable calculation method.

Value chain CO₂ emissions by scope (fiscal 2018)

| CO ₂ emission volume | FY2013 | FY2014 | FY2015 | FY2016 | FY2017 | FY2018 |
|---|---------|---------|---------|---------|---------|---------|
| Total CO₂ emission volume (①+②+③) | 158,900 | 155,941 | 162,957 | 141,906 | 138,683 | 110,258 |
| ① Scope1 | 2,376 | 1,669 | 1,722 | 1,698 | 1,591 | 1,574 |
| ② Scope2 (Market based) | 11,045 | 13,396 | 13,387 | 12,581 | 11,206 | 11,162 |
| Scope2 (Location based) | 14,174 | 14,262 | 15,310 | 14,741 | 12,354 | 11,991 |
| ③ Scope3*1,2,3,4 | 145,479 | 140,876 | 147,848 | 127,626 | 125,885 | 97,522 |

*1 Categories subject to calculation in fiscal 2013: 1,2, 4-7, 11, 12

*3 We revised the calculation method for category 1 data from fiscal 2018

*2 Categories subject to calculation in fiscal 2014: 1-7, 11, 12

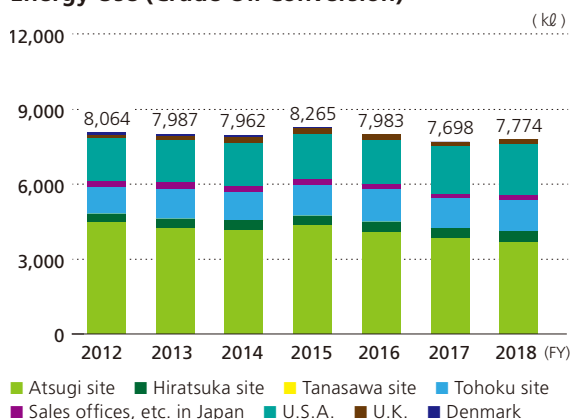
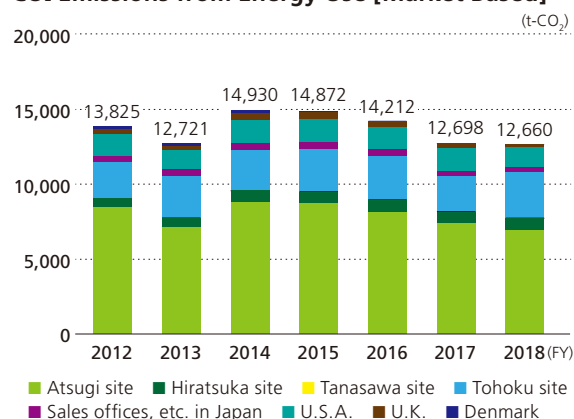
*4 We revised the lifetime utilization period used in the category 11 calculation from fiscal 2018

■ Energy-saving Activities at Factories and Offices

We have focused our efforts on reducing energy consumption, as more than 99% of Anritsu Group CO₂ emissions (Scope 1 and 2) are from energy consumption. Our efforts have resulted in the group's energy consumption on a crude oil equivalent basis dropping by about 25% over the past ten years. In fiscal 2018, we implemented the Cool Biz / Warm Biz activities at the Domestic Anritsu Group and the operating conditions improvement of air conditioning equipment and, by means of a raft of measures that included the new installation of high-efficiency air conditioning equipment, reduced energy consumption (crude oil equivalent) by approximately 2.2%. However, due to an increase in the number of overtime hours worked, the Anritsu Group's energy consumption (crude oil equivalent) increased by 1% compared with the fiscal 2017 level.

Climate Change / Energy

Energy Use (Crude Oil Conversion)

CO₂ Emissions from Energy Use [Market Based]

Other Targets of the Domestic Anritsu Group

Result for Fiscal 2018

| | |
|---|---|
| Improving the basic unit of energy by 1% every year toward 2020 (Program promoted by the electric and electronics-related industries in Japan for establishing a low carbon society) | 16.8% improvement from base year (fiscal 2012) |
| Achieve annual reductions of at least 1% in the basic unit of energy consumption per real sales for the past 5 years under the Act on the Rational Use of Energy | 3.8% improvement |

Renewable Energy

Anritsu Group has solar power generators with maximum output capacity of 200 kW and 15 kW installed at the Koriyama Second Factory and Global Headquarters Building, respectively. In fiscal 2018, the Koriyama Second Factory used 206 MWh of renewable energy generated by solar power, representing about 13% of its total electricity needs, and the global headquarters building used 20 MWh of solar power, representing about 0.6% of its total electricity needs. Excess power generation from the Koriyama Second Factory, such as generated on holidays, is provided free of charge to the power supply company.

At present, while drawing up a future renewable energy introduction plan, we are also considering the installation of solar power generators with a total maximum output of several megawatts by 2030.

In addition, we received third-party verification for the amount of renewable energy we generated.

Renewable energy (Annual electrical output)

(MWh)

| | FY2013 | FY2014 | FY2015 | FY2016 | FY2017 | FY2018 |
|--------------|--------|--------|--------|--------|--------|--------|
| Solar energy | 216 | 212 | 241 | 227 | 233 | 241 |

* The Koriyama Second Factory: installed in fiscal 2013. The Global Headquarters Buildings: installed in fiscal 2015.

Reducing CO₂ Emissions from Purchased Goods and Services

Anritsu is working to reduce CO₂ emissions relating to purchased goods and services (Scope 3, Category 1), which account for a particularly high ratio of CO₂ emissions throughout the value chain. It is imperative to reduce Category 1 emissions in cooperation with our suppliers. So that data better reflects the results of cooperation, we have revised our calculation method based on the direct collection of CO₂ emissions data from our suppliers.

Reduced CO₂ Emissions from the Use of Products Sold

Anritsu is working to reduce CO₂ emissions generated during product use (Scope 3, category 11), which has the highest percentage of CO₂ emissions across the entire value chain. For category 11, we are analyzing the power consumption status of each product and making revisions to more appropriate calculation methods.

Reducing product energy consumption^{*1, *2}

| | FY2013 | FY2014 | FY2015 | FY2016 | FY2017 | FY2018 ^{*5} |
|---------------------------------|--------|--------|--------|--------|--------|----------------------|
| GJ ^{*3} | 25,665 | 29,852 | 27,748 | 36,713 | 31,241 | 71,744 |
| t-CO ₂ ^{*4} | 1,416 | 1,650 | 1,611 | 2,162 | 1,604 | 3,569 |

*1 Conversion coefficient x time spent in operation over one year x sales volume x reduction in power consumption when compared to a conventional product at the same level of functionality and performance

*2 Domestic Anritsu Group hardware products 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 revision to annual utilization from fiscal 2018

Climate Change / Energy

Third-party Verification of CO₂ Emissions and Annual Renewable Energy Power Generation

In order to ensure the reliability of the report, we sought and received third-party verification from the Sustainability Accounting Co., Ltd. regarding CO₂ emissions (Scope 1, Scope 2, and Scope 3) and annual renewable energy power generation.



Related data

Scope 1, 2 CO₂ Emission Volume per Sales

Units: t-CO₂/¥100 million

| | FY2013 | FY2014 | FY2015 | FY2016 | FY2017 | FY2018 |
|--|--------|--------|--------|--------|--------|--------|
| Scope 1, 2 CO ₂ Emission Volume per Unit (Sales) *1 | 13.2 | 15.2 | 15.8 | 16.3 | 14.9 | 12.8 |

*1 Scope 1, 2 CO₂ emissions (market based) / sales

Energy Consumption*1 and Reductions*2,*3,*4

GJ

| Type of energy*5, *6 | FY2013 | FY2014 | FY2015 | FY2016 | FY2017 | FY2018 | Reductions |
|--|---------|---------|---------|---------|---------|---------|------------|
| Total energy consumption in the Organization | 309,793 | 308,465 | 320,197 | 309,232 | 298,178 | 301,108 | 19,089 |
| Subtotal for non-renewable energy Sources | 26,772 | 24,374 | 23,713 | 25,927 | 24,066 | 24,364 | -651 |
| Class A heavy oil*7 | 6,498 | 5,832 | 5,202 | 6,830 | 5,476 | 5,018 | 184 |
| Light oil*7 | 291 | 269 | 285 | 262 | 223 | 224 | 61 |
| Gasoline*7 | 10,678 | 10,204 | 9,925 | 10,165 | 9,113 | 9,098 | 827 |
| Kerosene*7 | 969 | 969 | 969 | 969 | 969 | 932 | 37 |
| City gas*7 | 2,695 | 2,571 | 2,216 | 2,409 | 2,824 | 2,750 | -534 |
| LPG*8 | 175 | 189 | 189 | 158 | 146 | 115 | 74 |
| Natural gas*7 | 5,466 | 4,340 | 4,927 | 5,134 | 5,315 | 6,227 | -1,299 |
| Purchased electrical power*7 | 281,610 | 282,817 | 296,076 | 283,304 | 274,112 | 276,744 | 19,333 |
| Regional heating*9 | 1,411 | 1,274 | 408 | — | — | — | 408 |

*1 Method for calculating energy consumption: Volume purchased x conversion coefficient

*2 Method for calculating reduced energy consumption: 2015 energy consumption – 2018 energy consumption

*3 Base year for reduction comparisons is fiscal 2015

*4 Reason for choosing base year: 2015 was chosen as this was the year the global headquarters building was completed in March of the same year, which ushered in major changes in the use of energy-saving equipment.

*5 Consumption of cooling and heating, and energy sold are not derived from renewable energy sources.

*6 Energy consumed outside the organization 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) 50.8 x (1/458) (propane/butane m³ equivalent).

*9 Source for conversion coefficient: Reports from operations in Denmark

Energy Consumption per Sales

GJ/¥100 million

| | FY2013 | FY2014 | FY2015 | FY2016 | FY2017 | FY2018 |
|--|--------|--------|--------|--------|--------|--------|
| Energy Basic unit of energy consumption (Sales)* | 304 | 312 | 335 | 353 | 347 | 302 |

* Total energy consumption/sales

Water Resources

Social issues as a background

Water is irreplaceable for us to lead our daily lives and for conducting economic activities. Currently, water resource depletion and dispute issues over water are occurring on a global scale due to factors that include the growth of the world's population, economic growth in developing countries and climate change. The state of California, where the Anritsu Company (U.S.A.) is located, experienced record-breaking droughts from 2011 to 2017, and in 2015 all residents were asked to reduce their water use by 20%. Anritsu believes that efforts to use limited water resources efficiently and appropriately are important.

Medium- to long-term goals

| Fiscal 2020 Target | Fiscal 2018 Progress |
|---|--|
| Maintain Domestic Anritsu Group water consumption at less than 60,000m³ (about the level consumed in fiscal 2017) | ○: 59,723m ³ . An increase of 1.7% 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 40m³.

In the Domestic Anritsu Group, in fiscal 2018 water usage increased by 1.7% compared with fiscal 2017 due to an increase in the overtime hours worked in the development and manufacturing departments as a result of increased sales.

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. Since 2017, we stopped watering plants in the rainy season. In fiscal 2018, among other measures we repaired water leaks, swapped out plants for those that are more resistant to dryness and installed water-saving valves, but water usage at Anritsu Company increased by 8.4% year on year due to the increase in working hours and the effects of the leaks.

■ Consideration for Water Resources

With regard to the Anritsu Group's water usage by the source from where it is drawn, other than using underground water at the Atsugi site, we use city water, which uses surface water drawn from rivers as its source, at all our facilities.

At the Atsugi site, where we use groundwater to flush toilets, we have reduced our use of groundwater to about a quarter of the volume in the past 10 years by upgrading to water-saving toilets.

And considering the possibility of groundwater depletion and flooding caused by heavy rainfall, we installed a rainwater permeation basin at the global headquarters building to facilitate the penetration of rainwater into the ground.

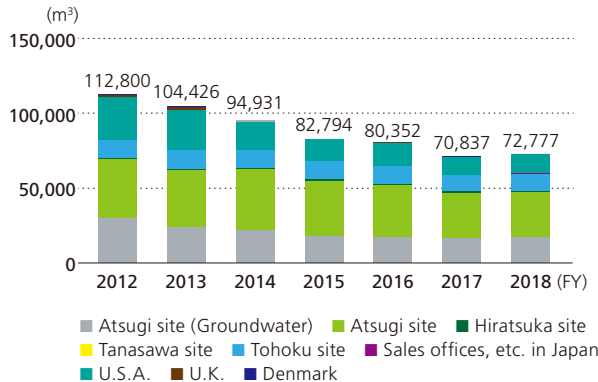
For additional information on the treatment and management of wastewater, please see page 29 "Preventing Environmental Pollution."

Water Resources

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, "Otohome," 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) | ○ | | | |

Water Consumption



Water usage by source

Unit: m³

| Water source | FY2013 | FY2014 | FY2015 | FY2016 | FY2017 | FY2018 |
|--------------|---------|--------|--------|--------|--------|--------|
| Water-works | 80,943 | 73,253 | 65,207 | 63,382 | 54,371 | 55,774 |
| Ground-water | 23,483 | 21,678 | 17,587 | 16,970 | 16,466 | 17,003 |
| Total | 104,426 | 94,931 | 82,794 | 80,352 | 70,837 | 72,777 |

Preserving Biodiversity

Social issues as a background

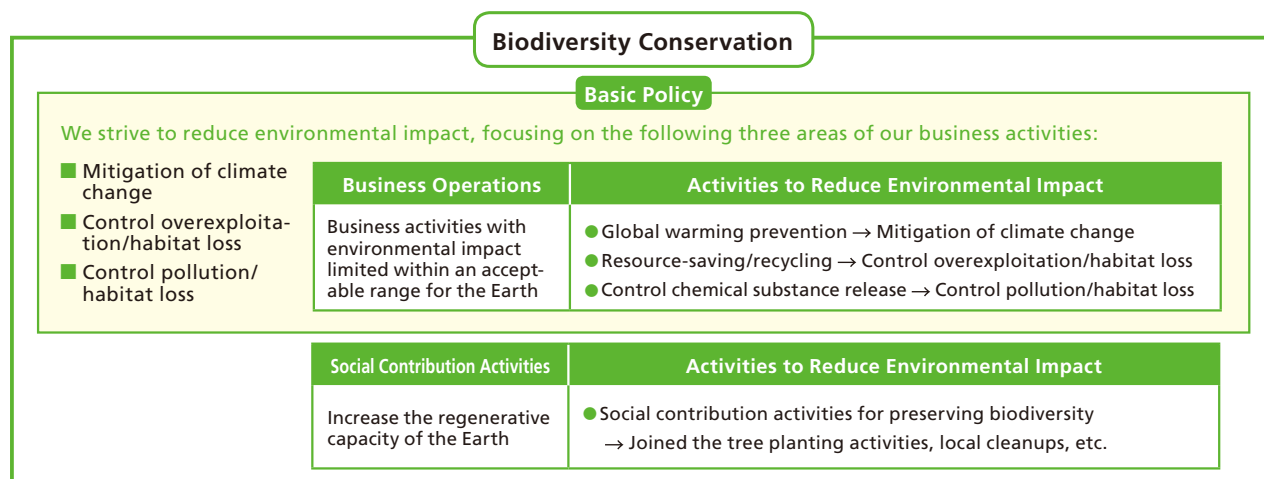
If biodiversity is lost, natural resources will be lost and people's survival will be threatened. The biodiversity crisis is a major risk affecting corporate sustainability.

In the cycle from the procurement of raw materials to the disposal of a product, there are elements at Anritsu that affect biodiversity, such as waste, releases of chemicals and energy usage. 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 the purpose of protecting the natural environment.

Preserving Biodiversity

Policy and medium-to long-term goals

The Anritsu Group has formulated and implemented a basic policy on preserving biodiversity based on its understanding of the relationship between the Company's business activities and biodiversity. Since we have no specific business activities that have a direct impact on biodiversity, our basic policy for preserving biodiversity is focused on activities aimed at reducing environmental impacts. Our efforts are centered on three areas: 1) the promotion of activities aimed at preventing global warming in order to mitigate climate change; 2) the promotion of resource saving and 3R with an aim to limit overexploitation and habitat loss; and 3) controlling the use and release of chemical substances in order to reduce pollution and habitat loss.



For information on our medium- and long-term goals for "Global Warming Prevention Activities," "Resource-saving/ Recycling Activities," and "Control Chemical Substance Release" 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 greening of Company premises, we carry out planting that shows consideration for the original vegetation (potential natural vegetation) that matches the climate and soil of the site.

■ 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.

■ 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).*

| Activity name | Actions | Target |
|--|--|--|
| 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 |

* Citizen groups, companies, and local governments declared their support and registered activities for achieving the 20 Aichi Targets at the 10th Ordinary Meeting of the Conference of the Parties to the Convention on Biological Diversity (COP10).

Preventing Environmental Pollution

Social issues as a background

The use and control of chemical substances is becoming an increasingly important issue given a tightening in regulations in regard to their handling. These regulations and laws include the Pollutant Release and Transfer Register (PRTR) Law, which focuses on the emission of specific chemical substances and improved management, the Poisonous and Deleterious Substances Control Act, the Industrial Safety and Health Act, the Fire Service Act, the Water Pollution Prevention Law, the Air Pollution Control Act, and the Soil Contamination Countermeasures Act.

In product development and manufacturing, Anritsu handles chemicals so that, if they were not properly managed, would seriously affect the surrounding environment. Thorough measures to prevent environmental pollution are essential for Anritsu to continue its business activities.

Medium- to long-term goals

| Fiscal 2020 Target | Fiscal 2018 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

The Domestic Anritsu Group is working to prevent environmental pollution by establishing voluntary management standards that are stricter than laws and regulations.

■ Industrial 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.

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 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.

■ Wastewater Quality

We conduct regular water quality analysis and management activities for wastewater discharged from manufacturing sites and offices. Naturally, there are no violations, either of laws and regulations or of voluntary management standards.

Details (WEB)
Wastewater quality data from the Domestic Anritsu Group

■ Air Quality

The Koriyama First Factory Office at the Tohoku site operates heavy oil boilers subject to the Air Pollution Control Law and there are naturally no violations, either of laws and regulations or of voluntary management standards. There are no facilities at the Atsugi site, the Hiratsuka site, or the Koriyama Second Factory at the Tohoku site that generate air pollution that is subject to legal regulations.

Details (WEB)
Air quality data for the Tohoku district

Preventing Environmental Pollution

Noise

The Domestic Anritsu Group strives to detect abnormalities at an early stage, including by pre-screening equipment prior to installation, inspecting equipment ahead of the launch of operations, and conducting regular patrols of the facility. We also measure noise levels at the boundaries of our facilities every year. At the Hiratsuka site, where there are many types of machinery, we are working to reduce noise by moving particularly noisy equipment to a sound-proofed room and placing noise reducing covers over exhaust vents. Results show that measured noise levels not only meet legal standards but also do not exceed our voluntary standards.

Details (WEB)
Noise data for the Domestic Anritsu Group

Chemical Substances Management

Use of chemical substances by the Domestic Anritsu Group is determined by designating banned or restricted substances in manufacturing from the standpoints of environmental regulations, hazardousness, safety and health, and disaster prevention, and having expert evaluators with knowledge of each criterion conduct prior assessments.

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.

In fiscal 2018, the handling volume at the Tohoku site of methylnaphthalene, a substance found within the Class-A heavy oil used in boilers, exceeded 1t. 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 in manufacturing | 7 Groups of substances: CFC (chlorofluorocarbons), halon, tetrachlormethane, 1,1,1-trichloroethane, HBFC (hydrobromofluorocarbons), bromochloromethane, methyl bromide |
| Suppressed substances in manufacturing | 7 Groups of substances: HCFC (hydrochlorofluorocarbons), trichloroethylene, tetrachloroethylene, dichloromethane, HFC (hydrofluorocarbons), PFC (perfluorocarbons), SF6 (Sulfur hexafluoride) |

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 is also aware of. We will continue to conduct regular analysis and monitoring of the site.

Details (WEB)
Groundwater data from 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, and we contracted a government-certified treatment company to properly complete processing of the waste.

In fiscal 2018, we outsourced the treatment of low-concentration PCB transponders to processing companies certified by the government. Following confirmation that the waste had been properly treated, we submitted a notification to the Kanagawa Prefectural government that the processing of low-concentration PCB waste had been completed.

With regard to the remaining ballasts containing a high concentration of PCB, we completed loading and unloading registration for consigned processing with the JESCO Hokkaido Facility. 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.

Resources Recycling

Social issues as a background

As the global population increases, so too does the amount of waste it generates. We believe solving the issue of waste requires the proper management and disposal of waste on a global basis. Anritsu understands that it is our social responsibility to properly manage not only the waste generated by our plants and offices, but also waste in the form of used products. We are working to solve the issue of waste, including by using the 3R (reduce, reuse, and recycle) approach.

Medium- to long-term goals

| Fiscal 2020 Target | Fiscal 2018 Progress |
|--|---|
| Maintain zero emissions* at the Domestic Anritsu Group | ○ : Maintained zero emissions. |
| Maintain industrial waste volume at the Domestic Anritsu Group at 67 tons or lower | ○ : Maintained industrial waste volume below 67 tons (66.7 tons in fiscal 2018) |
| Maintain general waste and put at the Atsugi site at 36 tons or lower | ○ : Maintained general waste output below 36 tons (31.3 tons in fiscal 2018) |

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

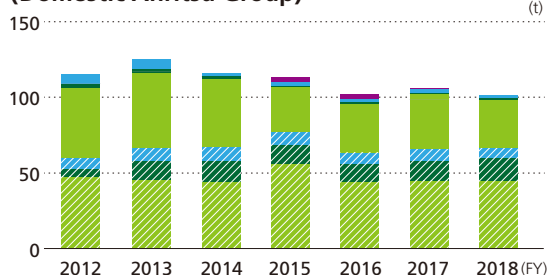
Activities / Achievements

■ Waste Reduction

The Domestic Anritsu Group is promoting “3R” activities and the separation of waste in our offices and production lines. We replaced special wooden frames used to ship components produced abroad to Japan with rented reusable plastic frames, which led to a reduction of wood waste in fiscal 2016. We installed in fiscal 2015 a raw garbage disposal tank* at the Atsugi site, and a second in fiscal 2017. We are continuing to reduce general waste output. In fiscal 2018, we were able to improve value by shifting some waste oil from thermal recycling to material recycling.

* Landfill disposal tanks are installed underground, where the temperature remains stable. Raw garbage can simply be thrown into the tank, where it decomposes naturally with both anaerobic and aerobic bacteria, significantly reducing the volume of garbage. It works like a large compost bin that does not require periodic maintenance and does not consume any electricity.

Change in Volume of Waste (Domestic Anritsu Group)



General waste : ■ Atsugi site ■ Hiratsuka site ■ Tanasawa site
 ■ Tohoku site ■ Sales offices, etc. in Japan
 Industrial waste : ■ Atsugi site ■ Hiratsuka site ■ Tanasawa site
 ■ Tohoku site ■ Sales offices, etc. in Japan

Volume of Waste Generated by the Domestic Anritsu Group by Treatment Method and Waste Type

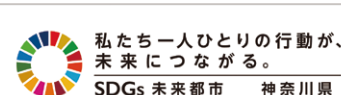
(Including valuables)

| Treatment method | Type of waste | FY2018 |
|--------------------|---------------------------|--------|
| Material recycling | Metal scraps | 137.0 |
| | Paper | 111.0 |
| | Sludge | 1.9 |
| | Oil | 1.8 |
| | Glass/ceramic scraps | 1.3 |
| | Plastics | 1.3 |
| | Woodchips | 1.0 |
| | Alkali | 0.1 |
| Thermal recycling | Animal and plant residues | 36.3 |
| | Plastics | 30.8 |
| | Oil | 16.2 |
| | Woodchips | 10.0 |
| | Sludge | 2.7 |
| | Paper | 2.4 |
| | Alkali | 1.2 |
| | Acid | 0.4 |

Resources Recycling

TOPICS 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 an "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 the Atsugi location, 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 the Eco Club environmental magazine.



■ Environmental Considerations in Packaging

The Domestic Anritsu Group seeks to reduce the volume of packaging materials. Together with our packaging subcontractors, in fiscal 2018 we 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. The total elimination of urethane foam has contributed to a reduction in packaging material waste volume.

Eco-friendly Packaging Efforts at the Domestic Anritsu Group

| | 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

Resources Recycling

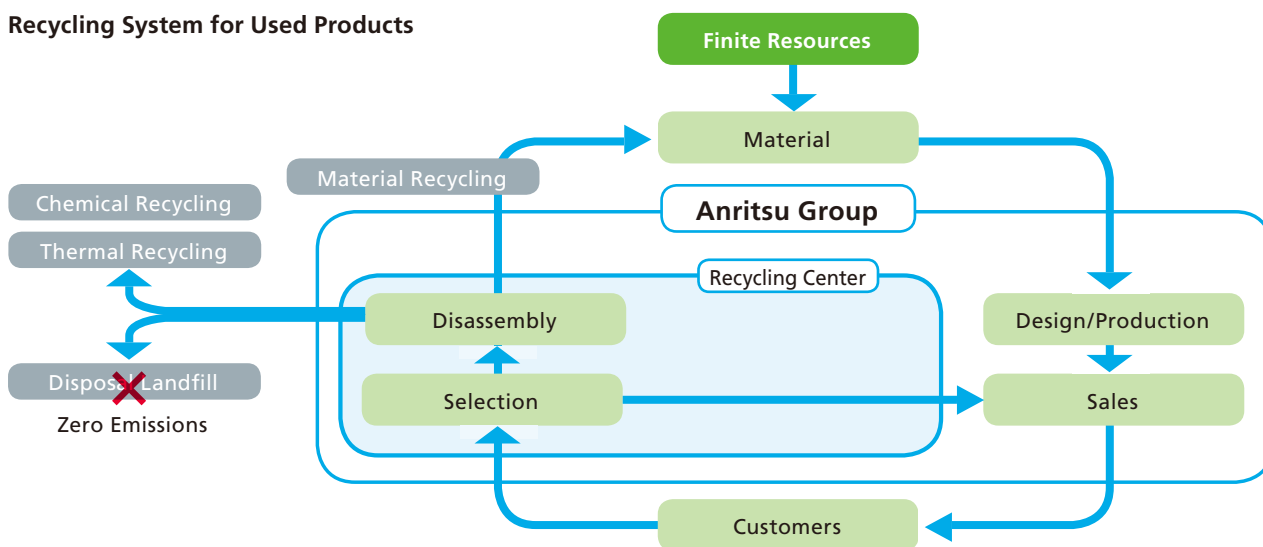
■ Recycling Center

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 products used by customers.










In fiscal 2018, the center received 138 tons of used products and equipment generated by the Anritsu Group and recycled nearly 100% of the waste after disassembling and sorting, shipping 92.7% of the resultant material as valuable resources.

The center 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



Environmental Impact Mass Balance*¹ (fiscal 2018)Input *²

| | | |
|---|-----------------------|--------|
|  Electricity Electric power for use at manufacturing sites and offices | 28,415MWh | 1% |
|  Gas City gas, LPG, and natural gas used as energy | 205,292m ³ | 10.2% |
|  Fuels Heavy oil, diesel, and gasoline used in factories, offices, and vehicles, etc. | 423kℓ | -3% |
|  Water Municipal water, groundwater (excluding recycled water) | 72,777m ³ | 2.7% |
|  Chemical substances Greenhouse gases such as HFC, PFC, SF6, N ₂ O | 79kg | -66% |
|  Chemical substances Chemical substances that are regulated by laws in Japan * ³ * ⁴ | 7t | 2.9% |
|  Chemical substances PRTR | 2t | -4.6% |
|  Paper Copy paper used at factories and offices | 16t | -27.6% |
|  Packaging material Packaging material for transportation of products | 355t | -5.8% |

Output *²

| | | |
|--|----------------------|--------|
|  CO₂ *⁵ CO ₂ emitted as a result of using electricity, gas, fuel or other greenhouse gasses | 12,736t | -0.5% |
|  NO_x *⁶ Nitrogen oxides generated as a result of using gas and fuels | 1,306kg | 35.9% |
|  SO_x *⁶ Sulfuric oxides generated as a result of using gas and fuels | 510kg | 52.4% |
|  Wastewater Wastewater discharged from manufacturing sites and offices | 58,530m ³ | 0.3% |
|  BOD Biochemical oxygen demand in wastewater | 261 kg | -17.9% |
|  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) | 35t | -13.1% |
|  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 | 67t | 2% |
|  Waste outside Japan All waste generated by business activities | 115t | 5.7% |
|  Recycle ratio | 83% | 0.7% |
|  Non-recycle ratio | 17% | -3.1% |

*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.

*2 Percentages expressed in the right hand column for Input and Output reflect percentage change from the previous fiscal year.

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

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

*5 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 CO₂ conversion values for greenhouse gases other than CO₂.

*6 For NO_x and SO_x, annual emissions are calculated based on values measured annually.

Environmental Accounting (The Domestic Anritsu Group Fiscal 2018)

| Category | | | Environmental conservation cost | | Benefits | | | |
|--------------------------------|---|--|---------------------------------|------------------------|-------------------------------------|----|--------------------------|----|
| Main category | Sub-category 1 | Sub-category 2 | Investment (millions of yen) | Cost (millions of yen) | Economic benefits (millions of yen) | | Environmental Impact | |
| Business area cost | Pollution prevention cost (Includes risk policy) | | 4.6 | 12.7 | 146.3 | *2 | — | |
| | | | 0.0 | 6.0 | 146.3 | *2 | — | |
| | Global environmental conservation cost | Prevention of global warming | 11.3 | 13.2 | 30.7 | *2 | 511.0t-CO ₂ | |
| | | | 17.1 | 14.7 | 32.4 | *2 | 798.3t-CO ₂ | |
| | Resource circulation cost | Resource recycling/ utilization activities | 0.0 | 63.4 | 0.2 | | 4.9t | |
| | | | 2.2 | 64.4 | 0.1 | | 3.2t | |
| | | Waste disposal Cost | 0.0 | 40.2 | 11.7 | | 348.7t | |
| | | | 0.0 | 41.1 | 14.1 | | 358.2t | |
| Upstream/ down-stream cost | Green purchasing/procurement cost | | 0.0 | 19.5 | 131.5 | *2 | 3,458.4t-CO ₂ | *2 |
| | | | 0.0 | 24.9 | | | | |
| | Design of environmentally friendly products | | 0.0 | 15.2 | 62.7 | *2 | 1,604.4t-CO ₂ | *2 |
| | | | 0.0 | 20.7 | | | | |
| | Recycling and treatment of products, containers, and packaging | | 0.0 | 0.0 | | | | |
| | | | 0.0 | 0.0 | | | | |
| Administration cost | Environmental education/training | | 0.0 | 16.7 | 0.0 | | — | |
| | | | 0.0 | 18.6 | 0.0 | | — | |
| | Operation and maintenance of EMS and internal audit | | 0.0 | 76.5 | 0.0 | | — | |
| | | | 0.0 | 79.7 | 0.0 | | — | |
| | Environmental impact monitoring and measurement cost | | 0.0 | 11.9 | 0.0 | | — | |
| | | | 0.0 | 17.1 | 0.0 | | — | |
| | Personnel expenses for environmental management | | 0.0 | 7.6 | 0.0 | | — | |
| | | | 0.0 | 10.7 | 0.0 | | — | |
| Social activity cost | Support for community groups, environmental conservation bodies, etc. | | 0.0 | 1.5 | 0.0 | | — | |
| | | | 0.0 | 1.8 | 0.0 | | — | |
| | Disclosure of information | | 0.0 | 8.3 | 0.0 | | — | |
| | | | 0.0 | 10.2 | 0.0 | | — | |
| R&D cost | Research and development to reduce environmental impacts | | 0.0 | 0.1 | 0.0 | | — | |
| | | | 0.0 | 0.8 | 0.0 | | — | |
| Environmental remediation cost | Cost incurred for recovery from environmental degradation | | 0.0 | 0.0 | 0.0 | | — | |
| | | | 0.0 | 0.0 | 0.0 | | — | |
| Total | | | 15.9 | 299.6 | 320.4 | | — | |
| | | | 19.3 | 323.9 | 255.6 | | — | |

*1 Shaded portion is for fiscal 2017

*2 Effects of estimated reduction