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### **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 Kousan Co., Ltd., AT Techmac Co., Ltd., **Group Companies Outside Japan** Anritsu Company (U.S.A.) Anritsu Ltd. (U.K.) 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.



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# MESSAGE

**Message from Chief Environment Officer** 



Akio Takagi Senior Executive Officer, Chief **Environment and Quality Officer** 

# Prevent global warming by expanding our solar power generation capacity for our own consumption

nritsu does not consume a massive amount of energy for its business. However, we still want to do our part to prevent global warming. It has been over two years since we launched the Anritsu Climate Change Action PGRE 30, intended to increase the ratio of power generation for our own consumption to 30%, and we have been actively working toward this goal. We have completed the first phase of expanding our solar power generation capacity in the Atsugi site (additional 57 kW), and we are making steady progress in installing a new solar power generation facility (1,100 kW) at a local subsidiary in Morgan Hill, California, U.S.A. To further strengthen our renewable energy capability, our next steps are to expand solar power generation capacity in the Tohoku Anritsu and work on the second phase of capacity expansion in the Atsugi site. We hope these efforts will contribute to alleviating the risk of climate change.

Solar power generation generates electricity only during the daytime when the weather is good, and not during stormy weather or at night. It is difficult to rely solely on solar panels to provide a stable supply of energy throughout the day. To overcome this problem, we are considering the use of storage batteries to store the power generated during the daytime and use it at night. Climate change is a serious social issue. Anritsu will continue working to reduce greenhouse gas emissions as one of our ESG responsibilities to meet the demands of society.

Furthermore, we will work with our employees so that each of them recognizes their personal relationships to social issues, actively works on energy-saving measures, and develops products that consume less energy. In addition, we will continue to encourage our suppliers to reduce CO<sub>2</sub> emissions during the manufacturing of parts and materials to address climate change throughout our supply chain.

We plan to introduce new initiatives to address environmental issues and make them more actionable for our employees. We hope that this will foster stronger environmental mindsets throughout the organization and build momentum behind our progress toward the SDGs.



CEO Hamada and Senior Executive Officer Takagi visit the solar panel facility in the Atsugi site



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#### **Environment**

# **Environmental** Management

#### **Stance on Social Issues**

Recently, ESG and the SDGs have come to play critical roles in corporate activities. We recognize that the protection of the global environment is particularly important as it directly impacts the goal of creating a sustainable society, and companies must actively work on tackling 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 climate action, 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: 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

The Action Guidelines apply only to the Domestic Anritsu Group

In addition, Anritsu has stated its intent to "We will take the initiative in solving environmental issues, such as climate change, to contribute to building a people- and planet- friendly future." in our Sustainability Policy.

WEB Environmental Policy

P.01 Creating a Sustainable Future Tomorrow "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 Anritsu Corporation's chief environment officer (the environmental management executive 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 meetings. In fiscal 2020, four matters were reported to the Management Strategy Conference and three to the 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

<sup>\*</sup>Environmental management activity unit

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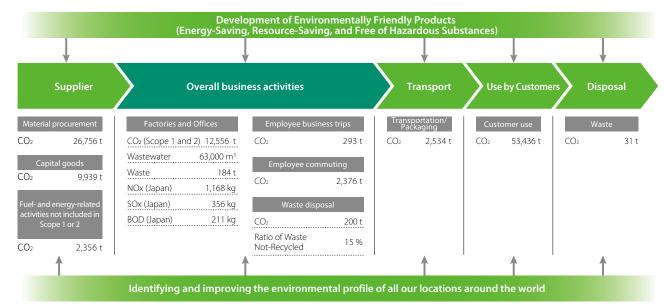
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#### Goals

#### Review the Achievement Level of 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 its goals for fiscal 2012 to fiscal 2020 as the 2020 VISION, entitled "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 focused on developing and producing environmentally friendly (energy-saving, resource-saving, and hazardous substance-free) products on a global scale and also worked to understand and improve the environmental impact of all of our bases throughout the entire product value chain.

We have largely achieved our goals in the areas of developing and producing environmentally friendly products on a global scale. This goes as well for understanding the environmental impact of all of our bases throughout the entire product value chain, promoting measures against climate change, the key focus of environmental management, and establishing a system to disclose information to stakeholders. Looking ahead, we will continue to refine these activities and, at the same time, develop more in-depth activities for vital issues.



Figures are calculated in accordance with the "Basic quidelines on calculating greenhouse gas emissions in the supply chain." The figures listed here are those for fiscal 2020.

WEB Environmental Impact Across the Entire Value Chain

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**Solving Social Issues** 

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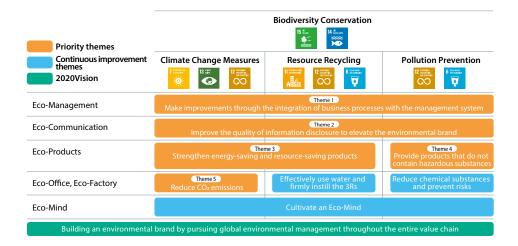
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#### **GLP2020 Environmental Initiative**

Corporate

Since fiscal 2018, Anritsu has been undertaking the GLP2020 Environmental Initiative, its three-year mid-term business plan and the final stage for achieving its 2020 Vision.

Overview of



#### **GLP2020 Environmental Initiative's Priority Themes, Objectives, and Achievements**

GLP2020 Environmental Initiative has largely progressed as planned.

Remaining issues will continue to be addressed as part of the GLP2023 Environmental Initiative, our new mid-term business plan.

GLP2020 Objectives	GLP2020 Achievement (Fiscal 2018–2020)							
Theme 1: Integrated Management	Theme 1: Integrated Management System to Improve Business Processes							
For departments involved in product realization processes, incorporate their business processes into the integrated management system (MS). Also, set and manage targets related to quality and the environment through the MS.	<ul> <li>In fiscal 2019, 7 departments were identified as candidates for the integrated internal audit for Environmental Management System (EMS) and Quality Management System (QMS). In fiscal 2020, the integrated internal audit was conducted for 2 of these departments.</li> </ul>							
Construct and administer a mechanism to review compliance with environment-related laws and regulations globally	Environment officers from our oversea offices have conducted environmental internal audits in parts of our domestic organizations.     The environmental internal audit checklist used by our oversea counterparts was shared.     The checklist for environmental internal audits was shared globally to improve the effectiveness of internal audits.     Checklist for Anritsu Infivis (Thailand) was implemented.							

GLP2020 Objectives	GLP2020 Achievement (Fiscal 2018–2020)
Theme 2: Better Communication to	o Improve the Environmental Brand
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	As an SDGs initiative, conducted general environmental education programs for all Anritsu Group employees in Japan in fiscal 2018.  Reviewed the contents of our Sustainability Report as part of ensuring compliance with GRI Standards.  Continued to participate in Environmental Reporting Platform Development Pilot Project by the Ministry of the Environment.  Won "Special Award" in fiscal 2018 and "Excellence Award" in fiscal 2020 in Environmental Communication Awards.  Ranked in the second highest ranked group of companies (deviation score of 65–70) in Nikkei's SDGs Management Survey 2019 and 2020.  Maintained the B Rank assessment (management level) in CDP's Climate Change Survey.
Theme 3: Strengthen the energy-	and resource-saving products
Reduce CO₂ emissions related to products (Scope 3*1 Category 1*2 and 11*3)	Reduced emission by 10.1% compared with fiscal 2018.  Category 1 Reviewed the calculation method, collected necessary data for calculation from our suppliers, and worked with them to reduce Category 1 emissions.  Explained to our suppliers about our initiatives to reduce Category 1 emissions and requested their cooperation.  Selected as one of the companies listed in the Supplier Engagement Rating Leaderboard (highest rated companies) in CDP's Climate Change Survey 2020.  Category 11 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.  Set up a working group between the PQA Business and environment promotion departments and came up with measures that are applicable to a subset of our products and started implementation.
Theme 4: Provide hazardous subst	ance-free products
Address additional and revised product and environmental regulations, such as RoHS in Europe, and continue to provide products that do not contain hazardous substances	<ul> <li>Installed equipment that analyze and detect four new substances that were added to the list of substances prohibited by the RoHS Directive.</li> <li>Started implementing measures for the ten substances in the RoHS Directive for development of new products that fall under Category 9** of the directive.</li> </ul>
Theme 5: Reduce CO <sub>2</sub> emissions	
Reduce Scope 1 and 2*5**6 CO2 emissions by 2% per year compared with fiscal 2015 (26% reduction by fiscal 2030) Set long-term CO2 emissions target for 2030 and 2050	Reduced emissions by 16.9% compared with fiscal 2015.  Established long-term emission targets* for 2030 and received SBT Initiative's approval *8.  Set provisional long-term emission targets* for 2050.
*1 Scope 3: Indirect CO <sub>2</sub> emissions from noi *2 Scope 3, Category 1: Purchased products *3 Scope 3, Category 11: Use of sold product *4 European RoHS directive Category 9 proi *5 Scope 1: Direct CO <sub>2</sub> emissions *6 Scope 2: Indirect CO <sub>2</sub> emissions from ene	s and services cts ducts: monitoring and control equipment as defined by European RoHS Directive

Scope 3: achieve 30% reduction from fiscal year 2018 by fiscal 2030 in emissions from purchased products and services and use of sold products.

\*8 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)

\*7 Scope 1 and 2: 30% reduction from fiscal 2015 by fiscal 2030

\*9 Target for 2050 for Scope 1 and 2: 60% reduction from fiscal 2015 by fiscal 2050

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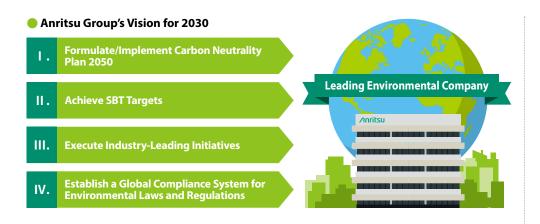
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#### **GLP2023 Environmental Initiative—New Mid-term Business Plan**

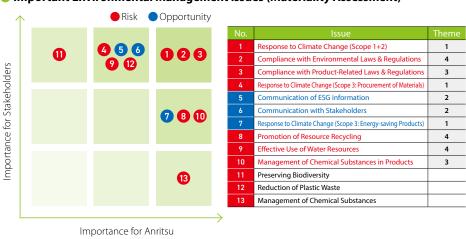
Message from Chief Environment Officer

We formulated the GLP2023 Environmental Initiative for the three-year period from fiscal 2021 to fiscal 2023, based on the Group's Vision for 2030 and materiality map, which highlights what is important to our stakeholders and Anritsu. We have already started taking related actions organized into four key themes. Carbon neutrality has been under discussion with a view to publicly declare our commitment to its implementation.



**Environmental Management** Climate Change and Energy

#### Important Environmental Management Issues (Materiality Assessment)



GLP2023 Target	Relevance to our Vision for 2030
Theme 1: Reduce Greenhouse Gas Emissions	
• Develop specific measures for the long-term plan to achieve carbon neutrality by 2050 • Consider revising the SBT target currently set at "2°C" to either "well-below 2°C" or "1.5°C".	1,11
Interim SBT Target (target value for fiscal 2023) - Scope 1+2: Achieve 23% reduction from fiscal 2015 (self-power generation ratio: 13% or more) - Scope 3 (Category 1 and 11): Achieve 13% reduction from fiscal 2018	,,,,
Theme 2: Better Communication to Improve the Environmental Brand	
Broadly communicate achievements from our unique and highly-advanced initiatives to improve our corporate image as a leading environmental company.	III
Theme 3: Provide products free of hazardous substances	
Ensure compliance with new laws and regulations by actively gathering information on prevailing laws and regulations and by developing internal tools that can be commonly used by both development and manufacturing departments.	IV
Theme 4: Promote Effective Use of Management Systems to Address Environmental Issues	
Reduce the risk of violating environmental laws and regulations by improving internal environmental audits and other mechanisms Promote resource recycling and effective use of water resources by continuously implementing the PDCA cycle.	IV

Resource Recycling

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**Group CEO Message** 

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#### **Activities and Achievements**

#### **Environmental Audit**

In fiscal 2020, the Anritsu Group was audited the periodic external audit for ISO 14001:2015 in its main production bases in Japan and the U.S. In addition, an internal environmental audit was also conducted in the Anritsu Domestic Group.

No non-conforming items were discovered by these external and internal audits.

Every year, the 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.

In fiscal 2020, both external audits and internal environmental audits were conducted remotely using online meeting tools to prevent the spread of the COVID-19. For internal environmental audits, we introduced webcams to remotely check manufacturing and other sites, and we also took the opportunity to digitalize the remaining paper-based records.

#### **Environmental Education**

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 2020 focused on the topic of reducing greenhouse gas emissions. There were 2,802 participants in the course, including 2,635 who attended Web-Based Training. For the Internal auditor training program, we had previously

sent our internal auditors to external educational institutions for training. This year, however, that approach was difficult to implement due to constraints such as the limited number of participants imposed by the COVID-19 pandemic. Instead, we and conducted the training in-house with invited lecturers. Although it was conducted remotely to avoid direct contact between the lecturer and participants, the training was still highly satisfactory and educational as it leveraged many group exercises.

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 offered proposals for improvement. In fiscal 2020, 32 group projects and 104 proposals were awarded.

\*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 in the Anritsu Domestic Group as well as its English version "Global Eco Club" for overseas employees.

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.







Eco Club



Global Eco Club

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#### TOPIC

**Won the Climate Change Report Excellence Award in the 24th Environmental Communication Awards** 

We won the Climate Change Report Excellence Award in the 24th Environmental Communication Awards, coorganized by Japan's Ministry of the Environment and the





considered our contribution toward achieving the SDGs. These points have been highly regarded. Our focus on improving our corporate image by promoting sustainability management, making steady progress on ESG-related initiatives, and releasing easy-to-understand reports that provide our stakeholders with the information they want have all contributed to receiving the award.

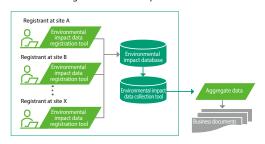


The remote Award Ceremony: Mr. Shigeru Sumitani, President of the Global Environment Forum (left), Akio Takagi, Senior Executive Officer of Anritsu (right)

#### **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. These data is used for reporting progress toward environmental targets to the Environmental Management Committee as well

#### Framework for Collecting Environmental Impact Data



as for monitoring. In March 2021, these data showed that water consumption had increased significantly. We investigated the cause and discovered that the automatic flushing function in a rarely used toilet was broken. This enabled us to quickly fix the problem.

#### **Development of Environmentally Friendly Products**

The Anritsu Group actively promotes the development of environmentally friendly products by conducting global assessments of every product under development and to certify products that are environmentally sound as Excellent Eco-Products or Eco-Products. By doing this, it meets customer demand for products that save energy and resources and are free of hazardous substances as well as stakeholder demand for reduced environmental impact. Moreover, it helps us to manage risks and identify new opportunities. Environmentally friendly products accounted for about 92%, and Excellent Eco-Products, the highest rank in environmentally friendly products, about 85% of sales of measuring instruments for fiscal 2020.

In addition, the Domestic Anritsu Group calculates

environmental preservation costs associated with designing environmentally friendly products as well as the associated economic benefits. In fiscal 2020, the total environmental preservation cost was 14.2 million yen with associated economic benefit expected to be 191.1 million yen.

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

#### TOPIC

**Development of Universal Wireless Test** Set MT8870A and its TRX Test Module MU887002A



The Universal Wireless Test Set MT8870A is a tester for mass production lines for wireless communication devices and modules that support wireless communication standards such as 5G NR Sub-6 GHz and IEEE 802.11ax.

TRX Test Module MU887002A is the test unit installed into MT8870A. Up to 24 communication devices can be connected to the unit, which helps to save space and shorten inspection time. In addition to adding functions and improving performance, compared to conventional units, we have reduced the size of the internal divider circuit, increased density by reducing cable wiring, and shared components such as the CPU to save resources and power.

As a result, the module achieves a significant reduction of 67% in volume, 60% in weight, and 71% in power consumption compared to conventional units with the same number of input/ output ports.



Above: Universal Wireless Test Set MT8870A Below: TRX Test Module MU887002A



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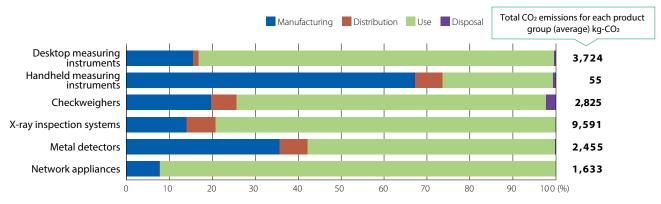
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#### **CO2 Emissions Across the Life Cycle of Our Products**

The Domestic Anritsu Group conducts product life cycle assessments to monitor the CO2 emissions at each stage of the product life cycle.

#### CO<sub>2</sub> Emissions and Breakdown across the Life Cycle of Product Groups (Fiscal 2020)



# **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 led by Chief SCM Officer through green procurement and conducts research on the chemical substances in the parts it purchases, in accordance with the Basic Rules of Procurement.



# 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 2020, Anritsu received zero 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 Kousan Co., Ltd.
- AT Techmac 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 2021
- Certification organization/number: AMERICAN GLOBAL STANDARDS, LLC/AGS-USEMS-051618-1

WEB Anritsu Corporation ISO 14001 Certification

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

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#### **Environmental Impact Mass Balance\*1 (Fiscal 2020)**

	Input		
4	Electricity Electric power used in factories, offices, etc.	31,995 MWh	[5.0 %]
	Gas City gas, LPG, and natural gas used as energy in factories, offices, etc.	200,644 m³	[-3 %]
X	Fuels Heavy oil, diesel, and gasoline used in factories, offices, and vehicles, etc.	396 kℓ	[-0.8 %]
	Water Municipal water, groundwater (excluding recycled water)	77,085 m³	[-3.1 %]
	Chemical substances (Domestic Group) Greenhouse gases such as HFC, PFC, SF6, N2O	170 kg	[12.1 %]
	Chemical substances (Domestic Group) Chemical substances that are regulated by laws in Japan*2'3	7 t	[-25.8 %]
	Chemical substances (Domestic Group) PRTR	2 t	[14.2 %]
	Paper Copy paper used in factories and offices	25 t	[-0.6 %]
	Packaging material Packaging material for transportation of products	330 t	[-9.4 %]

- \*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

		Output		
	Ç	CO2*4 CO2 emitted as a result of using electricity, gas, fuel or other greenhouse gasses	12,556 t	[0.9 %]
	$\sim$	NOx*5 (Domestic Group) Nitrogen oxides generated as a result of using gas and fuels	1,168 kg	[67.6 %]
	رهب	SOx*5 (Tohoku site) Sulfuric oxides generated as a result of using gas and fuels	356 kg	[22.3 %]
		Wastewater Wastewater discharged from manufacturing sites and offices	63,105 m³	[-2.9 %]
	8	BOD Biochemical oxygen demand in wastewater	211 kg	[-41.0 %]
•		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)	26 t	[-30.2 %]
		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	69 t	[-13.3 %]
		Waste outside Japan All waste generated by business activities	89 t	[-16.3 %]
		Recycle ratio	85 %	[-0.3 %]
		Non-recycle ratio	15 %	[1.8 %]

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<sub>2</sub> conversion values for greenhouse gases other than CO<sub>2</sub>.

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

WEB Environmental Impact Mass Balance Data

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#### **Environment**

# **Climate Change** and Energy

#### **Stance on Social Issues**

Intense climate-related disasters cause major damage nearly every year. 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<sub>2</sub> emissions throughout its value chain and offering products and solutions that mitigate damage associated with natural disasters. In addition, we participate in Japan Climate Initiative (JCI) and Liaison Group of Japanese Electrical and **Electronics Industries for Global Warming Prevention** to incorporate the latest climate change policies and trends in our internal policies.

#### **Approach**

To prevent global warming, we will set scientifically based targets for reducing greenhouse gas emissions and actively work on initiatives such as reducing energy consumption, increasing the share of private power generation of renewable energy, collaborating with suppliers and reducing the power consumption of our products.

#### **Response to TCFD\* Recommendations**

Our Sustainability Report 2020 previously disclosed information in accordance with the framework recommended by TCFD. We also officially expressed our support for the TCFD recommendations on June 30, 2021. We will continue to address climate change and disclose information in accordance with the TCFD recommendations



\*Task Force on Climate related Financial Disclosures: 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.



P.96 TCFD Content Index

#### Governance

Major risks associated with the Anritsu Group's business and management are appropriately reported during the Management Strategy Conference and Board of Directors. 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 the central 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. In addition, risk management items, plans, status, and reports of the annual management cycle are also presented to these entities.



P. 85 Risk Management Structure

#### Strategy

Anritsu has analyzed risks and opportunities related to climate change based on the two degree Celsius scenario (2DS) and the four degree Celsius scenario (4DS). The analysis revealed that, under these scenarios, we may face changes in regulation and experience physical impacts in short- (1 year), mid- (3 years), and long-term (up to 30 years) 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 are investing in renewable energy generation facilities and expand our capability for consuming the energy we generate. In addition, we are collaborating with suppliers to reduce their greenhouse gas emissions and striving to develop environmentally friendly products by product assessments of all products under development. These efforts will reduce greenhouse gas emissions, which we believe is the most direct way to contribute to mitigating climate change. We are also strengthening our sales structure for products that help to minimize damage from natural disasters associated with climate change.

	Philosophy	Gloup CLO Me	Group CLO Message	ssage	Management	Through Business	Management		Livironment	Jocial	Governa	iice	and App	endix	
Message from Chief Environment Officer		Environme	ental Management	Climate Change and E	nergy	Water Resources	Preserving Biodiversity	y Preventing Environm	nental Pollution	Resource	e Recycling	Data Links			

#### **Risks and Opportunities**

Corporate

We have analyzed the risks and opportunities that significantly impact Anritsu's business activities.

Overview of

**Solving Social Issues** 

Туре	Scenarios	Impa Scer		Risks and Opportunities	Measures
			4°C		
	To accelerate the transition to a decarbonized society, various countries will begin imposing taxes on the use of fossil fuels.	Medium	Small	Risk As we expect that a carbon tax will be placed in Japan by 2030, greenhouse gases associated with business activities will be taxed, which will increase the operating costs.	By reducing Scope 1 and Scope 2, prepare for the additional cost associated with a carbon tax.
Togethion	Energy mix will change. Thermal power generation will decline and the share of renewable energy generation will increase.	Large	Medium	Opportunity The grid electricity rate will rise causing operational costs to increase and the cost of installing solar power generation equipment will decrease. Use these opportunities to accelerate installation of solar power generation equipment for own consumption.	By promoting PGRE 30, we will increase the ratio of private power generation and reduce the amount of purchased electricity. In 2020, we installed a mega-watt solar facility in Anritsu Company (USA)).  P. 32 Progress on Anritsu Climate Change Action PGRE 30
Transition	Investment in energy-saving technologies will become more active, and technological innovation will advance and become widely available.	Medium	Small	Opportunity Incorporate energy-saving technologies into our products and improve their environmental value.	Strengthen our product assessment process to promote the development of environmentally friendly and energy-efficient products. In addition, actively incorporate energy-efficient components into product design.  P. 26 Development of Environmentally Friendly Products  P. 33 Reducing CO <sub>2</sub> Emissions from the Use of Sold Products
	Consumers are more environmentally conscious and increasingly prefer energy- and resource-efficient products.	Medium	Small	Opportunity Market for inspection solutions for Food Processing Industry, such as highly accurate metal detectors, will become more competitive as they reduce food losses and associated resource consumptions.	Promote the development of products for the Food Processing Industry, such as more accurate and more energy-efficient metal detectors.
	The increase in global average temperature will accelerate and intensify extreme weather events in many regions.			Risk Damage from typhoons and floods will impact factory operations and procurement of materials.	Tohoku Anritsu Co., Ltd, the production center for Anritsu Group, built its second factory in a flood-free zone and relocated its major production there in 2013. Remaining production lines in the first factory were moved to the second floor
Physical					Map the main manufacturing and sales locations of our suppliers which help us to purchases from several companies
		Small	Medium	Opportunity Investment in disaster prevention equipment will increase and the demand for solutions to prevent and mitigate disaster risks, such as road and river monitoring, will also rise.	Strengthen our sales structure for products that prevent and mitigate disaster risks, including our image information system "SightVisor Series".

<sup>\*</sup>Impact by scenario is determined based on the level of financial impact and likelihood that the risk or opportunity will materialize.

Notes: Reference Scenarios are as follows. Transition: 2°C: IEA ETP 2017, 4°C: IEA WEO STEPS 2019, Physical: 2°C: IPCC RCP 2.6, 4°C: IPCC RCP 8.5

#### **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. We will continue to identify emerging risks in 2030 and 2050 and execute PDCA cycles to remediate these risks as part of GLP2023 Environmental Initiatives.

Other Information

Notes: The 4°C scenario is a world in which no further measures are taken to prevent global warming and the average temperature rises by 4°C above the pre-industrial level by the end of the century.

The 2°C scenario is a world in which stringent measures are taken to prevent global warming and the rise in average temperature is limited to 2°C (or well below 2°C) above pre-industrial levels by the end of the century.

Philosophy	<b>-</b>	Management		Through Business	Management						and Appendix		
Message from Chief Environment Officer		Environmental Mana	agement	Climate Change and E	nergy	Water Resources	Preserving Biodiversity	Preventing Environm	ental Pollution	Resource	Recycling	Data Links	

**Promoting** 

**Solving Social Issues** 

Climate Change and Energy

#### Goals

Corporate

Group CFO Message

Targets*1	SBT	Fiscal 2020 Progress
Scope 1 and Scope 2: By fiscal 2030, reduce the Anritsu Group's greenhouse gas emissions by 30% compared to the fiscal 2015 level	Approved in 2019.	Reduced by 16.9% compared to the fiscal 2015 level.
Scope 1 and Scope 2: By fiscal 2050, reduce the Anritsu Group's greenhouse gas emissions by 60% compared to the fiscal 2015 level	Self-imposed target, not submitted to SBT Initiatives	
Scope 3: By fiscal 2030, reduce the Anritsu Group's greenhouse gas emissions resulting from the purchased goods and services and the use of sold products by 30% compared to the fiscal 2018 level.	Approved in 2019.	Reduced by 10.1% compared to the fiscal 2018 level
Anritsu Climate Change Action PGRE 30 Using the Anritsu Group's energy consumption* <sup>2</sup> 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 3.3%. Installed a solar power generation facility with 1,100 kW capacity in Anritsu Company (USA)

Overview of

#### CO<sub>2</sub> Emissions and Reduction Targets in Scope 1 and Scope 2 (Market-Based)



We plan to change the science-based target (SBT) to either well below 2°C or 1.5°C by fiscal 2023. In addition, we plan to identify specific measures for the long-term plan to achieve carbon neutrality by 2050.

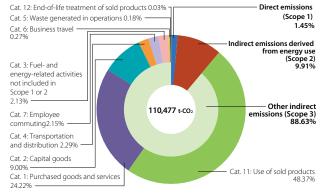
#### **Activities / Achievements**

Preserving Biodiversity

#### CO<sub>2</sub> Emissions Throughout the Entire Value Chain

Preventing Environmental Pollution

#### Value Chain CO<sub>2</sub> Emissions by Scope (Fiscal 2020)



<Boundary> Atsugi site, Tohoku site, Hiratsuka site, Anritsu Corporation operations, Anritsu Infivis Co., Ltd. operations and sanatorium, Anritsu Company (U.S.A.), Anritsu Ltd. (U.K.). However, the values of Scope3 (except Capital goods) exclude Anritsu Ltd. (U.K.) from the boundary because its values are

relatively small.

Other Information

Resource Recycling

(t-CO<sub>2</sub>)

CO <sub>2</sub> emissions volume	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020
Total CO <sub>2</sub> emissions volume* <sup>1</sup>	162,957	141,906	138,683	118,288	118,396	110,477
Scope 1	1,722	1,698	1,591	1,574	1,649	1,602
Scope 2 (Market-based*2)	13,387	12,581	11,206	11,162	10,794	10,954
(Location-based*3)	15,310	14,741	12,354	11,991	11,804	11,586
Scope 3*4,5,6,7	147,848	127,626	125,885	105,552	105,952	97,922
Category 1	80,332	69,608	73,008	29,057	26,078	26,756
Category 2	17,606	5,806	5,737	4,996	7,625	9,939
Category 3	1,068	1,022	989	998	2,064	2,356
Category 4	2,645	2,184	1,702	2,791	3,254	2,534
Category 5	34	19	127	145	245	200
Category 6	2,829	2,621	3,554	4,002	3,685	293
Category 7	3,879	3,743	3,434	3,404	3,671	2,376
Category 11	39,358	42,590	37,304	60,126	59,297	53,436
Category 12	96	33	31	33	34	31

Some of the values have been retroactively revised to improve accuracy.

- \*1 The calculated value of actual emissions was verified by a third party. Total CO2 emissions volume is calculated as the sum of CO2 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. (Some of the target models were also reviewed.)
- \*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.

<sup>\*1</sup> For information about Fiscal 2020 Targets in "Climate Change and Energy" section of Sustainability Report 2020, which relates to progress against GLP2023, please refer to Themes 3 and 5 in the GLP2020 Objectives table in the "Environmental Management" section. \*2 Excluding AT Techmac Co., Ltd. power consumption, which is not applicable to the wholly owned subsidiary.

Corporate Philosophy

**Group CEO Message** 

Overview of Sustainability Management

Solving Social Issues Through Business Promoting
Sustainability
Management

Environmen

Social Governance

Other Information and Appendix



Message from Chief Environment Officer

Environmental Management

Climate Change and Energy

Water Resources

Preserving Biodiversity

Preventing Environmental Pollution

Resource Recycling

Data Links

#### Reducing CO<sub>2</sub> Emissions from 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 Scope 2) are from energy consumption. In fiscal 2020, the Anritsu Group's energy consumption (crude oil equivalent) increased by 2% and  $CO_2$  emission (Scope 1 and Scope 2) increased by 0.9% compared to the fiscal 2019 level. This was due to measures against the spread of COVID-19, including operating airconditioning systems for longer hours and operating experimental equipment 24 hours to support remote operations. In the Domestic Anritsu Group as well, energy consumption (crude oil equivalent) increased by 3.1% and  $CO_2$  emission (Scope 1 and Scope 2) increased by 1.3% compared to the fiscal 2019 level.

In reducing  $CO_2$  emissions, we converted air-conditioning units to high-efficiency models and, at the Tohoku site, switched 4% of purchased electricity (180MWh) to green electricity since June 2020.

# Energy Consumption (Crude Oil Equivalent) 12,000 9,000 7,983 7,698 7,774 8,274 8,436 6,000 3,000 0 2016 2017 2018 2019 2020 (FY) ■ Atsugi site ■ Hiratsuka site ■ Tohoku site

■ Sales offices, etc., in Japan ■ U.S.A. ■ U.K.

# Other Targets of the Domestic Anritsu Group Improving the basic unit of energy by 1% every year until fiscal 2020 (program promoted by the electric and electronics-related industries in Japan for establishing a low carbon society) 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

#### **Progress on Anritsu Climate Change Action PGRE 30**

We established the Anritsu Climate Change Action PGRE 30\* (PGRE 30) in fiscal 2019 as an additional measure for achieving the reduction target for greenhouse gas emissions (Scope 1 and Scope 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. In fiscal 2020, we installed a 1,100 kW solar power generation facility at Anritsu Company (U.S.A.), which started generating electricity in October 2020. We plan to expand the generation capacity at Tohoku Anritsu Corporation in Koriyama City, Fukushima Prefecture and install a power storage facility there as well. In addition, we also intend to work on the second phase of capacity expansion in the Atsugi area.

\*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 (U.S.A.)



Solar power generation facility (Tohoku site)



Solar power generation facility (Atsugi site)

#### **VOICE**



Installation of a Solar Power Generation Facility and Electric Vehicle Charging Stations in Anritsu Company (U.S.A.)

Ben Hartshorn Inritsu Company Facility Manager

Anritsu Company headquarters in Morgan Hill, CA USA is now the proud owner of 2,788 solar panels. These panels span across 4 buildings and 7 carport structures. These combined panels are producing a daily average of 4,300kWh. What does this all equate to? Our Solar production will reduce our overall operating electrical load about 20%.

With the installation of the new campus solar array,
Anritsu made the decision to add 6 electric vehicle charging
stations underneath one of the new solar carports. Anritsu has
developed an Electric Vehicle Charging Program for employees
to utilize the charging stations while on campus. So far, in
the programs limited existence, we have already enrolled 20
employees with interest by many more. With the amount
of success we have seen with the current setup of 6 charge
stations we may look to adding more in the coming years

Although it will take a few years for us to recoup the overall project cost, we are starting to take the steps of becoming a Greener company. This will be a positive benefit to Anritsu's overall goal of reducing its carbon footprint and moving towards a more sustainable future.



Solar panels installed in carports



Charging station for electric vehicles



Environmental Management

Climate Change and Energy

Water Resources

Preserving Biodiversity

Preventing Environmental Pollution

Resource Recycling

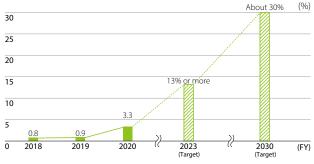
Data Links

#### Solar Power Generated and its Consumed Privately

(MWh)

	FY2016	FY2017	FY2018	FY2019	FY2020
Solar power generated	227	233	241	246	892
Solar power consumed	212	218	225	239	891

## PGRE30: Share of Solar Power Generated Privately to Consumed Privately



# Reducing CO<sub>2</sub> 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 2020, we planned to visit some of our suppliers to introduce case studies that Anritsu has implemented in the past. However, these meetings were ultimately not scheduled due to concerns of the potential spread of the COVID-19. We did manage to remotely conduct information sharing sessions with our suppliers, and during these we requested that they collaborate with us to achieve the goals.

In fiscal 2020, our  $CO_2$  emissions (Scope 3, Category 1) were reduced by 7.9% from fiscal 2018. In addition, the average value of  $CO_2$  emissions per net sales collected from each supplier was reduced by approximately 11%, confirming that our suppliers are making progress in reducing their  $CO_2$  emissions. We will continue to discuss with our them through information sharing sessions and other forums about reducing  $CO_2$  emissions and request their ongoing cooperation.

# Reducing CO<sub>2</sub> Emissions from the Use of Sold Products

Anritsu is working to reduce CO<sub>2</sub> emissions related to the use of sold products (Scope 3, Category 11), which has the highest percentage of CO<sub>2</sub> emissions across the entire value chain. This is in line with our overall goal of achieving the SBTi-approved Scope 3 target. In fiscal 2020, a working group for energy conservation was formed between the PQA Business Division, which is responsible for products with high CO<sub>2</sub> emissions, and the Environment Promotion Division. They considered transport equipment that is shared by many product groups, came up with applicable measures, and began implementing them. This effort will be continued in fiscal 2021 and beyond to further promote energy conservation. We will also strive to reduce CO<sub>2</sub> emissions from more Anritsu Group products by extending the same kind of collaboration to other business units.

In fiscal 2020, the  $CO_2$  emissions for Scope 3, Category 11 were reduced by 11.1% compared to the fiscal 2018 level.

#### Reducing CO<sub>2</sub> Emissions from Transportation

The Domestic Anritsu Group is actively working on reducing CO<sub>2</sub> 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. In fiscal 2020, we assessed the impact of a modal shift from trucks to railway for a part of our transportation needs between Atsugi site and Kyushu. From the findings of that assessment, we concluded that our target for fiscal 2021 is to shift from trucks to railway for 50% of transportation between these areas, and we will work steadfastly to achieve this goal. We also plan to conduct similar assessments for our transportation needs between Atsugi site and Hokkaido.

#### **Climate Change Survey Results by CDP**

The score for Anritsu's response to the CDP questionnaire on climate change for fiscal 2020 was "B: Management level," which is the same score as fiscal 2019. This means that the Company is taking action to mitigate climate risk and its impact.

In addition, in CDP's Supplier Engagement Rating (SER) in fiscal 2020, we were recognized by being listed on the Leaderboard (the highest rating). SER evaluates companies in four categories: collaboration with suppliers, governance, value chain (Scope 3) emissions, and targets, and presents the highest rated companies on its Leaderboard list. In fiscal 2020, approximately 5,800 companies were evaluated, and 394 companies from across the globe were listed on the Leaderboard, 83 of which were in Japan including Anritsu.

We will continue our efforts against climate change through a reduction of CO<sub>2</sub> emissions throughout the entire value chain and disclosure of reliable information.

NGAGEMENT LEADER 2020

SUPPLIER



Environmental Management

Climate Change and Energy

Water Resources Preserving Biodiversity Preventing Environmental Pollution

Resource Recycling

Data Links

#### TOPIC

#### **Anritsu Receives the Kanagawa Global Environment Award for 2020**

With the recommendation of Kanagawa Prefecture, we received the Kanagawa Global Environment Award for the third time. The last time we received this award was in fiscal 2016. On this occasion, our initiatives such as actively installing solar power generation facilities and optimizing the work settings for air-conditioning systems, which consume a significant level of energy, significantly reduced in CO<sub>2</sub> emissions and were highly regarded.



#### **Related Data**

Scope 1 and 2 CO<sub>2</sub> Emissions Volume per Sales (Market-based) (t-CO<sub>2</sub>/100 million yen)

	FY2016	FY2017	FY2018	FY2019	FY2020
Scope 1 and 2 CO <sub>2</sub> Emissions Volume per Unit (Sales)*	16.3	14.9	12.8	11.6	11.9

<sup>\*</sup>Scope 1 and Scope 2 CO2 emissions (market based) divided by sales

#### Energy Consumption\*1 and Reductions\*2,3,4 by Energy Type

(GJ) FY2015 FY2016 FY2017 FY2018 FY2019 FY2020 Total energy consumption in 321,005 309,996 298,961 301,920 321,340 331,766 -10.761 the Organization Subtotal for non-renewable 23,713 25,927 24,066 24,364 23,539 23,268 445 energy Sources Class A heavy 5,202 6,830 5,476 5,018 4,439 5,502 -300 Light oil\*7 285 262 223 224 165 178 108 Gasoline\* 9,925 10,165 9,113 9,098 8,926 7,857 2,068 Kerosene\*7 969 932 859 859 969 969 110 City gas\*7 2,409 2,824 2,750 3.054 2.650 -434 LPG\*8 96 189 158 146 115 78 93 Natural gas\*9 4.927 5.315 6.227 -1.203 5.134 6,018 6.130 Private 808 765 783 812 859 3,208 -2,400 solar power Generation Purchased electrical 296,076 283,304 274,112 276,744 296,942 305,290 -9,213 power\*7 Regional 408 408 heating\*10

- \*1 Method for calculating energy consumption; volume consumed × conversion coefficient
- \*2 Method for calculating reduced energy consumption: 2015 energy consumption—2020 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
- \*6 Energy consumed outside the organization was not included due to the difficulty of documentation.
- \*7 Source for conversion coefficient: Agency for Natural Resources and Energy, "Guidelines for Completing the Statutory Periodic Report and Medium- to Long-Term Plan for Energy Conservation (Specified Business Operators, etc.)"
- \*8 Source for conversion coefficient: Agency for Natural Resources and Energy, "Guidelines for Completing the Statutory Periodic Report and Medium- to Long-Term Plan for Energy Conservation (Specified Business Operators, etc.)," 50.8 × (1/458) (propane/ butane m3 equivalent).
- \*9 Source for conversion coefficient: regulations in line with the "Act on the Rational Use
- \*10 Source for conversion coefficient: Report from the Danish base at that time

#### **Energy Consumption per Sales**

(GJ/100 million ven)

	FY2016	FY2017	FY2018	FY2019	FY2020
Basic unit of energy consumption (sales)*	353	347	302	299	313

<sup>\*</sup>Total energy consumption divided by sales

#### Reduction in Energy Consumption and CO<sub>2</sub> Emissions during the Use of Sold Products\*1,2

	FY2016	FY2017	FY2018	FY2019	FY2020
Reduction in Energy Consumption (GJ)* <sup>3</sup>	36,713	31,241	71,744	85,847	95,347
Reduction in CO <sub>2</sub> Emissions (t-CO <sub>2</sub> )* <sup>4,5</sup>	2,162	1,604	3,569	3,978	4,256

- \*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

Corporate Philosophy	Group CEO Message	Overview of Sustainability Management	Solving Social Issues Through Business	Promoting Sustainability Management	Environment	Social	Governance	Other Information and Appendix	<>⊅ ≣	
Message from Chief Enviro	onment Officer Environ	mental Management	Climate Change and End	ergy Water Resources	Preserving Biodiversity	Preventing Environm	ental Pollution Resour	ce Recycling Data Links		

#### Third-party Verification of CO<sub>2</sub> and Other Emissions

In order to ensure the reliability of the report, we sought and received third-party verification engaged in accordance with International Standard on Assurance Engagement 3000 (ISAE 3000) and International Standard on Assurance Engagement 3410 (ISEA3410) from the Sustainability Accounting Co., Ltd. regarding our  $CO_2$  emissions (Scope 1, 2, and 3), annual renewable energy power generation including its self-consumption and total energy consumption.



Independent Assurance Statement

July 26, 2021

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 CO2 emissions during the fiscal year 2020, that were 1,602 t-CO2 (Scope 1), 10,954 t-CO2 (Scope 2, market-based), 11,586 t-CO2 (Scope 2, location-based), and 97,922 t-CO2e (Scope 3), 332 TJ of energy use and 892 MWh of annual electricity from renewable energy generated by solar power (of which 891MWh for self-consumption) (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.



Environmental Management

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Preventing Environmental Pollution

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#### **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 as 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 have major development and manufacturing sites in high water risk areas, including Anritsu Company 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 2020 Progress
	55,388 m³, a decrease of 5.7% compared to fiscal 2017

In fiscal 2021, the Domestic Anritsu Group intends to maintain its water consumption at 62,000 m<sup>3</sup> (roughly the FY2019 level) or lower.

The Global Anritsu Group's mid-term target for water use will be set as early as fiscal 2021.

#### **Activities and Achievements**

#### **Reducing Water Consumption**

While water is mostly used for toilets and washing hands in the Anritsu Group, a part of manufacturing, such as the washing process, also requires water. 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 m<sup>3</sup>.

Compared to fiscal 2019, the Domestic Anritsu Group's water use during fiscal 2020 decreased by 10.9% as more employees worked at home amid the COVID-19 pandemic. The decrease, however, was smaller than expected, and this turned out to be associated with the use of more water to humidify facilities during the winter because of the dry outside air being taken in for increased ventilation as a COVID-19 countermeasure and a water leak in a toilet that went undetected for a period of time.

From fiscal 2013 to 2015, Anritsu Company (U.S.A.) nearly halved

its water use by replacing its lawn with plants requiring less water and converting to water-conserving toilets. In fiscal 2020, however, Anritsu Company's water use significantly increased mainly due to the application of the water-consuming production of thin-film devices and resumption of watering ornamental trees following California's relaxation of water conservation regulations.

#### **Water Risk Regional Evaluation**

Through the use of the Aqueduct, a water risk evaluation tool developed by the World Resources Institute (WRI), as well as the Water Risk Filter, another similar tool jointly developed by the World Wildlife Fund (WWF) and German Investment Corporation (DEG), water risk is assessed at Domestic Anritsu Group companies with major development and production functions (in Atsugi City, Kanagawa Prefecture, and Koriyama City, Fukushima Prefecture), Anritsu Company (Morgan Hill, California, U.S.A.) and Anritsu Ltd. (Luton, U.K.). None of them has been identified as a source of high water stress\* to date, but we are applying a PDCA cycle under an environmental program to reduce our water use, particularly by the sites in Koriyama and Morgan Hill, where water stress is expected to reach high levels by 2030.

Philosophy	Group CEO Mes	ssage	Sustainability Management	Through Business	Sustainability Management	Environment	Social	Governa	nce	and App		
Message from Chief Enviro	onment Officer	Environm	nental Management	Climate Change and Energy	Water Resources	Preserving Biodiversity	Preventing Environme	ental Pollution	Resource	e Recycling	Data Links	

**Promoting** 

#### **Water Risk Evaluation**

Evalua	Evaluation Tool		Tohoku Site (Koriyama City)	USA (Morgan Hill)	UK (Luton)
	Water Stress				
Aqueduct	Water Stress in 2030				
	Riverine flood risk				
Matau Diale Filtan	Scarcity Risk				
water KISK FIITEr	Flooding Risk				
Water Risk Filter	Flooding Risk				

Overview of

**Solving Social Issues** 

Evaluation with the Aqueduct  Low (<10%)  Low-medium (10-20%)  Medium-high (20-40%)  High (40-80%)	Evaluation with the Water Risk Filter Very Low risk (0-1.8) Low risk (1.8-2.6) Medium risk (2.6-3.4) High risk (3.4-4.2)	Tools Used Aqueduct: a world atlas the World Resources Inst Water Risk Filter: A map (WWF) and Deutsche In- to help evaluate physica	titute (WRI). developed by the World vestitions- und Entwickl	d Wide Fund for Nature lungsgesellschaft (DEG
J	· ·	(WWF) and Deutsche Into help evaluate physica	vestitions- und Entwickl Il water risks, such as wa	lungsgesellschaft (DEG iter resource shortages,
		flooding, droughts, seaso while also evaluating red		' '

<sup>\*</sup>A state in which the amount of water usable by a person per year is less than 1,700 tonnes and in which people feel that their daily living is inconvenienced. A very high level of water stress means that the shortage of water in a region is so severe that more than 80% of its population has no sufficient access to water for agricultural, household, or industrial use.

#### **Consideration for Water Resources**

Corporate

Most of water used by the Anritsu Group comes from public water systems drawn from surface water such as rivers and lakes, except for the water used by the Atsugi site to flush its toilets, which comes from underground.

The Atsugi site is replacing its toilets with more water-saving ones to reduce the amount of water pumped from underground aquifers for the prevention of groundwater depletion.

Meanwhile, a rainwater permeation basin is installed at our global headquarters building to facilitate rainwater infiltration into the ground and prevent heavy rainfall from causing rivers to flood.

#### **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)	•			

Other Information

#### Amount of Water Intake by Type\*, Wastewater by Type, and Recycled Amount

 $(m^3)$ 

		FV2016	EV2017	EV2010	EV2010	EV2020
		FY2016	FY2017	FY2018	FY2019	FY2020
Total Amount of Water Intake		80,352	70,837	72,777	79,588	77,085
	Subtotal	63,382	54,371	55,774	61,585	62,041
	Atsugi site	34,798	30,277	30,181	31,695	30,100
	Hiratsuka site	750	716	700	659	605
City Water Intake	Tohoku site	11,888	11,203	11,363	11,711	9,608
	Sales offices, etc., in Japan	69	47	476	93	31
	U.S.A.	15,477	11,858	12,858	17,312	21,536
	U.K.	401	270	196	116	161
Groundwater Intake	Atsugi site	16,970	16,466	17,003	18,003	15,044
<b>Total Wastewater Amount</b>		65,741	58,373	58,530	64,978	63,105
	Subtotal	53,853	47,170	47,167	53,267	53,497
	Atsugi site	45,004	40,935	41,364	44,364	39,378
Amount Deposited to	Hiratsuka site	750	716	700	659	605
Sewers	Sales offices, etc., in Japan	60	47	476	93	31
	U.S.A.	7,639	5,202	4,431	8,036	13,322
	U.K.	401	270	196	116	161
Amount Deposited to Rivers	Tohoku site	11,888	11,203	11,363	11,711	9,608
Recycled Amount	Hiratsuka site	40	40	40	40	40
Recycled Rate (%)	Hiratsuka site	5	5	5	6	6

<sup>\*</sup>City water and groundwater are our only two sources for water intake.



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#### **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.

#### **FSC™ CoC Certification**

The printing department in Anritsu Kousan Co., Ltd. underwent a review process and has renewed its FSC™ CoC certification\*, initially acquired in fiscal 2019. While the company has been promoting the use of FSC™ certified paper for printing catalogs and reports, it will strengthen this effort by expanding the scope of use to business cards in fiscal 2021.



The mark of responsible forestry

\*The Forest Stewardship Council™ (FSC™), a global, not-for-profit organization dedicated to the promotion of responsible forest management worldwide, defines standards based on agreed principles for responsible forest stewardship. Among the FSC™ certificates, CoC applies to the processing and logistics of forestry products.

Corporate Philosophy	Group CEO Messa	Overview of  Sustainability  Management	Solving Social Issues Through Business	Promoting Sustainability Management	Environment	Social	Governance	Other Information and Appendix	< > ⊅ ≣	
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# Supporting the Kanagawa No Plastic Waste Declaration

Under the Kanagawa No Plastic Waste Declaration, the prefectural government of Kanagawa, which has SDGs Future Cities, is tackling marine pollution issues, particularly those associated with microplastics. As a supporter of the prefecture's initiative, Anritsu is striving to raise employee awareness of these issues. Efforts include participation in the Sagami River Clean-up Campaign for preventing plastic waste from flushing into the ocean and rivers, the publication of the company magazine "Eco Club," and educating employees on the environmental protection, in addition to cleanup campaigns in the neighborhood areas of the Atsugi and Hiratsuka sites, which had been under way for many years prior to the declaration.





# 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 Nijyumaru 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



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#### **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. For our sustainable business activities, it is critical that we maintain appropriate control over the use and discharge of these chemicals.

In its product development and manufacturing, Anritsu handles chemicals, and if they were not properly managed, they would seriously affect the surrounding environment. We will continue to focus on pollution prevention toward creating a sustainable society while achieving our corporate growth.

#### Goals

Fiscal 2020 Target	Fiscal 2020 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 and 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 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 are reducing risks by using a breakwater structure that would prevent any leakage of raw water, intermediary wastewater, or treatment-use chemicals and also 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, where metal materials are degreased with alkaline cleaning agents, their stock solutions are collected by batch. Water used for rinsing is recycled and reused at the site and therefore not discharged as process wastewater. The Tohoku site does not have a specific facility for discharging industrial wastewater, but it has 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 its own response procedures in place 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**

The Domestic Anritsu Group monitors every chemical substance used at every operation phase, from design and development to procurement, production and shipping. Decisions on the use of any specific chemical substance are made in a prior process by expert evaluators assigned by field of expertise, who consider such usage in light of environmental regulations, toxicity, safety, accident prevention and the Group's criteria on banned and restricted substances. Every three months, all of the Group's departments handling chemical substances take inventory of chemical substances on hand and enter the amounts purchased, used and disposed in the Group's database for managing chemical substances so that the Group not only compiles data on substances subject to the Pollutant Release and Transfer Register (PRTR) Law, hazardous materials designated by the Fire Service Act and greenhouse gases but also confirms whether a chemical substance that has been used is now subject to a recently revised regulation. It then considers

Corporat	e
Philosoph	ıy

**Group CEO Message** 

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replacing it, if possible, with an alternative that is safer and has a lower environmental impact. When using a chemical substance subject to the reporting requirement of the Industrial Safety and Health Law, the Group conducts a risk assessment and implements countermeasures in advance.

In fiscal 2020, as 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 tonnes 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	The group of the following seven substances: CFC (chlorofluorocarbons), halon, tetrachloromethane, 1,1,1-trichloroethane, HBFC (hydrobromofluorocarbons), bromochloromethane, methyl bromide
Restricted substances	The group of the following seven substances: HCFC (hydrochlorofluorocarbons), trichloro-ethylene, tetrachloroethylene, dichloromethane, HFC (hydrofluorocarbons), PFC (perfluorocarbons), SF6 (Sulfur hexafluoride)

#### **Responding to Regulations** on Hazardous Chemical Substances in Products

Anritsu prevents the use of hazardous chemical substances in its products by complying with domestic and international regulations (e.g., RoHS Directives, REACH regulations) as well as industrial standards. It also specifies the hazardous chemical substances in the Anritsu Group Global Green Procurement Specification. The chemicals used in the products are inspected in accordance with the list of substances subject to reporting under IEC 62474 (Material Declaration for Products of and for the Electrotechnical Industry) created by the International Electrotechnical Commission.

The European Union directive 2015/863, issued in 2015, amended the RoHS Directive to restrict four additional phthalates (DEHP, BBP, DBP, and DIBP). We had already taken the necessary precautions for Category 3 products related to our IT and communication devices in the Environmental Measurement 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 took all necessary measures to meet restrictions that came into force in July 2021. As for the content of six substances, cadmium, mercury, lead, hexavalent chromium, polybrominated biphenyls (PBB), and polybrominated diphenyl ethers (PBDE), that had already been



Analyzing phthalates

restricted before 2015, we have been conducting sampling inspections using a fluorescent X-ray analyzer during acceptance inspections of purchased parts, and we have thus reduced the risk of releasing those substances into distribution via our products. Additionally, we have conducted the same sampling inspection on the four newly-added substances as well since fiscal 2019, when we introduced an analyzer for phthalates. Since phthalates can migrate, we also inspect non-purchased parts that can come in contact with any phthalate during a production process.

\*Excluding parts used for old products sold only in Japan

#### **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 the Atsugi site is voluntarily analyzing five organochlorine substances in groundwater once a year. Levels of tetrachloroethylene tend to be higher than permitted environmental standards, but the substance has never been used by the Anritsu Group. The results of a soil survey showed that the Atsugi site was not responsible for the contamination ultimately attributed to groundwater from upstream of the location, which the local government also agrees with. We will continue with regular analysis and monitoring at the site.

WEB Groundwater Data for the Domestic Anritsu Group

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#### **PCB Management**

The PCB (polychlorobiphenyl) waste stored at the Atsugi site was disposed of according to plan. In fiscal 2020, the Atsugi site outsourced the disposal of the remaining ballasts containing a high concentration of PCB to the JESCO Hokkaido Facility, thereby implementing the proper disposal process. This marked the completion of all PCB disposal, and a report on the completion was duly submitted to the government.

In consideration of reducing CO<sub>2</sub> emissions, the ballasts were transported from Atsugi to Hokkaido by rail and road.

#### **TOPIC**

Kanagawa Award of Merit in the Preservation of the Environment (Air, Water and Land)

Anritsu Corporation received the "Kanagawa Award of Merit in the Preservation of the Environment (Air, Water and Land)" from the Kanagawa prefectural government for its efforts to reduce greenhouse gas emissions, including the introduction of photovoltaic facilities and high-efficiency lighting; proactive environmental initiatives, including the adoption of stricter wastewater discharge criteria than required by regulations; contribution to the local community through active participation in volunteer cleanups and other activities; many years of anti-pollution behavior; and illuminating efforts on the environmental protection of the air, water, and land.





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#### **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

FY 2020 Target	FY 2020 Progress
Maintain zero emissions* <sup>1</sup> at the Domestic Anritsu Group	Maintained zero emissions
Maintain industrial waste volume at the Domestic Anritsu Group at 67 tonnes or lower	61.2 <sup>x2</sup> tonnes emitted
Maintain general waste and put at the Atsugi site at 36 tonnes or lower	22.1 tonnes emitted

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

We will continue our efforts to reduce the volume of waste disposal in fiscal 2021 and into the future

#### Goals in FY2021 and Beyond

Maintain zero emissions at the Domestic Anritsu Group

Reduce industrial waste volume at the Domestic Anritsu Group by 5% or more per sales until fiscal 2030

Maintain general waste volume at the Atsugi site at 36 tonnes or less through fiscal 2030

#### **Activities and Achievements**

The Domestic Anritsu Group is promoting waste separation and the 3Rs of recycling at its offices and factories, as well as improving the quality of recycling by adopting a material recycling method instead of energy recovery for part of our waste oil. In fiscal 2020, the Atsugi site launched an initiative to turn waste wood into a valuable resource in addition to another effort for reducing waste wood by replacing wooden pallets used to transport parts produced overseas to Japan with rented plastic pallets. The Atsugi site, where waste wood has accounted for about 20% of its industrial waste, will

be turning some 10 tonnes of waste wood into valuable resources every year.

Incidentally, general waste from the Domestic Anritsu Group dropped significantly in fiscal 2020 because of increased teleworking due to the COVID-19 pandemic.

We will keep promoting the 3Rs and waste reduction initiatives.

#### Change in Volume of Waste (Domestic Anritsu Group)



### Volume of Waste Generated by the Domestic Anritsu Group by Treatment (Including Valuable Resources and Waste Solely for Recycling)

Material recycling				
Туре	FY2020			
Waste glass and ceramic	0.2			
Waste metal	171.4			
Waste paper	73.7			
Waste plastics	2.3			
Waste oil	3.5			
Waste wood	3.6			

Energy recovery			
Type	FY2020		
Sludge	4.7		
Waste paper	2.4		
Animal and plant residue	24.8		
Specified hazardous industrial waste	0.3		
Waste alkali	0.9		
Waste plastics	39.5		
Waste acid	0.3		
Waste oil	11.6		
Waste wood	4.2		

<sup>\*2</sup> Excluding irregular disposals resulting from layout changes, etc.



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#### Amount of Hazardous Waste Generated\* and Recycling Rate

	FY2020
Hazardous waste generated (t)	2.5
Hazardous waste recycling rate (%)	100

<sup>\*</sup>Volume of waste recovered in accordance with the storage standards for specially controlled industrial waste in Japanese laws concerning waste treatment and cleaning

#### **Environmental Considerations in Packaging**

Efforts to reduce packaging materials and packaging waste are under way at the Domestic Anritsu Group. In fiscal 2020, we studied an approach to replace wooden boxes with reinforced cardboard boxes for part of our product packaging, since nearly all of the former are incinerated after use for energy recovery, whereas the latter is recyclable material. Although study results indicated that the replacement would bring about a 40% reduction in the volume of packaging materials and 50% in packaging waste, we were not able to implement this approach during the year due to the COVID-19 pandemic. Implementation will begin in fiscal 2021.

We will continue our efforts to reduce packaging materials and packaging waste for the sake of the environment.

#### Eco-Friendly Packaging Efforts at the Domestic Anritsu Group

Packing Method Target Product Group

	,		
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* <sup>3</sup>	Adopted method where product is held between two layers of elastic film	Reduction in packaging material waste volume (waste material is elastic film)* <sup>2</sup>
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)* <sup>2</sup>
Cardboard as a cushioning material packaging	ushioning aterial         equipment for domestic and         Package standard attachments and optional		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 reus-able) Simplified product packaging (Packaging with protective polyethylene)	Reduction in waste volume by 94% compared to regular packaging**
No packaging	Large products shipped domestically (mainly PQA Business 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

Note: All packaging materials must protect the product from shock and vibrations while in transport.

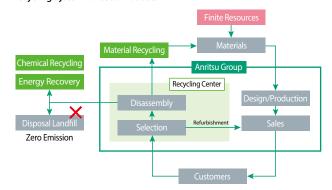
- \*1 Desktop measuring equipment and handheld measuring equipment being developed and shipped overseas from fiscal 2016 is, in principle, shipped using PEF packaging.
- \*2 Reduction in packaging material based on a comparison of urethane foam waste with waste when item in parentheses is used.
- \*3 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 2020, it received 100 tonnes of used products and equipment generated by the Anritsu Group and recycled nearly 100% of the waste after disassembling and sorting, shipping 93.3% 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**



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Reporting Theme	Content	Title	Format	Page in this Report	Website
	Environmental policy	Environmental policy	Text document (HTML)	21	https://www.anritsu.com/en-us/about-anritsu/sustainability/environment
	Environmental impact summary encompassing the entire value chain	Environmental Impact across the Entire Value Chain	Spreadsheet of historical data by year (Excel)	22	https://dl.cdn-anritsu.com/en-en/about-anritsu/environment/environmental-data/lca.xlsx
	List of excellent Eco-products	Excellent Eco-products	List (HTML)	26	https://www.anritsu.com/en-us/about-anritsu/sustainability/environment/eco-products
Environmental Management	CO <sub>2</sub> emissions across the life cycle of our products	CO <sub>2</sub> Emissions and Breakdown across the Life Cycle of Product Groups	Graph of fiscal 2020 data	27	
management	Eco-friendly procurement guidelines	Anritsu Group Global Green Procurement Specification	Booklet (PDF)	65	https://dl.cdn-anritsu.com/ja-jp/about-anritsu/environment/environmental-supplier-information/Guide-Eg.pdf
	Environmental management system	Anritsu Corporation ISO 14001 Certification	Certificate (PDF)	27	https://dl.cdn-anritsu.com/en-en/about-anritsu/environment/iso14001/jqa-em0210-en.pdf
	certifications	Anritsu Company (U.S.A.) ISO 14001 Certification	Certificate (PDF)	27	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)	28	https://dl.cdn-anritsu.com/en-en/about-anritsu/environment/environmental-data/mass-balance.xlsx
		CO <sub>2</sub> Emissions & Reduction Targets in Scopes 1 and 2 (Market-based)	Graph of historical data and target by year	31	_
	Canadana	Value Chain CO₂ Emissions by Scope	Graph of fiscal 2020 data	31	_
	Greenhouse gas emissions	Value Chain CO₂ Emissions by Scope	Spreadsheet of historical data by year	31	_
		Scopes 1 and 2 CO <sub>2</sub> Emission Volume per Sales (Market-based)	Spreadsheet of historical data by year	34	_
Climate Change/	Renewable energy generated	Solar Power Generated and its Consumed Privately	Spreadsheet of historical data by year	33	_
Energy		Share of Solar Power Generated Privately to Consumed Privately	Graph of historical data and target by year	33	_
	Energy consumption	Energy Consumption (Crude Oil Equivalent)	Graph of historical data by year	32	_
		Energy Consumption and Reductions by Energy Type	Spreadsheet of historical data by year	34	_
		Energy Consumption per Sales	Spreadsheet of historical data by year	34	-
		Consumption and CO <sub>2</sub> Emission during the Use of Sold Products	Spreadsheet of historical data by year	34	_
W-1 D	Efforts to protect water resources	Efforts to Protect Water Resources	List	37	-
Water Resources	Water consumption	Amount of Water Intake by Type, Wastewater by Type and Recycled Amount	Spreadsheet of historical data by year	37	_
	Wastewater quality	Wastewater Quality Data for the Domestic Anritsu Group	Spreadsheet of historical data by year (Excel	) 40	https://dl.cdn-anritsu.com/en-en/about-anritsu/environment/environmental-data/water-quality.xlsx
Preventing Environmental	Air quality	Air Quality Data for the Tohoku site	Spreadsheet of historical data by year (Excel	) 40	https://dl.cdn-anritsu.com/en-en/about-anritsu/environment/environmental-data/air.xlsx
Pollution	Noise	Noise Data for the Domestic Anritsu Group	Spreadsheet of historical data by year (Excel	) 40	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	) 41	https://dl.cdn-anritsu.com/en-en/about-anritsu/environment/environmental-data/groundwater.xlsx
		Change in Volume of Waste (Domestic Anritsu Group)	Graph of historical data by year	43	-
Resource	Waste emission	Volume of Waste Generated by the Domestic Anritsu Group by Treatment	Spreadsheet of fiscal 2020 data	43	_
Recycling		Amount of Hazardous Waste Generated* and Recycling Rate	Spreadsheet of fiscal 2020 data	44	-
	Environmental considerations in packaging	Eco-friendly Packaging Efforts at the Domestic Anritsu Group	List	44	_

Data Links

Preventing Environmental Pollution Resource Recycling