

to construct a system that uses GPS and photography to confirm proper disposal from the site of discharge to the disposal plant.

Reduction in Plastics Use and Promotion of Recycling

The NTT Group is seeking to reduce the use of plastics and promoting recycling. For example, plastic parts of telecommunications equipment such as coverings for branch lines and ready access terminal boxes are used in a closed recycling system in which similar types of disposed covers are recycled into plastics to manufacture new products. We are also seeking to abolish the use of plastic packaging materials for devices used at customers' homes when connecting optical lines such as optical network units (ONU) and home gateway (HGW) units.

Recycling Process for Mobile Phones

Containing gold, silver, copper, palladium and other metals, mobile phones could be regarded as a valuable recycling resource in Japan with its paucity of mineral resources. NTT DOCOMO has accordingly collected used mobile phones from customers since 1998 at its approximately 2,300 docomo shops throughout Japan, and through various events. In fiscal 2019, we collected about 3.87 million* mobile phones, bringing our cumulative total to 115.23 million units collected.

In fiscal 2011, the company introduced a new recycling process for pyrolyzing any plastic used in mobile phones to turn it into oil for use as a fuel, after which gold, silver and other metals are recovered from the residues of this process.

Going forward, we will continue to implement recycling initiatives and contribute to realizing a sustainable society.

* The number of units collected for reuse is included in the figure after fiscal 2015.

Hazardous Waste

For NTT Group operations, hazardous waste as defined by law applies to asbestos contained in waste generated from construction work on relay stations, waste such as transformers and condensers containing PCBs, and lead batteries. These are disposed of appropriately and in compliance with the Waste Management and Public Cleansing Law (Waste Disposal Law) as well as other laws and regulations, and the NTT Group does not have a record of disposing of such waste in foreign countries. We also pay meticulous attention to the proper storage and management of equipment containing PCBs and PCB contaminated wastes, and dispose of them with safe and appropriate methods in conformity with the Law Concerning Special Measures Against PCB Waste.

Water Management

Due to the nature of the NTT Group's business, little water is consumed in our operations. In Japan, one-year domestic and industrial water consumption totaled 25.9 billion m³*, while the NTT Group's water consumption totaled 5.834 million m³, only about 0.03% of the total for all of Japan. Moreover, our water use is spread out across the country and so we believe our water intake does not have any significant impact on water sources.

The NTT Group reduces its consumption of tap water by using recycled wastewater and rainwater.

Research centers where we use chemical substances in our research activities implement individual measures against leakages of chemical substances into wastewater. For example, at the Atsugi R&D Center, which carries out research on the physical properties of materials, we have installed equipment to treat chemical-infused waste liquid discharged by the laboratories. Furthermore, we regularly monitor the quality of this wastewater to confirm that it is within legal regulation values. The NTT Group has not been involved in any significant spills.

* From the Ministry of Land, Infrastructure, Transport and Tourism website: Actual water use in fiscal 2015 (water intake basis) was approximately 79.9 billion m³ per year (domestic and commercial use of water: approximately 14.8 billion m³; water for industrial use: approximately 11.1 billion m³; water for agricultural use: approximately 54.0 billion m³).

Paper Management and Recycling

Paper consumption of the NTT Group in fiscal 2019 was 32 thousand tons. As for telephone directories, which account for more than 70% of our paper consumption, we established a closed loop recycling system in 1999 to collect old directories and recycle them to produce new ones. We undertake numerical management for our use of virgin pulp.

Also, we are working to reduce paper consumption of society through the use of ICT, which includes measures such as our Web billing service*.

* A service enabling customers to check their charges and usage at any time online.