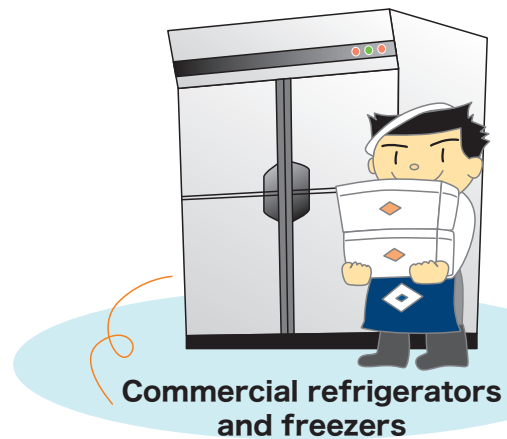
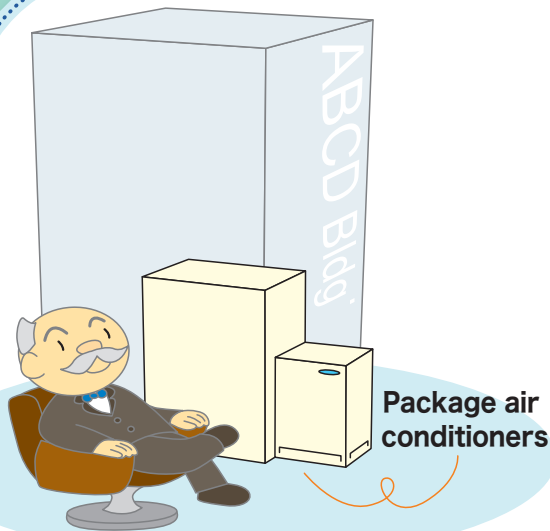
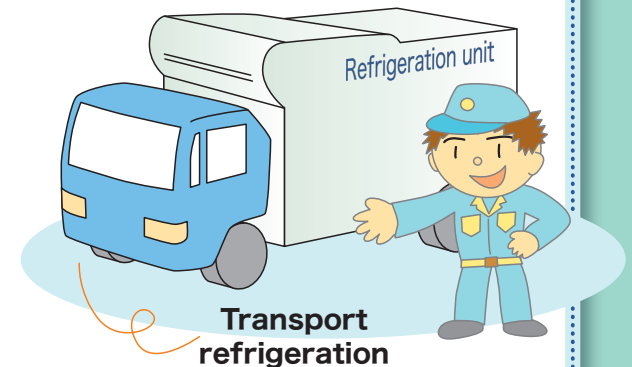
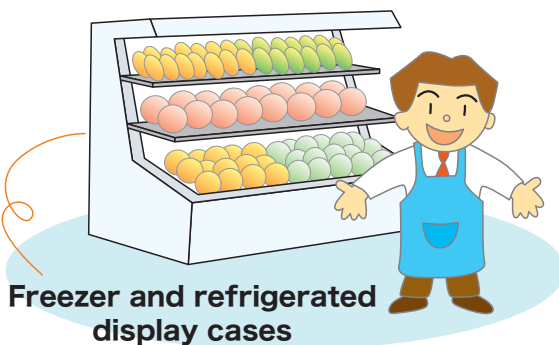


Protecting the Ozone Layer and Combating Climate Change

Act on Rational Use and Proper Management of Fluorocarbons (Fluorocarbon Emissions Control Act)



Managing Fluorocarbon Refrigerants is Your Responsibility!



Releasing fluorocarbons without good reason is subject to a penalty of imprisonment or a fine.
Users of commercial freezers, refrigerators, and air conditioners and related parties must follow the law.

Ministry of the Environment
Ministry of Economy, Trade and Industry
Ministry of Land, Infrastructure, Transport and Tourism

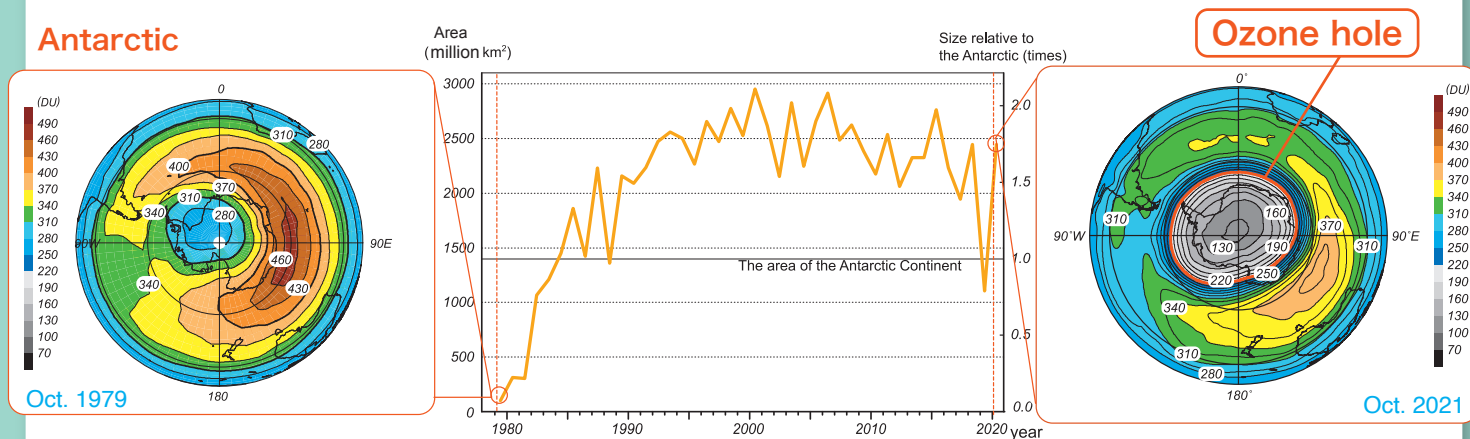
Basics on Fluorocarbons

What are Fluorocarbons?

- Fluorocarbons are chemical compounds containing fluorine and carbon. Under Japan's Act on Rational Use and Proper Management of Fluorocarbons (Fluorocarbon Emissions Control Act), chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), and hydrofluorocarbons (HFCs) are collectively referred to as "fluorocarbons". These chemicals have been widely used as refrigerants in air conditioners and refrigerators, foaming agents in insulation materials, cleaning agents for semiconductors and precision parts, and aerosol propellants as a result of their specific properties; they are chemically very stable, easy to handle, and low in toxicity.
- Since scientists revealed that fluorocarbons caused destruction of the ozone layer and contribute to climate change, the Government of Japan has been promoting a transition to HFCs or alternatives with lower global warming potential (GWP) based on their technology availability.

Ozone Layer Depletion

- The stratospheric ozone layer protects life on earth by absorbing harmful ultraviolet radiation. However, when CFCs, HCFCs, and other fluorocarbons are released into the atmosphere, they rise into the stratosphere and cause depletion of the ozone layer through chemical reaction. The result is the so-called 'ozone hole' over the Antarctic.
- According to the "Scientific Assessment of Ozone Depletion: 2022" by the World Meteorological Organization (WMO) and the United Nations Environmental Program (UNEP), the Antarctic ozone hole is expected to gradually close, returning to 1980 values by around 2066.

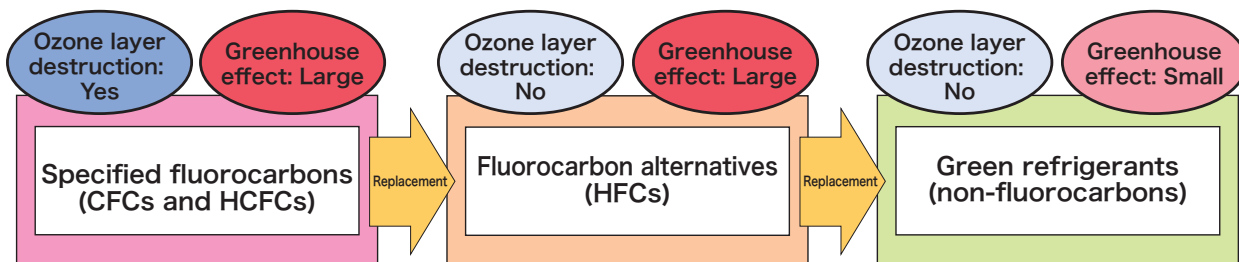


Based on the data provided by Japan Meteorological Agency

Changes in annual maximum of the ozone hole area (center) and the total ozone maps over the Antarctic region in October (left and right)

Climate Change and Japan's Countermeasures

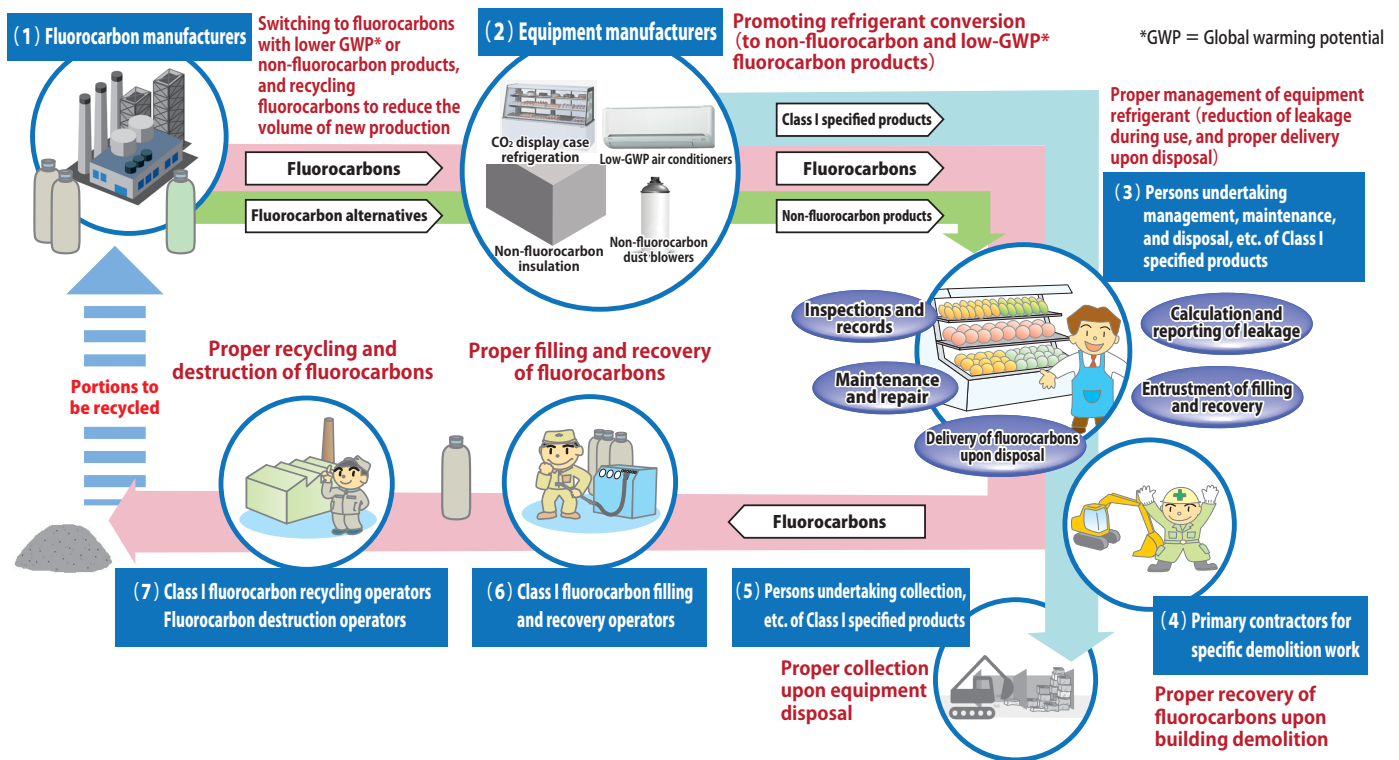
- To ensure ozone layer recovery, the Government of Japan has regulated the production and consumption of ozone depleting substances (ODS), promoting the replacement of CFCs and HCFCs with ozone-friendly HFCs. However, the high GWP of HFCs, which is hundreds to thousands times higher than carbon dioxide (CO₂), has gradually become a major issue.
- Today, the government is promoting a switch to natural refrigerants or low-GWP HFCs through the introduction of new equipment and the replacement of old. It is also essential to reduce emissions of all fluorocarbons (CFCs, HCFCs, and HFCs) from equipment that contains them.



- HFCs have been added to the list of regulated chemicals under the Montréal Protocol, an international framework regulating ODS production and consumption. This addition, known as the Kigali amendment, was adopted in October 2016 and came into effect on January 1, 2019, following ratification by more than 20 countries.

Overview of the Fluorocarbon Emissions Control Act

Flow Chart of Fluorocarbon Life-Cycle



Under the Fluorocarbon Emissions Control Act, each party in the life-cycle is to follow the procedures outlined below.

Measures concerning the rational use of fluorocarbons

(1) Fluorocarbon Manufacturers

- Manufacturers of fluorocarbons are encouraged to manufacture alternatives to fluorocarbons and undertake other rational uses of fluorocarbons, in accordance with the "Standards of Judgment for Manufacturers, etc. of Fluorocarbons" established by the Japanese government.

(2) Designated Products Manufacturers

- "Designated products" refer to products designated by Cabinet Order which are specified products (limited to those used heavily in Japan and filled with considerable amounts of fluorocarbons as a refrigerant) and upon their use it is technically possible to promote reduction in emissions of fluorocarbons.
- Manufacturers of designated products are encouraged to reduce the environmental impact of fluorocarbons used in each designated product, in accordance with the "Standards of Judgment for Manufacturers, etc. of Designated Products" established by Japanese government.

Measures concerning proper management of fluorocarbons used in specified products

(3) Persons responsible for managing the use, maintenance, and disposal of Class I specified products

- Managers of Class I specified products must conduct inspections of such products under their management based on the "Standards of Judgment for Managers."
- Managers of Class I specified products whose calculated amount of leaked fluorocarbons surpass a certain amount must report the calculated amount of leaked fluorocarbons to the national government. (The national government announces amounts.)
- When persons undertaking maintenance or disposal of Class I specified products have a need for filling and recovery of fluorocarbons or for equipment disposal (including disposal and transfer of all or part of a product for use as raw materials or parts in another product), they must entrust filling, recovery, and/or transfer of the fluorocarbons to a Class I fluorocarbon filling and recovery operator.

(4) Primary contractors for specific demolition work

- Before beginning work, primary contractors for specific building demolition work must confirm whether any Class I specified products are present in the structure and communicate the results by issuing documentation to the party ordering the demolition work.

(5) Persons undertaking collection of Class I specified products

- Persons planning to collect discarded Class I specified products must confirm that fluorocarbon recovery has been completed according to a copy of the collection certificate sent by persons undertaking the disposal of the products.

(6) Class I fluorocarbon filling and recovery operators

- Class I fluorocarbon filling and recovery operators must undertake filling and recovery in accordance with the standards for filling and the standards for recovery. If they do not recycle any recovered fluorocarbons themselves, they must deliver them to Class I fluorocarbon recycling operators or fluorocarbon destruction operators.

(7) Class I fluorocarbon recycling and fluorocarbon destruction operators

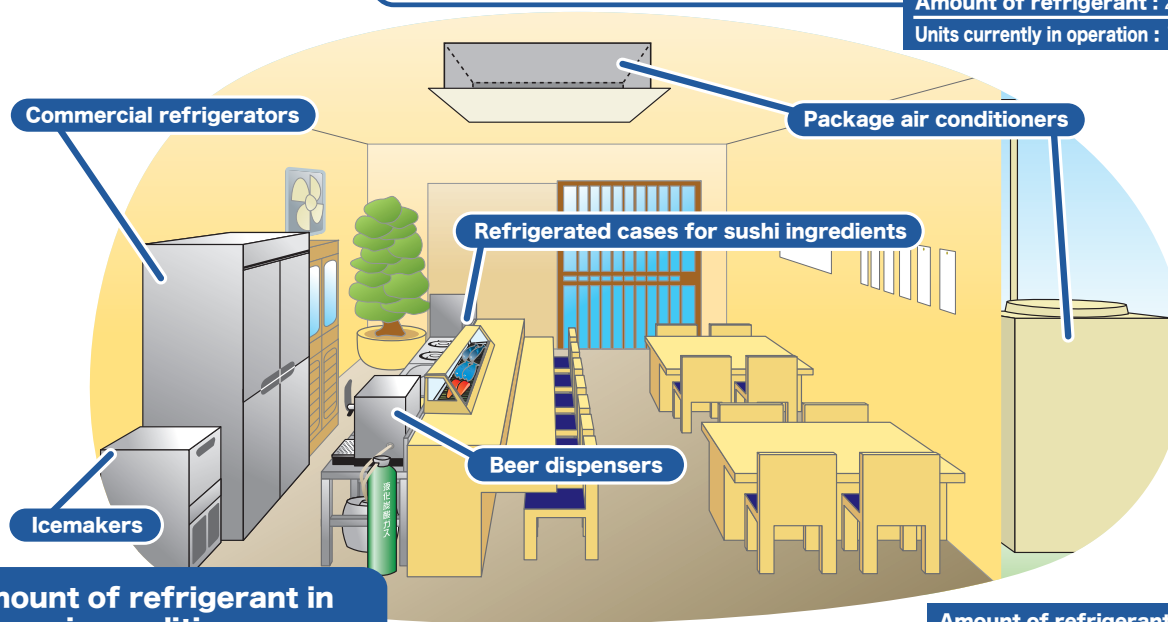
- Class I fluorocarbon recycling operators and fluorocarbon destruction operators must recycle or destroy the collected fluorocarbons in accordance with the standards for recycling of fluorocarbons and the standards for destruction of fluorocarbons.

● Examples of commercial refrigeration and air conditioning equipment (targets of the Fluorocarbon Emissions Control Act)

■ In Restaurants...

Package air conditioners This is the type of air conditioner most commonly used in commercial establishments from small coffee shops to factories and large buildings. A single outdoor unit can support from one to 20 indoor units. A refrigerant circulates from the outdoor unit to the indoor units, which come in various types and may be recessed in a ceiling, hung from a wall, or placed on a floor.

Amount of refrigerant : 2 to 200 kg/unit
Units currently in operation : 10 million



Amount of refrigerant in room air conditioners:
Approximately 0.5 to 3 kg/unit

Amount of refrigerant : 0.1 to 0.5 kg/unit
Units currently in operation : 2.2 million

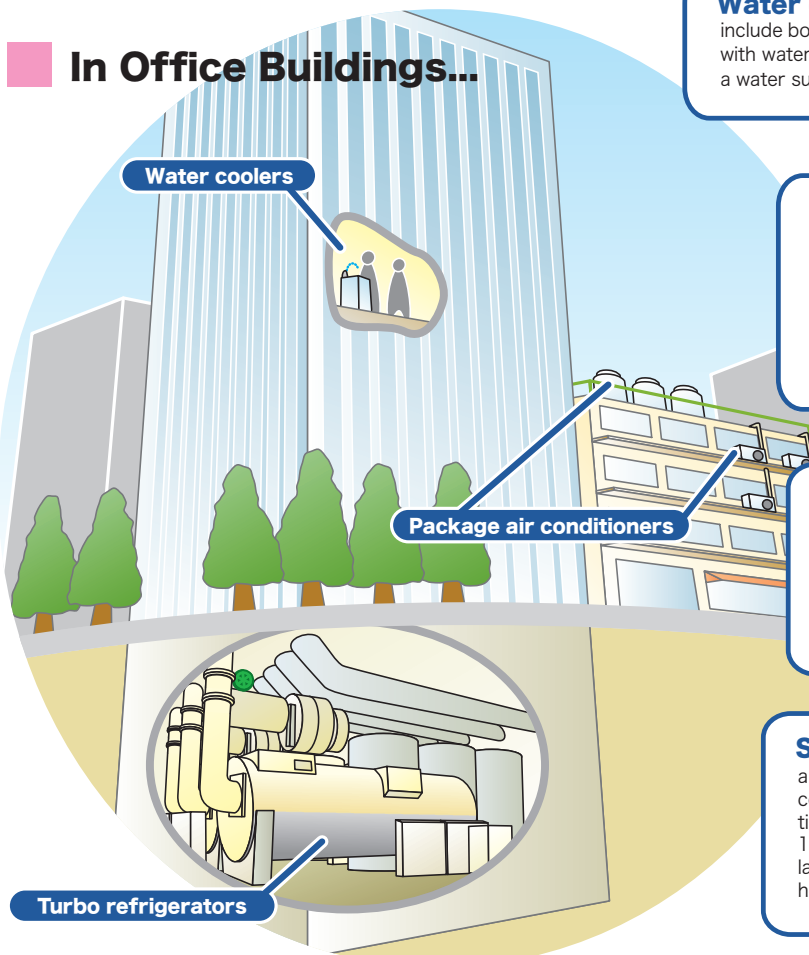
Commercial refrigerators

This type of equipment is used in the kitchens of restaurants and hotels. While large household refrigerators may have a capacity of 400 to 500 liters, most commercial refrigerators have four doors and a capacity of 1,000 liters or more. There are also commercial freezers and combined refrigerator-freezers. Many have stainless steel interiors and exteriors.

■ In Office Buildings...

Water coolers Water coolers are used to cool drinking water, and include both tabletop and floor-standing units. Tabletop units are used in offices, with water supplied from a tank. Floor-standing units are plumbed in directly to a water supply and are used in locations such as factories and public facilities.

Amount of refrigerant : 0.05 to 0.3 kg/unit
Units currently in operation : 3.5 million



Turbo refrigerators The machines are used for relatively large-scale applications such as whole-building air-conditioning and industrial processes. The capacity varies widely, from 350 to 3,500 kW. Some are used for district heating and cooling. Because they are capable of year-round high-power operation, they are often used in semiconductor plants and the like. Heat transfer between the cooling unit and heat-radiating unit is by water, with refrigerant contained only in the refrigerating unit itself.

Amount of refrigerant : 100 to 10,000 kg/unit
Units currently in operation : 100,000

Chillers (chilling units) In these systems, water or brine is cooled in an integrated unit with a circulating refrigerant. The cold water or brine is piped to places where cooling is needed. They have a variety of applications, including refrigerated warehouses, process cooling in factories, and air conditioning. They range in size from very small to extremely large.

Amount of refrigerant : 1 to 100 kg/unit
Units currently in operation : 0.15 million

Screw refrigerators These refrigerators can be used for a wide range of applications, from low-temperature refrigeration to air conditioning. They are used in refrigerated warehouses and refrigeration plants, and also for air conditioning. Their capacity ranges from 100 to 1,000 kW and they are frequently used in medium to large-scale applications, second only to turbo refrigerators. Cold and heat is carried by water or antifreeze to where it is needed.

Amount of refrigerant : 90 to 300 kg/unit
Units currently in operation : 0.03 million

In Supermarkets...

Gas-engine heat pump (GHP) air conditioners

These are used for air conditioning, the same as package air conditioners. Commercial electric power is used for the control system, but the compressor is driven by a gas engine, which has the advantage of reducing commercial electric power consumption. These are often used for air conditioning in suburban supermarkets and in school and agricultural air conditioning with low electric power capacity.

Amount of refrigerant : 3 to 200 kg/unit

Units currently in operation : 0.4 million

Package air conditioners and GHP systems

Foods

Freezer-refrigerator units

These refrigeration devices for prefabricated refrigerators are installed at collection and delivery stations and back rooms of supermarkets. Most are either integrated units installed through a prefab ceiling, or separate, like small package units.

Amount of refrigerant : 1.5 to 3 kg/unit

Units currently in operation : 0.5 million

Refrigerated display cases

Amount of refrigerant : 2 to 20 kg/unit

Units currently in operation : 1 million

Display cases with separate condensing unit

Most refrigerated display cases in supermarkets and convenience stores are of this type. The condensing unit (enclosed unit equipped with a compressor) is installed outdoors, and the display cases are installed inside the store. A single condensing unit provides cooling for multiple display cases.

Freezer display cases

Amount of refrigerant : 0.05 to 2 kg/unit

Units currently in operation : 2.8 million

Display cases with built-in condensing unit

Many of these cases with a built-in condensing unit are small, including ice cream chest cabinets, dairy display cases, and tabletop display cases. Top-opening chest freezers for commercial use are included in this category, which also includes products such as small cases for sushi ingredients.

Around Town...

Portable spot air conditioners

This is a type of package air conditioner, but the indoor and outdoor units are generally integrated, not separated. Cool air is blown toward workers through flexible ducts that come out of the unit. Some are moved on rollers, and some are placed on stands.

Amount of refrigerant : 1 to 5 kg/unit

Units currently in operation : 0.3 million

Package air conditioners

Portable spot air conditioners

Transport freezer and refrigerator units

Transport freezer and refrigerator units

These are cooling devices for the refrigerated compartments of refrigerated transport vehicles. The vehicle's engine turns the compressor to cool the refrigerated compartment. The refrigerant pipes are long, because radiators are located over the driver's seat or under the truck bed. They are used in vehicles ranging from small light trucks to large trucks. In addition, some are equipped with a dedicated engine to drive the compressor.

Vending machines

There are various types in addition to beverage vending machines, such as prepared food and fresh produce vending machines.

Air handling units (indoor units of chillers)

Transport air conditioners

Water coolers

Commercial refrigeration and air conditioning equipment subject to the Fluorocarbon Emissions Control Act is referred to as "Class I specified products".

"Class I specified products" are commercial refrigerators and air conditioners using fluorocarbons. (Automobile air conditioners are not included because recovery of their refrigerants is handled under the End-of-Life Vehicle Recycling Act.)

The following are some ways to **identify Class I specified products**.

- (1) Check the nameplate and stickers on outdoor units.
Labeling is required on equipment sold since April 2002 (the time when the Fluorocarbon Recovery and Destruction Act was enforced). The label must state that it is a Class I specified product, and must also give the types and amounts of fluorocarbons contained and other information. Equipment sold before that time was also labeled with stickers thanks to voluntary efforts by the industry.
- (2) Contact the equipment manufacturer or vendor.

In Factories, Ships, and other locations...

Refrigeration and air-conditioning equipment includes not only equipment for cooling, but also equipment for heating, such as heat pump hot-water supply devices.

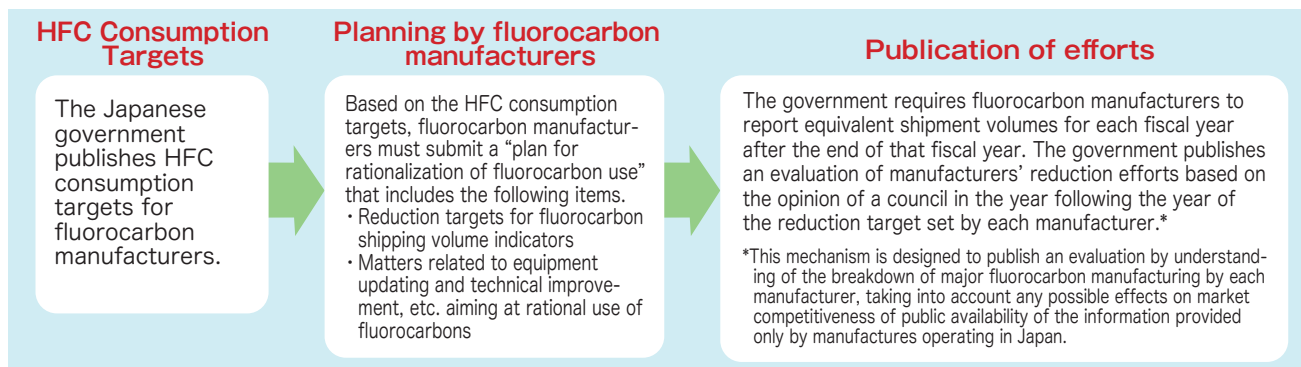
● Reinforcement of measures for fluorocarbon manufacturers and designated product manufacturers

Required actions by fluorocarbon manufacturers and product manufacturers

■ Fluorocarbon manufacturers

- Fluorocarbon manufacturing or importing operators must endeavor to implement the following actions.

- ① Switch to the manufacture or import of low-GWP fluorocarbons or fluorocarbon alternatives.
- ② Update and implement technical improvements to equipment toward alternative gas manufacturing, as well as fluorocarbon recovery, destruction, and recycling efforts



■ Product manufacturers

- Under the designated product scheme, target values and target years are established for each designated product, such as room air conditioners, to promote transitioning to equipment using non-fluorocarbon or low-GWP refrigerants. Manufacturers and importers of designated products must meet their targets as a weighted average based on their shipping in each product category.
- Target values are established for designated products in the following 20 categories (as of February 2023), based on the current status of technical development of products that use alternative refrigerant candidates as well as safety assessments. Products that are not currently covered by these targets will be included as soon as the necessary conditions are met.

Specified product category	Main refrigerants currently used and GWP	Environmental impact target value	Target fiscal year
Household air conditioners (excluding through-the-wall types, etc.)	R410A(2090) / R32(675)	750	2018
Commercial air conditioners for stores and offices			
(1)Statutory refrigeration capacity of less than 3 tons, excluding floor-standing units, etc., and excluding (4) to (7) below.	R410A(2090)	750	2020
(2)Statutory refrigeration capacity of at least 3 tons, excluding floor-standing units, etc., and excluding (3) to (7) below.	R410A(2090)	750	2023
(3)Centrifugal chillers	R134a(1430) / R245fa(1030)	100	2025
(4)Reciprocating liquid chiller for air conditioning	R410A(2090)	750	2027
(5)Variable Refrigerant Flow systems for buildings (those installed in new buildings or those with replacement of all refrigerant piping, excluding those for use of cooling and heating at the same time and those for use in cold district)	R410A(2090)	750	2025
(6)Gas engine heat pump air conditioners (those installed in new buildings or those with replacement of all refrigerant piping, excluding those for use of cooling and heating at the same time and those for use in cold district)	R410A(2090)	750	2027
(7)Air conditioners for facilities (those installed in new buildings or those with replacement of all refrigerant piping, excluding those for specific use such as for those computers, those for use at medium temperature range, and all-in-one air conditioners)	R410A(2090)	750	2027
Automotive air conditioners			
Automotive air conditioners (excluding those installed in passenger cars having a capacity of 11 persons or more)	R134a(1430)	150	2023
Automobile air conditioner for buses (automobiles that carries 11 people or more) and trucks (automobiles used for freight shipment)	R134a(1430)	150	2029
Condensing units and stationary refrigeration units (excluding those having a compressor with rated output of 1.5 kW or less)	R404A(3920) / R410A(2090) R407C(1770) / CO2(1)	1500	2025
Refrigerate and freeze equipment combined unit for commercial use (those that have refrigerator and freezer within housing)			
Commercial refrigerator and freezer for commercial kitchen (Those where the refrigerant evaporates at above -45 degrees Celsius)	R134a(1430) / R404A(3920) R410A(2090) / R407C(1770) CO2(1)	150	2029
Refrigerated display cabinets with incorporated motor compressors (compressor capacity is 750W or less)		150	2029
Refrigerator and freezer using rigid polyurethane foam	HFC-245fa(1030) / HFC-365mfc(795)	100	2024
Vending machine with a refrigerating or freezing function using rigid polyurethane foam	HFC-245fa(1030) / HFC-365mfc(795)	100	2024
Central refrigeration equipment (only those shipped for use in new refrigerated warehouses having effective volume of at least 50,000 m³)	R404A(3920) / Ammonia(<10)	100	2019
Rigid polyurethane foam stock solution for residential use	HFC-245fa(1030) / HFC-365mfc(795)	100	2020
Rigid polyurethane foam stock solution for use other than residential use	HFC-245fa(1030) / HFC-365mfc(795)	100	2024
Heat insulating materials (using rigid polyurethane foam)	HFC-245fa(1030) / HFC-365mfc(795)	100	2024
Spray equipment filled with propellant only (excluding those for applications requiring non-combustibility)	HFC-134a(1430) / HFC-152a(124) CO2(1) / DME(1)	10	2019

● Proper refrigerant management by managers of commercial refrigeration and air conditioning equipment

Standards of Judgment for Managers

As a general rule, the term "manager" refers to the business or corporation that owns the equipment. However, in cases where contracts or other documentation stipulate that a party other than the owner of the equipment is responsible for its maintenance and repair, then that party is considered the manager.

In ordinary times

① Installation in appropriate locations

- To prevent equipment damage, etc., the equipment is installed in an appropriate location, and the installation environment is maintained and protected.

② Inspection of equipment

- Simple inspections are performed for all Class I specified products (at least once every 3 months).
- Periodic inspections by experts are performed for certain types of Class I specified products.

Frequency of periodic inspections required by law

Equipment category	Rated output of motor used by compressor, or output of engine driving compressor	Inspection frequency
Refrigeration equipment and freezer equipment	Equipment of 7.5 kW or more (Main types of equipment: Display cases with separate condensing unit, freezer-refrigerator units, and chilling units for freezers and refrigerators)	At least once per year
Air conditioners	Equipment of 50 kW or more (Main types of equipment: Central air conditioners)	At least once per year
	Equipment of at least 7.5 kW but less than 50 kW (Main types of equipment: Large store air conditioners, multi-split air conditioning units for buildings, and gas heat pump air conditioners)	At least once every 3 years

Response when leakage is detected

③ Leakage prevention measures; filling without repair generally prohibited

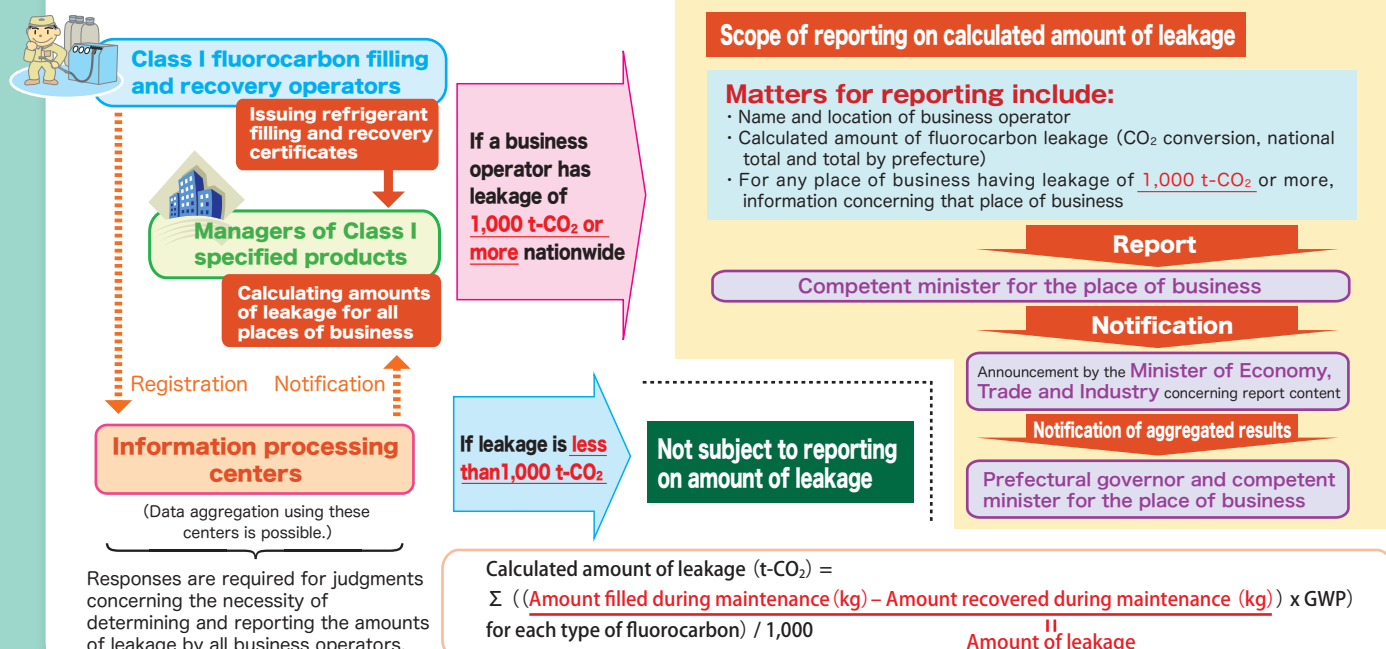
- When refrigerant leakage is confirmed, the equipment is inspected and the source of the leak is identified and repaired.
- When leakage or malfunction is confirmed, filling with fluorocarbons without performing repairs is prohibited, as a general rule.

④ Keeping records on inspection history, etc.

- For appropriate equipment management, records are to be prepared and retained on the history of equipment inspections and repairs, refrigerant filling and recovery, etc.
- These records are to be disclosed upon request by maintenance operators, etc. at times of equipment maintenance.

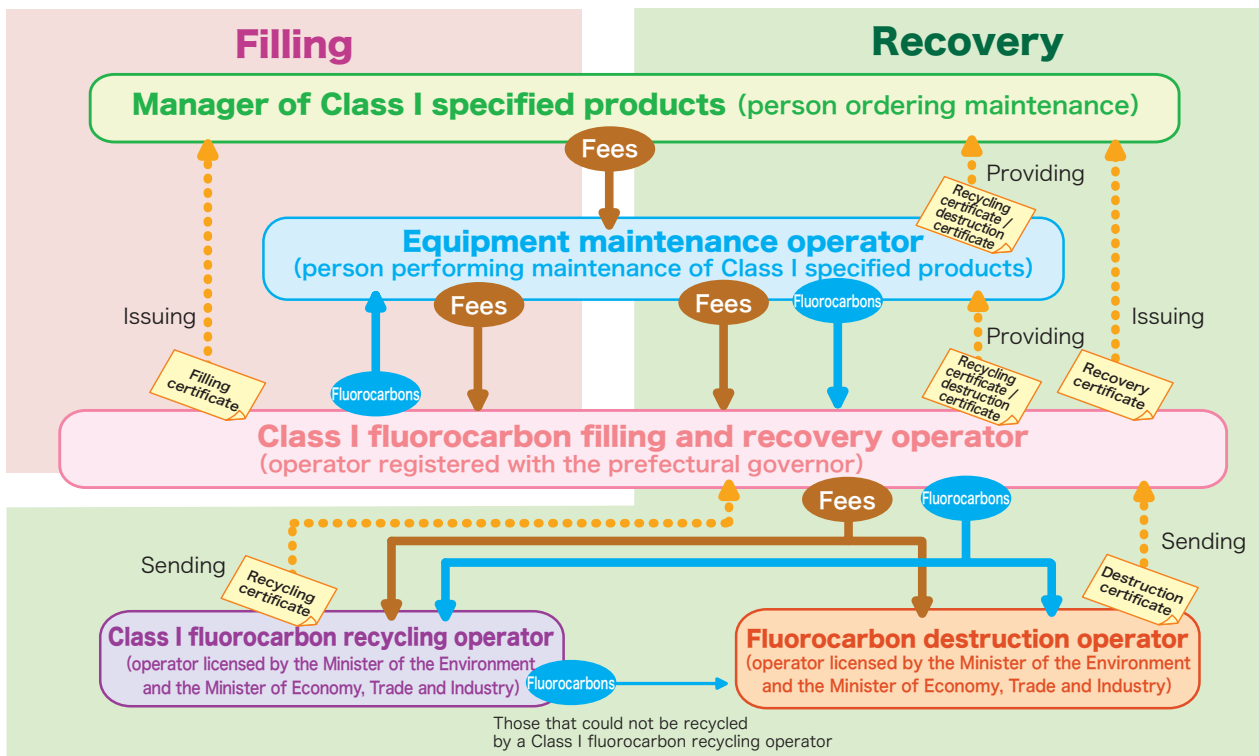
Report on calculated amount of leaked fluorocarbons

- The amount of fluorocarbons that leak from commercial refrigeration and air conditioning equipment (Class I specified products) must be calculated and reported by the manager as part of the corporate reporting requirements. (For franchisors whose standard general conditions specify the use of commercial refrigeration and air conditioning equipment, the total leakage for all franchisees should be calculated and reported.)
- Leakage is considered to be the total amount of refrigerant refilling that takes place. The manager should calculate the amount of leakage based on filling and recovery certificates issued by a Class I fluorocarbon filling and recovery operator.
- The manager should report the calculated leakage amount to the ministers with jurisdiction over the business of the manager (by July 31 of the following fiscal year).

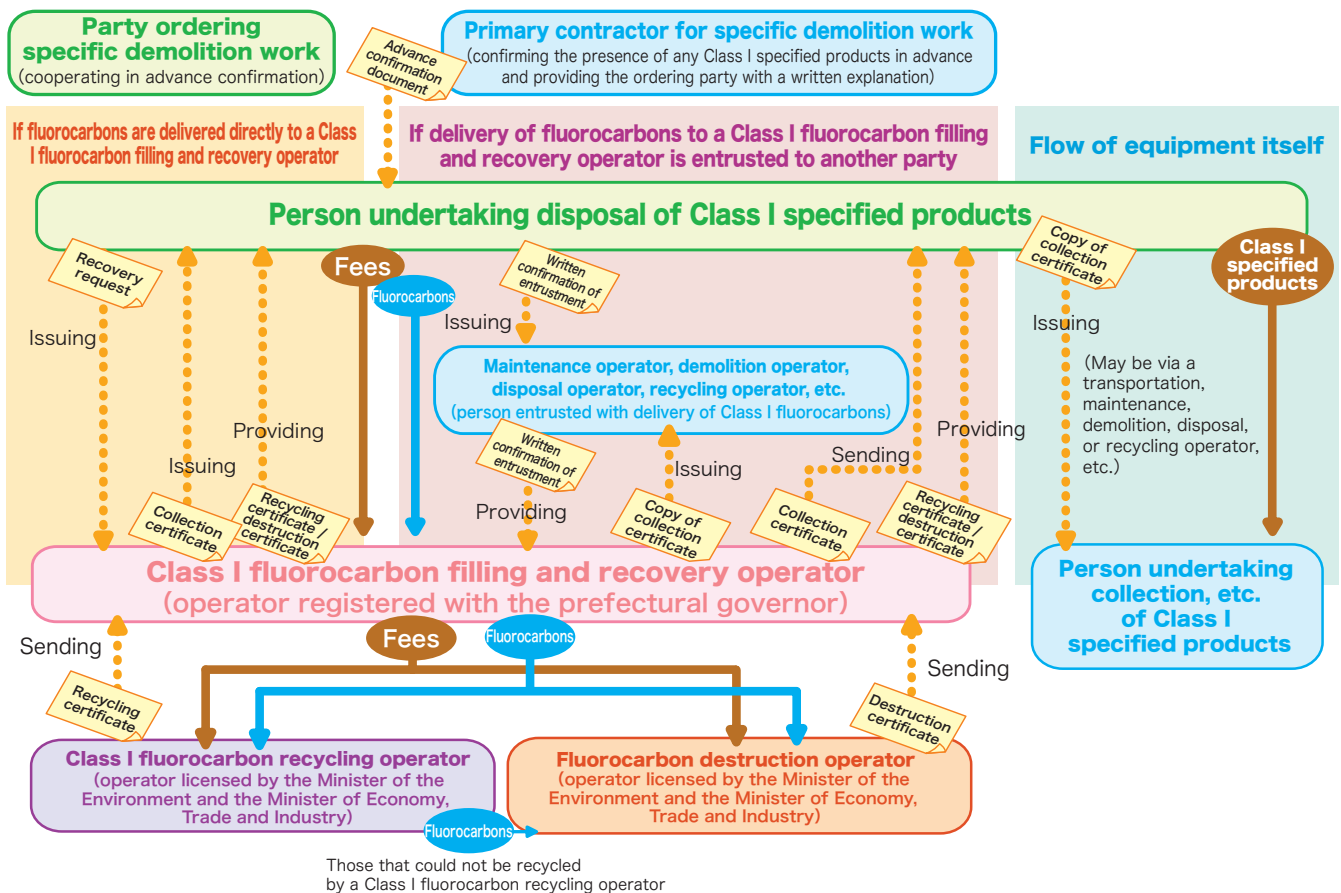


Fluorocarbon filling, recovery, recycling, and destruction

During maintenance



During disposal, etc.

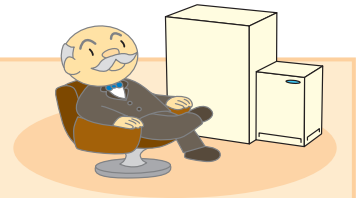


Use of the Information Processing Center

Instead of issuing filling and recovery certificates, a Class I fluorocarbon filling and recovery operator may record filling and recovery information using the information processing center. (Managers then receive the information by electronic notification.) This enables managers to handle all filling and recovery data electronically.

Responsibilities of related parties

Business owners



The following business owners need to make sure the use of Class I specified products (commercial refrigeration and air conditioning equipment).

Business owners who own offices, factories, or stores

- Your packaged air conditioners and other air conditioning equipment, water coolers, and factory cooling equipment are considered Class I specified products.

Business owners who own refrigerated warehousing, food manufacturing, food and beverage wholesaling or retailing, restaurant, and accommodation businesses

- Your freezers equipment and refrigeration equipment, such as commercial refrigerators and display cases, are considered Class I specified products.

Business owners who engage in rental businesses

- The commercial refrigerators and air conditioners that you rent are considered Class I specified products.

Business owners who own ships or special commercial vehicles

- Your ship air conditioners, fresh fish freezers, and refrigerated freight compartments of vehicles are considered Class I specified products.

If you own commercial refrigeration and air conditioning equipment using fluorocarbon refrigerants, you are a “manager of Class I specified products”. When you dispose of such equipment, you are considered a “person undertaking the disposal, etc. of Class I specified products”.

- Please note that “disposal, etc.” means not only disposal by the payment of disposal fees, but also disposal by trade-in and by sale such as to a nonferrous metal scrap wholesaler for reuse as raw materials or parts.
- A transfer of the equipment to others as secondhand goods for reuse, whether for compensation or free of charge, does not make you “a person undertaking the disposal, etc. of Class I specified products.” In such cases, the used equipment vendor or other transferee comes to be considered the manager of the equipment.
- Refrigerators, freezers, and air conditioners manufactured for household use must be recycled according to the Home Appliance Recycling Law, even if they were used in settings such as offices and commercial spaces. Please consult the vendor of the equipment for details.

Responsibilities of managers of Class I specified products (Standards of Judgment for Managers of Class I Specified Products, Article 16 of the Act)

- To prevent damage to any Class I specified product, it must be installed in an appropriate location, and an appropriate installation environment must be maintained and protected. (Article 16 of the Act)
- Simple inspections must be performed for all Class I specified products. For Class I specified products of a certain minimum size, periodic inspections by experts are required. (Article 16 of the Act)
- If a fluorocarbon leak is confirmed, the location of the leak must be identified as soon as feasibly possible and the necessary measures must be taken. (Article 16 of the Act)
- To ensure proper management of the equipment, the inspection, repair, and refrigerant filling and recovery history must be recorded for each Class I specified product and the records must be kept until three years have elapsed after disposal of the product and delivery of the recovered refrigerant. (Article 16 of the Act)
- When maintenance is carried out on a Class I specified product, the above records must be shown to the maintenance operators on request. (Article 16 of the Act)
- If there is a fluorocarbon leak exceeding a certain level, the calculated leakage must be reported to the national government. (Article 19 of the Act)
- Persons intending to order the demolition of buildings are considered “parties ordering specific demolition work.” They must cooperate with the primary contractor for the specific demolition work to confirm whether Class I specified products are present in the building and must retain documentation concerning the results of confirmation for three years. (Article 42 of the Act)
- When contracting for maintenance of Class I specified products, managers must cover costs such as fluorocarbon recovery, recycling, and destruction. (Article 74 of the Act)

Responsibilities of persons undertaking the disposal of Class I specified products [Regarding handling of fluorocarbons and Class I specified products]

- At the time of disposal of a Class I specified product, unless a Class I fluorocarbon filling and recovery operator has confirmed that the product is empty of fluorocarbons, the person undertaking the disposal must ensure that the fluorocarbons are delivered to a Class I fluorocarbon filling and recovery operator, either by themselves or by entrusting the task to another party. (Article 41 of the Act) At that time, they must cover the costs of fluorocarbon recovery, recycling, and destruction. (Article 74 of the Act)
- At the time of disposal of a Class I specified product, upon delivery of the product to a person undertaking the collection of Class I specified products, a person undertaking the disposal of the product must issue a copy of the collection certificate. (Article 45-2 of the Act)
- *A “collection certificate” is referred to as a document attesting to the collection of fluorocarbons which a Class I fluorocarbon filling and recovery operator must provide with a person undertaking the disposal after the collection of fluorocarbons contained in the discarded product completes.

[Regarding process management systems]

- At the time of disposal of a Class I specified product, the person undertaking the disposal must issue a written recovery request if they are to deliver the fluorocarbon refrigerants directly to a Class I fluorocarbon filling and recovery operator. The person undertaking the disposal must issue a written confirmation of entrustment if they contract with another party to deliver the refrigerants to a Class I fluorocarbon filling and recovery operator, and if that party is a person entrusted with the delivery of Class I fluorocarbons, such as a maintenance operator, demolition operator, or vendor, who is not registered as a Class I fluorocarbon filling and recovery operator. A copy of the recovery request and confirmation must be retained for three years. (Article 43 of the Act)
- If a person entrusted with the delivery of Class I fluorocarbons further entrusts the delivery of fluorocarbons to another party, the person undertaking the disposal of the product must issue written consent for the onward entrustment. A copy of the consent must be retained for three years. (Article 43 of the Act)
- When the recovery of fluorocarbons from the Class I specified product is completed by the Class I fluorocarbon filling and recovery operator, the person undertaking the disposal must receive a collection certificate issued or sent by the operator. The collection certificate must be retained for three years. (Article 45 of the Act)
- If the Class I fluorocarbon filling and recovery operator has not issued or sent a collection certificate within 30 days after the written recovery request or written confirmation of entrustment was issued (or within 90 days in the case of building demolition), this must be reported to the prefectural governor. (Article 45 of the Act)

Responsibilities of related parties

Maintenance operators

The following applies to those who work in electrical equipment and appliance repair, air conditioning and heating equipment installation, refrigerated warehousing, food manufacturing, food and beverage wholesaling, equipment and appliance retailing, etc.

The work of fluorocarbon filling and recovery during maintenance of commercial refrigeration and air conditioning equipment must be entrusted to a Class I fluorocarbon filling and recovery operator.

- When entrusting this work to a **Class I fluorocarbon filling and recovery operator**, the Class I specified products maintenance operator must cover the costs of fluorocarbon recovery, recycling, and destruction. (Article 74 of the Act)
In addition, the maintenance operator must provide **the filling and recovery operator** with information concerning **the manager of the Class I specified products** who ordered the maintenance work. (Article 37 and Article 39 of the Act)
- Unless the equipment is refilled with the recovered fluorocarbons by **the entrusted Class I fluorocarbon filling and recovery operator**, the recovered fluorocarbons must be delivered to **this I fluorocarbon filling and recovery operator**. (Article 39 of the Act)
- When a recycling certificate or destruction certificate is provided to a Class I specified products maintenance operator by a **Class I fluorocarbon recycling operator** or **fluorocarbon destruction operator**, the maintenance operator must pass on the certificates to **the manager of the Class I specified product** without delay. The maintenance operator must retain a copy of the certificate for three years. (Article 59 and Article 70 of the Act)

To undertake fluorocarbon filling and recovery, a maintenance operator must register as a Class I fluorocarbon filling and recovery operator.

[Examples of business operators requiring registration as filling and recovery operators]

Equipment vendors, sales offices, and management companies

If the company undertakes fluorocarbon filling and recovery work as part of its equipment repair and inspection business.

Large refrigerated warehouses and other large facilities

If the company has an equipment repair and service department and undertakes fluorocarbon filling and recovery work itself.

Factories and workplaces

If the company uses equipment in heating, cooling, or other processes, has an equipment repair and service department, and undertakes fluorocarbon filling and recovery work itself.

- If equipment is not refilled with recovered fluorocarbons, you must either reuse the recovered fluorocarbons or deliver them to a **Class I fluorocarbon recycling operator** or **fluorocarbon destruction operator**. (Article 46 of the Act)
- Amounts of fluorocarbons recovered during the recovery process must be recorded and reported to the prefecture every fiscal year. (This does not include amounts refilled back into the equipment after recovery.) (Article 47 of the Act)
- For more details, please consult the section "Fluorocarbon filling and recovery operators" on page 12.

Sales, installation, and maintenance operators

The following applies to businesses that engage in electrical equipment and appliance wholesaling, equipment and appliance retailing, air conditioning and heating equipment installation

When you collect an used Class I specified product containing a fluorocarbon refrigerant for disposal or trade-in from a person undertaking the disposal of Class I specified product, you are considered a "person entrusted with the delivery of Class I fluorocarbons".

A person entrusted with the delivery of Class I fluorocarbons must implement following actions.

(If you collect a Class I specified product and reuse it as second-hand equipment, you are considered a **manager of this equipment**. If you later dispose of the equipment, you will then be considered a **person undertaking the disposal of Class I specified products**.)

- When you collect commercial refrigeration and air conditioning equipment containing fluorocarbon refrigerants, you will receive a written confirmation of entrustment issued by the contracting party (**the person undertaking the disposal of Class I specified products**). You must provide this written confirmation of entrustment to **the Class I fluorocarbon filling and recovery operator** and retain a copy for three years. (Article 43 of the Act)
- If you further contract another party to deliver the fluorocarbons contained in a Class I specified product to a **Class I fluorocarbon filling and recovery operator**, you must obtain written consent for onward entrustment from **the person undertaking the disposal of the product**. In addition, you must retain the written consent for onward entrustment for three years. (Article 43 of the Act)
- When you receive a copy of a collection certificate issued by a **Class I fluorocarbon filling and recovery operator**, you must retain it for three years. (Article 45 of the Act)
- When you are entrusted with the delivery of fluorocarbons to a **Class I fluorocarbon filling and recovery operator**, the ordering party (**the person undertaking the disposal of Class I specified products**) must cover the costs of recovery, recycling, and destruction. (Article 74 of the Act)

Waste and recycling operators

The following applies to those who work in ferrous metal scrap wholesaling, nonferrous metal scrap wholesaling, industrial waste collection and transportation, industrial waste disposal, etc.

If you dispose of products collected from a person undertaking the disposal of Class I specified products, or if you recycle parts from such products, you are considered a **“person undertaking collection of Class I specified products”**. It is **illegal** to collect such equipment that contains fluorocarbon refrigerants without a **collection certificate** provided by the person undertaking the disposal.

A person undertaking collection of Class I specified product must implement following actions.

- You are prohibited from collecting a Class I specified product for which fluorocarbon recovery cannot be confirmed based on a copy of a collection certificate. (Article 45- 2 of the Act)
- When receiving a Class I specified product for the disposal, you must obtain a copy of the collection certificate issued by **the person undertaking the disposal of the product**. (Article 45- 2 of the Act)
- If you further contract the disposal of a Class I specified product that you have collected, you must provide the entrusted party with a copy of the collection certificate. (Article 45- 2 of the Act)
- You must keep the copy of the collection certificate for three years. (If you further entrust the disposal of the Class I specified product that you have collected, you must retain the copy of the collection certificate until you provide a copy to that entrusted party.) (Article 45- 2 of the Act)

If you carry out fluorocarbon recovery in addition to equipment collection, you are considered a **“Class I fluorocarbon recovery and collection operator”**; and if you also deliver the fluorocarbons to a Class I fluorocarbon filling and recovery operator, you are considered a **“person entrusted with the delivery of Class I fluorocarbons”**.

- For more details, please consult the section "Fluorocarbon filling and recovery operators" on page 12, and the section "A person entrusted with the delivery of Class I fluorocarbons" on page 10.

Building demolition operators

The following applies to those engaging in general construction, scaffolding work, earthworks, concrete work, demolition, etc.



If you undertake contracts for demolition work directly from a party that orders building demolition work (other than a contractor), you are considered a **“primary contractor for specific demolition work”** unless it is clear that there is no commercial refrigeration or air conditioning equipment present in the building to be demolished.

- * “Specific Demolition work” means demolition work of all or part of a building or other structure (excluding any building or other structure in which Class I specified products are clearly not present).
- A **primary contractor for specific demolition work** must confirm in advance whether any Class I specified products are present and issue documentation (advance confirmation) to explain the results of the confirmation to the party ordering the specific demolition work. A copy of the advance confirmation must be retained for three years. (Article 42 of the Act)
- If any Class I specified products are found to be present in a building you have contracted to demolish, you are accountable for recovery of the fluorocarbons from the equipment. For any Class I specified products whose presence is confirmed by the advance confirmation, you must either have **the party ordering specific demolition work** recover the fluorocarbons in advance or the contracted demolition work must include provision of service for the delivery of the fluorocarbons to a **Class I fluorocarbon filling and recovery operator**.
- If **the party ordering specific demolition work** contracts you to deliver the Class I specified product of which the fluorocarbons contained have already been recovered to a **person undertaking collection of Class I specified products**, you must deliver the equipment to that person as contracted along with a copy of the collection certificate that is provided by the person undertaking the disposal of the product.

If your contracted demolition work includes provision of service for the delivery of the fluorocarbons to a Class I fluorocarbon filling and recovery operator, you are considered a **“person entrusted with the delivery of Class I fluorocarbons”**.

- For more details, please consult the section "A person entrusted with the delivery of Class I fluorocarbons" on page 10.

Responsibilities of related parties

Fluorocarbon filling and recovery operators

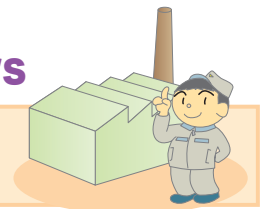


The following applies to those intending to engage in Class I fluorocarbon filling and recovery operations.

You must register with the prefectural governor having jurisdiction over the area where you intend to conduct business. (Article 27 of the Act)

- You must comply with the filling and recovery standards when filling or recovering fluorocarbons. (Article 37, Article 39, and Article 44 of the Act)
- When filling or recovering fluorocarbons during maintenance, you must either issue a filling or recovery certificate to **the manager** who ordered the maintenance work of the Class I specified product, or register the required filling or recovery information with the information processing center. (Article 37 to Article 40 of the Act)
- If you are contracted by **a Class I specified product maintenance operator, person undertaking the disposal of Class I specified products, or person entrusted with the delivery of Class I fluorocarbons** to recover fluorocarbon refrigerants, you must undertake recovery of the refrigerants unless there is a valid reason not to. (Article 29 and Article 44 of the Act)
- If **a Class I specified product maintenance operator or person undertaking the disposal of Class I specified products** asks for an explanation of the fees related to fluorocarbon recovery, you must provide such an explanation. (Article 74 of the Act)
- When you collect fluorocarbons as a result of disposing of a Class I specified product, you must issue a collection certificate and retain a copy for three years. (Article 45 of the Act)
- If you confirm that a Class I specified product that is intend to be disposed of by a person undertaking the disposal of the product is empty of fluorocarbons, you must issue a confirmation certificate and retain a copy for three years. (Article 41 of the Act)
- You must deliver any collected fluorocarbons to **a Class I fluorocarbon recycling operator or a fluorocarbon destruction operator.** (Article 46 of the Act)
- After receiving a recycling or destruction certificate issued by **a Class I fluorocarbon recycling operator or fluorocarbon destruction operator**, you must provide it to **the manager** who ordered the maintenance work of the Class I specified product or **the product maintenance operator** and retain a copy for three years. (Article 59 and Article 70 of the Act)
- You must prepare records of the amounts of fluorocarbons that you fill and recover, retain the records for five years, and report the amounts to the prefecture every year (within 45 days after the end of the fiscal year). (Article 47 of the Act)
- When undertaking filling or recovering fluorocarbons, you must have a person present who has adequate knowledge of fluorocarbon filling or recovery.

Fluorocarbon recycling and destruction operators



The following applies to those intending to engage in the business of recycling or destruction of fluorocarbon refrigerants contained in Class I specified products.

You must obtain a license from the Minister of the Environment and the Minister of Economy, Trade and Industry for each place of business where you will operate. (Article 50 and Article 63 of the Act)

- You must comply with the recycling or destruction standards when recycling or destroying fluorocarbons. (Article 58 and Article 69 of the Act)
- When recycling or destroying fluorocarbons, you must send a recycling or destruction certificate to **the Class I fluorocarbon filling and recovery operator**, and retain a copy for three years. (Article 59 and Article 70 of the Act)
- **A Class I fluorocarbon recycling operator** must deliver any unrecycled fluorocarbons to **a fluorocarbon destruction operator.** (Article 58 of the Act)
- **A fluorocarbon destruction operator** must collect the fluorocarbons unless there is a valid reason not to, if **a Class I fluorocarbon filling and recovery operator or Class I fluorocarbon recycling operator** requests the collection of fluorocarbons. (Article 69 of the Act)
- You must prepare records of the amounts of fluorocarbons that you recycle or destroy, retain the records for five years, and report the amounts to the national government every year (within 45 days after the end of the fiscal year). (Article 60 and Article 71 of the Act)

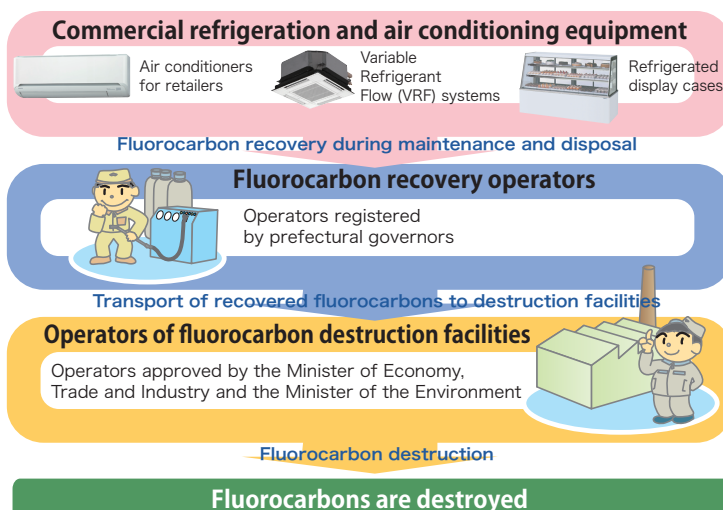
All parties

Releasing fluorocarbons without good reason is subject to a penalty of imprisonment of up to one year or a fine of up to ¥500,000.

Background to the Fluorocarbon Emissions Control Act

The Fluorocarbon Recovery and Destruction Act

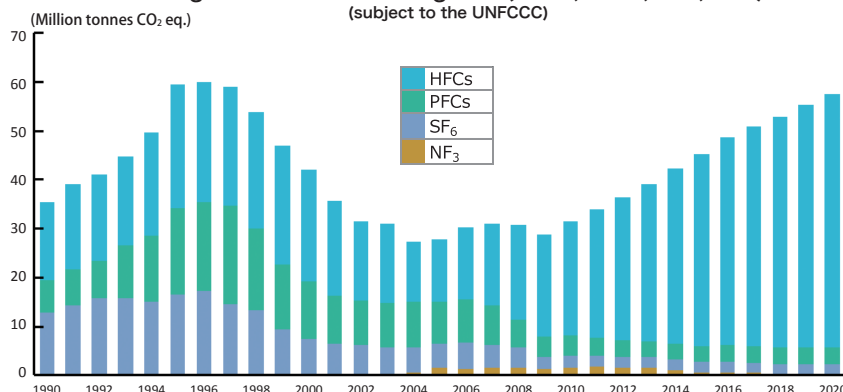
- To protect ozone layer and mitigate climate change, we must reduce emissions of fluorocarbons.
- Japan enacted the Act on Ensuring Recovery and Destruction of Fluorocarbons Related to Specified Products (Fluorocarbon Recovery and Destruction Act) in 2001. This law obligated equipment users to recover fluorocarbon refrigerants from commercial refrigeration and air conditioning equipment during acts of maintenance and disposal, as well as to destroy the recovered refrigerants.



Revision to the act and the current scheme

- As issues such as a surge in the use of HFC refrigerants, low refrigerant recovery rates, and significant refrigerant leakage rates from operational equipment arose, a response became necessary. There was also a need to reflect in the law changes such as technological advances and the market-penetration of non-fluorocarbon and low-GWP products, as well as a global trend toward tighter HFC regulation.
- Thus, the law was amended in June 2013 to include comprehensive measures encompassing the life cycle of fluorocarbons, from manufacturing to disposal. Since this expanded on the initial scope of the law – fluorocarbon recovery and destruction – the legislation was renamed the Act on Rational Use and Proper Management of Fluorocarbons (Fluorocarbon Emissions Control Act). The revised act became effective on April 1, 2015.
- In June 2019, the Fluorocarbon Emissions Control Act was amended in order to increase the recovery rate of fluorocarbon refrigerants during disposal, which had remained low at less than 40% for over 10 years. Major changes were made, including the addition of direct penalties for users who violate the law by failing to recover fluorocarbons at the time of equipment disposal. The amendment became effective on April 1, 2020.

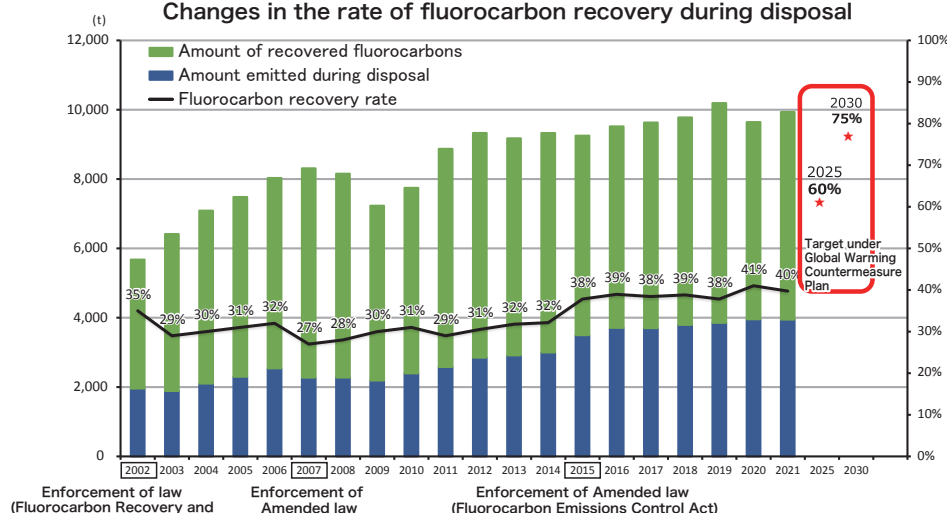
Changes in emissions of F-gases (HFCs, PFCs, SF₆, NF₃)
(subject to the UNFCCC)



Note 1:
Of emissions of F-gases, HFCs emissions are increasing most rapidly due to the ongoing shift from CFCs and HCFCs to HFCs, mainly as refrigerants in refrigeration and air conditioning equipment.

Source:
The National Greenhouse Gas Inventory Report.

Changes in the rate of fluorocarbon recovery during disposal



Note 2:
The Global Warming Countermeasures Plan (cabinet decision of October 2021) set a target rate for fluorocarbon recovery during disposal of 60% by 2025 and 75% by 2030.

Source:
Ministry of the Environment

List of obligations and penal provisions under the Fluorocarbon Emissions Control Act

The Fluorocarbon Emissions Control Act provides the following obligations and penalties for related parties for the purpose of controlling fluorocarbon emissions.

Note:

■ Clause number abbreviations: "Art.18(1)" refers to Article 18, Paragraph 1, and "Art.104, (i)" refers to Article 104, Item (i).

■ ■ indicates matters subject to the guidance and supervision of the competent minister and ■ indicates matters subject to the guidance and supervision of the prefectural governor.

Obligated party	Obligation under the Fluorocarbon Emissions Control Act	Guidance and advice			Penal provisions	
		Recommendations	Public announcements	Orders	Indirect penalties (Art.104, (i) for violations of orders)	Direct penalties
All parties	No releasing fluorocarbons from specified products without good reason (Art.86)					Imprisonment for up to one year or fine of up to ¥500,000 (Art.103, (xiii))
Fluorocarbon manufacturers, etc.	Compliance with the standards of judgment for manufacturers, etc. of fluorocarbons (Art.9(1))					
	Manufacturers whose production volume, etc. is 10,000 t-CO ₂ or more				Fine of up to ¥500,000	
Designated product manufacturers, etc.	Compliance with the standards of judgment for manufacturers, etc. of designated products (Art.12(1)) (Manufacturers who produce or import more than a certain amount)				Fine of up to ¥500,000	
	Labeling of designated products (Art.14)				Fine of up to ¥500,000	
Specified product manufacturers, etc.	Labeling of specified products (Art.87)					Non-criminal fine of up to ¥100,000 (Art.109, (iii))
Managers of Class I specified products	Compliance with the standards of judgment for managers (Art.16(1))					
	Managers having equipment of at least 7.5 kW				Fine of up to ¥500,000	
	Reporting on calculated amount of leaked fluorocarbons (Art.19)					Non-criminal fine of up to ¥100,000 (Art.109, (i))
Persons ordering maintenance of Class I specified products	Bearing the cost of fluorocarbon recovery, etc. (Art.74(6))					
Class I specified product maintenance operators	Entrustment of fluorocarbon filling (Art.37(1))				Fine of up to ¥500,000	
	Notification of manager's name, etc. when entrusting filling (Art.37(2))				Fine of up to ¥500,000	
	Entrustment of fluorocarbon recovery (Art.39(1))				Fine of up to ¥500,000	
	Notification of manager's name, etc. when entrusting recovery (Art.39(2))				Fine of up to ¥500,000	
	Fluorocarbon delivery other than refilling (Art.39(4))				Fine of up to ¥500,000	
	Issuing and retaining copies of recycling certificates (Art.59(3))				Fine of up to ¥500,000	
	Issuing and retaining copies of destruction certificates (Art.70(2) pursuant to Art.59(3) mutatis mutandis)				Fine of up to ¥500,000	
	Bearing the cost of fluorocarbon recovery, etc. (Art.74(3))					
Persons undertaking disposal, etc. of Class I specified products	Fluorocarbon delivery (Art.41)				Fine of up to ¥500,000	Fine of up to ¥500,000 (Art.104, (ii))
	Issuing and retaining copies of written recovery requests and written confirmations of entrustment (Art.43(1)-(3))				Fine of up to ¥500,000	Fine of up to ¥300,000 (Art.105, (ii), (iii))
	Issuing and retaining copies of written consent for further entrustment (Art.43(4))				Fine of up to ¥500,000	
	Retaining collection certificates (Art.45(3))				Fine of up to ¥500,000	Fine of up to ¥300,000 (Art.105, (iv))
	Reporting when collection certificates are not received, not filled out, or contain false statements (Art.45(4))				Fine of up to ¥500,000	
	Issuing copies of collection certificates (Art.45-2(1))				Fine of up to ¥500,000	Fine of up to ¥300,000 (Art.105, (v))
	Bearing the cost of fluorocarbon recovery, etc. (Art.74(3))					
Parties ordering specific demolition work	Cooperation with confirming whether Class I specified products are in place					
	Retaining explanatory documents (Art.42(3))					
Primary contractors for specific demolition work	Confirming and explaining whether Class I specified products are in place, and retaining copies of explanatory documents (Art.42(1))					
Persons entrusted with the delivery of Class I fluorocarbons	Receiving in advance and retaining written consent for further entrustment (Art.43(4))				Fine of up to ¥500,000	
	Providing and retaining copies of written confirmations of entrustment (Art.43(5)-(7))				Fine of up to ¥500,000	
	Retaining copies of collection certificates				Fine of up to ¥500,000	

Obligated party	Obligation under the Fluorocarbon Emissions Control Act	Guidance and advice			Penal provisions	
		Recommendations	Public announcements	Orders	Indirect penalties (Art.104, (i) for violations of orders)	Direct penalties
Class I fluorocarbon filling and recovery operators	Registration as filling and recovery operator (Art.27) and renewal (Art.30)					Imprisonment for up to one year or fine of up to ¥500,000 (Art.103, (i), (ii))
	Notification of change in registration as filling and recovery operator (Art.31, (i))					Fine of up to ¥300,000 (Art.105, (ii))
	Notification of discontinuation, etc. as filling and recovery operator (Art.33, (i))					Non-criminal fine of up to ¥100,000 (Art.109, (ii))
	Compliance with business suspension order (Art.35, (i))					Imprisonment for up to one year or fine of up to ¥500,000 (Art.103, (iii))
	Compliance with filling standards (Art.37, (iii))				Fine of up to ¥500,000	
	Issuing filling certificates and recovery certificates (Art.37(4), Art.39(6))				Fine of up to ¥500,000	
	Registration of filling information, etc. with information processing centers (Art.38(1))				Fine of up to ¥500,000	
	Compliance with recovery standards (during maintenance) (Art.39(3), pursuant to Art.44(2))				Fine of up to ¥500,000	
	Collection of fluorocarbons (during maintenance) (Art.39(5))				Fine of up to ¥500,000	
	Registration of recovery information, etc. with information processing centers (Art.40(1))				Fine of up to ¥500,000	
	Collection of fluorocarbons (during disposal) (Art.44(1))				Fine of up to ¥500,000	
	Compliance with recovery standards (during disposal) (Art.44(2))				Fine of up to ¥500,000	
	Issuing and sending collection certificates and issuing and retaining copies (Art.45(1),(2))				Fine of up to ¥500,000	
	Delivery of fluorocarbons (Art.46(1))				Fine of up to ¥500,000	
	Compliance with transport standards (Art.46(2)) (including persons entrusted)				Fine of up to ¥500,000	
	Creating and retaining records of amounts filled, amounts recovered, etc. (Art.47(1))					Fine of up to ¥200,000 (Art.107, (i))
	Allowing inspection of records of amounts filled, amounts recovered, etc. (Art.47(2))					
	Reporting on amounts filled, amounts recovered, etc. (Art.47(3))					Fine of up to ¥200,000 (Art.107, (ii))
	Class I fluorocarbon recycling operations based on ministerial orders (Art.50(1))					Imprisonment for up to one year or fine of up to ¥500,000 (Art.103, (iv))
	Providing and retaining copies of recycling certificates (Art.59(2))				Fine of up to ¥500,000	
	Providing and retaining copies of destruction certificates (Art.70(2) pursuant to Art.59(2) mutatis mutandis)				Fine of up to ¥500,000	
	Explaining fees for fluorocarbon recovery, etc. (Art.74(2))					
Persons undertaking collection, etc. of Class I specified products	Providing copies of collection certificates (Art.45-2(2))				Fine of up to ¥500,000	Fine of up to ¥300,000 (Art.104, (v))
	Retaining copies of collection certificates (Art.45-2(3))				Fine of up to ¥500,000	Fine of up to ¥300,000 (Art.105, (vi))
	No collection, etc. of Class I specified products without confirming that no fluorocarbons remain in them (Art.45-2(4))				Fine of up to ¥500,000	Fine of up to ¥300,000 (Art.105, (iii))
Class I fluorocarbon recycling operators and fluorocarbon destruction operators	License for recycling and destruction operations (Art.50(1), Art.63(1)), Renewal (Art.52(1), Art.65(1)), and license for changes (Art.53(1), Art.66(1))					Imprisonment for up to one year or fine of up to ¥500,000 (Art.103, (iv)-(vi),(viii)-(x))
	Reporting changes (Art.53(3), Art.66(3))					Fine of up to ¥300,000 (Art.105, (i))
	Reporting discontinuation, etc. (Art.54(1), Art.68)					Non-criminal fine of up to ¥100,000 (Art.109, (ii))
	Compliance with business suspension order (Art.55, Art.67)					Imprisonment for up to one year or fine of up to ¥500,000 (Art.103, (vii),(xi))
	Compliance with fluorocarbon recycling standards (Art.58(1)) (Recycling operators only)				Fine of up to ¥500,000	
	Delivery and collection of fluorocarbons (Art.58(2), Art.69(1)-(3))				Fine of up to ¥500,000	
	Compliance with transport standards (Art.58(3)) (Recycling operators only)				Fine of up to ¥500,000	
	Sending and retaining copies of recycling certificates and destruction certificates (Art.59(1), Art.70(1))				Fine of up to ¥500,000	
	Recording and reporting amounts of recycling and destruction, etc. (Art.60(1),(3), Art.71(1),(3))					Fine of up to ¥200,000 (Art.107, (i), (ii))
	Compliance with fluorocarbon destruction standards (Art.69(4)) (Destruction operators only)				Fine of up to ¥500,000	

Notes: · Regarding the collection of reports (Article 91), failure to file a report and making false statements are punishable by a fine of up to ¥200,000 (Article 107, (iii)) (for fluorocarbon manufacturers and specified product manufacturers, etc., managers of Class I specified products, Class I specified product maintenance operators, persons undertaking disposal, etc. of Class I specified products, primary contractors for specific demolition work, persons entrusted with delivery of Class I fluorocarbons, Class I fluorocarbon filling and recovery operators (including persons entrusted with transportation), persons undertaking collection, etc. of Class I specified products, Class I fluorocarbon recycling operators (including persons entrusted with transportation), and fluorocarbon destruction operators).

· Refusal, obstruction, and avoidance of on-site inspections are punishable by a fine of up to ¥200,000 (Article 107, (iii)) (for fluorocarbon manufacturers and specified product manufacturers, etc., managers of Class I specified products, Class I specified product maintenance operators, persons undertaking disposal, etc. of Class I specified products, primary contractors for specific demolition work, persons entrusted with delivery of Class I fluorocarbons, Class I fluorocarbon filling and recovery operators (including persons entrusted with transportation), persons undertaking collection, etc. of Class I specified products, Class I fluorocarbon recycling operators (including persons entrusted with transportation), and fluorocarbon destruction operators).

· Regarding punishment by fines (excluding those under Article 103, (xii)), cumulative imposition is applicable for corporations (Article 108).

Contact information for inquiries, reports, and consultation

Prefectural government offices in charge

Hokkaido	Zero Carbon Strategy Division, Zero Carbon Promotion Bureau, Economic Affairs Department	011-204-5334	Shiga	Environmental Policy Division, Lake Biwa Environment Department	077-528-3357
Aomori	Resource Recycling Promotion Division, Environment and Energy Department	017-734-9249	Kyoto	Environmental Management Division, General Policy and Environment Department	075-414-4709
Iwate	Environmental Conservation Division, Environment and Community Affairs Department	019-651-3111	Osaka	Industrial Waste Guidance Division, Circular Economy Promotion Office, Environment, Forestry, and Fishery Department	06-6210-9626
Miyagi	Environmental Policy Division, Environment and Community Affairs Department	022-211-2661	Hyogo	Water and Air Division, Environmental Department	078-341-7711
Akita	Environmental Conservation Division, Environment and Community Affairs Department	018-860-1603	Nara	Water and Air Environment Division, Environment and Forest Department	0742-27-8734
Yamagata	Water and Air Environment Division, Environment and Energy Department	023-630-2339	Wakayama	Environmental Management Division, Environmental Policy Bureau, Environment and Community Affairs Department	073-441-2688
Fukushima	Water and Air Environment Division, Environment and Energy Department	024-521-7261	Tottori	Circular Economy Promotion Division, Nature Coexistence Society Bureau, Community Affairs and Environment Department	0857-26-7562
Ibaraki	Environmental Division, Community Affairs and Environment Department	029-301-2956	Shimane	Environmental Policy Division, Environment and Community Affairs Department	0852-22-5111
Tochigi	Environmental Protection Division, Environmental and Forest Department	028-623-3188	Okayama	Environmental Planning Division, Environment and Culture Department	086-226-7299
Gunma	Environmental Protection Division, Environmental and Forest Department	027-226-2832	Hiroshima	Environmental Protection Division, Environment and Community Affairs Department	082-513-2920
Saitama	Air Environment Division, Environmental Department	048-830-3058	Yamaguchi	Air and Chemical Substances Environment Group, Environmental Policy Division, Environment and Community Affairs Department	083-933-3034
Chiba	Yard and Surplus Soil Measures Division, Environment and Community Affairs Department	043-223-4658	Tokushima	Resource Circulation Division, Community Affairs and Environment Department	088-621-2278
Tokyo	Environmental Protection Division, Environmental Department, Environment Bureau	03-5388-3471	Kagawa	Environmental Management Division, Environment and Forest Department	087-832-3219
Kanagawa	Environment Division, Environment Department, Environmental and Agriculture Administration Bureau	045-285-0854	Ehime	Environment and Zero Carbon Promotion Division, Environment Bureau, Community Environment Department	089-912-2347
Niigata	Environmental Policy Division, Environment Bureau	025-285-5511	Kochi	Environmental Division, Forestry and Environment Department	088-821-4524
Toyama	Environmental Policy Division, Community Affairs, Environment, and Culture Department	076-444-8727	Fukuoka	Water and Air Environment Division, Environment Department	092-643-3360
Ishikawa	Environmental Policy Division, Community Affairs and Environment Department	076-225-1463	Saga	Ariake Sea Regeneration and Environment Division, Community Environment Department	0952-25-7774
Fukui	Environmental Policy Division, Energy and Environment Department	0776-20-0303	Nagasaki	Community Environment Division, Community Affairs and Environment Department	095-895-2356
Yamanashi	Forestry and Environmental Policy Division, Forestry and Environment Department	055-223-1506	Kumamoto	Circular Economy Promotion Division, Environment and Community Affairs Department	096-333-2278
Nagano	Resource Circulation Promotion Division, Environmental Department	026-235-7164	Oita	Circular Economy Promotion Division, Community Affairs and Environment Department	097-506-3126
Gifu	Environmental Management Division, Environment, Energy and Community Affairs Department	058-272-1111	Miyazaki	Environment Management Division, Environment and Forest Department	0985-26-7085
Shizuoka	Environmental Policy Division, Environment Bureau, Community Affairs and Environment Department	054-221-3781	Kagoshima	Waste and Recycling Management Division, Environment and Forestry Department	099-286-2594
Aichi	Water and Air Environment Division, Environmental Policy Department, Environment Bureau	052-954-6215	Okinawa	Environmental Protection Division, Environmental Department	098-866-2236
Mie	Climate Change Countermeasures Division, Environmental Coexistence Bureau, Environment and Community Affairs Department	059-224-2368			

For inquiries concerning the Fluorocarbon Emissions Control Act

Ministry of the Environment

Office of Fluorocarbons Control Policy,
Climate Change Policy Division,
Global Environment Bureau
1-2-2 Kasumigaseki, Chiyoda-ku, Tokyo 100-8975
Tel. 03-3581-3351 (main)
<https://www.env.go.jp/seisaku/list/ozone.html>

Ministry of Economy, Trade and Industry

Fluoride Gases Management Office,
Chemical Management Policy Division,
Industrial and Product Safety Policy Group
1-3-1 Kasumigaseki, Chiyoda-ku, Tokyo 100-8901
Tel. 03-3501-1511 (main)
https://www.meti.go.jp/policy/chemical_management/ozone/index.html

For inquiries concerning primary contractors for specific demolition work

The list of construction business license

【URL】 https://www.mlit.go.jp/totikensangyo/const/1_6_bt_000088.html

The list of the Construction Material Recycling Act and demolition business registration

【URL】 https://www.mlit.go.jp/sogoseisaku/region/recycle/d06link/index_0601link.htm

General inquiries on the Construction Business Act (construction business license) and the Construction Material Recycling Act (demolition business registration)

Ministry of Land, Infrastructure, Transport and Tourism

Construction Industry Division, Land Economy and Construction Industries Bureau
2-1-3 Kasumigaseki, Chiyoda-ku, Tokyo 100-8918 Tel. 03-5253-8111 (main)
https://www.mlit.go.jp/totikensangyo/const/1_6_bt_000283.html

The list of Class I fluorocarbon filling and recovery operators

You can obtain the list from a prefectural office of your interest.

The list of Class I fluorocarbon recycling operators and fluorocarbon destruction operators

【URL】 <https://www.env.go.jp/earth/ozone/cfc.html>

For more details, please visit the website of the Fluorocarbon Emissions Control Act.

<https://www.env.go.jp/earth/furon/>