

Viet Nam -Japan Environment Week 2021
Information exchange seminar on development of standard for
refrigerant management in Viet Nam-



Japan's Legal Framework

provided by

the Act on Rational Use and Proper Management of Fluorocarbons

17 December 2021

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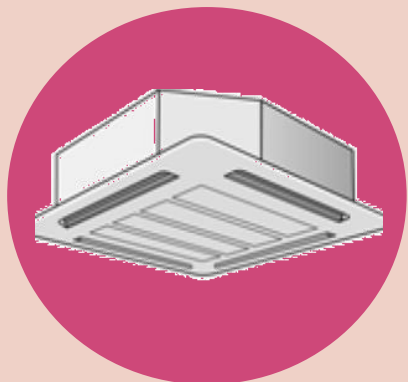
- 1. Legislation Structure on Controlling the emission of Fluorocarbons**
- 2. Viet Nam-Japan Cooperation on Fluorocarbons Life Cycle Management**

Background and History of legislation and regulation



- In order to further strengthen the emission control of fluorocarbons that cause ozone depletion and climate change, Japan has developed several related legislation since 1990s. (Fluorocarbons = CFC, HCFC, and HFC)

1987	Agreement of the original Montreal Protocol
1988	Ozone Layer Protection Law In order to implement obligation to reduce production and consumption of fluorocarbons based on the Montreal Protocol, manufactures and imports of fluorocarbons are controlled.
1995	Completed phase out of CFC production
1998	Home Appliance Recycling Law
2001	Law Concerning the Recovery and Destruction of Fluorocarbons
2002	End-of-life Vehicle Recycling Law
2015	Act on Rational Use and Proper Management of Fluorocarbons Renamed from the Recovery and Destruction of Fluorocarbons Law. Aiming for restraining emission of fluorocarbons, the Act provides comprehensive approaches throughout the lifecycle of fluorocarbons, including periodical inspection of commercial refrigeration and air-conditioning equipment using fluorocarbons, in addition to recovery of fluorocarbons from these equipment at the time of disposal.
2019	Revised Act on Rational Use and Proper Management of Fluorocarbons Further strengthened the obligations of equipment managers.



Commercial Refrigerators & A/Cs

Act on Rational Use and Proper Management of Fluorocarbons



Automobile A/Cs

End-of-life Vehicle Recycling Law



Domestic Refrigerators and A/Cs (+TVs, Washing Machines)

Home Appliance Recycling Law

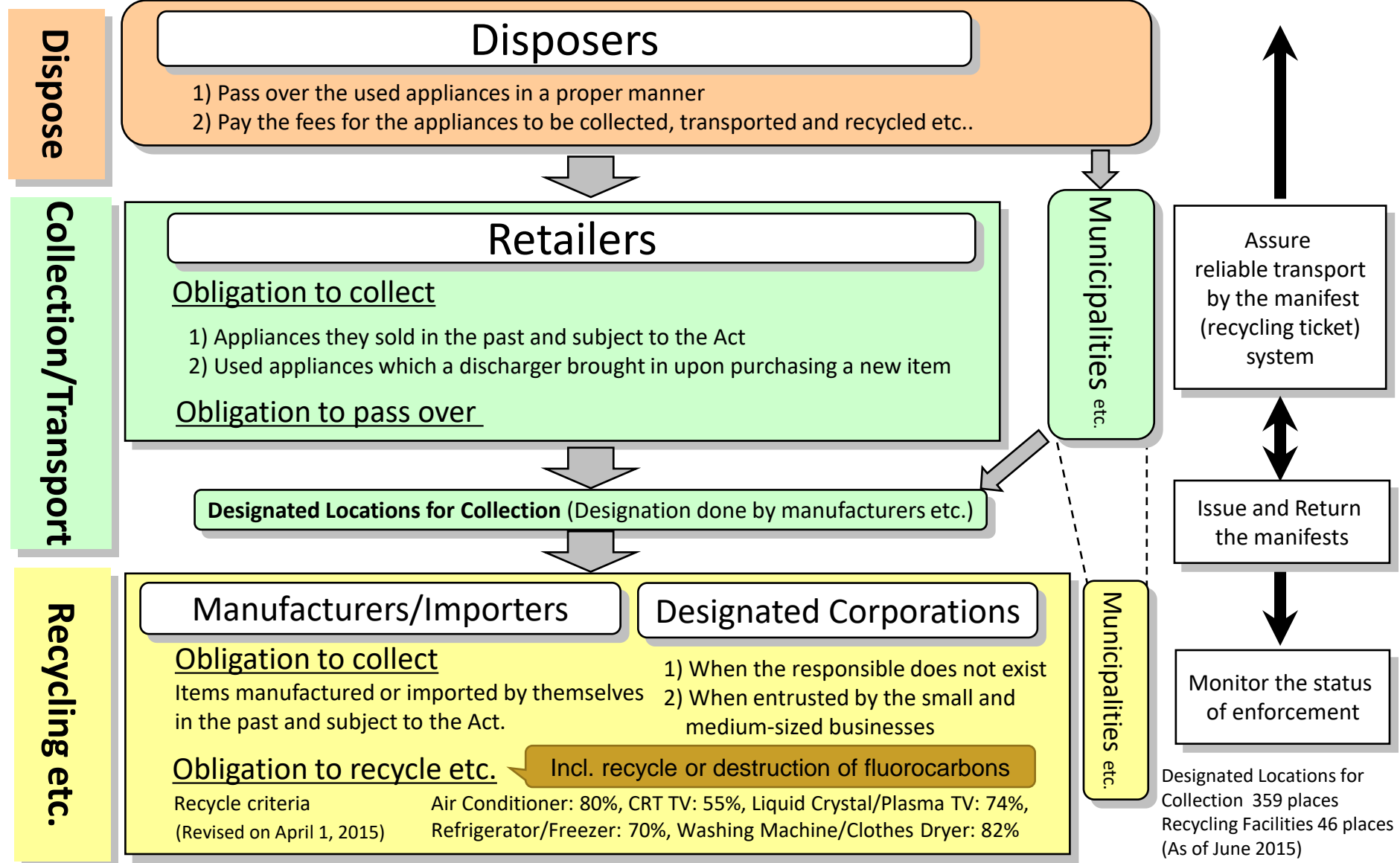
Home Appliance Recycling Law



Appliances to be recycled:
 Conditioner, TV(CRT, Liquid Crystal*, Plasma TV)
 Refrigerator/Freezer, Washing Machine/Clothes Dryer

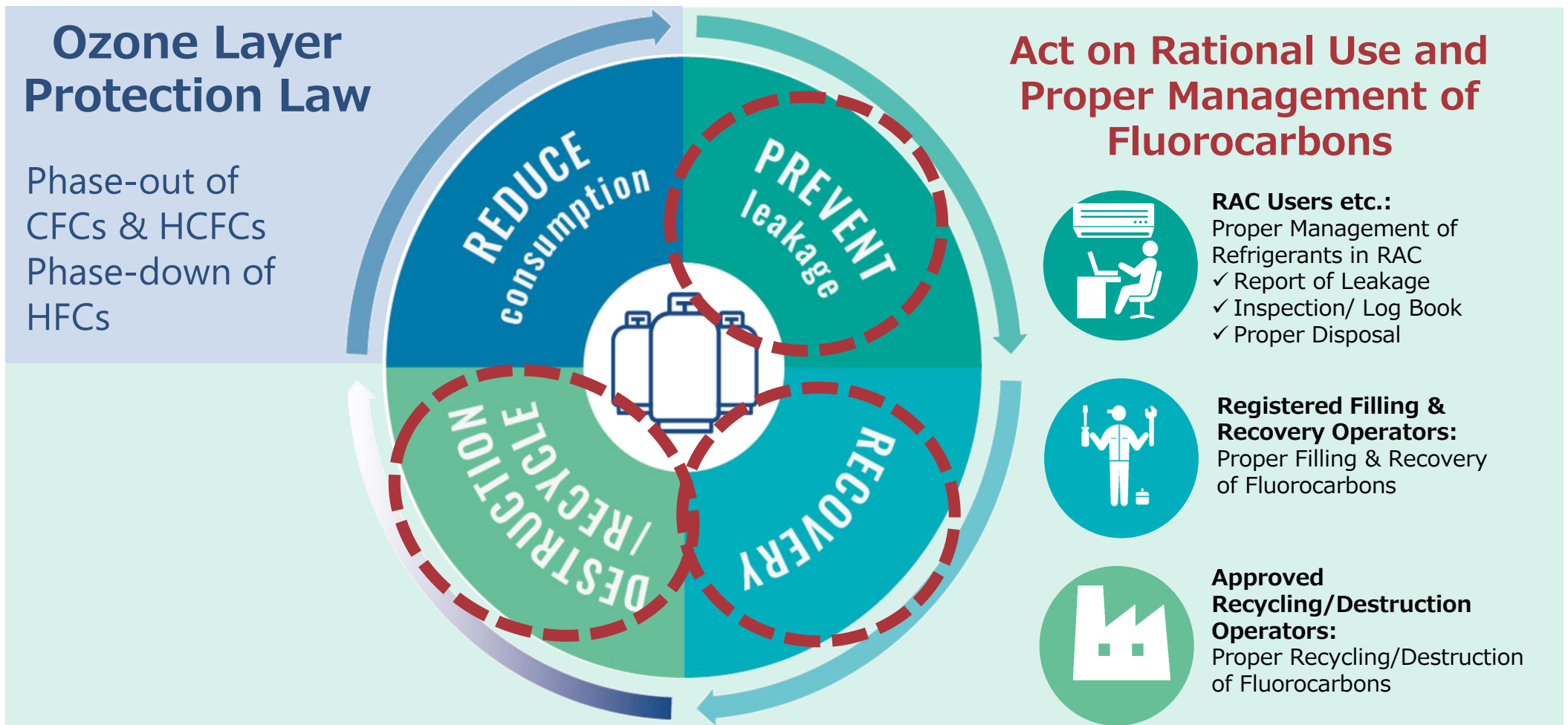
(Official announcement in June 1998, Full enforcement in April 2001)

* Excluding portable TVs,
 Car TV units and TVs for bathrooms



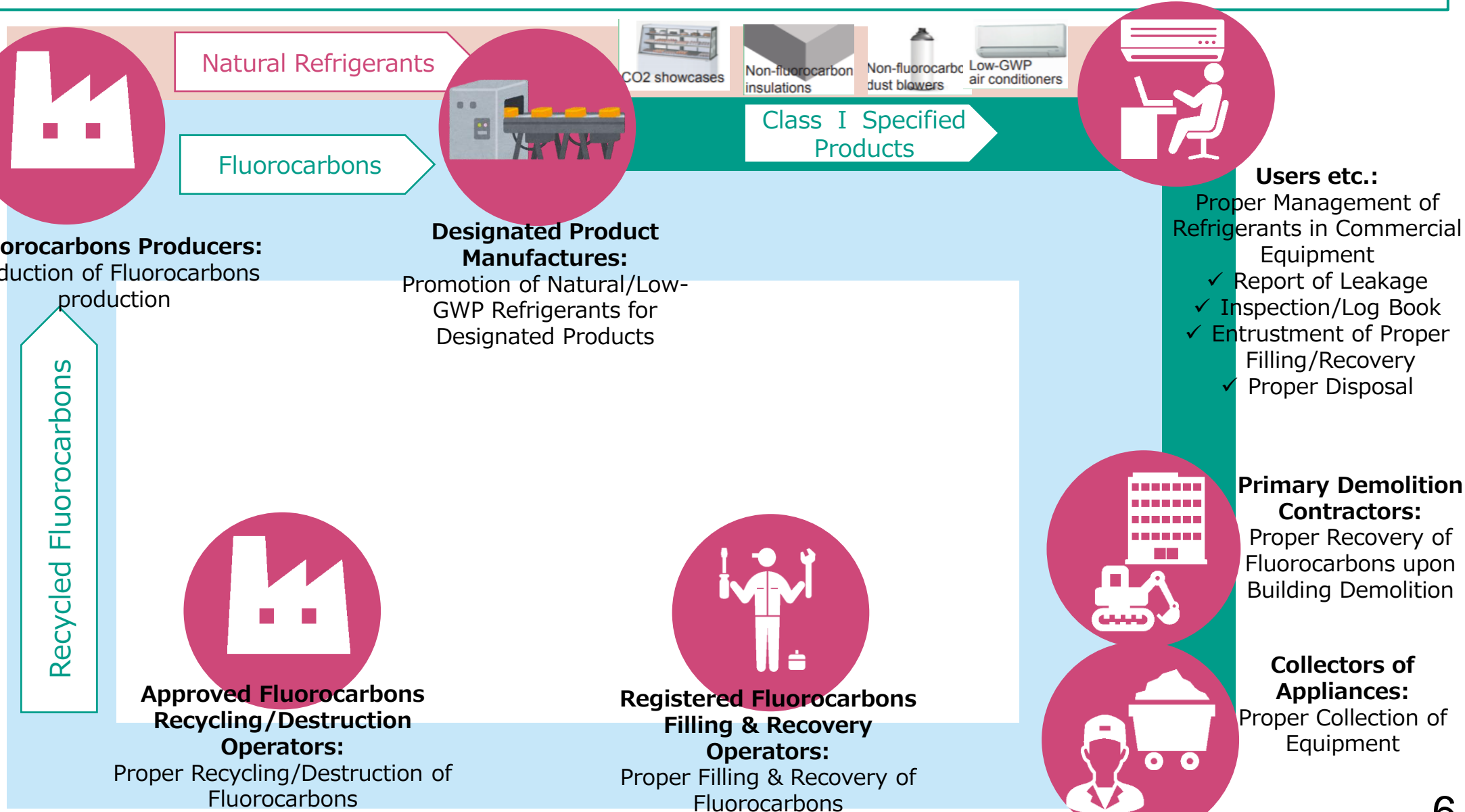
HFCs Regulations in Japan

- Regulating HFCs from upstream to downstream, life cycle management of HFCs, is effective in achieving its smooth phase-down and emission reduction.



Act on Rational Use and Proper Management of Fluorocarbons

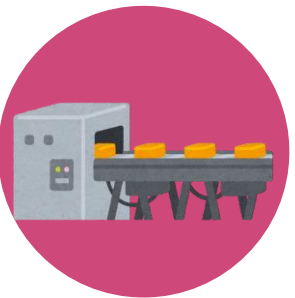
- Enhancing the Lifecycle of Fluorocarbons in **Commercial Equipment**
- Promotion of Natural/Low-GWP Refrigerants for Designated Products





Fluorocarbons gases producers

Producers and importers of fluorocarbons gases must strive to reduce HFC consumption to be produced and imported in accordance with the government's estimation on HFC consumption reduction.



Designated product manufacturers

Manufacturers and importers of designated products must strive to achieve the lowering GWP targets* in manufacture and import of designated products.

* The targets, which include lowering GWP and year, are set by the product categories (such as home a/c, commercial a/c, and condensing unit). The assessment is conducted based on the weighted average GWP.

Major responsibilities of stakeholders (2/4)



Users etc. of commercial refrigeration and A/C equipment

- Users of specified products carry out inspection of the equipment in accordance with the management criteria for users.
- Users must report calculated leakage amount to the national government when the calculated amount of the leakage is 1,000t-CO₂ eq of fluorocarbons gases or more.
- When filling equipment with fluorocarbons or recovering, users must entrust registered filling/recovery operators to fill with or recover fluorocarbons gases.
- When disposing of equipment, users (disposers) must entrust registered filling/recovery operators to recover fluorocarbons gases from the equipment. Disposers also must issue recovery certificates to collectors of appliances.
- Users/disposers of the appliances must keep inspection log books, certificates of gas destruction/recycle, entrustment certificates for 3 years after the disposal.



Registered Fluorocarbons gases filling & recovery operators

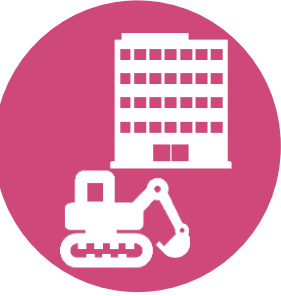
- Fluorocarbons gases filling & recovery operators must be registered to local governments.
- Registered filling & recovery operators must comply with the criteria in filling with or recovering fluorocarbons gases.
- If they do not recycle recovered the gases by themselves, they must deliver the gases to an approved fluorocarbons gases recycling/destruction operator.




Approved Fluorocarbons gases recycling/destruction operators

- Fluorocarbons gases recycling/destruction operators must be approved by the government upon their operation.
- Approved recycling/destruction operators must recycle or destroy fluorocarbons recovered and delivered by filling & recovery operators in accordance with the standards for the recycling/destruction of the gases.

Primary Demolition Contractors

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- Demolition contractors must confirm presence/absence of the specified products upon the building demolition and must explain the confirmation results to their client provided with the documents.
 - In case of the products presence in the building to be demolished, the contractors must either make their clients to recover fluorocarbons or adjust the demolition contract so that it includes coordination on fluorocarbons recovery.

Collectors of the Appliances



(Such as Iron scrap wholesalers, nonferrous metal scarp wholesalers, Industrial waste collectors & transporters, and Industrial waste disposal operators)

- Collectors of the appliances must not collect the appliances without the certificate of fluorocarbons recovery.
- Collectors must receive the copy of the recovery certificate issued by the appliances disposer.



14 State/Int'l Organization Partners

Chile, France, Japan, Maldives, Mongolia, New Zealand, The Philippines, Singapore, The United Kingdom, Vietnam, The World Bank, CCAC, ADB, and UNIDO (as of Dec '21)

- Japan-led **initiative on Fluorocarbons Life Cycle Management (IFL)**, launched in '19, **is actively working on to promote awareness on the importance on the refrigerant life cycle management globally.** The IFL also aims to facilitate innovation and mutual collaborations among its partners. Such as...
 - ✓ **Cooperation on strengthening policy and measures**
 - ✓ **Capacity building trainings**
 - ✓ **JCM projects on F-gas destruction**

Viet Nam – Japan Cooperation on Fluorocarbons Life Cycle Management

- **At Japan-Viet Nam Summit Meeting**, both parties consented on cooperation on Fluorocarbons Life Cycle Management. Also, **ministers of the MOEJ and the MONRE(Viet Nam)** consented to enhance their cooperation in *“supporting formulation of regulations, capacity development of policy makers and technicians, and continued utilization of the JCM for advancing lifecycle management of fluorocarbons, based on the partnership”* under the IFL. (Nov 24, 2021)
- **UNFCCC COP26 Official Side Event** was organized at Glasgow UK by the MOEJ and Climate and Clean Air Coalition (CCAC), *“Sustainable and Efficient Cooling for a Warming Planet: Challenges, Opportunities, and Solutions”*, and the MONRE, Viet Nam Representative provided updated efforts on the Revised Law on Environmental Protection and draft Decree on GHG management and ozone layer protection, to introduce the concept of life cycle management in its legal system.



Viet Nam – Japan Cooperation on Fluorocarbons Life Cycle Management



JFY2021 (August 2021 thru March 2022)

The MONRE is developing standard/specifications (TCVN) for fluorocarbons life cycle management (collection, recycling and destruction of refrigerants), and the MOEJ provide technical support.

August: Scoping discussion and developed TOR

November: Sharing the progress of work including

- ✓ Identification of gap for standard/specification
- ✓ Developed roadmap for work

December : Viet Nam -Japan Environment Week 2021

Information exchange seminar on development of standard for refrigerant management in Viet Nam

March 2022

Expected Output : A technical report via MOEJ support will be delivered to facilitate the further work on development of standard/specifications (TCVN).



Provides a basis for operationalizing fluorocarbons life-cycle management and further cooperation between Viet Nam and Japan.

