

***Responsible use of HFCs –  
Workshop and Demonstration,  
Brussels July 27, 2004***



# ***Refrigerant Recovery for Recycling, Reclamation or Destruction***

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# Facts about Refrigerants

- ◆ Refrigerants are contained and not consumed by the Refrigeration System
- ◆ Due to their stability refrigerants are especially suitable for Recycling and Reclamation
- ◆ The Refrigerant itself is a valuable material

# Some Definitions

## Recovery

Removal of refrigerant from a system into a closed vessel

for

## Recycling

Reuse of the same refrigerant in the same refrigeration system

## Reclamation

Cleaning of refrigerant to meet official standard specification

## Destruction

Destruction/Separation by thermal cracking of the molecules



## Reuse

Refrigerant is reused after maintenance or repairs

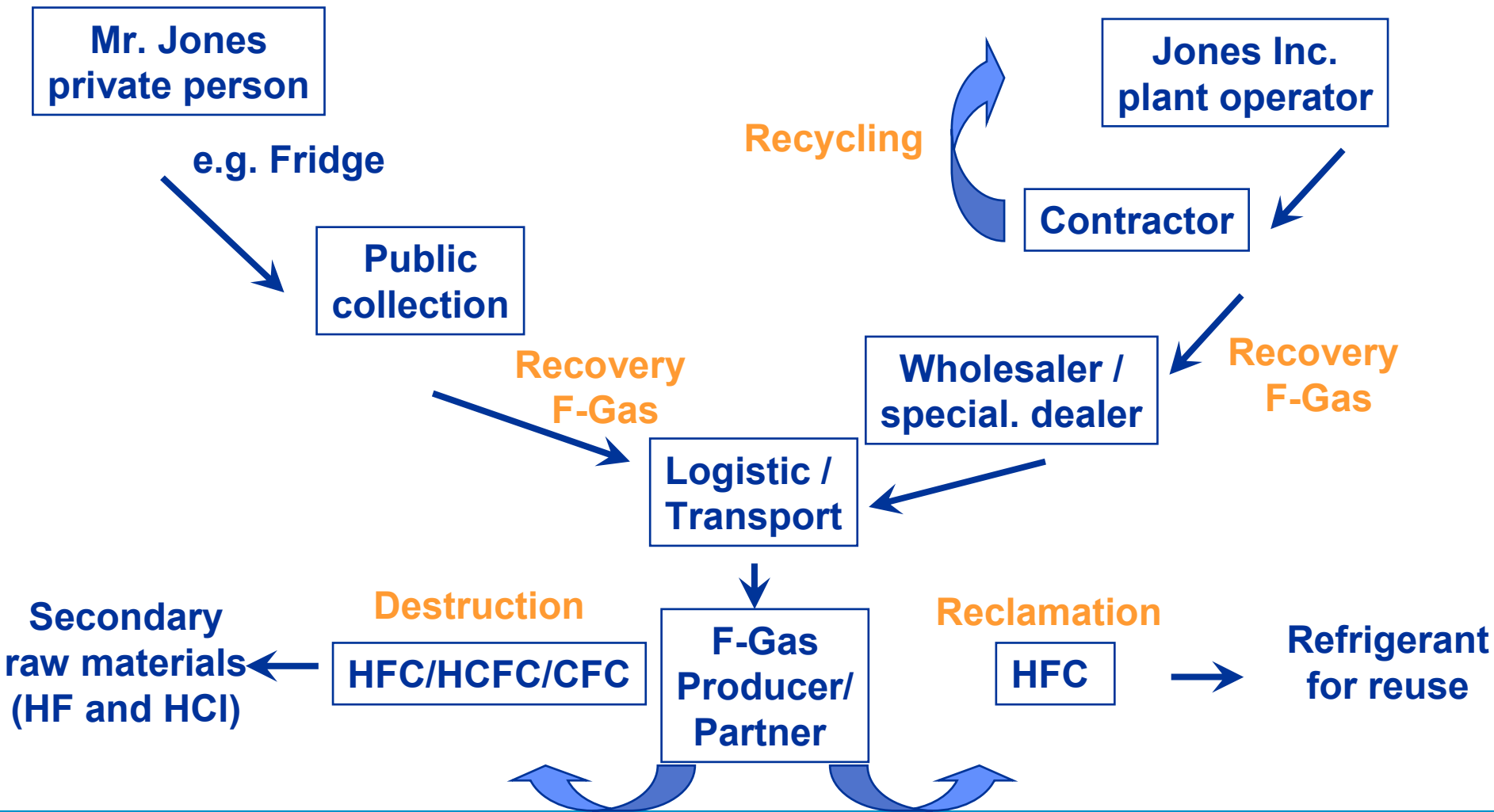
## Reuse

Refrigerant can be used like virgin material

## Reuse

HCl and HF can be recovered and reused as raw material

# Overview Recycling Systems



# Recycling

-available machines-

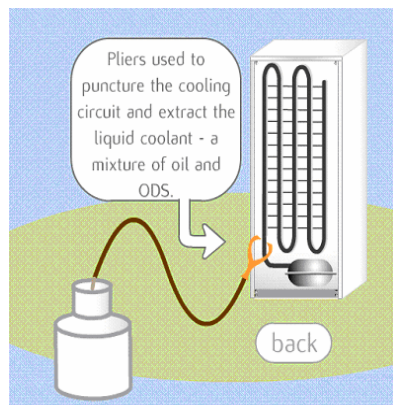
Recovery / Recycling

Reclamation



# Example: Recovery for destruction purpose

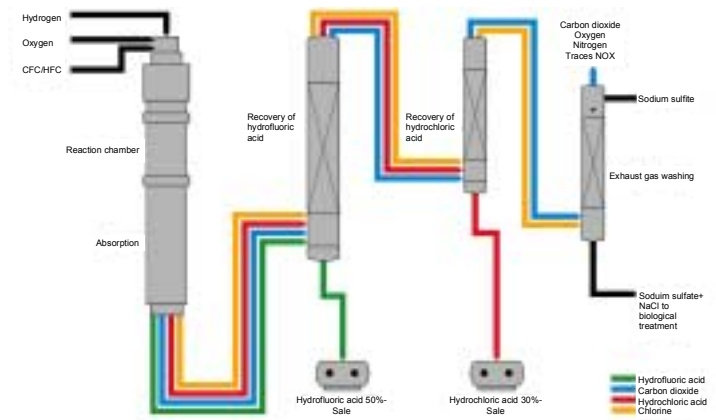
## Step 1: Recovery of Refrigerant / Oil



## Step 2: Transport / Refilling of cylinders



## Step 3: Thermal destruction / separation



# CONCLUSIONS

- ◆ **Professional End of life management is key**
- ◆ **Recycling, reclamation and destruction are already operational today**
- ◆ **Reduction of bureaucratic hurdles regarding handling and cross-border transport of used refrigerants is essential**