



THE AIM ACT: MANAGING HFCs & SUBSTITUTES

Stakeholder Meeting

March 16, 2023

Outline

- Welcome
- AIM Act Overview
- Management of HFCs and Substitutes
- Reclamation Background
- Discussion





WELCOME

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Director, Stratospheric Protection Division



OVERVIEW

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Stratospheric Protection Division

Objectives

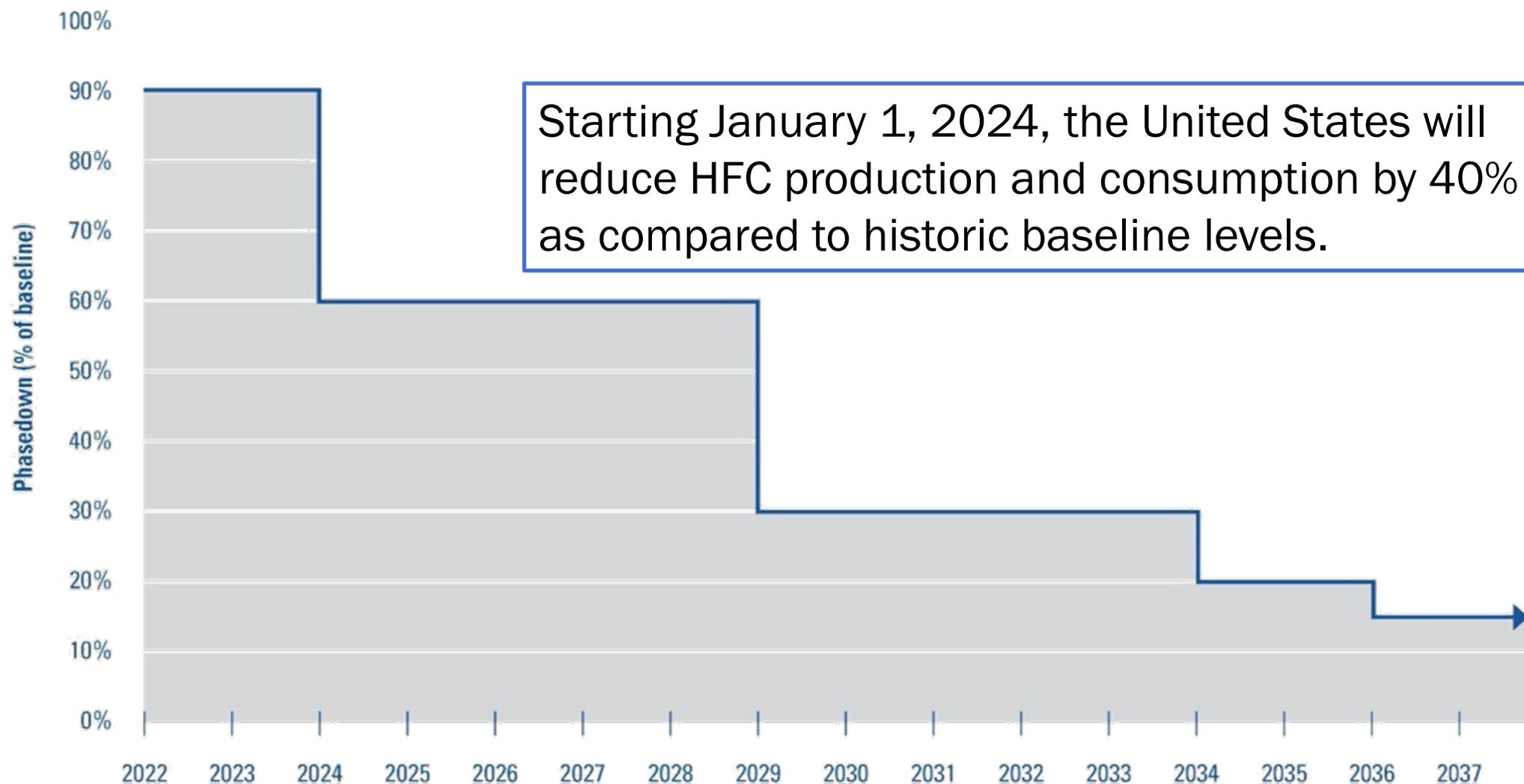
- Provide background and update on the AIM Act, specifically its rule development under subsection (h)
- Share understanding and invite information on current reclamation practices
- Provide opportunity for discussion on challenges to increased reclamation of HFCs

Background

- The AIM Act authorizes EPA to establish three main types of regulatory programs
 - Phase down production and consumption of HFCs
 - Facilitate technology transition through sector-based restrictions on HFCs
 - Issue certain regulations for purposes of maximizing reclamation and minimizing releases of HFCs and their substitutes from equipment



HFC Phasedown Schedule



Subsection (h): Management of HFCs and Substitutes

- **General**

- Subsection (h) directs EPA to establish regulations to control, where appropriate, practices, processes, or activities regarding the servicing, repair, disposal, or installation of equipment for purposes of:
 - Maximizing the reclamation and minimizing the release of HFCs from equipment
 - Ensuring the safety of technicians and consumers

- **Reclaiming**

- Provides for the Agency to consider using authority to increase opportunities for the reclaiming of regulated substances used as refrigerants
- Requires that recovered refrigerant must be reclaimed before ownership changes, with a few exceptions

- **Coordination**

- EPA may coordinate with any other similar EPA regulations (e.g., CAA 608 and 609 regulations)

- **Inapplicability**

- Subsection (h) does not apply to HFCs or their substitutes contained in foams

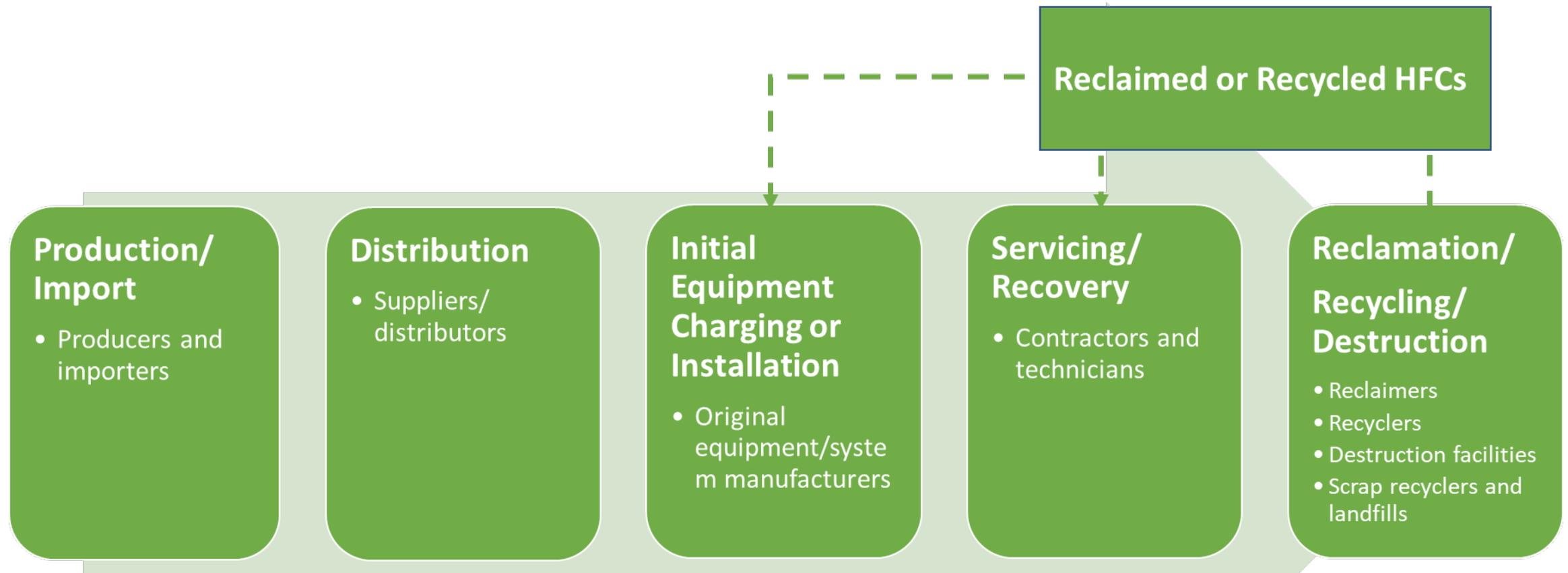
Current CAA Title VI Requirements for HFCs and Substitutes

- Existing requirements under CAA Title VI, e.g., Sections 608 and 609 apply to HFCs and substitutes (e.g., HFOs), including:
 - Servicing practices
 - Recovery and recycling equipment
 - Venting prohibition
 - Safe disposal
 - Sales restriction
 - Technician training and certification
 - Recordkeeping
- Leak repair requirements only apply to appliances that contain an ozone-depleting refrigerant
- Additional requirements include use conditions under the SNAP program

Current CAA Title VI Requirements for Fire Suppression Emissions Reduction

- The SNAP program lists HFCs for fire suppression
- There are no Section 608 requirements for HFC fire suppression agents
- Section 608 regulations addressing emissions reduction for halons, include:
 - Ban on halon blends
 - Intentional releases
 - Technician training
 - Proper disposal

General Flow Chart for HFCs Used as Refrigerants and Fire Suppressants



Stakeholder Engagement and Next Steps

- Notice of Data Availability (NODA) and draft report on U.S. reclamation market published October 17, 2022
- First stakeholder meeting, held on November 9, 2022, provided opportunities for input as EPA develops the proposed rule
 - participants from industry, reclaimers, associations, federal government, eNGOs, and states
- Plan is to issue a proposed rule in summer 2023

Questions for Input

- What challenges and opportunities do reclaimers anticipate as HFCs are phased down?
- Do you anticipate a ramp up in the amount HFCs available for reclamation? Starting in 2024? 2029?
- What are common barriers to increasing the amount of refrigerant recovered and reclaimed?
- Are there barriers to using reclaimed HFCs for initial charge for factory or field charged equipment? Are there barriers to using reclaimed HFCs for servicing existing RACHP equipment?
- What barriers, if any, are there to using recycled HFCs in fire suppression for initial installation or servicing? Does the industry make a distinction between recycled and reprocessed?

Questions for Input (cont.)

- Should there be a limit on the amount of virgin refrigerant that can be included in *reclaimed* refrigerant? E.g., California limits virgin HFCs to 15% by weight.
- Should reclamation equipment be certified to meet a certain performance level?
- Is refrigerant recovered from MVAC systems reclaimed?
- Are cylinders containing reclaimed material labeled to distinguish from virgin material?
- Could labels be used to promote the use of reclaimed HFCs?

Reminders

Unless called to speak,
please keep your speaker
on **MUTE**

- If joining by phone, unmute by entering ***6**

During Q&A session

- Raise your **HAND** to ask to speak 
- Open **CHAT** to submit questions or ask to speak 
- Please indicate your **NAME** and **AFFILIATION**
- Please be mindful of time to allow others opportunity to ask questions or speak

If your internet
connection is unstable

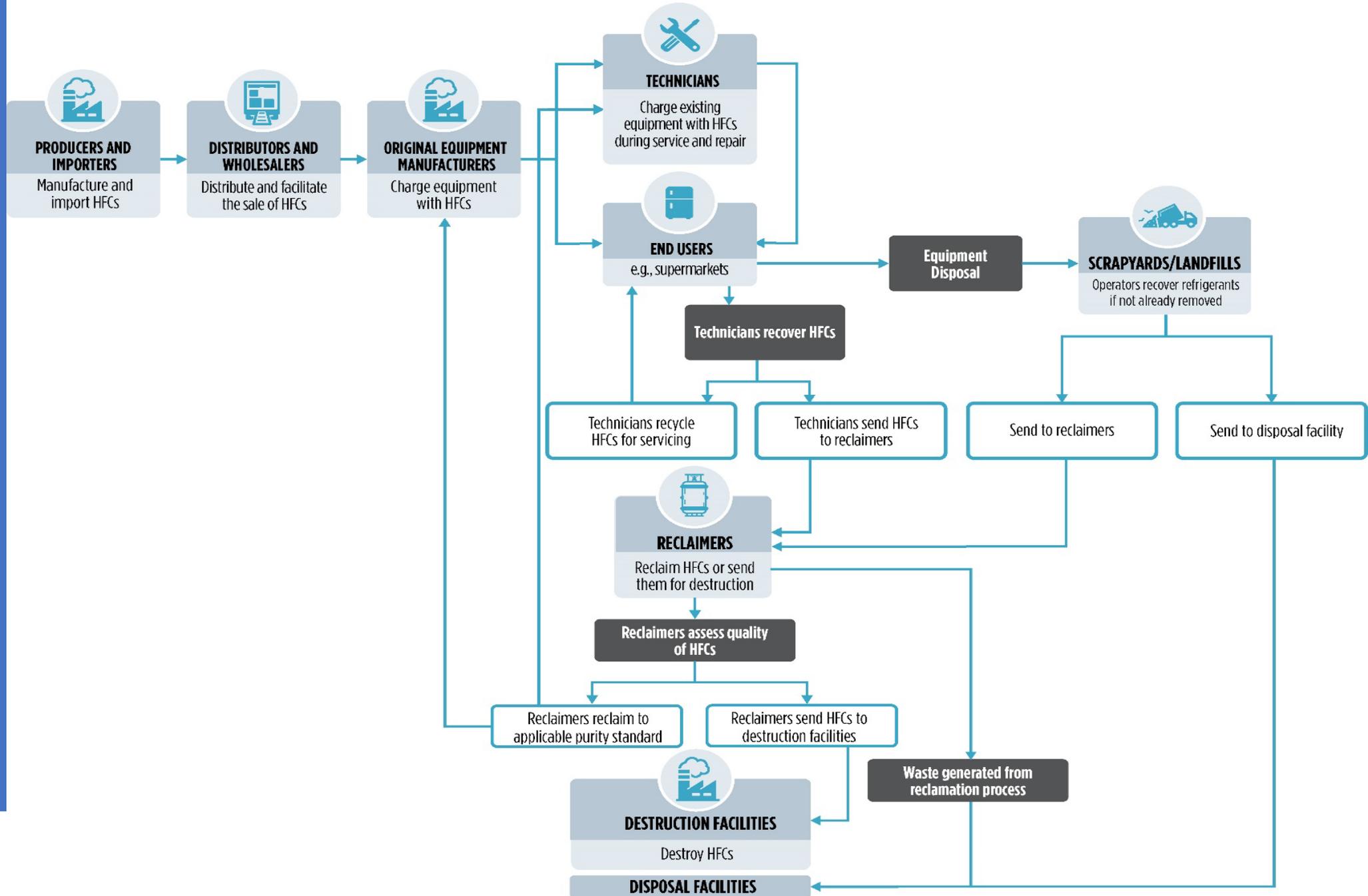
- Turning off your **VIDEO** might help

Additional Background Slides

Resources

- Protecting Our Climate by Reducing Use of HFCs
 - <https://www.epa.gov/climate-hfcs-reduction>
- Managing HFCs and Substitutes
 - <https://www.epa.gov/climate-hfcs-reduction/background-management-hfcs-and-substitutes-under-subsection-h-aim-act>
- Draft report, *Analysis of the U.S. Hydrofluorocarbon Reclamation Market: Stakeholders, Drivers, and Practices*
 - <https://www.epa.gov/climate-hfcs-reduction/regulatory-actions-and-notice-related-subsection-h-aim-act>
- Phasedown of HFCs: Issuing Allowance Allocations
 - <https://www.epa.gov/climate-hfcs-reduction/phasedown-hydrofluorocarbons-hfcs-issuing-allowance-allocations>
- Summary of Refrigerant Reclamation Trends
 - <https://www.epa.gov/section608/summary-refrigerant-reclamation-trends>

General Flow Chart of HFCs Through Industry, Including Recovery and Reclamation



Subsection (h): Managing HFCs and Substitutes

(h) Management of regulated substances

(1) In general

For purposes of maximizing reclaiming and minimizing the release of a regulated substance from equipment and ensuring the safety of technicians and consumers, the Administrator shall promulgate regulations to control, where appropriate, any practice, process, or activity regarding the servicing, repair, disposal, or installation of equipment (including requiring, where appropriate, that any such servicing, repair, disposal, or installation be performed by a trained technician meeting minimum standards, as determined by the Administrator) that involves-

- (A) a regulated substance;
- (B) a substitute for a regulated substance;
- (C) the reclaiming of a regulated substance used as a refrigerant; or
- (D) the reclaiming of a substitute for a regulated substance used as a refrigerant.



Subsection (h): Managing HFCs and Substitutes (cont.)

(2) Reclaiming

(A) In general

In carrying out this section, the Administrator shall consider the use of authority available to the Administrator under this section to increase opportunities for the reclaiming of regulated substances used as refrigerants.

(B) Recovery

A regulated substance used as a refrigerant that is recovered shall be reclaimed before the regulated substance is sold or transferred to a new owner, except where the recovered regulated substance is sold or transferred to a new owner solely for the purposes of being reclaimed or destroyed.

(3) Coordination

In promulgating regulations to carry out this subsection, the Administrator may coordinate those regulations with any other regulations promulgated by the Administrator that involve-

(A) the same or a similar practice, process, or activity regarding the servicing, repair, disposal, or installation of equipment; or

(B) reclaiming.

(4) Inapplicability

No regulation promulgated pursuant to this subsection shall apply to a regulated substance or a substitute for a regulated substance that is contained in a foam.

Subsection (h): Managing HFCs and Substitutes (cont.)

(5) Small business grants

(A) Definition of small business concern

In this paragraph, the term "small business concern" has the same meaning as in section 632 of title 15.

(B) Establishment

Subject to the availability of appropriations, the Administrator shall establish a grant program to award grants to small business concerns for the purchase of new specialized equipment for the recycling, recovery, or reclamation of a substitute for a regulated substance, including the purchase of approved refrigerant recycling equipment (as defined in section 609(b) of the Clean Air Act (42 U.S.C. 7671h(b))) for recycling, recovery, or reclamation in the service or repair of motor vehicle air conditioning systems.

(C) Matching funds

The non-Federal share of a project carried out with a grant under this paragraph shall be not less than 25 percent.

(D) Authorization of appropriations

There is authorized to be appropriated to carry out this paragraph \$5,000,000 for each of fiscal years 2021 through 2023.