The **American Innovation and Manufacturing (AIM) Act** was signed into law in 2020. The **AIM Act** mandates that the US EPA limits the consumption and production of hydrofluorocarbons (HFCs) including refrigerants.

### Aim Act Phasedown Schedule

**Phase down of HFCs (equivalent GWP) by 85% over 15-years**

![Graph showing phasedown schedule](https://www.epa.gov/climate-hfc-reduction/aim-act)

The phasedown begins in 2022!

Reductions in production and consumption are based on 2011-2013.

- 2022: 10% reduction
- 2024: 40% reduction
- 2029: 70% reduction
- 2034: 80% reduction
- 2036: 85% reduction

**Consumption = Production + Imports - Exports**

### AIM Act: The “To Do List”

- Establish the phasedown program
- Address petitions for sector transitions
- Develop a refrigerant management program including recovery and reclaim

**2021 EPA final rule** established an *allowance allocation* and *trading program* for the 18 most commonly used HFCs. This will limit the availability of newly produced, higher-GWP refrigerants.

[https://www.epa.gov/climate-hfc-reduction/](https://www.epa.gov/climate-hfc-reduction/)
**EPA HFC Allowance Allocation Final Rule**

- HFC supply is reduced over time and *allocated* to importers and producers.
- Production and imports in 2022 are prohibited without allowances.
- Allowances were established for 2022 and 2023, similar to the quota process used for R-22.
- Allowance methodologies may change after 2024.
- Currently, allocations currently do not apply to products that contain HFCs and that are imported into the US.

---

**Some Other Details about the AIM Act**

- Allowances* allocated for 90% of the baseline for 2022 and 2023.
- Next stepdown is significant: 60% of the baseline in 2024.
- Producers hold production and consumption allowances.
- Importers only need to hold consumption allowances.

*An allowance is based on an exchange value that is identical to CO2-equivalent, which is often seen as GWP (global warming potential) values in HFCs.

---

**Reducing Demand to Balance Supply Options**

- Stakeholders should take the HFC phasedown into consideration when installing new equipment (i.e., transition to lower-GWP refrigerants when possible).
- Consider smaller charge sizes in new equipment.
- Retrofit to lower-GWP A1 refrigerant if approved by EPA and manufacturers.
- Reduce leaks.
- Use recovered/reclaimed refrigerants.
Manufacturers will transition to lower-global warming potential refrigerants.

Many new, lower-GWP refrigerants will have different safety classifications.

R-410A is ASHRAE A1 refrigerant and other lower-GWP refrigerants may be ASHRAE A2L.

<table>
<thead>
<tr>
<th>End-Use</th>
<th>Substitutes</th>
<th>Listing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air-Conditioning (SNAP Rule 23)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential and light commercial air</td>
<td>R-32, R-452B, R-454A,</td>
<td>Acceptable Subject to Use</td>
</tr>
<tr>
<td>conditioning and heat pumps (New)</td>
<td>R-454B, R-454C, R-457A</td>
<td>Conditions</td>
</tr>
<tr>
<td>Air-Conditioning (SNAP Rule 19)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-contained room air conditioners</td>
<td>R-32</td>
<td>Acceptable Subject to Use</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Conditions</td>
</tr>
</tbody>
</table>

AHRI, along with other industry stakeholders have been preparing for this transition for over a decade.

AHRI, ASHRAE, CARB, and DOE have spent over $7 million in research evaluating the impacts relating to the transition.

Many new low-GWP refrigerants are ASHRAE A2L.
EPA must approve refrigerants use by application.

- Most new low-GWP refrigerants are **ASHRAE A2L**.
- **EPA considers** safety, toxicity, flammability, and environmental factors before approving refrigerants.
- EPA requires compliance with safety standards.
- All refrigerants are subject to safety standards and building codes.

**Existing R-410A equipment does not need to be replaced prematurely and can still be serviced through its useful life.**

**What’s different?**

- Low-GWP refrigerants include some lower flammability (ASHRAE A2L) refrigerants.

**What do I need to do about it?**

- Stakeholders must be aware and properly trained in risk mitigation due to lower flammability properties associated with new refrigerants.

[https://www.ahrinet.org/resources/research/ahri-flammable-refrigerants-research-initiative](https://www.ahrinet.org/resources/research/ahri-flammable-refrigerants-research-initiative)