The AIM Act Explained for HVAC Owners & Operators

What is the AIM Act?

The 2020 **American Innovation and Manufacturing (AIM) Act** is a federal law designed to reduce the use of hydrofluorocarbons (HFCs). The law's three programs give the U.S Environmental Protection Agency (EPA) the authority to:

- **HFC Allowance Allocation Program**: Reduce HFC production and consumption by 85% by 2036.
- **Technology Transitions Program**: Transition new equipment to lower-GWP refrigerants and technologies.
- **Emissions Reduction and Reclamation (ER&R) Program**: Reduce refrigerant leaks and increase recovery, reclamation, and responsible end-of-life management.

The AIM Act does not ban specific refrigerants outright. Instead, it reduces HFC supply and restricts the use of higher-global warming potential (GWP) refrigerants in new equipment. It emphasizes reuse and ensures proper equipment servicing and disposal.

Refrigerants Impacted

The HFC Allowance Allocation Program regulates 18 specific HFCs and applies to many refrigerant blends that contain those HFCs. This cap-and-trade program controls the national production and bulk import of these.

R23 R41 R125* R134a* R143a* R152a R236cb R236fa R245fa
R32* R4310 R134 R143 R152 R227ea R236ea R245ca HFC-365mfc

R404A* R407C* R407H R417A* R422D* R434A* R452A R454B R507A* R449A*
R407A R407F* R410A* R421A* R427A* R438A* R452B* R448A* R513A* R450A

**Indicates those most commonly used in HVAC applications*

Refrigerant Phase-Down Schedule

Year	Reduction from Baseline
2022	10%
2024	40%
2029	70%
2034	80%
2036	85%

The Importance of Reclaim

As supplies of certain virgin HFC refrigerants decrease, reclaimed refrigerants are expected to play an increasingly important role in servicing existing equipment. Owners should discuss recovery, reclamation, and refrigerant sourcing strategies with service providers. This is where the market is heading, regardless of future EPA actions.

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How does the AIM Act impact HVAC owners/operators?

The AIM Act primarily affects:

- Refrigerant selection for new equipment
- Operation & maintenance of existing appliances
- Leak detection & repair requirements
- Refrigerant inventory management
- Recordkeeping & compliance reporting
- Long-term risk management & asset planning

Existing Equipment

The AIM Act does not require replacement of existing HVAC systems that use refrigerants such as R410A or R134a. Existing systems may continue operating and be serviced. However, supplies of high-GWP refrigerants will continue to tighten as production allowances decrease, resulting in significant impacts on lifecycle costs and long-term operation, including increased refrigerant costs over time.

Refrigerant Risk Factors

Owners and operators can increase resilience in existing equipment by evaluating:

- Equipment age
- Refrigerant type
- Charge size
- Historical leak rates
- Future refrigerant availability
- Replacement timelines

New Equipment

Beginning in 2025, many categories of newly manufactured air-conditioning and refrigeration equipment are subject to EPA technology transition requirements that limit the use of higher-GWP refrigerants. For many comfort-cooling applications, newly manufactured equipment must use refrigerants with a GWP below 700. Compliance dates and requirements vary by equipment type.

Product or System	Installation Completion Date
Residential & light commercial AC & heat pump systems (e.g mini-splits, unitary systems)	No installation completion date for systems where all specified components were manufactured or imported prior to January 1, 2025
Stationary residential & light commercial ACs & heat pumps (e.g window units, portable room air conditioning)	January 1, 2025
Variable refrigerant flow systems	January 1, 2027*
Chillers (comfort cooling)	January 1, 2025
Data centers, computer room air conditioning, & information technology equipment cooling	January 1, 2027*

**New systems with GWP above 700 can be installed until January 1, 2027, if components are manufactured or imported before January 1, 2026. New systems with GWP above 700 can be installed until January 1, 2028, in buildings that were issued an approved building permit prior to October 5, 2023, if that permit approved the use of an HFC or blend containing an HFC in such a system, and all components used in that system are manufactured or imported before January 1, 2026.*

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Reporting, Recordkeeping, & Tracking Requirements

Beginning January 1, 2026, for all appliances containing **15lbs or more** of refrigerant with **GWP greater than 53**, owners and operators must maintain records related to:

- Refrigerant types & GWP ratings
- Refrigerant additions & removals
- Leak inspections & repair activities
- Verification testing
- Refrigerant recovery & reclamation
- Appliance charge calculations
- Leak-rate calculations
- Leak detection system inspections (where applicable)

These records must be available for EPA review and retained according to regulatory requirements. Existing equipment may continue to be serviced with virgin or reclaimed refrigerants, provided those refrigerants remain legally available and are used in accordance with applicable EPA requirements.

Which appliances must be monitored?

For appliances containing **15lbs or more** of refrigerant with **GWP greater than 53**, the AIM Act requires that leak rates be calculated whenever refrigerant is added. This is a significant change from prior EPA requirements that focused on appliances containing **50lbs or more** of refrigerant. When a covered appliance's calculated leak rate exceeds the applicable EPA threshold (**10%** for comfort cooling) appliances must be repaired within **30 days** or **120 days** if an industrial process shutdown is required.

Systems Commonly Covered

- Rooftop units
- Chillers
- Split systems
- Heat pumps
- VRF/VRV systems
- Comfort-cooling systems

Automatic leak detection (ALD) is required for appliances containing **1,500 lbs or more** of refrigerant and must be installed within **30 days** of appliance installation. For appliances already installed, ALD must be installed **before January 1, 2027**.

Keeping Up With AIM Act Rulings & Updates

Updates to the AIM Act have occurred since it was first enacted in 2020; the most recent EPA ruling was announced in May 2026, and there may be additional changes made in the future. However, the following remains true:

- The AIM Act is federal law.
- The HFC phasedown remains in effect.
- Existing equipment can continue operating.
- HFC supplies will continue to decline over time.
- Refrigerant management is important for controlling costs and emissions.
- Many manufacturers have already transitioned product lines to lower-GWP refrigerants.

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What can owners & operators do to ensure compliance?

Owners and operators can take action *now* to help reduce future costs, avoid compliance issues, and improve equipment reliability:

✓ *Inventory Refrigerants Across All Facilities*

Inventory all systems impacted under the AIM Act and identify which types of refrigerants are used in those systems.

✓ *Determine System Charge Sizes*

Document refrigerant charge quantities for every impacted system.

✓ *Identify Covered Systems*

Flag systems with:

- **15lbs or more** of refrigerant with **GWP greater than 53** (leak management)
- **1,500 lbs or more** of refrigerant (automatic leak detection)

✓ *Implement Refrigerant Tracking Procedures*

Track and maintain records of refrigerant movement and usage, including:

- Refrigerant type
- Charge size
- Refrigerant additions
- Refrigerant removals
- Leak events
- Repairs
- Verification tests
- Calculated leak rates

✓ *Train Internal Staff and Service Providers*

Ensure facility staff, maintenance teams, and third-party contractors are trained on refrigerant handling, recordkeeping requirements, and AIM Act compliance.

✓ *Incorporate Refrigerants Into Capital Planning*

Prioritize lower-GWP equipment when replacing aging systems to avoid future refrigerant cost increases and availability concerns.

✓ *Develop a Refrigerant Transition Roadmap*

Plan replacement of aging systems with lower-GWP alternatives based on asset life, refrigerant availability, and regulatory trends. Update the roadmap periodically to reflect AIM Act phasedown impacts and market changes.

✓ *Adopt Refrigerant Management Tools*

Consider implementing refrigerant management software and recordkeeping tools to centralize records and improve audit readiness.