

## Board of Directors

*Chair*  
Kathleen McCarthy  
Global Co-Head of Blackstone Real Estate  
Blackstone

*President and CEO*  
Jeffrey D. DeBoer

*Treasurer*  
Thomas M. Flexner  
Director  
GLP Capital Partners

*Secretary*  
Jodie W. McLean  
Chief Executive Officer  
EDENS

Thomas J. Baltimore, Jr.  
Chairman & CEO  
Park Hotels & Resorts

Jeff T. Blau  
CEO  
Related Companies

Michael A. Covarrubias  
Chairman and Co-CEO  
TMG Partners

John F. Fish  
Chairman & CEO  
SUFFOLK

*Immediate Past Chair*  
*The Real Estate Roundtable*

Conor Flynn  
Chief Executive Officer  
Kimco Realty Corporation  
*First Vice Chair, Nareit*

Leslie D. Hale  
President & CEO  
RLJ Lodging Trust

Michelle Herrick  
Head of Real Estate Banking  
J.P. Morgan

Diane Hoskins  
Global Co-Chair  
Gensler

Chair, The Urban Land Institute  
Geordy Johnson  
CEO  
The Johnson Group

Brian Kingston  
Managing Partner and CEO  
Brookfield Property Partners

Michael H. Lowe  
Co-CEO  
Lowe

Anthony E. Malkin  
Chairman and CEO  
Empire State Realty Trust, Inc.

Roy Hilton March  
Chief Executive Officer  
Eastdil Secured

Kara McShane  
Head of Commercial Real Estate  
Wells Fargo

Mark J. Parrell  
President & CEO  
Equity Residential

Ross Perot, Jr.  
Chairman  
Hillwood

Andrew P. Power  
President & CEO  
Digital Realty

Scott Rechler  
Chairman & CEO  
RXR Realty

Matthew G. Rocco, Sr.  
President  
Colliers Mortgage  
*Immediate Past Chair*  
*Mortgage Bankers Association*

Rob Speyer  
President and CEO  
Tishman Speyer

Barry Sternlicht  
Chairman and CEO  
Starwood Capital Group

Owen D. Thomas  
Chairman & CEO  
BXP

Kenneth J. Valach  
CEO  
Trammell Crow Residential  
*Immediate Past Chair*  
National Multifamily Housing Council



## The Real Estate Roundtable

September 25, 2024

U.S. Environmental Protection Agency  
EPA Docket Center  
Air and Radiation Docket  
Mail Code 28221T  
1200 Pennsylvania Ave., NW  
Washington, DC 20460

Re: *Phasedown of Hydrofluorocarbons:  
Restrictions on the Use of HFCs Under the AIM Act:*  
89 Fed. Reg. 65,574 (Aug. 12, 2024) (“Reopening the Comment Period”)  
EPA-HQ-OAR-2021-0643

The Real Estate Roundtable (RER) ([www.rer.org](http://www.rer.org)) represents the leaders of public and private companies that own, develop, finance, manage, and service all types of income-producing real estate in the United States and abroad. Our members’ buildings house our population, small businesses, classrooms, government agencies, and health care facilities. They provide cell towers to let us communicate, laboratories where we invent, facilities where we store personal and business items, and hotels where we vacation with family and friends. We include owners, developers, and financiers of shopping centers, restaurants, data centers, and warehouses. Investors seek out our members’ assets for their efficiency and sustainability features to support pensions and retirement obligations.

The proposed rule concerns the phase down of hydrofluorocarbons (HFCs) under the *American Innovation and Manufacturing (AIM) Act* of 2020. The *AIM Act* lists 18 HFCs regulated because of their high global warming potential.<sup>1</sup> HFCs are greenhouse gases used as refrigerants in chillers, heat pumps, and other air conditioning (AC) equipment, and cold storage equipment, installed in residential, commercial, and industrial buildings. This rulemaking focuses on EPA’s authority to facilitate the “transition to next-generation technologies by restricting use of these HFCs in the sector or subsectors in which they are used.”<sup>2</sup> The proposed rule would extend to January 1, 2027, the installation deadline solely for Variable Refrigerant Flow (VRF) systems using “regulated substances” covered by the *AIM Act*.

RER welcomes a partnership with EPA to implement the HFC phasedown and transition, just as we have partnered successfully for many years with the Office of Air and Radiation’s ENERGY STAR branch. We hope to collaborate with EPA to educate the U.S. real estate sector on the agency’s plans to implement the *AIM Act* generally, and how deadlines including those related to HFC equipment sales, imports, and installations affect our industry.

<sup>1</sup> 42 U.S.C. § 7675(c).

<sup>2</sup> 89 Fed. Reg. 53,373, 53,374 col. 1 (June 26, 2024) (citations hereafter denoted with reference to Federal Register “page/column”).

We appreciate the opportunity to provide these comments, and respectfully request a meeting with EPA to more fully discuss the proposed rule's specific effects and overall impacts of the *AIM* Act's implementation on our industry.

**1. EPA did not put the real estate industry on sufficient notice of the proposed rule's potential effects on building construction, ownership, and operations.**

The proposed rule's heading, "*Does this action apply to me?*" highlights businesses in the supply chain of real estate development and ownership as being "potentially affected" by the HFC phasedown and transition. However, neither the proposed rule (nor the related rules issued in October and December of 2023) alert the U.S. real estate industry *itself* as a "sector or subsector" that may be potentially affected.

EPA identifies AC equipment contractors, manufacturers, and "merchant wholesalers" as potentially affected by the HFC transition. The agency pinpoints four (4) specific NAICS Codes corresponding to these sectors.<sup>3</sup> Certainly, the HFC phasedown may also affect dozens of sectors and subsectors related to residential, commercial, and industrial properties. Yet, the proposed rule does not forewarn real estate-related businesses under "[building](#)" and "[construction](#)" NAICS Code classifications. This is unfortunate because our members will be impacted at least to the same extent as "wholesalers," "manufacturers," and "contractors" who lie upstream from the developers and owners who procure AC equipment, and downstream from the buildings where this equipment is installed.

The *AIM* Act final rule<sup>4</sup> EPA released last Friday on HFC detection and recycling in building air conditioning and refrigeration systems lists dozens of NAICS Codes for "Potentially Affected Entities" – including multiple real estate industry sectors and subsectors. It is incongruous for EPA to put various building owners, lessors, and developers on notice that they are affected by the HFC detection and recycling rule, but fail to inform our industry similarly regarding proposed rules to implement the HFC phasedown and technology transitions. EPA states the proposal's list of affected sectors "is not intended to be exhaustive," but respectfully, failing to notify the real estate industry specifically is a major oversight.

The real estate industry warrants the agency's heightened attention. Buildings house the chillers, heat pumps, and air conditioners that use HFCs subject to the *AIM* Act's technology transitions. Developers are ultimately responsible for ensuring such equipment meets building code requirements for new construction and major retrofits. Owners and lessors must operate and maintain these systems properly and efficiently for the health, safety, and comfort of residents, business tenants, and other occupants. Furthermore, the agency's website hosts a "fact sheet" geared to inform the residential and commercial sectors regarding the global warming potential of refrigerants used in various AC systems, and describes practices to "reduc[e] emissions from servicing and disposal."<sup>5</sup> Nowhere does this fact sheet explain the *AIM* Act's requirements, how EPA plans to enforce the law, or provide any notice regarding potential regulatory consequences on real estate assets.

---

<sup>3</sup> *Id.* at 53,373/3 (NAICS Code 238220 [Plumbing, Heating, and Air Conditioning Contractors"]; Code 333415 [Air Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing"]; Code 423720 [Plumbing and Heating Equipment and Supplies (Hydronics) Merchant Wholesalers"]; Code 423730 ["Warm Air Heating and Air Conditioning Equipment and Supplies Merchant Wholesalers"]).

<sup>4</sup> [Pre-publication final rule](#) (Sept 20, 24), at pp. 19-21. EPA's webpage, "[Regulatory Actions for Managing HFC Use and Reuse](#)."

<sup>5</sup> EPA [website](#), "Transitioning to Low-GWP Alternatives in residential and Commercial Air Conditioning and Chillers."

**2. EPA should prioritize potential impacts on the real estate sector when it sets HFC phasedown deadlines based on dates of product “installations.”**

To implement the HFC phasedown and technology transitions, EPA has proposed varying deadlines regarding “installation” of certain building AC and refrigeration systems:

EPA Regulation	Subsectors/System Type	Installation Deadline
88 Fed. Reg. 73,098 (“2023 Technology Transitions Rule”) ( <a href="#">Fact Sheet</a> ) (selected subsectors)	Chillers (comfort cooling)	Jan. 1, 2025
	Data Centers	Jan. 1, 2027
	Cold Storage Warehouses	Jan. 1, 2026
	Retail Food Supermarkets	Jan. 1, 2027
	Stationary AC	Jan. 1, 2025
88 Fed. Reg. 88,825 (Dec. 26, 2023) (Interim Final Rule)	Residential and Light Commercial Air Conditioning and Heat Pumps	Extended to January 1, 2026 (for components manufactured in the U.S. or imported before Jan. 1, 2025)
89 Fed. Reg. 53,373 (June 26, 2024) (Proposed Rule)	Variable Refrigerant Flow (VRF) Systems	Extended to January 1, 2027 (for components manufactured in the U.S. or imported before Jan. 1, 2026)

In establishing and extending these deadlines, EPA has accommodated concerns of AC equipment manufacturers and wholesalers regarding “stranded inventory” of their products.<sup>6</sup> We agree that perspectives of companies who *make* and *sell* AC products are important. Equally important are the concerns of real estate companies that *buy* and *use* these products. Unfortunately, EPA’s deadlines have not been set or proposed with ample regard to the practical realities of building design, permitting, approval, and construction processes.

Years can elapse from the start of architectural design to the ultimate installation of AC components in complex residential, commercial, and industrial buildings. Ongoing developments, for example, may have non-VRF or VRF systems approved and permitted under state laws and buildings codes in effect years before actual construction starts – and long before equipment installation. EPA’s “one-size fits all” timelines create the problem where an AC system maybe compliant at the point the building’s design is approved, or when a permit allows construction to start, but that same system becomes non-compliant later at the date of equipment installation. In short, “Technology Transition” deadlines pegged without exception to installation do not provide a fair HFC transition for many real estate assets.

Congress did not establish phasedown deadlines in the *AIM* Act itself for particular sectors. The statutory section dealing with “Technology Transitions” allows EPA to phase-out HFCs slowly in various sectors so that production and consumption will be reduced by 85% by 2036.<sup>7</sup> The statute also mandates that EPA consider a number of factors, including “the best available data” and the “overall economic impacts and

<sup>6</sup> The preamble to proposed rule that would extend the VRF installation deadline states:

“An important consideration in the 2023 Technology Transitions Rule was to avoid stranding inventory of existing equipment. This includes systems that are already installed and operating as well as unsold equipment in the manufacturing and distribution chain. EPA stated that ‘[w]e recognize that the production and purchase of products that are unable to be sold to consumers is an economic and environmental outcome no parties desire, and the proposed rule’s forward looking compliance dates were intended to all parties in the market supply chain sufficient time to avoid that outcome.’ ”

<sup>89</sup> Fed. Reg. at 53, 375/1-2 (citing 88 Fed. Reg. 73,123).

<sup>7</sup> 42 U.S.C. § 7675(e)(2)(c).

environmental trends,” in developing a phasedown schedule.<sup>8</sup> Respectfully, we are concerned that strict, immutable deadlines that “strand” buildings from HFC regulatory compliance are not what Congress intended and may not be the best interpretation of the statute.

We urge EPA to collaborate with the real estate industry to gather data to understand the environmental impacts from HFCs in buildings, and how the phasedown can proceed as swiftly as possible with due consideration to the “design/construction vs. installation” dilemma we identify. At a minimum, AC installation compliance deadlines that EPA sets for residential, commercial, and industrial projects must not require developers to repeat or restart lengthy design, contracting, and/or permitting processes that are completed, approved or well underway. The proposed rule and the supporting Regulatory Impact Analysis do not consider the significant cost impacts and project delays that real estate developers will bear due to unrealistic installation deadlines. We ask EPA to work with us to explore mechanisms allowing fair and reasonable variances from categorical installation deadlines on real estate stakeholders.

**3. EPA should not set HFC phasedown and transition deadlines until it develops a holistic building code amendment strategy with model code bodies, state legislatures, and the buildings sector.**

Applicable mechanical, fire, and other building codes in a jurisdiction generally govern installation of AC and refrigeration equipment. Although the AIM Act itself expressly states that “building codes” should be considered during technology transitions,<sup>9</sup> we are not aware of any coordinated strategy by EPA to synchronize model code revisions and state code amendments with its self-created, sector-specific HFC phasedown deadlines.

EPA should demonstrate national leadership by publicizing and helping track all of the residential and commercial building code updates across the U.S. needed to allow use of A2L and other [refrigerants with low global warming potential](#). AHRI’s [interactive map](#)<sup>10</sup> is a helpful resource and EPA is in a prime position to amplify the message. City and county code offices, not federal agencies, are typically the first regulatory actors that building owners and developers consult to ensure compliant projects. We request that EPA craft AIM Act deadlines in alignment with design and construction approvals conferred by building permit and code officials at the local level.

**4. EPA should clarify what, if any, regulatory impact will arise on existing buildings’ AC and chiller systems when they reach the end of their “useful lives.”**

An EPA fact sheet and FAQ document state the Technology Transitions Rule “does not limit the use of any existing product or system,” and that the phasedown deadlines are “forward looking and restrict[ ] new products from being placed on the market or entering operations.”<sup>11</sup> Guidance also states the agency endeavors to ensure a “smooth transition” in the phasedown of HFCs by [a]llowing existing systems to continue to operate *to the end of their useful life*.<sup>12</sup>

---

<sup>8</sup> 42 U.S.C. § 7675(i)(4).

<sup>9</sup> 42 U.S.C. § 7675(i)(4).

<sup>10</sup> See [A2L Refrigerant Building Code Map | AHRI \(ahrinet.org\)](#).

<sup>11</sup> See EPA [website](#), “Frequently Asked Questions on the Phasedown of Hydrofluorocarbons.” See also, EPA, Technology Transitions Program, [Fact Sheet](#), “Final Rule – Phasedown of Hydrofluorocarbons: restrictions on the Use of Certain Hydrofluorocarbons Under Subsection (i) of the American Innovation and Manufacturing Act of 2020.”

<sup>12</sup> *Id.* (Fact Sheet). EPA’s FAQ’s likewise state that HFC transition deadlines are “designed specifically so that owners of refrigeration and air conditioning systems and products can continue to use and repair legacy systems *throughout the end of their useful lives*.”

EPA fails to address what, if any, regulatory impacts will apply to owners of commercial, residential, and industrial properties when existing AC, chiller, and refrigeration systems in fact reach the end of their useful lives after Technology Transition deadlines take effect. Presumably, existing buildings will need to be retrofitted to accommodate new AC systems using refrigerants with lower global warming potential but higher flammability ratings.

Can existing building designs, floorplates, and layouts be changed cost effectively to incorporate new systems compliant with the HFC phasedown? Will local permitting and zoning bodies have programs in place to allow any such retrofits swiftly, with minimal regulatory friction? How many heat pumps and other refrigeration equipment will need to be imported versus domestically produced when current systems become functionally obsolete?

The information-gathering arm of the Department of Energy (DOE) collects data on the millions of various types of cooling equipment presently installed in U.S. buildings.<sup>13</sup> When all of these systems are removed from service, presumably the buildings they serve will be subject to EPA's rules implementing the *AIM* Act. The Technology Transitions Rule's impact on new construction is significant, but the impact on existing buildings requiring retrofits in the future could be far greater based on the data collected by DOE's affiliated agency.

To our knowledge, EPA has not addressed the HFC phasedown in the context of AC and refrigeration systems that reach the end of their useful lives. We request that the agency work with the real estate industry so we can explore this issue and get well-ahead of its potential regulatory implications. Guides and resources to assist property owners with capital expenditure budgeting to support life-cycle investments in building AC and cooling equipment would greatly assist our industry to comply with EPA's rules to implement the *AIM* Act.

**5. *EPA should develop partnership programs with the real estate industry to drive the responsible and methodical phase down of HFCs and appropriate building equipment transitions.***

RER has a long history of cooperation with the federal government on climate- and sustainability-related programs. The ENERGY STAR office can vouch for the productive partnership we have developed over the years on matters including EPA's [1-100 building score](#), the platform to recognize excellence in commercial [tenant efficiency](#), and the landmark [NextGen certification program](#). *AIM* Act implementation provides ideal opportunities to continue our collaboration. Areas ripe for coordination include:

- *Educational sessions with the real estate sector:* EPA has conducted a [webinar](#) for product manufacturers regarding *AIM* Act requirements and transitions. We look forward to creating similar content with EPA specifically geared to inform real estate audiences on the HFC phasedown and related rules.
- *Voluntary public-private partnerships:* EPA's [GreenChill](#) program is a "voluntary partnership program that works cooperatively with the food retail industry to reduce refrigerant emissions and decrease their impact on the ozone layer and climate change." It "works alongside" the *AIM* Act and associated regulations. The agency's [Corporate Emissions Reduction Program](#) is another voluntary

---

<sup>13</sup> See U.S. Energy Information Administration, 2018 Commercial Building Energy Consumption Survey, [Table B1](#) (microdata estimating the millions of "packaged air-conditioning units," "residential-type central air conditioning units," "individual air conditioners," "central chillers," "heat pumps," "district chilled water," and "swamp coolers" installed in standing U.S. commercial buildings).

September 25, 2024

partnership that works with food retailers, refrigeration system manufacturers, and chemical producers on the “[t]ransition to environmentally friendlier refrigerants” and provides information to stakeholders to “implement best environmental practices” and “[a]dopt zero ozone depletion potential (ODP)/low global warming potential (GWP) refrigerant technologies.” Such partnership opportunities should expand from food retailers and product manufacturers to include real estate developers, owners, and operators.

- *Portfolio Manager refrigerant tracking*: RER has been a leading voice backing ENERGY STAR’s “[Portfolio Manager Upgrade Project](#).” We supported funding from the *Inflation Reduction Act* to update this preeminent resource used by nearly 25% of U.S. commercial space to manage and measure energy use, water consumption, and building-related emissions. It is the national sustainability “benchmarking tool” and the Upgrade Project will enhance the platform to incorporate refrigerant tracking. EPA’s efforts here are well known among our membership. The agency should explore how Portfolio Manager may be leveraged to assist with controlling HFC emissions, leak detection, elevating *AIM* Act awareness, and accelerating education and partnership opportunities discussed above.

\* \* \*

Thank you for the opportunity to provide our perspectives. For more information regarding these comments please contact Duane J. Desiderio, RER’s Senior Vice President and Counsel ([ddesiderio@rer.org](mailto:ddesiderio@rer.org)).

Sincerely,



Jeffrey D. DeBoer  
President and Chief Executive Office