

Government regulations are changing the home air conditioning industry. Here's how it could affect you.



The Environmental Protection Agency has mandated changes to the type of refrigerant used in home air conditioning systems. Unfortunately, the current commonly used refrigerant contains high levels of a chemical known to contribute to Earth's global warming. These changes will have wide-ranging implications for the HVAC industry and for homeowners.

The goal of these regulations is to replace the current refrigerant with a new, more environmentally friendly chemical, thus slowing the rate of global warming.



Why this is necessary.

Refrigerant, sometimes called “Freon,” is the chemical used in your AC or heat pump system to move heat from inside your home to the outside. Today’s most common refrigerant is known as R410A and has been used for many years to help cool homes and buildings. Unfortunately, recent studies have shown that this refrigerant contains high levels of a chemical known to contribute to Earth’s global warming. In September 2021, the EPA released its detailed plan to drastically reduce R410A consumption, which requires the introduction of a new class of refrigerants. As with previous changes to AC refrigerants, this transformation will have wide-ranging impacts that will continue for years.

So is this a big deal? Yes, it’s a really big deal because it will have a dramatic impact on the HVAC industry and, in turn, a significant effect on homeowners. Here’s what you need to know...



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By 2022, R410A production will decrease by 10%



By 2024, R410A production will decrease by 40%



By 2029, R410A production will decrease by 70%



By 2034, R410A production will decrease by 80%



By 2036, R410A production will decrease by 85%

Who is impacted.

The first impact is to manufacturers who will need to replace every unit in their air conditioner and heat pump product lines. Next, HVAC service companies and personnel will need to learn to service and install new air conditioners with a completely different refrigerant. Eventually, all homeowners with air conditioners will be affected. As the phase-out of current R410A refrigerant continues, its price is expected to increase, perhaps significantly.

That means the cost to service most existing home AC systems will become more expensive when replacement R410A refrigerant is needed during service.

What is impacted.

Air conditioners and heat pumps use refrigerant to transfer heat through the system, and today, these systems almost exclusively use R410A as the refrigerant. Considering the phase-out plan, most people ask what will be used to replace R410A. Our industry, with support from the Environmental Protection Agency, has pinpointed a new class of refrigerants called A2L to be used in new systems that will replace their counterparts that previously used R410 refrigerant. These new refrigerants can provide the same cooling and heat transfer abilities without negatively impacting the environment, making them a suitable alternative for most systems.

This transition will be far from seamless from a technical perspective. While not directly relevant to homeowners, the main thing HVAC professionals will need to be aware of is that these new A2L refrigerants are somewhat flammable. That sounds scary when you think about your home AC, but it does require a high level of energy to ignite the new A2L refrigerants, making them difficult to light and burn. Nonetheless, new AC and heat pump systems will have new safety controls to protect homes and homeowners. HVAC professionals will need to be properly trained to avoid potential mishaps with A2L refrigerants and, in addition, be educated on the new safety systems.

Now more than ever, it's important to look for HVAC companies who can make you feel right at home with service and new installations.

**R410A
REFRIGERANT**



**A2L
REFRIGERANT**

When we will be impacted.

This summer, 2024, will be pivotal to this transition. R410A production has already been reduced by 40%, putting upward pressure on the price of both servicing existing units and purchasing new AC systems. Additionally, most manufacturers will begin to replace their existing AC and heat pump product lines starting in the summer of 2024 to prepare for the 2025 deadline to completely stop manufacturing units with R410A. Starting in January 2025, all new ACs and heat pumps will need to be manufactured with the new class of A2L refrigerants.

While the phase-out of R410A will be inconvenient, the intent is to better protect us and our environment.



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A horizontal timeline with two vertical lines extending downwards to two colored boxes. The first box is blue and the second is red. The timeline itself is a thin grey line with two black square markers at the points where the vertical lines connect.

MID 2024

Manufacturers start replacing R410A lines with A2L models.

JAN 2025

Manufacturers must STOP producing R410A units.

What are your options?

As our home HVAC systems age, they inevitably start to require repairs. Evaluating whether to repair or replace typically required a relatively simple cost/benefit analysis on the cost of ongoing repairs versus the cost of replacement. However, these changes to the industry make it more complex to determine which option makes the most sense for each individual homeowner:

OPTION 1

Continue to operate and maintain your current R410A system:

PRO:

Lowest cost in the short term.

CONS:

Long-term service cost unpredictable and may increase dramatically.

Miss out on comfort and efficiency benefits of a new system.

OPTION 2

Replace your current system with a new R410A system:

PROS:

The most economical new system option.

Takes advantage of new designs with higher efficiency and improved comfort.

CON:

The future availability and cost of R410A refrigerant is unknown, making future service more costly.

OPTION 3

Replace your R410A system with a new A2L system:

PROS:

Ample supply of refrigerant and more predictable service costs.

Takes advantage of new system designs for higher efficiencies and improved comfort.

CON:

Higher replacement costs.

Who can help you navigate the changes.

Service Experts understands that each homeowner's situation is unique; we'll work with you to help you feel right at home with the option that's best for you. With proper understanding and planning, you can better navigate the sometimes-confusing industry changes that are impacting you.

We'll make you feel right at home through this transition.

We're dedicated to your Total Home Comfort—not only in your home but also in how you feel about dealing with this significant change. We'd be happy to answer your questions to help you navigate your options, as well as provide Expert service, guaranteed, if you need to repair or replace your HVAC system.

Plus, our proprietary Advantage™ Program may help make this transition easier on your budget and protect you from fluctuating and unpredictable repair charges. You can lease a brand-new system for one low, fixed monthly price, and you never pay a penny more for installation, maintenance, or repairs* (including refrigerant).

Our commitment is making you feel right at home, with the systems, services, and financing you need as well as information about how changes in our industry will affect you.

We're here to help. Contact us at ServiceExperts.com or 866-EXPERTS.



ServiceExperts.com

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