

ENERGY STAR® Certified Heat Pump HVAC Marketing Toolkit



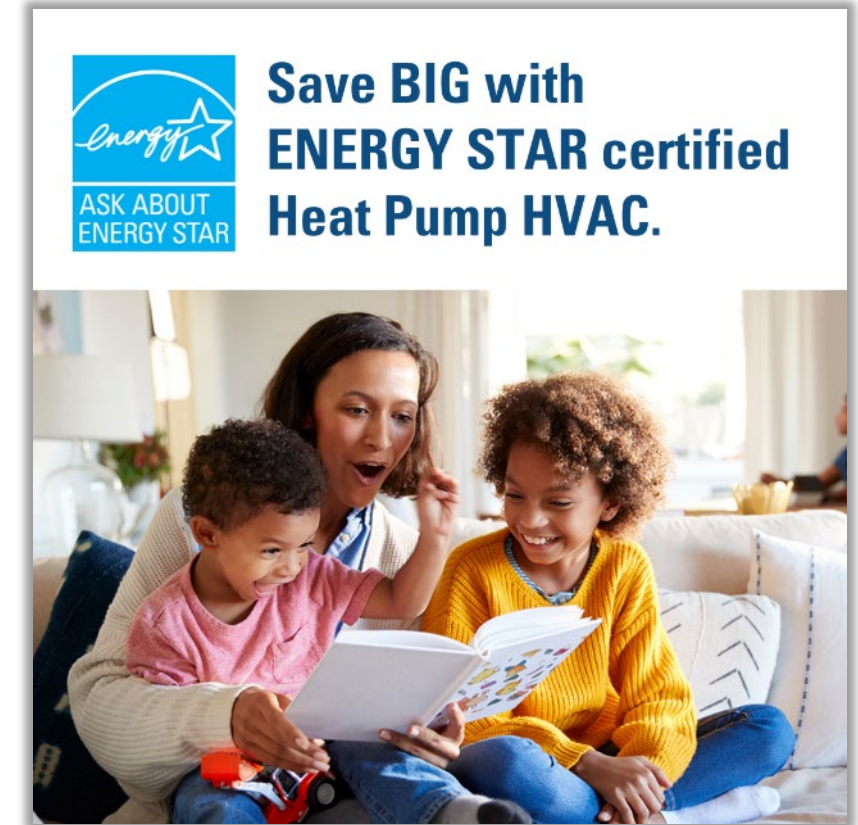


ENERGY STAR Certified Heat Pump HVAC

Marketing Toolkit

Welcome to the ENERGY STAR Heat Pump HVAC toolkit. The following slides provide an overview of available marketing materials, including messaging and creative resources, with easy links to facilitate access.

Partners are encouraged to use these materials as is or to mix and match to create your own look and feel.





Marketing Toolkit Contents

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ENERGY STAR Value

- Including the ENERGY STAR certification mark as a visible feature on marketing materials lends credibility, trust, and brand awareness. It serves as an implicit seal of approval and helps differentiate the product.
 - A 2017 study found JD Power Customer Satisfaction indexes for ENERGY STAR partners increased significantly over time compared to non-partners, particularly in the areas of Corporate Citizenship, Communications, and Customer Service.
 - A/B testing conducted by Focus on Energy shows that using the ENERGY STAR logo on ads drove a 60% increase in click-through rate.
- Partners should always use the certification mark when featuring ENERGY STAR certified products.
 - If no product featured; use the Ask About or Learn More marks [available here](#).





Heat Pump HVAC Messaging

Why Choose ENERGY STAR?

- For the average American household, almost half the annual energy bill goes to heating and cooling - more than \$900 a year. Installing efficient home heating and cooling systems like an ENERGY STAR certified heat pump will help you save money and stay comfortable in your home.
- Thanks to incentives from the Inflation Reduction Act, you can save thousands on upgrading your heating and cooling system to a super-efficient ENERGY STAR certified heat pump. Find generous rebates and tax credits in your area, and start your clean energy future today. <https://www.energystar.gov/homesavings>
- With so many opportunities to save, NOW is the perfect time to upgrade to a super-efficient ENERGY STAR certified heat pump. Not only can it both heat and cool your home, you'll also experience huge savings – both on your energy bill and with incentives to lower the cost of upgrading. Find savings in your area: <https://www.energystar.gov/homesavings>
- Heat pump HVAC is part of an [ENERGY STAR Home Upgrade](#) – a set of six high-impact, energy efficiency improvements for your home that are designed to work together to deliver significant energy and cost savings.
- ENERGY STAR certified heat pump HVAC is so efficient it can deliver up to three times more heat energy to a home than the electrical energy it consumes. This is possible because a heat pump moves heat rather than converting it from a fuel, as combustion heating systems do.
- ENERGY STAR certified heat pump HVAC is more efficient than furnaces or boilers because heat pumps serve double duty with heating and cooling, making this investment usable year-round.





Heat Pump HVAC Messaging

- ENERGY STAR certified mini splits use more sophisticated compressors and fans that can adjust speeds to save energy and money. They also cool directly from the unit, rather than passing air through a network of fabricated ductwork, eliminating energy losses that can account for more than 30% of a home's energy use for space conditioning.
- Replacing your older central AC with an ENERGY STAR certified heat pump could save you nearly \$600 over the life of the product, on cooling costs alone.
- In the southern US, replacing a gas furnace with a heat pump could save you \$250 per year, on average. Savings are even higher when replacing an electric HVAC system, such as an electric furnace, -- about \$450 per year.
- During the summer months, the heat pump serves as a central air conditioner and reduces cooling costs compared to conventional air conditioners. In the winter months, a heat pump can deliver up to three times more heat energy than the electrical energy it consumes, costing less to operate than traditional HVAC equipment such as furnaces, boilers, or electric resistance heat.
- ENERGY STAR certified heat pumps have higher ratings for seasonal energy efficiency ratio (SEER), energy efficiency ratio (EER), and heating seasonal performance factor (HSPF) and use 10% less energy than models meeting the federal minimum standard, saving approximately \$50 per year and \$600 over the life of the product.
- If all heat pumps sold in the US earned the ENERGY STAR label, the energy cost savings would grow to \$1.8 billion per year and 60 billion pounds of greenhouse gas emissions would be prevented.
- ENERGY STAR is your resource for navigating an HVAC equipment upgrade to save energy, save money, and help protect the climate. [Learn the symptoms](#) that it's time to replace your equipment, get purchase and installation guidance, find rebates, and calculate your personalized savings possibilities.





Heat Pump HVAC Messaging

Buying Guidance

- In most cases, your heating and cooling equipment will show signs that it is underperforming well before you reach the point of needing an emergency replacement. Recognizing these symptoms early on can help you plan for a non-emergency replacement that will not only keep your home comfortable year-round but also save you money. Here are some common indicators that it's time to start thinking about an upgrade:
 - Your equipment is over 10 years old
 - Your home's heating or cooling systems need frequent repairs
 - You've noticed your energy bills are going up
 - Parts of your home are either too hot or too cold
 - Your home has issues with humidity, excessive dust, or your rooms never seem to get comfortable.
- When it's time to start thinking about replacing your old heating or cooling system, one of the most impactful, energy-saving upgrades you can make to your home is to switch to clean heating and cooling with an ENERGY STAR certified heat pump.
- If you need to replace your HVAC system, ask your contractor about ENERGY STAR certified units. And make sure that your new energy-efficient unit is properly installed for maximum savings.



Heat Pump HVAC Messaging

- If you currently have a furnace, boiler, upgrading to an ENERGY STAR certified heat pump can help you transition from fossil fuels for a more efficient, healthier home.
- Here are a few different types of heat pump systems you should consider as part of your ENERGY STAR Home Upgrade:
 - **Ducted Air Source Heat Pumps:** Ducted air source heat pumps use your home's existing ductwork to deliver heating and cooling. In most homes, depending on factors like the climate zone, these units can be installed as a drop-in replacement for your central air conditioner or furnace. A contractor can help you determine if your home is a good fit for a 1:1 replacement.
 - **Ductless Heat Pumps:** Often referred to as a “mini split”, a ductless heat pump, is a good alternative to replace a window cooling unit (room AC), as well as radiator or baseboard heating, meaning it can replace a traditional HVAC system while delivering savings year-round.
 - A head unit, or multiple head units, are mounted on an interior wall or ceiling, with an accompanying unit outside. The outside unit extracts heat from the air, even when it's cold. Refrigerant carries the heat directly to the head(s) inside, which then delivers heated air to occupied space. In warmer months, the system works in reverse for quiet, efficient air conditioning.



Heat Pump HVAC Messaging

- **Mini splits:** are increasingly being used in these types of situations:
 - Older homes with no existing ductwork (e.g., radiators or baseboard heat) that have never had central air conditioning before.
 - Additions or outbuildings (e.g., shed, barn, garage) where extending ductwork or heating/cooling capacity is difficult.
 - Spaces adjacent to unconditioned spaces where ductwork would be exposed to harsher temperatures (e.g., a guest room above a garage).
- **Geothermal Heat Pumps:** Geothermal heat pumps exchange heat with either a body of water or the ground, using a fluid that is pumped through a series of pipe loops, rather than exchanging heat with the outdoor air. These products can either condition your home by circulating air (like a furnace or air conditioner) or circulating water (like a boiler). They are also occasionally called ground source or water source heat pumps.



Heat Pump HVAC Messaging

Additional Tips

- Although upgrading your heating and cooling system can be a major investment, installing an energy efficient heating and cooling system will lead to energy bill savings for years to come. To help make your heating and cooling upgrade more affordable, you'll want to take advantage of available [federal tax credits](#) to help reduce the upfront cost.
- Air source heat pumps that are ENERGY STAR certified are eligible for federal tax credits through 2032. You can claim 30% of the project cost for a maximum credit of \$2,000. www.energystar.gov/taxcredits
- Rolling out starting this year, state rebate programs will offer incentives available depending on your income. These state rebates may include a discount of up to \$8,000 for switching to an ENERGY STAR certified electric heat pump HVAC system.
- Many utility companies offer generous incentives toward the purchase of ENERGY STAR certified heating and cooling upgrades. Check out www.energystar.gov/rebatefinder to learn about rebates in your area.



Air Source Heat Pump Factsheet

- Use the Air Source Heat Pump factsheet to engage your customers this heating season and educate them on the energy-saving benefits of the technology.
- The factsheet is ready to download and print as-is or customize to incorporate your logo.

[Link to Air Source Heat Pump Factsheet](#)



A Highly Efficient, Tried-And-True Way to Comfortably Heat and Cool Your Home

Keeping your home at a comfortable temperature can be expensive. A typical household's energy bill is around \$1,900 annually, and almost half of that goes to heating and cooling! To cut these costs, an air source heat pump (ASHP) can be installed and connected to the conventional forced-air ductwork system that is typical of most American homes. (For homes without ductwork, see www.energystar.gov/minisplit). ASHPs that earn the ENERGY STAR label are independently certified to save energy, save money, and protect the climate.

What is an Air Source Heat Pump?

An ENERGY STAR certified ASHP provides highly efficient heating and cooling by extracting heat from outside into your home in winter and pulling the heat out of your home in the summer. For some, it may be helpful to think of a ducted ASHP as a central air conditioner that also works in reverse to provide whole-house space heating in winter. See Figure 1 below.

Benefits of an Air Source Heat Pump

- **Cutting heating costs compared to conventional heating systems.** An ENERGY STAR certified ASHP can provide heating for approximately 1/3 the cost of traditional electric baseboard heating, depending on where you live, and approximately 1/2 the cost of oil heat. An ASHP is so efficient it can deliver up to three times more heat energy to a home than the electrical energy it consumes. This is possible because a heat pump moves heat rather than converting it from fuel, as combustion heating systems do.
- **Reducing cooling costs compared to conventional room air conditioners.** During the summer months, a central ASHP automatically becomes a central air conditioner, and with ENERGY STAR, you will have reduced cooling bills due to its highly efficient operation.
- **Reducing greenhouse gas emissions.** An ASHP is good for your home and good for the planet. ENERGY STAR certified models avoid more than 17,100 lbs of greenhouse gas emissions, on average, over the course of their lifespan compared to standard systems.

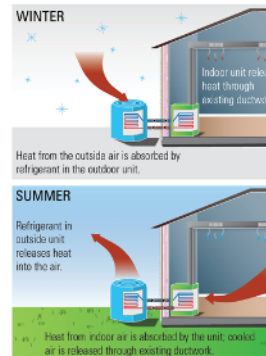


Figure 1. How an ASHP Works in Winter and Summer

ENERGY STAR® is the simple choice for energy efficiency. For more than 30 years, EPA's ENERGY STAR program has been America's resource for saving energy and protecting the environment. Learn more at energystar.gov/products/air_source_heat_pumps.



uses existing ductwork in your home to deliver heating and cooling. In most cases, ASHPs are installed as a drop-in replacement when either a central air conditioner or a furnace is present.

ASHPs offer highly efficient heating and cooling in one integrated system.

Right for You?

When to Consider ASHPs commonly used?

ASHPs are commonly used for air conditioning. In most cases, your HVAC equipment shows signs that it may be reaching the point of needing an emergency replacement. Recognizing the signs of a replacement. If your central heating and cooling system is more than 10 years old, the age and condition of your equipment may have caused it to become inefficient.

ASHPs can be used in place of air conditioners. In most cases, a central air conditioner can be replaced with an ASHP at a lower total cost. This could allow you to eliminate or down-size your furnace.

ASHPs are also a good choice for homes, such as those heated by propane or oil. Homes in these areas of the country may benefit from ASHPs. Dual fuel systems allow for the flexibility of heating with a heat pump or furnace and enables you to use each system optimally based on costs and availability.

ASHPs excel at providing space heating even in cold climates. New ENERGY STAR certified ASHPs excel at providing space heating even in cold climates. They use advanced compressors and refrigerants that allow for improved low temperature performance. In areas where winter temperatures regularly dip below freezing, talk to your contractor to determine if an ASHP is right for your particular home.

If you don't have existing ductwork or you are planning an addition or renovation, you can still install a heat pump to heat and cool a portion of your house. For more information, visit energystar.gov/minisplit, sometimes referred to as Ductless Heat Pumps.

Visit the energystar.gov/homeupgrade section to see if an ASHP is right for your home. Call your heating and cooling equipment, calculate savings, and find product and installation options.

ENERGY STAR certified ASHPs are eligible for a **federal tax credit covering 30% of the cost** through December 31, 2032. Learn more at www.energystar.gov/taxcredits.

Check with your local utility for more information on rebates and [ebatefinder](http://energystar.gov/ebatefinder).

INTRODUCING ENERGY STAR HOME UPGRADE

Air Source Heat Pumps are one of six high-impact, energy efficiency improvements for your home that are designed to work together to deliver significant energy and cost savings. Count on ENERGY STAR to help you transition from fossil fuels to a cleaner, healthier, and more comfortable home.

energystar.gov/homeupgrade





Mini Split Heat Pump Factsheet

- Use the Mini Split Heat Pump factsheet to engage your customers and educate them this heating season and educate them on the energy-saving benefits of the technology.
- The factsheet is ready to download and print as-is or customize to incorporate your logo.

[Link to Mini Split Heat Pump Factsheet](#)



An Ultra Efficient Way to Comfortably Heat and Cool Your Home

Keeping your home at a comfortable temperature can be expensive. A typical household's energy bill is around \$1,900 annually, and almost half of that goes to heating and cooling! To cut these costs, an increasingly popular and highly versatile system called a mini split heat pump can be professionally installed to comfortably heat and cool your home. Mini split heat pumps that earn the ENERGY STAR label are independently certified to save energy, save money, and protect the climate.

Benefits of a Mini Split Heat Pump

- **Cut heating costs in half compared to conventional electric heating systems.** Because they transfer rather than generate heat, ENERGY STAR certified mini splits use up to 60% less energy than standard home electric radiators.
- **Provide quiet, high efficiency cooling.** ENERGY STAR certified mini splits use more sophisticated compressors and fans that can adjust speeds to save energy and money. They also cool directly from the unit, rather than passing through a network of fabricated ductwork, eliminating energy losses from ductwork which can account for more than 30% of a home's energy use for space conditioning.
- **Reducing greenhouse gas emissions.** A mini split is good for your home and good for the planet. ENERGY STAR certified systems used in a whole house setting avoid more than 17,100 lbs of greenhouse gas emissions, on average, over the course of their lifespan compared to standard systems.
- **Heating and cooling in one device.** Mini split heat pumps offer highly efficient heating and cooling in one integrated system.

What is a Mini Split Heat Pump?

Ductless heat pumps, or mini split heat pumps, are an alternative to radiator or baseboard heating, as well as a replacement for window units for cooling. No duct work is needed. Instead, a head unit, or multiple head units, are mounted on an interior wall or ceiling, with an accompanying unit outside (Figure 1). The outside unit extracts heat from the air, even when it's cold. Refrigerant carries the heat directly to the head(s) inside, which then delivers heated air to occupied space. In warmer months, the system works in reverse for quiet, efficient air conditioning.

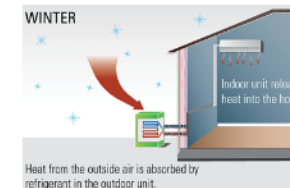


Figure 1. Ductless Mini Split Heat Pump Installed

ENERGY STAR® is the simple choice for energy efficiency. For more than 25 years, EPA's ENERGY STAR program has been America's resource for saving energy and protecting the environment. Learn more at energystar.gov/products/ductless_heating_cooling.



use narrow refrigerant lines positioned outside your home to optional central heating and cooling which requires bulky, and often an outdoor wall is needed for the refrigeration lines to connect

Mini splits can maintain different customized temperatures in each room (mounted or ceiling-inserted), remote controls, and smart phone apps.

Following situations:

radiant (e.g., furnace, wall heaters, electric radiant) that will also benefit from

radiators or baseboard heat) that have never had central air

rooms (e.g., garage) where extending ductwork or heating/cooling capacity is

needed. Areas where ductwork would be exposed to harsher temperatures (e.g., a

garage) in ENERGY STAR certified homes.

ductwork for air conditioning or expansions.

including spaces which serve as home offices.

unique heating and cooling applications and customer preferences that standard systems cannot provide. Styles include wall mounts, floor mounts, ceiling mounted, and recessed.

ENERGY STAR certified mini split models excel at providing space conditioning with more advanced compressors and refrigerants that allow for use in a climate where winter temperatures regularly dip below freezing. Choose an ENERGY STAR certified unit suited to your particular home.

Visit energystar.gov/homeupgrade to see if a mini split is right for your home, to find qualifying equipment and find product and rebate information.

Check for a **federal tax credit covering 30% of the project cost** up to \$2,000. Learn more at www.energystar.gov/taxcredits.

Check for ENERGY STAR certified ductless mini split heat pumps. Check with energystar.gov/rebatefinder.

INTRODUCING ENERGY STAR HOME UPGRADE

Mini Split Heat Pumps are one of six high-impact, energy efficiency improvements that you can make to your home that are designed to work together to deliver significant energy savings and cost savings. Count on ENERGY STAR to help you transition from fossil fuels to a cleaner, healthier, and more comfortable home.

energystar.gov/homeupgrade

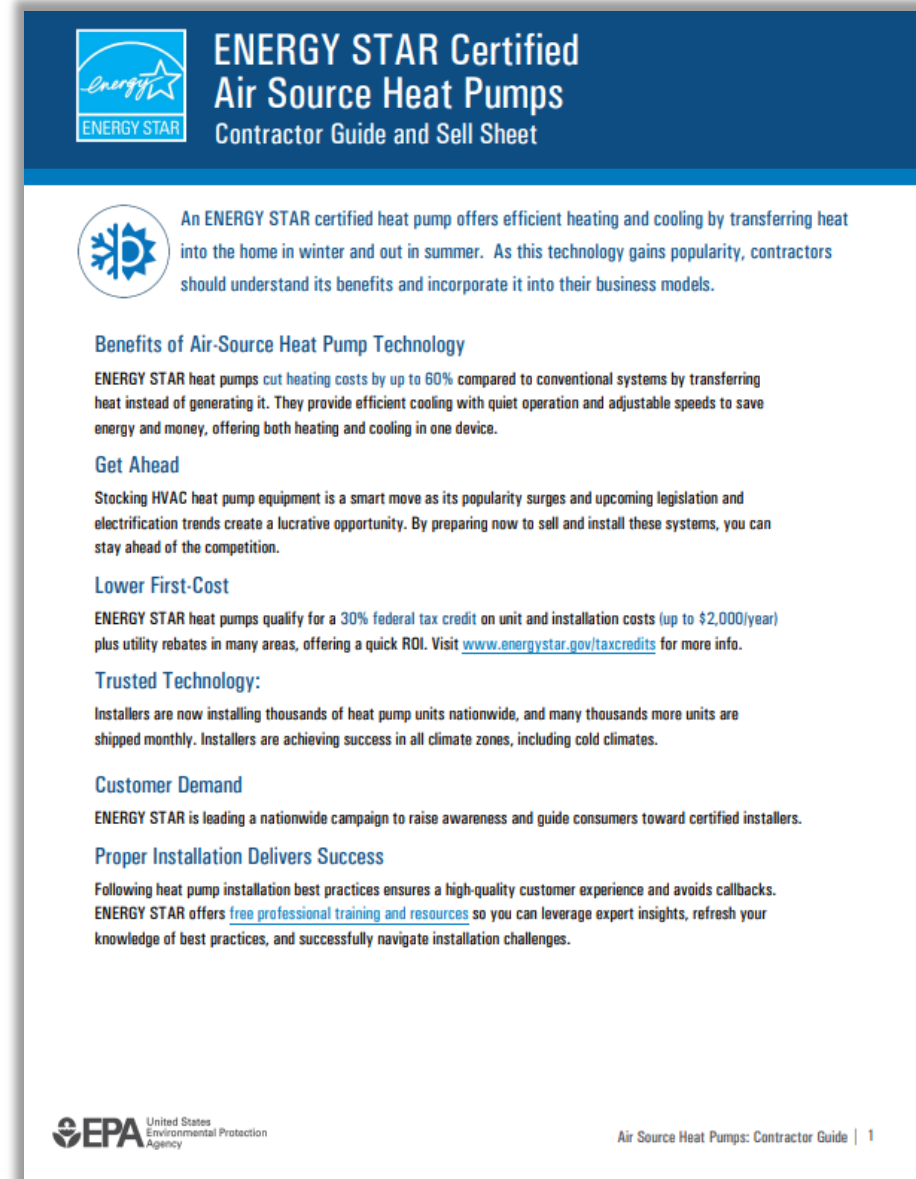




Heat Pump Contractor Sell Sheet

- Use this heat pump sell sheet to arm installers and contractors with an understanding of the benefits of this high impact upgrade from ENERGY STAR. This sell sheet provides a high-level overview of the benefits of this technology, as well as responses to common objections.
- The sell sheet is ready to download and print as-is or customize to incorporate your logo.

[Link to Heat Pump Contractor Sell sheet](#)



ENERGY STAR Certified Air Source Heat Pumps Contractor Guide and Sell Sheet

An ENERGY STAR certified heat pump offers efficient heating and cooling by transferring heat into the home in winter and out in summer. As this technology gains popularity, contractors should understand its benefits and incorporate it into their business models.

Benefits of Air-Source Heat Pump Technology
ENERGY STAR heat pumps cut heating costs by up to 60% compared to conventional systems by transferring heat instead of generating it. They provide efficient cooling with quiet operation and adjustable speeds to save energy and money, offering both heating and cooling in one device.

Get Ahead
Stocking HVAC heat pump equipment is a smart move as its popularity surges and upcoming legislation and electrification trends create a lucrative opportunity. By preparing now to sell and install these systems, you can stay ahead of the competition.

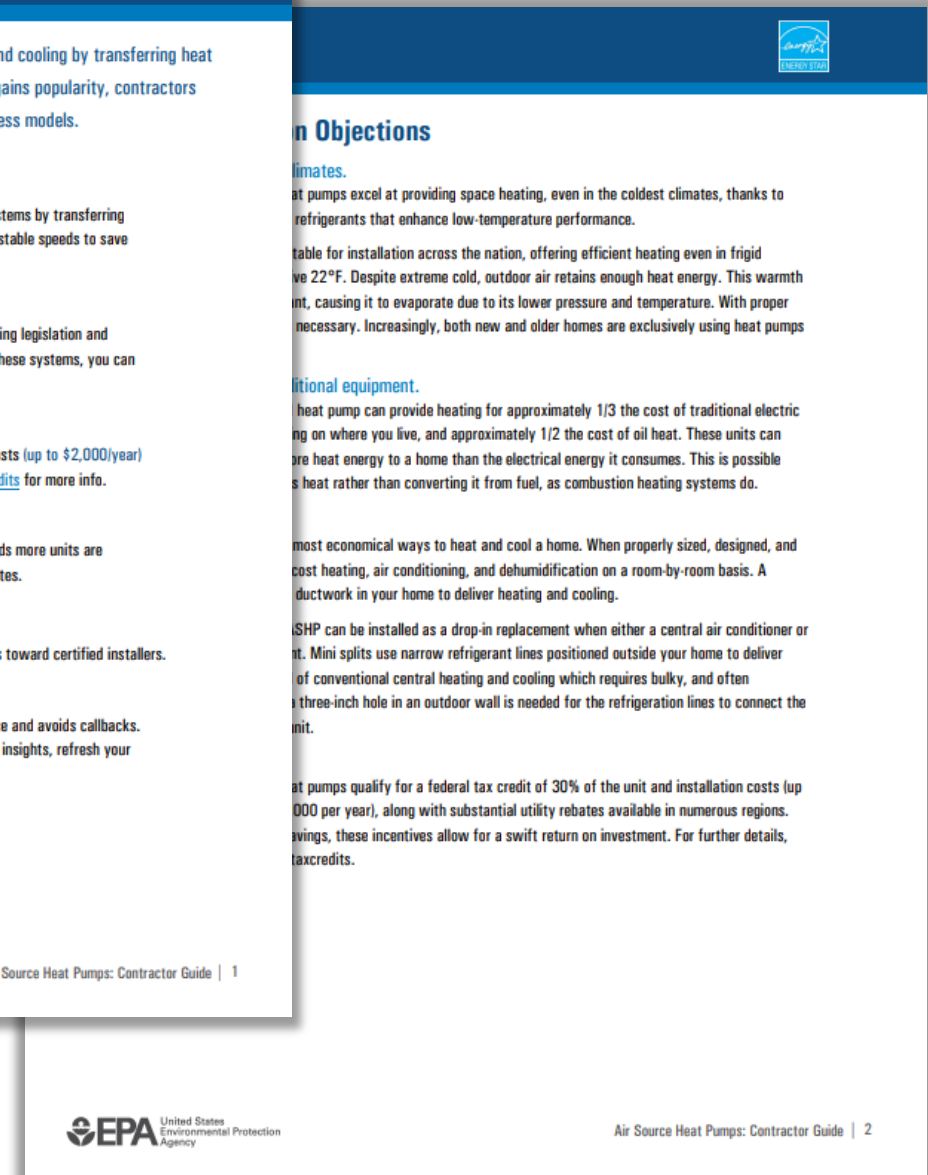
Lower First-Cost
ENERGY STAR heat pumps qualify for a 30% federal tax credit on unit and installation costs (up to \$2,000/year) plus utility rebates in many areas, offering a quick ROI. Visit www.energystar.gov/taxcredits for more info.

Trusted Technology:
Installers are now installing thousands of heat pump units nationwide, and many thousands more units are shipped monthly. Installers are achieving success in all climate zones, including cold climates.

Customer Demand
ENERGY STAR is leading a nationwide campaign to raise awareness and guide consumers toward certified installers.

Proper Installation Delivers Success
Following heat pump installation best practices ensures a high-quality customer experience and avoids callbacks. ENERGY STAR offers [free professional training and resources](#) so you can leverage expert insights, refresh your knowledge of best practices, and successfully navigate installation challenges.

EPA United States Environmental Protection Agency | Air Source Heat Pumps: Contractor Guide | 1



Common Objections

Climate.
Heat pumps excel at providing space heating, even in the coldest climates, thanks to refrigerants that enhance low-temperature performance.

Table for installation across the nation, offering efficient heating even in frigid temperatures.
Despite extreme cold, outdoor air retains enough heat energy. This warmth is captured and transferred into the home, causing it to evaporate due to its lower pressure and temperature. With proper installation, both new and older homes are exclusively using heat pumps.

Additional equipment.
A heat pump can provide heating for approximately 1/3 the cost of traditional electric heating on where you live, and approximately 1/2 the cost of oil heat. These units can provide heat energy to a home that the electrical energy it consumes. This is possible because heat pumps move heat rather than converting it from fuel, as combustion heating systems do.

Most economical ways to heat and cool a home.
When properly sized, designed, and installed, heat pumps provide efficient heating, air conditioning, and dehumidification on a room-by-room basis. A ductwork in your home to deliver heating and cooling.

SHPs can be installed as a drop-in replacement when either a central air conditioner or furnace is present.
Mini splits use narrow refrigerant lines positioned outside your home to deliver heat energy to a home that the electrical energy it consumes. This is possible because heat pumps move heat rather than converting it from fuel, as combustion heating systems do. A three-inch hole in an outdoor wall is needed for the refrigeration lines to connect the unit.

Heat pumps qualify for a federal tax credit of 30% of the unit and installation costs (up to \$2,000 per year), along with substantial utility rebates available in numerous regions.
By leveraging these incentives, these incentives allow for a swift return on investment. For further details, visit [www.energystar.gov/taxcredits](#).

EPA United States Environmental Protection Agency | Air Source Heat Pumps: Contractor Guide | 2





Heat Pump HVAC Social Media

- Social media materials include messaging and imagery that you can use as-is or customize as needed.
- **Sample social media posts** are included on the following slides.
- When drafting your post, be sure to tag ENERGY STAR
 - Facebook: Begin typing “@ENERGY STAR” and choose ENERGY STAR from the dropdown list; be sure to make the post public
 - LinkedIn: Begin typing “@ENERGY STAR” and choose ENERGY STAR from the dropdown list
 - X (Twitter): @ENERGYSTAR

[Link to Download Social Media Graphics](#)





Heat Pump HVAC Social Media

Sample Social Media

ENERGY STAR certified heat pump HVAC systems not only save you thousands on energy costs, but also thousands in tax credits and rebates. Find incentives and start your clean energy future at: <https://www.energystar.gov/homesavings>

Many utilities offer big rebates for homeowners that choose an ENERGY STAR certified product for their HVAC system replacement! Plus, save even more with a federal tax credit up to \$2,000. Use the home savings tool to find discounts in your area: <https://www.energystar.gov/homesavings>

Don't miss out on savings! Air source heat pumps that are ENERGY STAR certified are eligible for federal tax credits through 2032. You can claim 30% of the project cost for a maximum credit of \$2,000. www.energystar.gov/taxcredits

For the average household, almost half of the annual energy bill goes to heating & cooling—that's more than \$900/year! Cut these costs and help protect the environment by choosing ENERGY STAR certified heat pump HVAC products. www.energystar.gov/products/energy_star_home_upgrade/clean_heating_cooling

Learn the symptoms that it's time to replace your HVAC equipment, get purchase and installation guidance, find rebates, and calculate your personalized savings possibilities with the ENERGY STAR Home Upgrade calculator. www.energystar.gov/products/energy_star_home_upgrade/clean_heating_cooling

ENERGY STAR certified mini splits use more sophisticated compressors and fans that can adjust speeds to save energy and money. They also cool directly from the unit, rather than passing air through a network of fabricated ductwork, eliminating energy losses that can account for more than 30% of a home's energy use for space conditioning. Learn more: www.energystar.gov/products/energy_star_home_upgrade/clean_heating_cooling





Heat Pump HVAC Social Media

Sample Social Media

In cold weather, an ENERGY STAR certified air source heat pump delivers 3x more heat to a home than the electrical energy it consumes by transferring heat from the surrounding air rather than converting it from a fuel! This saves money and is better for the environment. www.energystar.gov/products/air_source_heat_pumps

Don't forget to check your HVAC system's air filter. Dirty air filters waste energy and can lead to expensive repairs or early system failure. ENERGY STAR recommends that you inspect it every month to ensure your system is running at optimum efficiency. www.energystar.gov/products/energy_star_home_upgrade/clean_heating_cooling

You can seal and insulate air ducts in your attic and crawlspace to improve the efficiency of your heating and cooling system by as much as 10% according to ENERGY STAR. That's \$190/year in heating and cooling savings! www.energystar.gov/products/energy_star_home_upgrade/clean_heating_cooling

An ENERGY STAR certified air source heat pump provides highly efficient heating and cooling by extracting heat from outside air in the winter and pulling the heat out of your home in the summer. It offers clean heating and cooling all in one system, and is good for you as well as the planet. Learn more: www.energystar.gov/products/energy_star_home_upgrade/clean_heating_cooling

Ready to consider an upgrade? The interactive ENERGYSTAR Home Upgrade calculator is your resource for navigating how to choose the right equipment to help you save energy, save money, and protect the planet. www.energystar.gov/products/energy_star_home_upgrade/clean_heating_cooling

Social Media Graphics

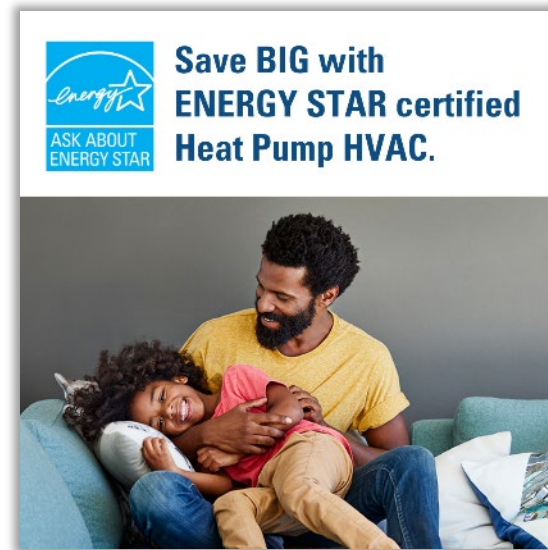
All graphics are available free to [download here](#).





Social Media Graphics

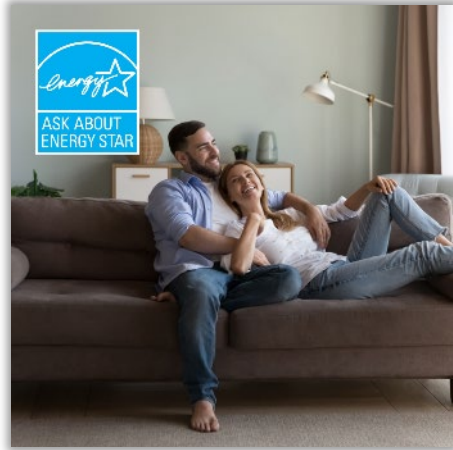
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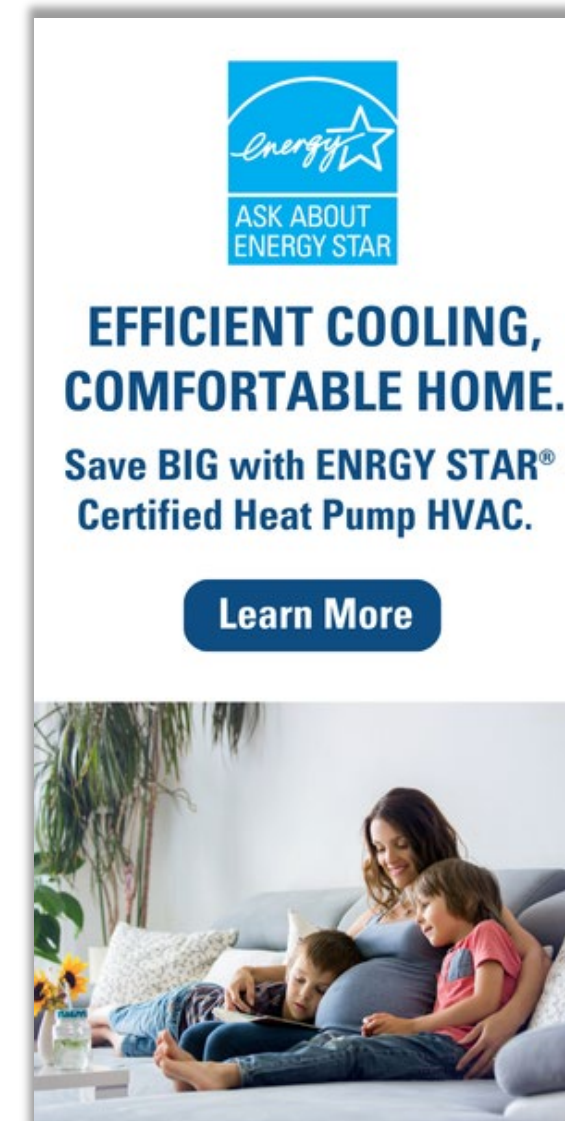
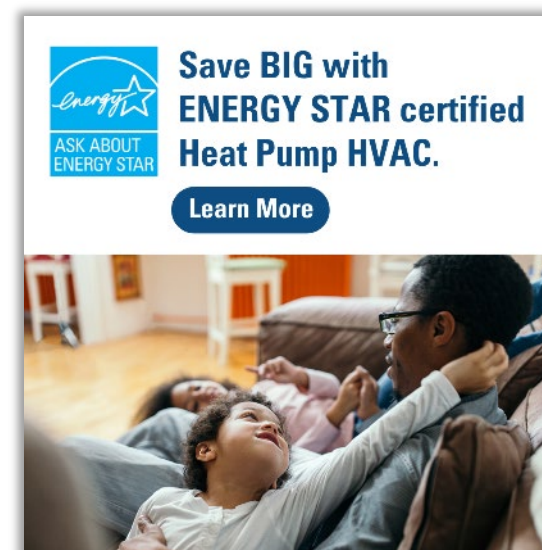
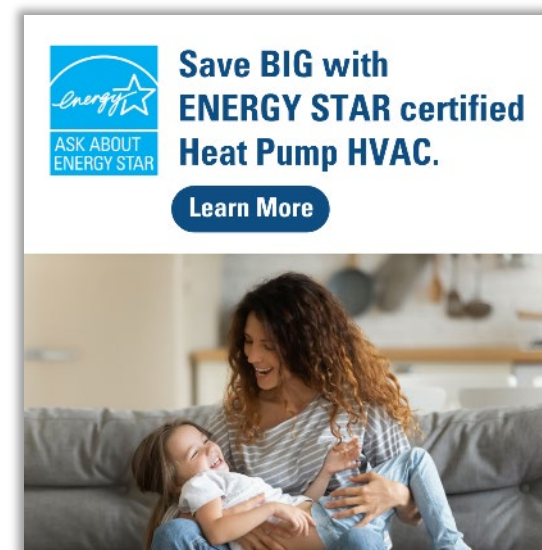
All graphics are available free to [download here](#).



Heat Pump HVAC Digital Graphics

- Feature one of the digital graphics on your ENERGY STAR, energy efficiency, or marketplace web pages or in e-newsletters and other communications.
- You can pair the graphics with key messaging found throughout this toolkit.
- **Web banners** are available in two sizes: 625x100 and 1032x234
- **Web buttons** are available in two sizes: 1080 x 1080 and 300 x 600
 - See all options on the next slides!

[Link to Digital Graphics](#)





Web Banners

Available in sizes 600x100 and 1032x234. [Link to Download Graphics.](#)



Save BIG with ENERGY STAR® Certified Heat Pump HVAC.



Save BIG with ENERGY STAR® Certified Heat Pump HVAC.



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Save BIG with ENERGY STAR® Certified Heat Pump HVAC.



Save BIG with ENERGY STAR® Certified Heat Pump HVAC.




Save BIG with ENERGY STAR® Certified Heat Pump HVAC.





Web Buttons

Available in sizes 300 x 600. [Link to Download Graphics.](#)





ASK ABOUT ENERGY STAR

**EFFICIENT COOLING,
COMFORTABLE HOME.**

Save BIG with ENERGY STAR®
Certified Heat Pump HVAC.

[Learn More](#)





ASK ABOUT ENERGY STAR

**EFFICIENT COOLING,
COMFORTABLE HOME.**

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Certified Heat Pump HVAC.

[Learn More](#)





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[Learn More](#)





ASK ABOUT ENERGY STAR

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[Learn More](#)





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[Learn More](#)




ASK ABOUT ENERGY STAR

**EFFICIENT HEATING,
COMFORTABLE HOME.**

Save BIG with ENERGY STAR®
Certified Heat Pump HVAC.

[Learn More](#)





Web Buttons

Available in sizes 1080 x 1080. [Link to Download Graphics.](#)

Save BIG with ENERGY STAR certified Heat Pump HVAC.

[Learn More](#)

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Save BIG with ENERGY STAR certified Heat Pump HVAC.

[Learn More](#)



Suggested Links for Digital Graphics

Use these links when adding these ENERGY STAR web banners and buttons to your website.

- [About ENERGY STAR Certified Air Source Heat Pumps](#)
- [About ENERGY STAR Certified Ductless Heat Pumps](#)
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Ask the Expert: How does a heat pump work?

- Learn why heat pumps are not just great for heating your home in the winter – they’re great for cooling too. Explore how heat pumps work and what the benefits are to upgrading your current HVAC systems to this super efficient technology.
- Use the ENERGY STAR Ask the Expert identifier on your website and hyperlink it directly to the article: [How does a heat pump work?](#)



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How Does a Heat Pump Work?

If you are looking to replace the air conditioning or heating system in your home, you may want to consider an air-source heat pump. These products provide cool air in the summer, just like standard air conditioners, but also provide heat in the winter. But how exactly do they do both?

How Heat Pumps Work in the Summer

In the summer months, a heat pump works just like a standard air conditioner would. Standard air conditioners, use a refrigerant to absorb unwanted heat in your home and transfer it to the air outside. This happens by changing the pressure of the refrigerant fluid. At low pressures, the refrigerant will easily absorb any heat available in the air and evaporate from a liquid to a gas. At high pressures, a gas refrigerant is higher energy than the outside air, so it passes heat to the surrounding air and the refrigerant condenses back to a liquid when it cools. By controlling the pressure of the refrigerant, an air conditioner can extract heat from your home, even on very hot days.

1. Warm air from inside the home is passed across a cool refrigerant coil, and the heat is absorbed by the liquid refrigerant, which evaporates into a low-temperature gas, and the cooled air is ducted back through the house.
2. The low-temperature gas refrigerant goes through a compressor, which raises its temperature and pressure.
3. Hot, high-pressure refrigerant gas is passed through the outdoor coil. The refrigerant passes heat to the outdoor air and condenses to a high temperature liquid.
4. Warm liquid refrigerant is passed through an expansion valve, which relieves pressure. As the pressure is reduced, the temperature of the liquid is reduced. The low-temperature, low-pressure liquid refrigerant is then piped back into the house.

* Ductless units operate similarly except the fan is built into the indoor unit and blows cooled air directly into the room.

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