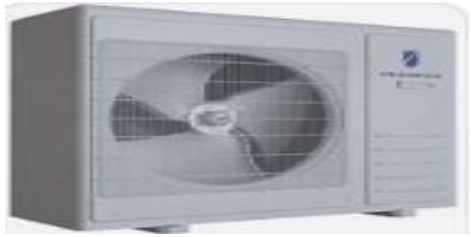
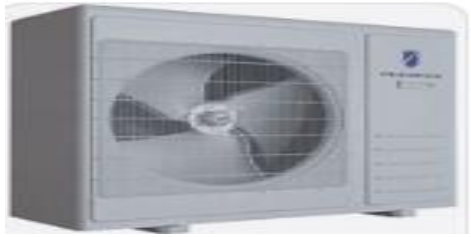


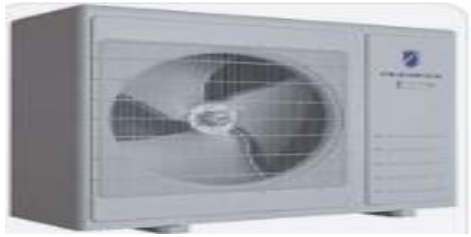


Episode 56UK June 6, 2024. Type in a zip code in New York State to find 2024 Heat Pump Rebates. In Episode 56UK, use the Rebate Finder https://www.energystar.gov/rebate-finder to find Heat Pump rebates in your area. 1) in New York State, Buffalo Area, zip code 14201, Heat Pump Rebates of up to $8,000 became available as of 5/31/2024. One example is the New York Home Electrification and Appliance Rebate Program. Other United States will follow. For example, Wisconsin is expected to roll out its up to $8,000 Heat Pump rebates in late Summer 2024. 2) in New York State, New York City Area, zip code 14201, Heat Pump Rebates of up to $8,000 became available as of 5/31/2024. The company ConEd offers Heat Pump rebates, as just one example in the New York City area. 3)United States Treasury website. Heat Pumps Deliver Major Savings for American Families. May 10, 2024. This website describes the Heat Pump Rebate program, among other rebates offered beginning in 2024. 4)Two other websites about U S Heat Pump Rebates https://www.energystar.gov/rebate-finder 1)14201 area code typed into the rebate finder. New York, Buffalo area, beginning 5/31/2024. Rebates and Incentives offered by New York Home Electrification and Appliance Rebate Program (one of many company rebates and incentives) on this webpage. Electric Panel Upgrades 05/31/2024 – ongoing Up to $4000 Point-of-Sale Discount New York Home Electrification and Appliance Rebate Program | 1-866-NYSERDA Learn More New York offers a point-of-sale discount on the purchase and installation of electric panel upgrades for income eligible, single-family households. Offer valid 05/31/2024 through no current end date. Other restrictions may apply. Electric Wiring Upgrades 05/31/2024 – ongoing Up to $2500 Point-of-Sale Discount New York Home Electrification and Appliance Rebate Program | 1-866-NYSERDA Learn More New York offers a point-of-sale discount on the purchase and installation of electric wiring upgrades for income eligible, single-family households. Offer valid 05/31/2024 through no current end date. Other restrictions may apply. Heat Pump Water Heaters 05/31/2024 – ongoing Up to $1750 Point-of-Sale Discount New York Home Electrification and Appliance Rebate Program | 1-866-NYSERDA Learn More New York offers a point-of-sale discount on the purchase and installation of ENERGY STAR certified heat pump water heaters for income eligible, single-family households. Offer valid 05/31/2024 through no current end date. Other restrictions may apply. Heat Pumps 05/31/2024 – ongoing Up to $8000 Point-of-Sale Discount New York Home Electrification and Appliance Rebate Program | 1-866-NYSERDA Learn More New York offers a point-of-sale discount on the purchase and installation of ENERGY STAR certified heat pumps for income eligible, single-family households. Offer valid 05/31/2024 through no current end date. Other restrictions may apply. Sealing and Insulation Products 05/31/2024 – ongoing Up to $1600 Point-of-Sale Discount New York Home Electrification and Appliance Rebate Program | 1-866-NYSERDA Learn More New York offers a point-of-sale discount on the purchase and installation of sealing and insulation products for income eligible, single-family households. Offer valid 05/31/2024 through no current end date. Other restrictions may apply. 2)New York, New York City. ConEd Rebates (one of many companies) Heat Pump 2024 Rebates. https://www.coned.com/en/save-money/rebates-incentives-tax-credits Heat pumps are the most efficient heating and cooling technology on the market and offer maximum control and quiet for year-round comfort in your home. How it Works. Choose from our list of approved contractors or have yours apply to participate. The contractor will visit your home free of charge, recommend the right equipment for you, and tell you how much it will cost after Con Edison's contribution. The contractor performs the work and takes up to $10,000 off your final invoice. No waiting for rebates! See below for full incentive details. About Air-Source Heat Pumps Air-source heat pumps move existing heat in the air from one place to another using electricity. In the summer, they move heat from inside the building to the outside. In winter, they extract heat from outside the building and bring it inside. A heat pump transferring the heat in the air into a building to warm it during the winter and out to cool it during the summer. There are three types of air-source heat pumps to consider: Mini splits are a great option if you don't have existing ductwork. Indoor air handlers can be mounted on the floor, wall, or ceiling. A central air-source heat pump is great for buildings with existing ductwork and won't take up any additional space on your walls. Air-to-water heat pumps provide heating, cooling, and domestic hot





water and are a good fit if you have existing radiators that can be repurposed. Incentives Option 1 Remove or disable your old heating system when you install air-source heat pumps Option 2 Keep your old heating system and install integrated controls alongside your air-source heat pumps. If you previously received an incentive for a partial heat pump installation in your home, you could be eligible for additional incentives up to $4,000 for a single-family home and up to $1,500 for apartments, to fully decommission your old fossil fuel heating system. * Incentives are calculated per home or per apartment and are capped at 50% of project costs, or 70% if you're located in a Disadvantaged Community as defined by the New York State Climate Justice Working Group. **Residents of the Soundview neighborhood in the Bronx may be eligible for additional incentives. ***Only Single-family homes, two- to four-family buildings, and individual apartment owners in buildings with five or more units are eligible for these incentives. 3)United States Treasury website. Heat Pumps Deliver Major Savings for American Families. May 10, 2024. This website describes the Heat Pump Rebate program, among other rebates offered beginning in 2024. https://home.treasury.gov/news/featured-stories/heat-pumps-deliver-major-savings-for-american-families Heat Pumps Deliver Major Savings for American Families. May 10, 2024. Through tax credits and rebates, President Biden's Inflation Reduction Act (IRA) provides new opportunities to homeowners and renters to make energy efficient upgrades, such as heat pump installations, to their homes. Heat pumps are a year-round heating and cooling solution for many homes and climates; they are energy efficient and save money. Provisions available to homeowners installing heat pumps include the IRA's Energy Efficient HomeImprovement Credit, the Residential Clean Energy Credit, and the Home Electrification and Appliances Rebate Program. Each can help taxpayers defray the costs of making energy efficient upgrades to their homes including the cost of a new heat pump. For low to moderate income homes, rebates and tax credits can be combined to further reduce upfront costs. The Energy Efficient Home Improvement Credit (§ 25C) provides a tax credit for energy efficiency upgrades. This credit covers 30 percent of the cost of home improvements such as qualifying heat pumps, which are eligible for a credit of up to $2,000, as well as upgraded windows, doors, insulation, biomass stoves, water heaters, and boilers, which are subject to certain annual caps. The credit also provides 30 percent of costs up to $150 for home energy audits that identify potentially significant and cost-effective energy efficiency improvements to a home and that provide an estimate of the energy and cost savings for each improvement. The Residential Clean Energy Credit (§ 25D) covers up to 30 percent of the costs of qualifying home improvements that include certain geothermal heat pumps as well as qualifying solar water heaters, solar installations such as panels, small wind installations, fuel cells, and battery storage. The Department of Energy's Home Electrification and Appliances Rebate (HEAR) Program is focused on efficient electrification projects for low-to-moderate income (LMI) households. To qualify, projects must apply rebates as Point-of-Sale incentive program instant discounts. Installer incentives up to $500 are allowed. Additional information on these credits can be found on the Treasury Department's Taxpayer Resource Hub. WHY HEAT PUMPS? Heat pump systems work in every season, providing energy efficient solutions for heating and cooling homes. Unlike furnaces, which generate their own heat, heat pumps use energy to move heat in and out of a home as needed. The process makes heating and cooling homes cheaper and more energy efficient. Though historically heat pumps have primarily served homeowners in warmer climates, recent Department of Energy initiatives are enabling the deployment of heat pumps in climates that experience subzero temperatures, making heat pumps a valuable tool for homeowners throughout the United States. There are several kinds of heat pumps, designed to serve the varying needs of homeowners across the country: Air-source heat pumps transfer heat between a house and the surrounding air. They have two metal coils and contain a liquid refrigerant that evaporates and condenses to transfer heat. They can be either ducted, or ductless, and can reduce electricity use by roughly 65 percent. Geothermal heat pumps transfer energy from water or from the ground to and from a home. Though geothermal heat pumps can be more expensive to install, they have low operating costs and can reduce energy use significantly – sometimes up to 80 percent. Absorption heat pumps operate similarly to air-source heat pumps, but instead of electricity, they use heat or thermal energy as their primary





energy source. Each type of heat pump has the potential to save consumers money while also reducing their carbon footprint. CASE STUDIES. The following hypothetical scenarios illustrate the value that heat pumps can provide individuals, especially when used in tandem with credits or rebates in the IRA. Note that savings sums over time are left undiscounted. Case Study A. The Pompapanas family has a higher-than-average monthly electrical heating and cooling bill of $200[1] and is interested in buying an air-source heat pump for $12,000.[2] They take advantage of the Energy Efficient Home Improvement Credit, saving $2,000 on their year-end tax return, so the net cost is effectively $10,000. Adding a heat pump reduces the Pompapanas family's average monthly electricity bill by 65 percent[3] from $200 to $70, saving $130 a month, or $1,560 a year. After 7 years, they will have saved more in energy bills than the upfront cost they paid for the pump. Over 15 years, the family could save as much as $13,400 in net savings. Case Study B. The Antlia family lives in a large home with an average monthly electrical heating and cooling bill of $400. They are looking to install a $20,000 geothermal heat pump in their home and to finance the cost over time. Their bank offers them a $15,000 home improvement loan at 10 percent interest to be paid over 15 years with a $5,000 downpayment. They take advantage of the Residential Clean Energy Credit, saving 30 percent of the cost of the geothermal heat pump, or $6,000 on their year-end tax return. After installing the heat pump, the family's average monthly utility bill is reduced 75 percent[4] from $400 to $100 a month, saving them $300 a month, and a total of $3,600 a year. Over the term of the loan, they will make monthly payments of $161, meaning they will have net monthly savings of $139 a month, or $1,668 annually. By the time the loan is paid off in 15 years, the family will have saved approximately $20,000 with their geothermal heat pump after accounting for loan costs. Case Study C. Heat pump installations can also benefit low-to-moderate income (LMI) households. The Varmepump family, a moderate-income family, buys an air-source heat pump for $16,000 for their new home. They get a Home Electrification and Appliances Rebate, which saves them $8,000 of their heat pump expenses. If the Varmepump family have sufficient tax liability for that year, they can also take advantage of the Energy Efficient Home Improvement Credit, saving $2,000 on their year-end tax return, so the net cost is effectively $6,000. Adding a heat pump reduces the Varmepump family's average monthly electricity use for heating and cooling from $150 to $60, saving $90 a month, or $1,080 a year. After 6 years, they will have saved more in energy bills than the upfront cost they paid for the pump. After 12 years, the family will save $6,960 in energy costs. CONCLUSION. The Inflation Reduction Act, through the Energy Efficient Home Improvement Credit, the Residential Clean Energy Credit, and the Home Electrification and Appliances Rebate (HEAR) Program, is enabling households, including low-to-moderate income (LMI) households, to power their homes more efficiently and save money. Consumers buying heat pumps outright, with the help of a consumer loan, and/or with the help of a rebate, have the potential to realize tremendous climate and economic impacts. Heat pump buyers can save money on installation costs up front and on energy bills well into the future. RELEVANT RESOURCES. Energy Efficient Home Improvement Credit | Internal Revenue Service. Residential Clean Energy Credit | Internal Revenue Service. Heat Pumps | Department of Energy. Making Our Homes More Efficient: Clean Energy Tax Credits for Consumers | Department of Energy. Operating and Maintaining Your Heat Pump | Department of Energy. Energy 101: Geothermal Heat Pumps | Department of Energy (YouTube) Inflation Reduction Act | U.S. Department of the Treasury. 4)Two other websites about U S Heat Pump Rebates (below) https://www.energy.gov/scep/home-energy-rebates-frequently-asked-questions https://www.energystar.gov/rebate-finder