

Episode 56YHi 9 27 2024 Near Neighbor of proposed Vermont Biomass Plant fears air pollution.

In Episode 56YHi 1 United States 2 Colorado 3 Florida 4 Illinois 5 Maryland 6 New York 7 Vermont 8 Washington 9 Australia 10 New Zealand 11 United Kingdom 12 Europe 13 Finland 14 India 15 PM2.5 and human health. Main Content. 1A United States Department of Energy. September 27 2024. **RAWSEP View.** Heat Pump Rebates and reducing risk for Heat Pump contractors. DOE Clarifies HEAR Income Levels. From the article. Department of Energy. Whole Homes and Appliance Rebate Program · Building Codes and heat pump for space heating and cooling. This is not applicable for new construction. DOE Releases Resources on Retailers and Aggregators Clarifies HEAR Income Levels. **Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates, a 501c3 nonprofit organization.** September 26 2024. The U.S. Department of Energy has issued a couple of new documents to help states as they stand up their Home Efficiency Rebates HOMES and Home Electrification and Appliance Rebates HEAR programs: Getting Started: Launching a Retail Focused Home Electrification and Appliance Rebates Program: Providing rebates via retail can raise awareness of the HEAR program and efficient electric appliances. DOE is providing this document to help states and territories develop partnerships with retailers to help deliver the HEAR program. This factsheet focuses on an emerging model that reduces risk for contractors by using an aggregator that packages predicted savings from individual homes into larger units of energy savings valued at the portfolio level. FAQ updates: DOE has published two new FAQs to provide important clarifications to states territories and Tribes regarding the HEAR program: 108. Does the limited assessment requirement in the HEAR program apply to new construction? A: No. Under the Home Electrification and Appliance Rebates program limited home assessments are not required for new construction projects. Per Section 4.2.4 of the Program Requirements and Application Instructions to mitigate the risk of raising utility bills states are required to conduct a limited home assessment prior to installation of an electric heat pump for space heating and cooling. This is not applicable for new construction homes. 109. May states exclude households whose income level is between 80 to 150% Area Median Income AMI for the HEAR program? A: No. Section 50122 of the Inflation Reduction Act explicitly states that eligible entities must be provided with rebates and eligible entities include any household whose income is less than 150% of area median income AMI. About Home Energy Rebates. On Aug. 16 2022 President Biden signed the landmark Inflation Reduction Act. The law includes nearly \$400 billion to support clean energy and address climate change including \$8.8 billion in Home Energy Rebates which will provide two separate rebates to consumers: The Home Efficiency Rebates will provide \$4.3 billion to discount the price of energy saving retrofits in single family and multifamily buildings. These rebates will be administered by states and territories. The Home Electrification and Appliance Rebates will provide \$4.5 billion in rebates for high efficiency electricity upgrades in homes. These rebates will be administered by states territories and Indian tribes. For more information visit the Home Energy Rebates website and sign up for email updates. 1B United States. Email from the Biden Harris Administration 9/27/2024. **RAWSEP View.** Maine and Rhode Island have launched their HEAR programs which include Heat Pump Rebates. **Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates, a 501c3 nonprofit organization.** Greetings! ENVIRONMENTAL NEWS. September 24 2024. When President Biden took office he pledged to restore America's climate leadership at home and abroad. Every day since the Biden Harris Administration has led and delivered on the most ambitious climate conservation clean energy and environmental justice agenda in history including securing the largest ever climate

investment and unleashing a clean energy manufacturing boom that has created hundreds of thousands of new clean energy jobs; and lowered energy costs for families while delivering cleaner air for communities across the country. **Joining business leaders government officials young people and other advocates from around the world gathering in New York City to participate in Climate Week President Biden delivered remarks this week highlighting his Administration's unprecedented progress in tackling the climate crisis cutting energy costs for everyday Americans and modernizing our electric grid to reducing air pollution.** The Biden Harris Administration hosted the first ever White House Summit on Extreme Heat. As a part of the Summit the White House announced a new Extreme Heat Call to Action which invites interested organizations to submit a commitment to take action in advance of the 2025 heat season including a wide range of approaches and tools which could be used to protect people and resources from extreme heat. **The U.S. Department of the Energy DOE announced that Maine and Rhode Island have launched their first federal Home Energy Rebates programs supported by the Inflation Reduction Act and covered under the Justice40 Initiative. The launches of these programs in Maine and Rhode Island are part of the Biden Harris Administration's nationwide initiative to provide \$8.8 billion in Federal funding for states territories and Tribes to lower energy costs and increase efficiency in American homes.** The U.S. Department of the Treasury and the Internal Revenue Service IRS released guidance on the Alternative Fuel Vehicle Refueling Property Credit to expand clean vehicle recharging refueling infrastructure and lower transportation costs for Americans. The Department of Housing and Urban Development HUD announced its Extreme Heat Playbook to support communities by providing best practices for building community resilience mitigating the impacts of extreme heat and lowering cooling costs for public housing residents. HUD also launched an updated Environmental Justice website that connects communities to HUD initiatives on climate resilient housing and essential HUD programs that promote fair housing. DOE announced \$3 billion for 25 selected projects across 14 states to boost the domestic production of advanced batteries and battery materials nationwide. Batteries are critical to strengthening the U.S. grid powering American homes and businesses and supporting the electrification of the transportation sector. DOE announced \$90 million to help states cities Tribal Nations and their partners implement updated energy codes for residential and commercial buildings. Funded by President Biden's Bipartisan Infrastructure Law these awards will support 25 new projects across the country to help ensure buildings meet the latest standards for energy efficiency. DOI announced a \$71 million investment from President Biden's Investing in America agenda to electrify homes in 13 Tribal communities across Indian Country helping to close the Tribal access to electricity gap. SOCIAL MEDIA HIGHLIGHTS. President Biden. On my first day as your president America rejoined the Paris Agreement. Vice President Kamala Harris. The Biden Harris Administration has delivered the most ambitious climate agenda in history. Our Inflation Reduction Act is the largest ever investment in climate action and we have created more than 330,000 new clean energy jobs. Chair Brenda Mallory Council on Environmental Quality. Great to be back at Climate Week NYC and to discuss the health impacts of climate change. Secretary Jennifer Granholm. Today I'm at Climate Week NYC. Since POTUS signed the largest ever investment in climate action clean power generation is up and the U.S. is determined to lower emissions by 50% by 2030. NEWS CLIP HIGHLIGHTS. The Maine Wire: **Maine** Launches \$36 Million Federally Funded Home Energy Rebate Program. The Boston Globe: **Rhode Island** secures millions for new energy rebate program. GET INVOLVED! Upcoming Meetings and Events. U.S. Department of Energy: Electric Vehicle Working Group Public Meeting. Summary: The DOE is holding a virtual public meeting of the Electric

Vehicle Working Group EVWG formed by the Joint Office of Energy and Transportation to make recommendations to the Secretaries of Energy and Transportation regarding the development adoption and integration of light medium and heavy duty electric vehicles into the U.S. transportation and energy systems. 1C United States and California. How the Inflation Reduction Act IRA Can Help You Save Both Money and the Environment. **RAWSEP View.** California will soon launch their Heat Pump rebates. From the article. Sierra Club. rebate toward electric vehicles which has helped grow the national EV market. heat pumps or heat pump water heaters. This provides opportunities for. How the Inflation Reduction Act IRA Can Help You Save Both Money and the Environment. **Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates, a 501c3 nonprofit organization.** October 2, 2024. Picture of a Woman working on a building. As we all know, climate change is quickly becoming an issue that requires action at almost every level, from cars to buildings to the electrical grid to renewables. One big step toward saving the environment and thus improving our quality of life is electrifying our grid so we can become more energy efficient. In 2022, congress passed the Inflation Reduction Act IRA, marking the largest climate-change-related bill in US history, which allocates \$369 billion toward energy security and climate change. While parts of the bill allocate funds toward healthcare and deficit reduction, a large part of the bill is allocated toward helping buildings become much more energy-efficient by using electrified appliances such as central heating and cooling units, stoves, and water heaters. This bill also renewed the \$7,500 rebate toward electric vehicles, which has helped grow the national EV market. One portion of the IRA, the Home Efficiency Rebates HOMES program, allocates \$4.3 billion for single-family and multifamily discounts on whole-home efficiency upgrades. The program provides rebates toward major upgrades such as electrical panels, solar panels, insulation, windows, and other improvements to make homes more energy efficient. For example, it can provide up to 30% rebates on windows and doors. Solar panel installation costs can also be rebated back 30%, up to a certain limit. By making homes use more renewable energy and be more energy efficient, this program will move energy use away from fossil fuels. To collect the rebates for the HOMES program, certified contractors must do the work, to prove that the upgrades were done. Currently, this program will roll out in California later this year or early next year. The other part of the IRA, the Home Electrification and Appliance Rebates Called HEAR across the United States and perhaps called HEEHRA in California, allocates \$4.5 billion for single-family and multifamily discounts on the electrification of home appliances and equipment. For California, these programs will be rolling out later this year. To be approved by the federal government to receive the funds, each state is required to provide details of implementations and allocation based on the IRA. However, for the HEEHRA program, the rebates are to be issued when purchasing newer energy appliances, such as ductless mini-split heat pumps or heat-pump water heaters. This provides opportunities for people to not just save money, but become more sustainable, both by lowering the use of natural gas, as well as by using more renewable energy sources. This landmark law goes a long way in reducing climate change and protecting the environment, while allowing consumers to save substantial money. The rebate programs are a bit complicated since they are based on income and location. To search for what you're eligible for, here are two sources that can provide details: California: <https://switchison.org/> National: <https://homes.rewiringamerica.org/> The Sierra Club writer has been with the Sierra Club for the past three years. He is an avid hiker, runner, and surfer who nerds out over renewable energy, conservation, and sustainability. 1D United States. Meet EPA Senior Scientist Jason Sacks MPH. Environmental Protection Agency EPA. particulate matter PM2.5

exposure and mortality and identifying those populations at greatest risk of an air pollution related health effect. 1E United States. New government program pays out massive rebates for U.S. families 'A bank account for. The Cool Down. heat pumps electrical panels electrical wiring and insulation. Taking advantage of these rebates is one of the best ways for homeowners to. 1F United States. Heat Pump Possible: The revisit Air Conditioning and Refrigeration Journal. ACR Journal. One year after it launched its Heat Pump Possible with Kevin McCloud calling on homeowners and installers to share their heat pump installs. 1G United States. Panasonic to integrate its heat pumps with smart technology HPAC Magazine. Panasonic's Aquarea heat pump to be equipped with smart thermostats that can drive energy savings of up to 38 per cent. Panasonic testing smart thermostats in residential heat pumps PV Magazine. Panasonic announced that from November will integrate a series of home energy management solutions to its Aquarea air to water heat pumps. 1H United States. This startup could save you thousands with the first 'intelligent' hot water heater of its kind. The Cool Down. Lesson 2: The heat pump part of Cala's heat pump water heater is a rebate for installing a modern dual use heat pump for space heating. 1i United States. Heat pump water heater sales soar Environment America. More than 190000 heat pump water heaters were shipped in the United States last year representing a 35% increase over 2022. 1J United States. Ice Air to Present Webinar on How Heat Pump Water Heaters Can Aid Architects and. PHCP Pros. This course will delve into the principles applications and strategic considerations of Heat Pump Water Heaters HPWHs and electrification. 1K United States. Air pollution can have a lasting impact on white matter in young brains. U.S. Right to Know. Researchers estimated the amount of exposure to 14 different air pollutants such as fine particles PM2.5 and gases such as nitrogen oxides NOx. 2 Colorado. Two prescribed fires planned this fall on Forest Service land in Eagle County. Real Vail. Prescribed fire smoke may affect your health. For more information see <https://www.colorado.gov/pacific/cdphe/woodsmokeandhealth>. 3 Florida Tampa. It's fall which means there are several things you can do around your home to prepare for winter. Fox 13 News. Jona also told us about rebates that are currently available on qualifying products like clothes washers dishwashers freezers heat pump clothes. 4 Illinois Chicago. This Central Heat Pump Water Heater In Chicago Was One Of The First To Be Installed In A. Clean Technica. These heat pumps were extra welcome because they provided cooling to residents in the summer which before the project was only possible through. 5A Maryland and a log found in Quebec Canada. 3,775 year old wood burial supports wood vaulting as a durable carbon removal method. Science. **RAWSEP View.** Carbon Sequestration is not needed if only clean energy solutions are used such as wind and solar energy are used. Just don't burn wood or other solid fuel or fossil fuels to begin with. I believe this article is about carbon sequestration and wood burial seems to be not about burying trees or wood but about burying the emissions of wood burning such as CO2 and PM2.5 because in tests of the emissions from the cleanest burning wood stove in the United Kingdom the Ecodesign wood burning stove wood burning emissions of PM2.5 and CO2 were 2.8 times those of coal burning. A recent report by Ember stated that the Drax wood burning plant emits 4 times the CO2 as it did when the same Drax facility was used as a coal burning plant. This article does not mention the adverse human health effects of wood burning and makes many assumptions from the playbook of the scientifically debunked theory of Carbon Neutrality of Wood Burning such as sustainably harvested trees. Sustainably harvested trees have the same CO2 and PM2.5 emissions as ordinary wood when burned. Carbon sequestration attempts by **direct air capture have consistently failed over decades of trying, and nature-based strategies such as reforestation do not reliably sequester CO2** and never

sequester PM2.5, In fact a recent study showed by trees close their pores to PM2.5 emissions from wood burning wildfires or other wood burning and those trees inundated with PM2.5 slow or stop photosynthesis that sequesters some CO2 in the presence of PM2.5 in a manner like a human holding his or her breath. Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates, a 501c3 nonprofit organization. Greenhouse gas emissions from burning fossil fuel must be drastically reduced by transitioning to renewable energy sources to prevent climate change. This 3,775 year old log may hold the secret to slowing climate change. Washington Post. burning coal and other fossil fuels.. Follow Climate. Under the right conditions tons of wood could be buried underground in wood. Researchers have proposed a new approach to long-term carbon storage, drawing inspiration from a 3,775-year-old buried log found in Quebec. The method, referred to as "wood vaulting," involves burying wood in specially engineered vaults to store carbon for hundreds of years, offering a potential low-cost strategy to combat climate change. Researchers have proposed a new approach to long-term carbon storage, drawing inspiration from a 3,775-year-old buried log found in Quebec. The method, referred to as "wood vaulting," involves burying wood in specially engineered vaults to store carbon for hundreds of years, offering a potential low-cost strategy to combat climate change. With the world striving for net-zero carbon emissions, reducing fossil fuel emissions alone won't suffice. Methods of carbon dioxide removal CD, including both engineering solutions like direct air capture and nature-based strategies such as reforestation, are essential to meet climate targets. Forests, which act as carbon sinks by storing atmospheric carbon, often release that stored carbon back into the atmosphere through decomposition or burning, limiting their net impact. Researchers at the University of Maryland are exploring the idea of using wood vaults to preserve carbon-storing woody biomass for extended periods, thereby reducing atmospheric carbon levels. The ancient log discovery shows the potential for such a system. This log, buried in clay for nearly four millennia, lost only about 5% of its carbon, suggesting that wood burial in low-permeability environments could be an effective means of carbon storage. Using carbon cycle models, the researchers estimate that wood vaulting could sequester as much as 10 gigatons of CO2 annually by using sustainably harvested trees and underutilized wood waste, such as urban tree debris and byproducts from forestry operations. The initial cost for this method is estimated between \$100 and \$200 per ton of CO2. Yuan Yao, in a related commentary, highlights the need for a thorough life-cycle analysis of the environmental impacts of wood vaulting. Such assessments will be crucial for scaling up biomass burial projects globally. 5B Maryland. DOE Awards UMD Partners \$2.5M to Boost Heat Pump Safety Maryland Today. Heat pumps play an important role in decarbonizing the heating ventilation and air conditioning segment said Hwang. With both of these DOE. 6 New York Medina. Industrial steam generating heat pump to be installed at Western New York Energy. Ethanol Producer Magazine. Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates, a 501c3 nonprofit organization. Skyven Technologies has announced it will install its Skyven Arcturus a steam generating heat pump at Western New York Energy's ethanol plant. U.S. ethanol facility to host steam generating heat pump. PV magazine USA. Western New York Energy says it will install an industrial steam generating heat pump at its ethanol plant in Medina New York with a maximum. New York. Setting a New Standard First Ever Industrial Steam Generating Heat Pump to Be Deployed. PR Newswire. Cutting Edge Steam Generating Heat Pump Technology to Reduce Over 20,000 MT CO2 Annually From Western New York Energy's Ethanol Production. 7 Vermont Burlington and Lyndon. Developer seeks permit for Lyndon wood biogas plant. WCAX. I'm really worried.

RAWSEP View. It is not environmentally friendly to char wood, which is a euphemism for burning wood, instead of using the cheap and truly clean alternatives for energy generation such as wind and solar. Wood burning emits 90% PM2.5 particulate matter of 2.5 micrometer size the perfect size to infiltrate the human lung setting off a cascade of human health problems and early deaths. Precious wood and ordinary wood both emit PM2.5 when burned. Quibbling over whether good trees or bad trees are burned shifts the emphasis from the adverse health effects of burning wood which should be the main concern. Just don't burn wood to begin with. The only winners in this equation would be the wood burning profiteers making a quick buck while at the same time hastening climate change. A collision repair store owner next door to the proposed plant is concerned with adverse health effects from the expected air pollution, and he suspects he will act as a canary in a coal mine. Human health is important and if money is the bottom line the expected health care expenses of near neighbors should be factored into any decision to open this unnecessarily polluting wood burning plant when clean alternatives of generating electricity are available and cheaper in 2024. **Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates, a 501c3 nonprofit organization.**

Sep. 25, 2024. Lyndon, Vermont. WCAX A new kind of power plant could be coming to Vermont. A company wants to build a wood biogas powerplant in the Northeast Kingdom but some opponents are questioning if it is as climate-friendly as it claims. Neighbors in the town of Lyndon are raising some concerns about the possibility of a new biogas powerplant moving into the St. Jonsbury-Lyndon Industrial Park. "It wasn't until the beginning of last week I received an official notice. Only abutting landowners were entitled to receive. The general community did not get notice of this," said an abutting landowner, who has owned NEK Collision Repair for about five years and is across the street from where the proposed 8,000-square-foot 2.2MegaWatt facility would go. He's concerned about emissions and the well-being of his employees and customers. "We work with the doors open a lot. I'm really worried about the three stacks that they're going to have burning methane. Especially still, really humid days when that pollution lingers, it would get hard to breathe. I moved to Vermont for the nice clean air." Vermont Renewable Gas' representative says the plant would decompose scrap wood chips to produce to generate electricity. He says the byproduct called biochar could be used as fertilizer. [The company filed for a certificate of public good with the Vermont Public Utility Commission.](#) If approved, the Lyndon Electric Department and other utilities would be required to use a portion of the electricity under the state's standard offer program. But many still have questions about the project and its effects on the environment, including the Conservation Law Foundation CLF. "there are still some unanswered questions," said CLF's representative. Members of the group Stop Vermont Biomass SVB say the wood pitched for use in the project might not be scrap at all. "When you hear the term residue in the context of the forestry industry, residue can be a tree that is not marketable for high-value lumber. It is a tree that is very valuable from the standpoint of supporting biodiversity," said an SVB spokesperson. The developer denies that they'll be harvesting good trees. Lyndon town officials aren't sure of what kind of impact this could have on the area but will likely be intervenors in the case. There's no word on when the PUC will make a decision. 8 Washington. Seattle Offers Up To \$8000 In Rebates For Residents To Switch From Oil Heat to Energy. The Seattle Medium. Electric heat pumps offer several advantages including energy efficiency and the ability to provide both heating and cooling. Burning oil for. 9 Australia Victoria. PRESS RELEASE Free Commercial Heat Pump Upgrade Now Available in Victoria. Press Release Distribution Australia. cost. It comes courtesy of the Victorian State Government's Commercial Heat Pump Rebate

program. This initiative is part of the Victorian Energy. 10 New Zealand Tautaranga. PM_{2.5} concentrations air quality Data to 2023. Stats NZ. PM2.5 are particles particulate matter less than 2.5 micrometres in diameter that can be suspended in the air. PM2.5 concentrations are an. 11A United Kingdom. It's UK Heat Pump Week and EIA finds natural refrigerant models are now readily available! Environmental Investigation Agency. It is widely acknowledged that the rapid rollout of heat pumps is a key part of the UK's net zero strategy with a typical heat pump reducing. 11B United Kingdom. Fact check: Heat pumps move heat energy from outside to inside a home. Richmond and Richmond & Twickenham Times. Heat pumps are highly efficient and can release three times as much heat energy into a home as they consume energy in the form of electricity. 11C United Kingdom. UK consumers say they can't afford a heat pump and have a lack of understanding about. Envirotec Magazine. Lack of affordability finance options and lack of knowledge and trust in heat pump and solar panel technology the installation process and proposed. 11D United Kingdom. 10 benefits of installing a heat pump. The Telegraph. Heat pumps work most efficiently when homes are heated consistently to temperatures between 6470F 1821C – this is great for the fabric of the. 11E United Kingdom Scotland. Ministers pause ban on wood burning stoves. MSN. **RAWSEP View.** This is unnecessary bad news. People even in Scotland deserve clean air. From the article. A ministerial direction means that wood burners and other biofuel heating systems including peat can still be installed pending the outcome of the. 12A Europe. Heat pumps avoid 5.5bcm of gas per year. Cooling Post. According to the new information from the European Heat Pump Association EHPA these same heat pumps are also avoiding 45Mt of CO2 emissions in. 12B Europe. Heat pump lobby sounds alarm over plummeting sales. ENDS Europe. The European Heat Pump Association EHPA released figures today showing that only 765000 heat pumps were sold between January and June compared to. 13 Finland Helsinki. City builds largest heat pump of its kind with the potential to keep tens of thousands of homes warm. The Cool Down. **Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates, a 501c3 nonprofit organization.** In Helsinki, Finland's capital city, a German machinery manufacturer is building the world's largest air-to-water [heat pump](#), which is expected to keep 30,000 households cozy in colder weather all while drastically reducing pollution and, potentially, heating costs. As Euro news [reported](#), the massive heat pump will be installed by manufacturer MAN Energy Solutions as part of the Patola district heating plant in Helsinki. While district heating can make city energy systems more efficient since it centralizes heat generation, it also typically uses dirty fuels like oil and gas to produce energy, contributing to the warming of our planet. Yahoo. 14A India. With stubble burning up 400% this year govt rushes to stem Delhi smog. Mint. **RAWSEP View.** The stubble solid fuel burning of India field stubble burning produces similar amounts of PM2.5 as wood burning. Instead of burning stubble, field stubble could be composted to yield usable soil. From the article. particulate matter PM 2.5 the most harmful pollutant. 14B India Delhi. Exposure to PM 2.5 can cause deadly illnesses such as lung cancer stroke and heart. India. Delhi govt unveils 21 point winter action plan to combat air pollution. Hindustan Times. particulate matter having a diameter of less than 2.5 microns. The annual average PM 2.5 concentration was 101 microns per cubic meter micrograms per cubic meter. 15A PM2.5 and asthma. Air pollution asthma a related event link weakened by inhaled corticosteroid use. Healio. With a PM2.5 rise of 10 µg/m³ veterans without inhaled corticosteroid use faced an increase in the odds for an asthma event 2 days later. 15B PM2.5 and Kidney Disease. Social and Environmental Determinants of Health and Cardio Kidney Metabolic Syndrome.

JAMA Network. C K M related mortality was positively associated with the food insecurity rate median IQR $\beta = 6.78$ 2.78 11.56 and PM2.5 concentrations median.