

Episode 57AL November 21, 2024. Testimonial about 2023 evacuation from Wood Buffalo Fire.

In Episode 57AL 1 World 2 United States 3 Arizona 4 California 5 Colorado 6 Georgia 7 Massachusetts 8 Minnesota 9 New York 10 North Carolina 11 Pennsylvania 12 Wisconsin 13 Canada. Testimonial about 2023 evacuation from Wood Buffalo Fire. 14 Australia 15 United Kingdom 16 Switzerland 17 India 18 PM2.5 and human health. Main Content. 1A World. MDPI is a publisher of open-access scientific journals. WEB. **RAWSEP View**. This article teaches the acronyms associated with Geothermal Heat Pumps. **From the article headline**. How to Evaluate the Operating Performance of Mid Deep Geothermal Heat Pump Systems. MDPI. Mid deep geothermal heat pump systems MD GHPs use mid deep borehole heat exchangers MDBHEs to extract heat from the geothermal energy. 1B World and China. China's Soaring Emissions Are Upending Climate Politics. Europe has long ranked No. 2 in total historical greenhouse gas emissions. Until now. And projections show that China may nearly catch up with the United States. The New York Times. **RAWSEP View**. China is now the number 2 greenhouse gas emitter behind only the United States. The biggest emitters are receiving the most pressure at COP29 to contribute to a fund to pay for Climate Disaster Relief for the lowest income nations. **Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates, a 501c3 nonprofit organization**. November 19, 2024. For many years wealthy places like the United States and Europe have had the biggest historical responsibility for global warming and have been tasked with taking the lead in stopping it. China's astonishing rise is upending that dynamic. Over the past three decades China has built more than 1,000 coal fired power plants as its economy has grown more than 40 fold. The country has become by far the largest annual emitter of greenhouse gases in the world. The United States has still pumped more total planet warming pollution into the atmosphere since the 19th century in part because the country has been burning coal oil and natural gas for longer. But China is quickly catching up. Last year China for the first time passed Europe as the second largest historical emitter according to an analysis published on Tuesday. When humans burn fossil fuels or cut down forests the resulting carbon dioxide typically lingers in the atmosphere for hundreds of years heating the planet all the while. That's why historical emissions are often used as a gauge of responsibility for global warming. China for its part has promised that its emissions will peak this decade and then start falling. The country is installing more wind turbines and solar panels than all other nations combined and leads the world in electric vehicle sales. But even with China's shift to low carbon energy the Carbon Brief analysis found the nation's historical emissions are projected to approach those of the United States in the coming years. India says it should be granted time to burn more fossil fuels as it develops. At the same time some affluent oil and gas producing nations like Saudi Arabia and Qatar have disproportionately large emissions per capita. American and European leaders have suggested that these countries too should be called on to contribute more climate finance. How these disputes get resolved will go a long way toward determining whether negotiators from nearly 200 countries in Baku can agree to a new goal for delivering as much as \$1.3 trillion per year in climate aid. Experts say it won't be easy to strike a deal at the summit which is scheduled to end on Friday. 2A United States and Canada. Climate change exposure associated with increased emergency imaging. Medical Xpress. PM2.5 is fine particulate matter with 2.5 micrometer or smaller aerodynamic diameter. Credit: Radiological Society of North America RSNA. Using data. United States and Canada. New Resources to Help You Save on Efficient Home Upgrades. North American Precip Syndicate. Heat Pump Water Heaters: Like heat pumps for air heating and cooling heat pump water heaters don't burn fossil fuels and can improve your indoor.

Vitalis Offers a Packaged Megawatt CO₂ Heat Pump to the North American Market. Natural Refrigerants. For heating loads in a moderate climate around 10°C [50°F] ambient we get a COP for district energy close to 6. Applications: The heat pump. 2B United States. Efficiency Rebates Gaining Momentum. ACHR News. Opportunity is knocking for the HVAC industry in the form of consumer rebates offered through the federal Inflation Reduction Act IRA. United States. Tech company unveils world's 'smartest' water heater and the government will give you . The Cool Down. As temperatures plummet utility costs can start to soar and water heating is a significant part of that expense. United States. Electric Vehicles. Acura is making electric vehicle ownership easier than ever. here's how. The Cool Down. Learn about the incredible Acura ZDX the company's first EV and how it's revolutionizing the world of electric vehicles. United States Heat Pumps. Power sector benefits of flexible heat pumps in 2030 scenarios. Nature. Heat pumps play a major role in decreasing fossil fuel use in heating. They increase electricity demand but could also foster the system. 3 Arizona Maricopa County. Maricopa County Encourages Residents to Ditch Wood Burning to Improve Air Quality. Hood line. As the cold season descends on Maricopa County residents are being asked to consider the air we all breathe and ditch the wood logs. Hood line. Statistics paint an unsettling picture with local hospitals reporting a surge in respiratory problems when the air fills with wood smoke. 4A California. California's rooftop solar is a benefit not a cost to the state. A new study finds rooftop solar will save California \$2.3B this year, a rebuttal to the 'cost shift' math that's led regulators to stifle solar growth. Canary Media. Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates, a 501c3 nonprofit organization. November 15, 2024. For years California utilities regulators and consumer advocates have argued that residents with solar panels on their rooftops are making electricity more expensive for everyone else in the state. In August a state agency released the latest report detailing this so called cost shift caused by the rooftop solar industry. The report claimed that in 2024 alone rooftop solar will impose \$8.5 billion in extra costs onto customers of Pacific Gas & Electric Southern California Edison and San Diego Gas & Electric the state's three major utilities. But a new analysis commissioned by a distributed solar and storage trade group finds just the opposite that California's nation leading 17 gigawatts of rooftop solar have actually saved customers about \$2.3 billion on their utility bills this year. We started with an \$8.5 billion 'cost shift' said Richard McCann a founding partner at M.Cubed Consulting the energy and environmental analysis and consulting firm that conducted the study. We went through the steps to correct this and came up with a \$2.3 billion net benefit in 2024 when you go through and change some key principles and make some key corrections. Utilities across the country have used this same cost shift argument to fight various state level policies that benefit rooftop solar. The aim is typically to water down or roll back net metering programs which pay customers for the power their rooftop solar systems send back to the grid. Rooftop solar supporters dispute the cost shift argument which originated from the Edison Electric Institute EEI a trade group representing U.S. electric utilities. They say it not only fails to account for the various economic and environmental benefits that rooftop solar provides but has too often been backed by misleading or flat out false data from utilities and their allies. M.Cubed's new findings are yet more evidence that California policymakers and regulators need to push back harder against the utility led cost shift argument. They've gotten themselves into this weird mindset that all of the electrons that solar equipped customers are generating and sharing with their neighbors are the property of the utility she said. But the past two decades of rooftop solar growth show that if we give customers a little bit of a boost they're going to meet us more than halfway with their investments. 4B

California. Here's how Californians can get an \$8,000 rebate for buying a home heat pump. MSN. Californians who meet specific income thresholds may be eligible to receive rebates of \$4,000 and up to \$8,000 if they buy electric heat pumps for. How to get an \$8,000 rebate for buying a home heat pump. Whittier Daily News. Californians who meet specific income thresholds may be eligible to receive rebates of \$4,000 and up to \$8,000 if they buy electric heat pumps for. Here's how Californians can get an \$8,000 rebate for buying a home heat pump. Press Telegram. The state touts heat pumps as a way to help meet its greenhouse gas reduction goals. Rebate program is funded through a Biden federal program. California Palo Alto. Save Big For A Limited Time & Save the Planet: Install a Heat Pump HVA. City of Palo Alto. Take the next step towards a sustainable future by installing a Heat Pump HVAC System with new limited time income qualified savings available. 5 Colorado Moffat County. Bureau of Land Management to burn slash piles in Moffat County. Steamboat Radio. Prescribed fire smoke may affect your health for more information see [www.colorado.gov/cdphe/wood smoke and health](http://www.colorado.gov/cdphe/wood-smoke-and-health). 6 Georgia Heat Pump Rebates. New pilot programs offer rebates for home energy efficiency in Georgia. News Break. This coverage is made possible through a partnership between WABE and Grist a nonprofit environmental media organization. 7 Massachusetts Boston. North Shore communities have been blanketed by terrible air quality for days. What's going on? The Boston Globe. Those fires are burning things other than wood often so now you've smoke in your throat she said. You can almost see it like a. 8 Minnesota. CenterPoint lobbyist ghostwrote comments to support gas appliance rebates. Energy and Policy Institute. **RAWSEP View.** Methane is colorless and odorless, and the second largest greenhouse gas contributor to global climate change after carbon dioxide. A Minnesota Methane Gas Company Lobbyist wrote comments to support methane gas furnace rebates in order to skew customer rebates toward customer-funded gas furnace rebates rather than Heat Pump rebates. Critics said this was out of step with Minnesota state law which seeks to shift away from fossil fuels such as methane gas and shift away from fossil fuel run appliances such as methane gas furnaces. Customer-funding of rebates for methane gas furnaces was also criticized as improper use of customer money. **From the article headline.** The comments filed by appliance companies and a pro gas group came after consumer and climate advocates disputed CenterPoint's rebate program. CenterPoint lobbyist ghostwrote comments to support gas appliance rebates. **Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates, a 501c3 nonprofit organization.** November 19, 2024. Comments submitted to Minnesota regulators that support CenterPoint Energy's controversial push to skew customer rebates toward gas furnaces rather than electric air source heat pumps appear to have been created and ghostwritten by a CenterPoint lobbyist not the people who signed them, data attached to the documents show. The comments come as the Minnesota Department of Commerce, a state agency that oversees the customer-funded rebate program, considers modifications to CenterPoint's incentives. The Department will decide in early December whether to allow the utility to offer hefty rebates for furnaces, which critics say is out of step with state law and an improper use of customer money. The rebates stem from the Energy Conservation and Optimization (ECO) Act, which is designed to broaden energy conservation programs and support a shift away from fossil fuels like methane gas through electrification. CenterPoint, which only provides methane gas service in Minnesota, is financially motivated to keep households tethered to gas appliances. CenterPoint furnace rebates already among state's highest. CenterPoint's proposal of choice would increase furnace rebates dollar amounts over its existing offerings, even though the utility has achieved program participation goals at lower dollar amount

rebate levels. The increased dollar amount rebates would exceed furnace incentives provided by other Minnesota gas utilities, according to the Center for Energy and Environment (CEE), an energy efficiency advocate. In comments filed earlier this year, CEE included tables to show the asymmetry between CenterPoint's proposed rebates (see CenterPoint Rebate "updated" amounts) and those offered by other Minnesota gas utilities. 9 New York Putnam Valley Brewster. Report Of New Brushfire Was Instead Someone Ignoring Burn Ban. Police. Patch. In one case a Brewster man had been burning construction materials while a Putnam Valley man was later caught burning wood cops say. 10 North Carolina Durham. Pelleted by pollution: Why wood biomass is a false solution to the climate crisis. Duke Chronicle. fired power plants. All a company needs to do is to start burning wood instead of coal in the boilers of its power plants. A prominent example of. 11 Pennsylvania Butler County. Malfunctioning wood burner in East Butler sends one to the hospital. Butler Eagle. A wood burner caught fire at a house in East Butler Tuesday night Nov. 19 which sent one person to a hospital for treatment for smoke inhalation. smoke coming from the wood burner when they arrived at the residence. It took some time for the responding fire departments to get the fire under control. 12 Wisconsin. Reddit. Frustrated homeowner vents about neighbor choking community out with constant burning: 'That doesn't stop him from starting more fires'. MSN. 7 Reasons I Won't Get a Wood Burning Fireplace And Why You Shouldn't. Hey, She Thrives. Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates, a 501c3 nonprofit organization. 7/20/2024. After several attempts to communicate failed and calling the authorities didn't work, one exasperated homeowner took to Reddit in search of advice for how to deal with their "smokey neighbor." The Redditor said their neighbor will even smoke dirt and use leaf blowers to push the smoke onto their property. The neighbor has cussed out the Reddit poster when they've tried to discuss the issue, and the smoking continues. The police have been called, and still nothing has changed. The homeowner wrote: "Is there anything else I can do? It's to the point where other neighbors are complaining to them as well, and they get the same treatment, cussed out and harassed." Commenters on the post were incensed by this behavior. One user wrote: "Aim your hose and put it out." The original poster responded: "I've tried, trust me, that doesn't stop him from starting more fires." Burning and smoking things on personal property is not only obnoxious for the surrounding neighbors, but it's also detrimental to their health. Smoke pollutes the air, making it unsafe to breathe. People with underlying health issues are particularly vulnerable to this, as detailed by the Wisconsin Department of Natural Resources. The leftover ash from a fire may contaminate soil and groundwater, too. Starting a fire outside could cause a house fire and/or wildfire, endangering many lives. Many items release toxic chemicals, including nitrogen oxides and volatile organic chemicals, when burned. These are not only dangerous for humans, but also detrimental to wildlife and the environment. Research on long-term exposure to air pollution has shown that it can have many negative effects on humans, including an increased risk of dementia. The more data we have, the better we can combat these issues. Researchers are also developing artificial photosynthesis to help clean our air. Commenters on the Reddit post had plenty of sympathy for the poster, and some recommended they continue to call the appropriate officials to help take care of the issue. Voting for planet-friendly policymakers could also result in legislation to limit unnecessary burns in residential areas. One Redditor pointed out: "Omg that poor horse has to breathe that in the air too." "They suffer the most!" the Original Poster OP responded. 13A Canada Alberta and Northwest Territories Wood Buffalo. 'My legs were getting smashed in. My face was burning'. This is climate breakdown. The Guardian. In 2023 she was caught up in

the massive evacuation when the Wood Buffalo Complex fire broke out burning more than 500,000 hectares in and around. Wood smoke rises from fires. Location Fort Smith, Canada. Disaster Wood Buffalo Complex fire, 2023. 'My legs were getting smashed in. My face was burning'. This is climate breakdown. See more from the series. This is Olivia's story. Olivia is Dene, a member of the Athabasca Chipewyan First Nation, and works in environmental management. In 2023, she was caught up in the massive evacuation when the Wood Buffalo Complex fire broke out, burning more than 500,000 hectares in and around the national park. Across Canada, the 2023 wildfire season was unprecedented in its scale and intensity. Eight firefighters were killed, and about 200,000 people were displaced. Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates, a 501c3 nonprofit organization. November 20, 2024. We were on evacuation alert. I remember my heart racing. They gave us an eight-hour window to evacuate, because the fire was on the highway. There is one highway into Fort Smith, and you had to drive through the fire to leave. They focused all the fire crews to keep the highway open so people could leave before the fire got too close to town. To avoid traffic, and since we have long hours of light, I was like: "I'll be fine if I just leave later." We're the only town in the Northwest Territories with a water tower. Meta had just introduced their policy where no news media from Canada was supposed to be online. No one knew what was happening. I felt like, if I took down my videos because of my own fear of being seen, it would be selfish. I kept them up. I was the highest viewed video for what was going on in the Northwest Territories for a while, specifically, Fort Smith. I took it down when news sources started picking up what was happening. It wasn't until Yellowknife got evacuated a week later. I was getting ready to leave. As a wildland firefighter, my boyfriend stayed and I took off. I hadn't seen any of the burn areas yet. As I drove through, it looked like normal burn. If you're not used to seeing forest fire burn areas, what that means is there's standing trees and burnt grass, and the trees might be a little bit darker. It was not normal later. I took a video of this massive helicopter carrying a water bucket. Nonstop helicopters overhead. All that post said was: "Fort Smith, Northwest Territories is evacuated due to wildfires." You can see this giant smoke plume coming from a fire from the west. The wind is blowing that fire towards us. I stopped at the 60th parallel, which is the border into the Northwest Territories from Alberta. That fire burnt the highway people were evacuating on. I just missed it. People were in car accidents. People lost their livestock. People were driving through flames. I was really, really afraid for all my extended family. I was really afraid of the death toll that was going to come out of that. When we first got to Alberta, we went so far south that there was no evacuation center. word of Yellowknife being evacuated was up in the air. Eventually, because so many people were evacuating, a center opened up in northern Edmonton, which is where my parents were. "It'll feel like healing because we're going to go to a waterfall." I told her: "That's what I want right now. I just want to be by water. I'm so tired of fire." I got what I asked for, because it poured rain our whole drive up there. Absolutely poured the whole time for our hike. a week later we got to go home. South of Enterprise is a series of waterfalls that have nice boardwalks. You could see that they're burnt. Driving through Enterprise, it looked like a dystopian film. Everything was grey or black. You could see so many of the homes burnt. The way the fire burned it surrounded Fort Smith. I was shocked to see how much of the highway going toward my town burnt. The eerie thing about the drive was the wooden telephone poles. There were just wires hanging. I didn't receive any damage. I had power when I came home. There was no sewage issues. There's no water issues. The only thing is we did not have internet for a while. That area is outside of town called Salt Mountain. It's a key spot because that's where it burnt the hottest and it burnt the hardest. It looks like a

nuclear bomb went off. It's decimated. There's absolutely no plants. It is white ash everywhere for as far as you can see. It's still smoldering. You can still smell it. You can see it on the highway. It's not gone. I always thought climate change was something that affected other people. Tuktoyaktuk, which is on the Arctic Ocean, is slowly eroding away due to warmer weather, less sea ice. I still view climate change as affecting the Arctic-Arctic, not me. Then, I'm a victim of it. This testimonial was produced with the help of the Climate Disaster Project. 13B Canada Manitoba. Ritchot's Energy Efficiency Advocate Promotes Provincial Programs Rebates. Niverville Citizen. Efficiency Manitoba is doing in partnership with some municipalities. It's a two year program. 14 Australia. PM2.5 and age related health outcomes. Association between wildfire related PM2.5 and epigenetic aging: A twin and family study in Australia. ScienceDirect.com Exposure to PM2.5 has been associated with multiple age related health outcomes such as cardiovascular and respiratory diseases and cognitive. 15 United Kingdom. Do heat pumps work in old buildings? This 100 year old UK estate is testing out renewable heating. Euro news. Heat pumps are one solution to the world's fossil fuel emissions providing renewable heating and hot water in place of gas boilers. United Kingdom. Millions of people face £300 fines for using log burners in their homes. MSN. These rules mean that only some people with a wood burning stove or open fire. UK households with a log burner face £300 fine over rule they're 'unaware of'. Yahoo News UK. The current limit on the amount of smoke your chimney can produce. United Kingdom Derby. New rules for wood burning stoves in the UK that could leave you with a fine or criminal record. Derby Telegraph. Under new UK rules all newly manufactured wood burning stoves multi fuel stoves and fireplaces must meet stringent new guidelines known as Ecodesign. United Kingdom Worcestershire. PM2.5 Targets: Interim. Planning Guidance. New interim planning guidance encourages councils to consider the cumulative impact of development on. 16 Switzerland. More heat pumps and less oil: how the Swiss heat their homes. SWI swissinfo.ch Swiss info. A heat pump extracts thermal energy from the air water or ground and uses it to heat a building. If the electricity that powers it is of renewable. 17 India. Dominance of open burning signatures in PM2.5 near coal plant should redefine pollutant. Nature. For the past one and a half decades open biomass burning has been the largest emitter of PM10 and PM2.5 while coal combustion emissions have. India. Pollution Crisis: What is GRAP AQI PM2.5 PM 10? The Hindu Business Line. PM2.5 or particulate matter 2.5 is a key indicator of air quality. India Delhi. Delhi Pollution: Why PM2.5 matters more than the AQI. Patriot Newspaper. AQIs vs. PM2.5: A useful analogy. To understand the. India Hyderabad. As temperature drops air quality in Hyderabad plunges to 'poor' levels. Times of India. The primary pollutant PM 2.5 rose alarmingly to over 250 µg/m³ in some places nearly 50 times the World Health Organization limit. 18A PM2.5 and alterations in extracellular vesicles. Wildfire Relevant Woodsmoke and Extracellular Vesicles EVs: Alterations in EV Proteomic. ScienceDirect.com This study investigated EVs following a wildfire smoke relevant in vitro exposure. We hypothesized that woodsmoke WS would alter the proteomic. 18B PM2.5 and respiratory viruses. Molecular Characteristics of Organic Matters in PM2.5 Associated with Upregulation of. ScienceDirect.com Numerous epidemiological studies have demonstrated that exposure to fine particulate matter PM2.5 increased susceptibility to respiratory virus. 18C PM2.5 and eczema. Fine particulate matter linked to higher eczema risk. News Medical. These data were linked to the mean annual PM2.5 levels from 788 locations obtained from the Center for Air Climate and Energy Solutions CACES. Researchers discover pollution may be behind yet another condition. MSN. The scientists acknowledged the study had some limitations including only using P.M.2.5 data for each location from 2015. The World.