

Episode 56XEB August 21, 2024. Wood burning affects near neighbors more than continuous leaf blowing.

In Episode 56XEB 1 United States 2 California 3 Idaho 4 Michigan 5 Minnesota 6 Washington 7 Wisconsin 8 United Kingdom 9 China 10 India 11 PM2.5 and human health. Main Content. 1A United States. **RAWSEP View** Wood burning affects near neighbors more than continuous leaf blowing. In his 8/20/2024 speech at the Democratic National Convention former United States President Barack Obama compared current Republican candidate for President Donald Trump to “the neighbor who keeps running his leaf blower outside your window every minute of every day ” constantly obsessed about his own needs his own desires his own hardships and not those of the people he wants to represent.” 1B United States. New York Times Climate Forward Newsletter. Can Democrats Make the Case to Climate Voters? In another year of record breaking temperatures Democrats are faced with the challenge of making climate change resonate with voters. **RAWSEP View** In order to stop indoor residential wood burning it is necessary to stop using the excuse for wood burning of the scientifically debunked theory of Carbon Neutrality of Wood burning to lump always polluting wood burning with truly clean renewable energy sourced by wind and solar. It is necessary to transition only to clean renewables and it is necessary for nations states and localities to refuse to use the dirty renewable wood burning to replace coal burning in power plants. Those who only campaign against fossil fuel burning may sanction using wood burning instead of coal burning and those campaigners must be educated on the facts of air polluting emissions from wood burning in comparison to fossil fuel burning. Wood burning emits 2.8 times the CO2 and PM2.5 as the fossil fuel coal burning as tested with the EcoDesign wood burning stove the cleanest burning wood stove in the United Kingdom. Wood burning emits 450 times the PM2.5 as the fossil fuel natural gas burning. In a recent scientific study the CO2 emissions from the Drax wood burning power plant in the United Kingdom were measured as 4 times the CO2 emissions of the closed Drax coal burning power plant which operated at the same site. 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. CO2 may be absorbed at the same level as the cut down trees by mature trees through photosynthesis several decades or centuries after being planted in place of cut down burned trees but trees never absorb PM2.5 and trees indeed close their pores when inundated with PM2.5 from wildfire smoke as shown in a recent scientific study. One title of a news article about the study was Trees don't like to breathe PM2.5 either. **RAWSEP View** A key excerpt from the article below is One measure of the importance of local action is the number of Americans living in states with a commitment to achieving 100 percent clean energy. That figure was just 1 percent of the country's population in 2017; today it is 40 percent a change that was driven by state legislatures and governors not the White House. There are now 24 states along with the District of Columbia and Puerto Rico with 100 percent clean energy goals. **RAWSEP View** whether clean energy means the deceptive and dirty practice of lumping truly polluting wood burning along with truly clean wind and solar is a question that **RAWSEP Presidents** always must ask before backing schemes for what is frequently deceptively labeled clean energy only because it is technically renewable energy but also includes the always dirty energy source of wood burning. **Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates a 501c3 nonprofit organization.** August 20, 2024. News and insights for a warming world. It was another summer weekend in America complete with wildfires in California flash floods in Connecticut and violent storms in Tennessee. Yet even as climate change is hitting home for more and more Americans the issue remains a relatively low priority for many. Global warming is just the 19th most

important issue with voters behind issues like improving roads and the budget deficit. Several climate groups this week launched a \$55 million ad campaign to support Vice President Kamala Harris's presidential bid. Last week John Kerry Jane Fonda Bill Nye and Senator Ed Markey of Massachusetts joined a Zoom meeting called Climate Voters for Harris. And on Monday the Democratic National Convention opened in Chicago with President Biden touting the success of the Inflation Reduction Act which has unleashed billions of dollars in clean energy investments. Harris has yet to lay out a detailed climate policy as part of her presidential campaign. climate minded voters have flocked to support her. As vice president she cast the deciding vote to pass the Inflation Reduction Act. As a senator she was one of the sponsors of the Green New Deal. Former President Donald J. Trump by contrast has called climate change a hoax and has pledged to expand oil and gas production from already record highs. On Monday he called for rolling back pollution regulation . If elected Trump has vowed to undo parts of the Inflation Reduction Act. Most voters say they have not heard much about the Inflation Reduction Act and fewer than half believe it will help them or the country. "I definitely wish Taylor Swift was calling this the 'Climate Kick Ass Act' or something like that. That would just reach everybody and resonate with everybody." A climate activist is working to enlist other celebrities to make the case that a Harris administration would take bold action to combat climate change. "We have to be really smart about explaining the really wonky long term monumental policy legacy that Biden left behind which has actually really created jobs and really created a more breathable future. Just 54 percent of Americans overall say climate change is a major threat to the country and while that figure is 78 percent among Democrats it is just 23 percent among Republicans. Ads frame President Biden's climate policies and Harris's prospective policies in terms of economic benefits rather than environmental ones and also touch on economic issues not directly related to the climate. In Montana the contender for a Republican Senate seat has attacked what he calls the "climate cult" and warned that climate action would destroy jobs. A flip of just a few seats and the House is "back to having pro climate leadership." If Democrats manage to maintain control of the Senate and win a handful of those House seats they could control both chambers of Congress. Should Harris win they could pursue ambitious climate policy at the federal level. One measure of the importance of local action is the number of Americans living in states with a commitment to achieving 100 percent clean energy. That figure was just 1 percent of the country's population in 2017; today it is 40 percent a change that was driven by state legislatures and governors not the White House. There are now 24 states along with the District of Columbia and Puerto Rico with 100 percent clean energy goals. "That is driving investment it's driving research and development and it's getting results " said a senior vice president of campaigns for the League of Conservation Voters. "It's taking dirty polluting fossil fuels off the grid and putting clean renewable energy on the grid." Among the most recent states to make such a commitment Minnesota where the law was signed into law by Governor Tim Walz who is now running for vice president alongside Harris. Control of the legislatures of several swing states including Arizona Michigan Minnesota New Hampshire and Pennsylvania is up for grabs in November. But in some states governors can use executive authority to advance their priorities. One such state is North Carolina where Governor Roy Cooper has gone around a Republican Legislature to try to promote the development of offshore wind direct state agencies to work together to combat climate change and encourage the adoption of electric vehicles Cooper who will be interviewed at The New York Times live Climate Forward event on September 25 is term limited and can't seek re-election. But the two men running in a close race to replace him provide a stark contrast with their views on

climate issues. The Republican Lieutenant Governor Mark Robinson has called climate change a hoax and pledged to double down on fossil fuels. The Democrat Attorney General Josh Stein has sued polluters and suggested he would continue Cooper's strategy of using executive action to address climate issues. Then there are the local entities that regulate energy production. In at least two pivotal states control of those commissions is up for grabs. The Arizona Corporation Commission which sets clean energy minimums for utilities is currently controlled by Republicans who have not made efforts to expand solar in the state and have pushed back renewable standards despite abundant sunlight. But six candidates are vying for three open seats and if Democrats gain control of the commission it could lead to a significant shift in the state's energy policy. In Montana an almost identical dynamic is playing out in the race for seats on the Public Service Commission which regulates the state's utilities. With Democrats surging in the polls a representative of the Sierra Club believes the momentum of the Harris Walz campaign could have benefits for climate issues in other races. "The top of the ticket always drives turnout. We anticipate seeing a lot of momentum toward climate issues." 1C United States. How 'green' electricity from wood harms the planet and people. Nature. **RAWSEP View** The most concerning excerpt from this article is that Many nations have embraced burning wood pellets to produce electricity under the assumption that it is carbon neutral. From the article headline. How 'green' electricity from wood harms the planet and people. on neutral. But **research shows this approach can boost greenhouse gas emissions and threaten the health of local communities** 1D United States. Team Update Clean Energy August 2024 Sierra Club For example Xcel wants to declare wood burning and trash burning carbon free. They are clearly confused we certainly wouldn't want to accuse them. 2 California. Breaking News wildfire reported in Fresno County on August. 19 Merced Sun Star Wood Fire has been burning on private land. Currently the cause of the fire has yet to be determined. Source National Interagency Fire Center. 3 Idaho. Wildfire burning east of Fairfield Breaking News mtexpress.com Idaho Mountain Express Smoke from the Elk Creek Fire burning roughly 0.7 miles northeast of Wood River Journal 4A Michigan. Detroit Air Quality Tracker The latest on local air quality and wildfire smoke Planet Detroit Fine particulate matter PM 2.5 concentrations are also expected to stay in the Good range throughout the week. Over the weekend wildfire smoke 4B Michigan Sterling Heights. Wood Creek Elementary will open in time for new school year The Oakland Press However damage caused by a recent fire will leave some spaces unused for a couple of months. 5A Minnesota. Is burning wood or trash 'carbon free'? The utilities want you to think so. **RAWSEP View** The key excerpt from this article states that burning wood is not carbon free. The key excerpt from the article below is "Comments from utilities agencies and industry are claiming that with some clever accounting you could consider burning wood trash or coal to be carbon free. These are preposterous claims that are antithetical to the spirit of the law" **Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates a 501c3 nonprofit organization.** A July 23, 2024. Minnesota law passed in 2023 directed the state's utilities to generate all of their electricity from "carbon free" sources by 2040 an aggressive goal meant to make Minnesota a leader in climate adaptation. Now regulators are grappling with how to implement the plan approved by DFL lawmakers and signed by Governor Tim Walz while confronting intense lobbying by influential utilities seeking to protect profits. Much of the law's execution is up to the Public Utilities Commission a five member committee appointed by the governor and charged with regulating the state's energy providers. Environmental organizations are adamant that regulators should stick to the definition of "carbon free" spelled out in the law "a technology that generates electricity without emitting carbon dioxide." Energy

companies industry groups and some state leaders are pushing for the definition of “carbon free” to include carbon emitting sources of energy like “woody biomass” electricity generated by burning waste from logging and forest management operations; and anaerobic digestion which captures gas emitted by decomposing organic waste. In a public comment letter submitted to the PUC the Minnesota Pollution Control Agency officials argued in favor of a “bigger picture view of emissions accounting.” The MPCA argued for example that burning woody biomass should be allowed despite its carbon output because energy producers can implement measures to reduce or control emissions from burning the material. Environmentalists who recently attacked the Walz administration for being overly accommodating of industry scoffed at the logic. “Comments from utilities agencies and industry are claiming that with some clever accounting you could consider burning wood trash or coal to be carbon free. These are preposterous claims that are antithetical to the spirit of the law” said a government relations director at Minnesota Environmental Justice Table at a press conference Tuesday. Utilities also want to be allowed to capture compress and store or repurpose the carbon dioxide produced by fossil fuel and biomass power plants. In its public comment letter Xcel Energy advocated for the use of such carbon capture and sequestration technologies. But environmental advocates say the use of carbon capture technology would create a loophole allowing the continued use of fossil fuels and biomass as an energy source. “This law sets ambitious but necessary standards to achieve zero carbon emissions from the energy sector for 2040 and it does so using clear and unambiguous language to define carbon free ” said state Representative for DFL Eagan Minnesota who co-chairs the House Climate Action caucus. “Diluting the language opens the door to an array of false climate solutions.” The public comment period for the PUC’s implementation of the zero carbon energy law ends on July 24 at 5 p.m. 5B Minnesota Becker. Coal Power Defined This Minnesota Town. Can Solar Win It Over? RAWSEP View This is one coal plant shutdown followed by turning to solar power not turning to wood burning power. From the article. One of the nation’s largest coal fueled electric plants is being replaced with thousands of acres of solar panels and a test of long duration batteries. RAWSEP View This article talks about replacing coal with solar and does not talk about replacing coal with wood burning which is good news. RAWSEP View Hopefully the Sierra Club’s Beyond Coal campaign lumps wood burning with Coal as an other carbon emitting resource. The second key Excerpt from the Article below. Campaigns like the Sierra Club’s Beyond Coal plan highlighted the environmental and climate hazards posed by fossil fuels and other carbon emitting resources. Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates a 501c3 nonprofit organization. August 19, 2024. The past and the future of electricity in America are perhaps most visible in a Minnesota town surrounded by potato farms and cornfields. Towering over Becker a community of a little more than 5,000 people northwest of Minneapolis is one of the nation’s largest coal power plants. It is being replaced with thousands of acres of solar panels and a test of long duration batteries. Becker is one of the first of a group of seven Minnesota municipal areas called the Coalition of Utility Cities making the change from a fossil fuel based economy to clean energy. When the Sherburne County Generating Station known as Sherco completes its renewable project on adjacent land it will stand as the largest solar farm in the Upper Midwest replacing three coal units in Becker with three solar sites on the town’s outskirts along the Mississippi River. Becker crystallizes part of the legacy of the administration of Governor Tim Walz Vice President Kamala Harris’s running mate and his commitment to Minnesota’s goal of 100 percent carbon free electricity by 2040. And it tests how the energy transition could unfold on a nationwide scale for jobs

at decades old fossil fuel facilities local tax revenues and agricultural businesses. President Biden's climate bill the Inflation Reduction Act aims to cut U.S. emissions at least 52 percent below 2005 levels by the end of this decade and his administration is counting on solar power to play a significant role in decarbonizing electricity production. One Energy Department report concluded that solar energy could provide up to 40 percent of the nation's electricity by 2035. Minnesota is among the states that can benefit from the Inflation Reduction Act by using it as a tool to replace coal plants with sources like solar farms. Through the law Sherco's owner Xcel Energy received tax credits that reduced the cost of the solar project for the utility's ratepayers. Becker is also one of two sites where Xcel is installing demonstration battery systems from Form Energy a Massachusetts company. The systems using readily available materials like water air and iron can store solar and wind generated energy as a backup with a capacity to power 2,000 homes for up to five days. Farmers were paying a little more than \$200 an acre on a lease but solar developers began offering north of \$900. "Solar is a no brainer " With the kind of investments the state is making in Becker "all of a sudden the clean energy transition looks a lot more palatable." One of the coal plant's three coal units shut down at the end of last year. Xcel Energy plans to close the others in 2026 and 2030 adding to the decline not only in coal but in fossil fuels in general. In all the company said it has closed 24 of its 36 coal fired power plant units across the country. That sharply reduces coal consumption as a single burner in a power plant like Sherco can consume as much as 120,000 pounds of coal per hour to heat water and produce steam for turbines to generate electricity. Those closings contributed to a steep decline in electricity production from coal nationwide. By the end of last year coal produced a little more than 16 percent of the nation's electricity down from 52 percent in 1990 and natural gas provided about 43 percent of the country's power according to data from the Energy Information Administration. Campaigns like the Sierra Club's Beyond Coal plan highlighted the environmental and climate hazards posed by fossil fuels and other carbon emitting resources. Over the next several decades solar power is expected to replace natural gas as the single largest source of electricity production not just in Becker but across the United States a position once held by coal fired generators. The transition away from black gold as coal has been known has been felt on both sides of the train tracks that divide Becker into residential on the north side and industrial on the south. 6 Washington. Fire Heavily Damages East Wenatchee Home NewsRadio 560 KPQ An East Wenatchee residence has heavy damage from a fire. The Wenatchee Valley Fire Department says it was sent to a house fire in the 400 block of 7 Wisconsin. Inside Climate News Newsletter. In Wisconsin Senate Race Voters Will Pick Between Two Candidates With Widely Differing Climate Views. While Democratic Senator Tammy Baldwin has warned that climate change threatens "our very way of life " GOP challenger Eric Hovde compared clean energy tax credits to "corporate welfare." RAWSEP View Hopefully clean energy tax credits are for stopping coal burning as well as stopping wood burning in power plants and replacing coal burning power plants with only truly clean energy renewable energy sources such as wind and solar not replacing coal plants with dirty wood burning power plants. Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates a 501c3 nonprofit organization. August 20 2024. Senator Tammy Baldwin the Democratic incumbent is challenged by Eric Hovde in the Wisconsin Senate race. If Democrats lose both the White House and the Senate that could also mean the reversal of hard fought gains on pro climate policy namely the hundreds of billions of dollars in clean energy tax credits via the Inflation Reduction Act which former President Donald Trump vowed to repeal if he's elected. "We are the battleground state " Senator Tammy Baldwin

declared during a July rally for Harris in Milwaukee. Baldwin a Democrat seeking her third term faces off against businessman and GOP challenger Eric Hovde in one of the more closely watched Senate races this year. Baldwin has long advocated for taking swift and decisive action to slow the pace of global warming warning her colleagues on the Senate floor as far back as 2015 that “climate change will be costly to our economy and to our very way of life.” Wisconsin is one of several Midwestern states that saw a major decline in outdoor recreation revenue this year following a historically mild winter with little snowfall. Wisconsin has also seen a sharp rise in clean energy development in recent years in part because of the support of Governor Tony Evers a Democrat who voters elected into office in 2019 and re-elected last year one sign climate advocates say that Wisconsin isn’t as red as it used to be.” Climate change will be one of those issues that you can’t really win with but you can lose on. Taking an unreasonable or seemingly outdated position can do real damage to a campaign.” 8A United Kingdom. UK households with a wood burner face £300 fines in 2024 Yahoo News UK Wood burners are extremely popular among Brits and many choose to use them to warm their homes in the winter. Around 500,000 have one as an 8B United Kingdom. Understanding the UK's latest wood burning stove laws to avoid hefty fines Derbyshire Live Derby Telegraph Pictured is a wood burner. New laws on wood burning stoves only came into force last year meaning people could face £300 on the spot fines if they 8C United Kingdom. Wood burning stove owners told of loophole as new £300 fines to be enforced Leicestershire Live Leicester Mercury New wood burning laws came into effect in the UK on 1st January 2022 as part of the government's Clean Air Strategy with the goal of reducing air pollution. Wood burners are blamed for half of people's exposure to carcinogenic chemicals found in air pollution particles in urban areas. The purchase 9 China. PM2.5 and heat wave. Aerosol effects during heat waves in summer 2022 and responses to emission change over China Nature These Action Plans led to evident reductions in anthropogenic emissions and particulate matter concentrations with annual mean PM2.5 concentrations 10A India. Explained What Is PM 2.5 And How Will It Affect Our Health? ETV Bharat PM 2.5 however harms our health and it can lead to respiratory issues cardiovascular problems and premature death. Writes Nazneen. Explained What Is 10B India. Tech for predicting air quality has matured should be used more The Indian Express Of these particles less than 2.5 micrometres in diameter PM 2.5 can reach your lungs and pose great risk to health. 11A PM2.5 and dementia. Long Term Exposure to Wildfire Smoke and Dementia Risk What's the Link? Neurology Advisor The increasing intensity of wildfire seasons driven by climate change may elevate the risk for dementia and other diseases linked to PM2.5 exposure 11B PM2.5 and diabetes. The impact of PM2.5 and its constituents on gestational diabetes mellitus a retrospective cohort study BMC Public Health BioMed Central The mechanisms through which fine particulate matter PM2.5 exposure leads to GDM are not fully understood and may involve multiple pathways that 11C PM2.5 and early exposure. Understanding Metabolism of Wood Smoke Pollutants Implications for Early Life Exposure to PAHs EIN News The Science We studied how infants metabolize two pollutants phenanthrene and retene found in wood smoke compared to adults. 11D PM2.5 and lung cancer. What we're learning from lung cancer patients who never smoked National Geographic One of the biggest culprits is PM2.5 particulate matter that is 2.5 microns in size or about thirty times smaller than a human hair. Much like 11E PM2.5 and thermal imaging. Biomass One Prevents Wood Pile Fires with Thermal Imaging Solution Vision Systems Design But the wood which ages in a huge pile can catch on fire in hot weather spewing smoke and sometimes spreading to a nearby business.