

Episode 56SK March 28, 2024. Wood burning emissions cut efficiency of nearby solar panels by 50 percent.

Table of Contents 1)RAWSEP view on how wood burning cuts the efficiency of solar panels. 2)United Kingdom, the Economist's view on the future of Drax, the polluting wood burning power plant, and its UK government economic subsidies. RAWSEP View: It must be stated again that wood burning emits 2.8 times the PM2.5 and CO2 as the fossil fuel coal burning. 3)World. Misinformation about electric cars refuted. The truth is they emit less PM2.5 than gas powered cars. 4)World. Insulating an unused chimney. This topic is dear to RAWSEP's editor's heart as a do-it-yourselfer, as she has insulated her own never-used chimney herself! 5)World. Point, counterpoint to an argument for wood burning along with other unsafe practices, by RAWSEP's editor. The writer of the article posits that overregulation has not helped the economy or environment. RAWSEP's editor refutes that position by saying "Look at the planes downed just by Canadian wildfire smoke in June 2023, with businesses shuttered and schools closed. That has an economic effect. Look at the Inflation Reduction Act. That money will energize the economy and provide good paying jobs with a future." With regard to the environment, yes, logically, regulation will help the environment, because those regulations that safeguard the environment are designed by human hand to safeguard the environment and actually improve the health and longevity of citizens of the United States, although this topic of human health was not dared to be broached by the positor of the original argument. Americans are not losers, although the writer of this article would like them to be, losers in life and longevity. These standards are attainable and particulate limits in particular need to be attained to keep our economy and each life on track. 6)World. Woodsafe, wood made for building, not burning. What's not to like? I know, I know, we shall see. 7)World. What's so green about burning trees? Nothing! RAWSEP's editor just likes the sentiment of the title of this article. 8)Arizona lawmakers want new EPA rules dumped. RAWSEP's editor assumes Arizona Republican lawmakers want to stop the PM2.5 "safe" annual limit from remaining at 9 micrograms per cubic meter, for their own obscured economic gain, at the expense of public health. 9) California. Residential Wood Smoke Reduction Program in the San Joaquin Valley. 10)Nevada, Lake Tahoe prescribed burn. 11)New York. PM2.5 air pollution linked with cancers. 12)New York. A wood chopper fears he will be out of work because he cannot transport his chopped wood over 50 miles to sell it. RAWSEP's View is that if this is the future in New York state, the future looks brighter. Fire wood meant for burning should not be sold, to add to unnecessary air pollution. Exercising in ways that do not harm the air that we breathe should be embraced by those who want to exercise outdoors and end the day in better health than before they exercised. Pick up a truly useful hobby and make furniture out of wood. 13)Ohio. There was a State inspection prior to the deadly fire at the Morrow County 'puppy mill' where violations were found, but not remedied. A wood burner was responsible for the deaths of 70 dogs, in this case. 14)West Virginia, Clarksburg and Bridgeport. Clarksburg Fire Department holds smoke screening class. 15)RAWSEP View: Composting to usable soil should be the method used to deal with wood debris instead of wood burning. Canada, British Columbia, Anglemont and Kamloops. Pile burning in Anglemont - Sicamous - Eagle Valley News wood debris will be burned. The BC Wildfire Service will be assisting the Okanagan Shuswap Resource District and Anglemont Fire Department in the burn. 16)RAWSEP View: Please do not breach air quality regulations. United Kingdom, Yorkshire. Development consent for biomass burning at Yorkshire plant breached regulations, letter Local Government Lawyer. The decision means that the plant can generate electricity by burning almost entirely imported wood pellets, attracting large government subsidies. 18)Germany. Wood burning in villages poses health risks. 19)Kyrgyzstan. Air pollution: Kyrgyzstan is in top 20 of rating at year-end 2023. 20)RAWSEP wonders if by use of the term carbon neutrality China is talking about burning wood, using the fallacious, unscientific and political term Carbon Neutrality of Wood Burning. The scientifically debunked theory of Carbon Neutrality of Wood Burning allows attainment of climate goals on paper but not in real life. Clean air does not follow wood burning, in fact, the opposite is true, and the air is more polluted by wood burning than by coal burning. China. Accelerating China's transition to carbon neutrality and clean air. 21)India. Air quality crisis in capital: Rising concerns and urgent calls for action. 22)PM2.5 and cerebrovascular disease. Outdoor Light at Night, Air Pollution, and Risk of Cerebrovascular Disease: A Cohort Study in China, 23)PM2.5 and mitigation. A novel framework for quantitative attribution of particulate matter pollution mitigation to, 24)PM2.5 and prenatal exposure. 25)PM2.5 and Wildfire smoke. RAWSEP View: This article ignores the dangers of indoor residential wood smoke. Are You Protecting Your Workers From the Hazards of Wildfire Smoke? First in Table of Contents. 1)RAWSEP View: On reflection, after submitting a comment on Wisconsin's program to offer, by September 2024, Heat Pump rebates of up to \$8,000 to Wisconsin residents based on a sliding income scale, RAWSEP's editor regrets not including in her comment the following 6 reasons for not allowing continued use of wood burning in the presence of Heat Pumps, if a Heat

Pumps rebate is accepted by a resident in the State of Wisconsin. RAWSEP's editor believes the best arguments for not allowing wood burning appliances as a continuing backup to Heat Pumps (if the Heat Pump rebate is taken) are that 1) wood burning in the same neighborhood as solar panels reduces the efficiency of solar panels by 50% (this is shown by data from the incursion of Canadian wildfire smoke into New York state in June 2023, where a statewide solar panel network had efficiency reduced by 50% during the wood smoke wildfire incursion). (For this reason, it is also a public service to inform solar panel owners that if wood burning is done in the vicinity of solar panels, it reduces the efficiency of solar panels by 50%). and 2) The outcome that this rebate for Heat Pumps hopes to achieve is a cleaner community. Wood burning emits 2.8 times the PM2.5 as the fossil fuel coal burning. Wood burning emits 450 times the PM2.5 as the fossil fuel natural gas burning. Wood burning is 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. There are cleaner, cheaper alternatives to wood burning in 2024, including of course Heat Pumps, and those Heat Pumps could be powered by a modernized electrical grid that reaches all rural areas powered by clean and truly renewable wind and solar generation. 3) An electrical grid has existed in the United States since shortly after the 2nd World War, over 75 years ago. The most frequent reason given for using delivered fuels like wood rather than the cleaner natural gas is that some rural areas are not hooked up to natural gas piping. Using delivered fuels relies on expensive and now unnecessary transportation, transport which can often break down. Wood gathered or chopped down on one's land should be taken to a recycling center to be composted and broken down into usable soil through use of some fertilizer or other compound, soil which is not flammable. Perhaps economic incentives could be created for rural landowners to give found or chopped down wood to a recycling center. Or the landowner could compost his own fallen or chopped wood into usable soil, since many rural landowners are also farmers. In this way a landowner with excess wood on his land could be a problem solver rather than a problem generator, because the landowner has in the past unnecessarily burned wood. 4) A better backup to loss of electrical power is a propane or other (delivered) gas back up generator. If the generator is truly used only in emergencies when electrical power is out, the delivery of more propane will not be required often. Heating with propane is much cleaner than heating with wood burning. 5) Backup may not be needed for Heat Pumps that work down to 40 degrees below zero, since backup is only needed if electrical power goes out. Building better electrical grids will practically ensure electrical grids will not go down. The U S Government Climate Challenge in 2024 is inspiring Heat Pump manufacturers to come up with ideas for Heat Pumps that will reliably work down to 40 degrees below zero. 6) Building a home off any electrical grid which is designed to reach all rural areas should be discouraged by zoning laws or other laws that would make it economically uncomfortable for a prospective homeowner to create a reason for continuing to pollute the air just to heat a home that was for some reason deliberately planned to be heated by wood burning, although the home was connected or could be connected to an electric grid. If prospective homeowners acted in the most rational way that would benefit themselves as well as society that has to deal with air pollution, these steps would not be necessary, but this is taking into account that some people act in ways that harm themselves and others if that harm is not anticipated and stopped by societal forces that some call civilization and others call simple humanity.

2) United Kingdom, Drax wood burning power plant. RAWSEP View: It must be stated again that wood burning emits 2.8 times the PM2.5 and CO2 as the fossil fuel coal burning. It is unclear if the view that Drax may close is considered fortunate or unfortunate by the Economist, from the excerpt that RAWSEP was able to use. The facts show that shutting down Drax would decrease PM2.5 pollution drastically and save the UK government from punishingly high subsidy payments to Drax, freeing up UK money that could be used to truly help the planet. Subsidies for Heat Pumps for residents, perhaps? [The future of Drax, Britain's largest power plant - The Economist](#)

The final coal unit on the site closed in 2023; the vapour (and RAWSEP would include, the PM2.5 particulates) that now billows from the cooling towers is a byproduct of the process of burning wood pellets. Drax's role in the next stage of the transition is uncertain, however. The government is mulling whether to extend subsidies for the plant. Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates, a 501c3 nonprofit organization. March 27, 2024. IF YOU want a monument to Britain's energy transition, look no further than the 12 smoke-stained cooling towers of Drax power station, which loom over the north Yorkshire countryside. Built close to the now-dormant Selby coalfield, which once delivered the dirtiest fossil fuel to its furnaces, Drax is Britain's largest power plant, generating around 4% of the country's electricity supply. The final coal unit on the site closed in 2023; the vapour that now billows from the cooling towers is a byproduct of the process of burning wood pellets. Drax's role in the next stage of the transition is uncertain, however. The government is mulling whether to extend subsidies for the plant. The current arrangement, which

tops up lump-sum payments to Drax if the wholesale electricity price falls below a set level, is due to end in 2027. An extension would. 3)World. [FAKE NEWS: Electric cars are more polluting than the classic ones | Veridica](#) PM 2.5 (fine particles), according to the World Health Organization standards. 4)World. [Insulating an unused chimney - Singletrack World Magazine March 25, 2024](#) had the fireplace made into a box (we're not using it so no wood burning stove), and a c-cap fitted to the chimney pot. 5)World. Point, Counterpoint. [Robert Smith: Overregulation not helping economy or environment | TribLIVE.com](#) Pittsburgh Tribune-Review. 2.5 microns (PM2.5), annual, has decreased 42% (from 2000) (PM 2.5), reduced from 12 micrograms per cubic meter to 9 micrograms per cubic meter. 6)World. [Making Big Changes in Building and Energy with Fire Proof Wood and Solar Power Breakthroughs](#) Microgrid Media. In an exciting move, Woodsafe, a frontrunner in making wood that can't burn in Europe, is teaming up with Thermory, which is the top dog for heat. Resilient Wood, The partnership is working on creating a type of wood that can handle extreme heat and cold and supports cutting down trees in a responsible way. This new kind of wood could change the building industry because it's safe for the environment and an alternative to usual construction materials. 7)World. [What's So Green About Burning Trees? The False Promise Of Biomass Energy](#) Countercurrents. This broken system harms public health, the environment, and the climate. wood pellets. Renewable energy comes from matter that nature produces. World. [What's So Green About Burning Trees? The False Promise of Biomass Energy – Analysis](#) Eurasia Review. Burning wood pellets (burning trees) for heat and electricity harms people, biodiversity, and ecosystems. Compared to low-carbon technologies like. 8)Arizona. Alphabetical by article title. [Arizona GOP lawmakers, business leaders want new EPA rules dumped](#) Arizona Daily Star. At issue are standards for PM 2.5, fine, inhalable particles that are generally 2.5 micrometers and smaller. Health officials say they are so. [Arizona GOP leaders, Chamber sue EPA over new air pollution standard | The Hill](#) PM 2.5 are “arbitrary, capricious, an abuse of discretion.” PM 2.5 are some of the finest air pollutants, just 2.5 microns in size, small enough. [Arizona leaders, Republican lawmakers seek to block EPA's new air quality rule](#) Daily Independent. Current rules allow up to 12 micrograms of PM 2.5 particles per cubic meter of air to 9 micrograms. In approving the final rules last month, EPA says. [GOP leaders, Arizona Chamber sue PA over new PM 2.5 standard - AZCentral](#) Senate President Warren Petersen, House Speaker Ben Toma and the chamber called the new standard for PM 2.5 "arbitrary, capricious" and illegal. The particles, which are 2.5 microns in diameter, are sourced mainly to smoke from wildfires, fireplaces and wood-burning ovens, but burning coal and Wildfires, wood-burning fireplaces, smoke from fireworks, construction activities and tailpipe emissions are some of the primary local sources. [Top Republicans and the AZ Chamber of Commerce are suing the EPA over new pollution rules](#) Arizona Mirror. [Top Republicans & Az Chamber of Commerce suing EPA over new pollution rules](#) Tucson Sentinel. The EPA estimates that wildfires make up as much as 44% of the country's PM 2.5 pollution. In its rulemaking, the federal agency acknowledged that. 9)California. [Residential Wood Smoke Reduction Program | Valley Air District](#) San Joaquin Valley Air Pollution Control District. The Season Has Ended · UPGRADE YOUR DEVICE · NO BURNING · NO BURNING UNLESS REGISTERED · BURNING DISCOURAGED. Burning Discouraged. If you must burn, 10)Nevada, Lake Tahoe. [Small scale prescribed fire operations at Lake Tahoe](#) South Tahoe Now. smoke produced by unwanted wildfires. Smoke from prescribed burns, Pile burning involves burning slash piles that are constructed by hand or mechanical equipment. Smoke from prescribed burns, wildfire or wood. [Spring prescribed forest burning continues at Lake Tahoe, conditions and weather permitting](#) Carson Now. Smoke from prescribed burns, wildfire or wood burning stoves may hang low to the ground at night and in the early morning due to a phenomenon known as. 11)New York. [Cancer incidence trends in New York State and associations with common population-level](#) Nature. Models also found positive associations between ambient air pollutants (ozone and PM2.5) and prostate cancer, female breast cancer, and melanoma. 12)New York. [Beware This Law This Summer In New York State - WYRK](#) wood fire burning on a cold crisp day. But the firewood that you are burning does come with a lot of hard work. Whether it's wood that you cut. Untreated firewood may not be imported into NY from any other state or country. Untreated firewood grown in NY may not be transported more than 50 miles (linear distance) from its source or origin unless it has been heat-treated to 71° C (160° F) for 75 minutes. 13)Ohio. [State inspection prior to deadly fire at Morrow County 'puppy mill' found violations](#) The Columbus Dispatch. A wood-burning stove that the owner had stoked earlier to provide heat High-volume dog breeders, like the building that burned down, are. 14)West Virginia, Clarksburg and Bridgeport. [Clarksburg Fire Department holds smoke screening class - WDTV](#) At their station on. 15)Canada, British Columbia, Anglemont and Kamloops. [Pile burning in Anglemont - Sicamous - Eagle Valley News](#) wood debris will be burned. The BC Wildfire Service will be assisting the Okanagan Shuswap Resource District and Anglemont Fire Department in the burn. [Pile burning to begin in Anglemont area this week - CFJC Today Kamloops](#) CFJC Today

Kamloops. wood debris. The piles are expected to begin burning on Tuesday (Mar. 26), and wrap up Wednesday (Mar. 27). The plan is to have the Anglemont Fire. . [BC Wildfire Service plans to burn 250 debris piles in the Anglemont area as - Castanet Kamloops](#) “BCWS is supporting the Okanagan Shuswap Resource District and Anglemont Fire Department in burning approximately 250 piles of wood debris as part of. 16)United Kingdom, Yorkshire. [Development consent for biomass burning at Yorkshire plant breached regulations, letter](#) Local Government Lawyer. The decision means that the plant can generate electricity by burning almost entirely imported wood pellets, attracting large government subsidies. 17)Sweden, Stockholm, and Thailand. [Podcast: Empowering change - Thailand's pioneering citizen-led legislation for cleaner air](#) Stockholm Environment Institute. problem of Particulate Matter (PM) 2.5 became a critical threat to public health in Thailand. PM2.5 refers to fine particles with a diameter of 2.5 micrometers. 18)Germany. [Wood burning in villages poses health risks - EHN](#) Environmental Health News. In Melpitz, particle pollution levels were significantly higher in winter, especially on weekends due to wood stove use. The research highlighted the cozy warmth of a wood-burning stove or fireplace comes with a price: the emission of fine particulate matter, volatile organic compounds, carbon. 19)Kyrgyzstan. [Air pollution: Kyrgyzstan is in top 20 of rating at year-end 2023 - | 24.KG](#) The countries with the most polluted air are Bangladesh, Pakistan and India. The volume of particulate matter PM 2.5 there exceeds the WHO standard by. 20)China. [Accelerating China's transition to carbon neutrality and clean air - Phys.org](#) Progress in the synergetic control of CO2 emissions and PM2.5 pollution by sectors in each Chinese province from 2015 to 2020. 21)India. [Air quality crisis in capital: Rising concerns and urgent calls for action](#) Kerala Kaumudi particulate matter below 2.5 microns (PM 2.5) in Thiruvananthapuram, far exceeding the World Health Organization's recommended levels. Ranging. [City's Air Quality Improved In 5 Years, But Still Above Who Limit, Says Study | Hyderabad](#) Times of India. Hyderabad's PM 2.5 levels improved to 39.9 µg/mg in 2023 but still significantly exceed WHO's standard. The city faces air quality challenges due. 22)PM2.5 and cardiovascular disease. [Outdoor Light at Night, Air Pollution, and Risk of Cerebrovascular Disease: A Cohort Study in China](#) AHA Journals. Exposure-response curves of outdoor LAN and PM2.5 with risk of CeVD were almost all monotonically increasing and showed the linear relationships. 23)PM2.5 and mitigation. [A novel framework for quantitative attribution of particulate matter pollution mitigation to](#) ScienceDirect.com Two indices are formulated to quantify driver contributions locally and globally. Emissions reduction contribute 51.58 % and 51.96 % to PM2.5 and. 24)PM2.5 and prenatal exposure. [The joint effects of prenatal exposure to PM2.5 constituents and reduced fetal growth on - Nature](#) Prenatal fine particulate matter (PM2.5) constituents exposure and reduced fetal growth may be risk factors for accelerated growth in early. 25)PM2.5 and Wildfire smoke (ignoring indoor residential wood smoke) [Are You Protecting Your Workers From the Hazards of Wildfire Smoke? - JD Supra](#) PM2.5). If an employer will have employees working outdoors when the employee Once the PM2.5 reaches 20.5 or the AQI is 69 additional steps are.