Episode 56SI March 27, 2024. Can we afford to be passive about particulate air pollution? A German village.

RAWSEP View: 1a)Two actions you could take to move forward toward cleaner air in Wisconsin. 1)go to https://apps.psc.wi.gov/APPS/docketCalendar/Content/Subscribe.aspx and subscribe to two dockets on the Public Service Commission (PSC) of Wisconsin calendar 9717-FG-2023 and 9716-FG-2023. And 2) File a Comment Online on these Docket items at https://apps.psc.wi.gov/APPS/dockets/publicComment.aspx by scrolling down to Inflation Reduction Act - High-Efficiency Electric Home Rebate Program File a comment and Inflation Reduction Act - HOMES Rebate Program File a comment 1b) Can we afford to be passive about particulate air pollution? In our household, a favorite Youtube video is for the song "Watching and Waiting" by the Moody Blues https://www.youtube.com/watch?v=eYenQ5C77nk Illustrated with a picture of a lovely tree in the countryside. the lyrics include "Watching and waiting, for someone to understand me, I hope it won't be very long." It is a lovely sentiment to be patient and hope for the best, but the lyrics also include "there's lot of room for doing The things you've always been denied, So look and gather all you want to, There's no one here to stop you trying." Sounds like a (languid) call to action to me, to stop the particulate pollution from indoor residential wood burning. This is what RAWSEP's editor tried to do in a comment to the Public Service Commission of Wisconsin yesterday 3/26/2024, see Episode 56SH, enumerating the reasons why no indoor residential wood burning appliance should be considered for use as a backup to the clean energy home heating offered by Heat Pumps that now work down to 40 degrees below zero. The State of Wisconsin has tentatively scheduled rollout of their up to \$8,000 rebates for Heat Pumps, based on a sliding income scale, by September 2024. Table of Contents for Episode 56SI 2)A German Village, 3)United Kingdom, London. Air Quality Battle just warming up. 4) United Kingdom, London. Tactless Drax. 5) Scotland. Wood burning stoves causing pollution must be better regulated by SNP ministers, charity says. 6) Europe. Environment statistics at regional level - European Commission. United Kingdom. Hertfordshire. New campaign uncovers shocking downside of a common home heating practice. 8) Chile. Exploring role-playing as a tool for involving citizens in air pollution mitigation urban policies. 9) RAWSEP View: a cautionary, polluting tale from Connecticut. Re-Energize Connecticut - Yankee Institute. 10) Colorado, Vail. Letters to the Editor: Wood pellet project, Thanks to Vail Epic Promise | SierraSun.com Sierra Sun. Producing wood pellets so that they can be burned in burning of wood pellets in biomass incinerators is even more polluting than burning coal. 11) Headlines. Now 2nd on Table of Contents. 2) Germany. RAWSEP will probably start monitoring PurpleAir PM2.5 in Germany on a regular basis. RAWSEP View: The key takeaway from this article is that in Melpitz, a village in Saxony, Germany "The air pollution in the village was found to be twice as high as in the nearby fields, with the worst air quality observed during weekends when smoke from stoves added to the pollution". 2a)Synopsis of original Guardian article. Wood Burning in Small Villages Causes Significant Particle Pollution - Head Topics Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates, a 501c3 nonprofit organization. A recent investigation has found that wood burning in small villages can be a significant source of particle pollution. Wood Burning in Small Villages Causes Significant Particle Pollution 3/22/2024. The study was conducted in Melpitz, a village in Saxony, where most houses are heated by oil or wood central heating. The air pollution in the village was found to be twice as high as in the nearby fields, with the worst air quality observed during weekends when smoke from stoves added to the pollution. The risk of particle pollution was estimated to be half as high as the risk of death in a traffic accident for the villagers. The study also revealed that the cancer risk from wood and coal smoke was similar to that in major European cities. The researchers believe that this situation is likely to be replicated in many rural areas, including the UK. Environment News. Wood Burning, Small Villages, Particle Pollution, Air Quality, Melpitz, Saxony, Rural Areas, UK 2b) original Guardian Article. Germany. How one German village exemplifies the cancer risk from wood burning -The Guardian Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates, a 501c3 nonprofit organization. The air was worst at the weekends when smoke from stoves added to the pollution mixture. For the villagers, the risk from the extra particle pollution. Residential heating with wood or coal can lead to significant air pollution, even in rural communities, researchers say. 3)United Kingdom, London. Air quality battle just warming up - Workers' Liberty PM (particular matter) 2.5 tended to report more instances of sickness absence. PM 2.5 is matter that is less than 2.5 micrometres in diameter. Air quality battle just warming up. Posted in <u>Tubeworker's blog</u> 3/24/2024. Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates, a 501c3 nonprofit organization.

Research, published in March 2024 and led by Imperial College London, has found that London Underground staff who work in areas with higher concentrations of PM (particular matter) 2.5 tended to report more instances of sickness absence. PM 2.5 is matter that is less than 2.5 micrometres in diameter (considered "fine") and made up from a number of chemical compounds and materials – some of which are toxic. The fact PM 2.5 is so fine means it can enter the body and bloodstream and be transported to our vital organs, leading to health problems. It is particularly dangerous for people who already have underlying health issues. Last year, unions health and safety reps completed a number of air quality investigations across the network; some of the results were startling. The Imperial College research does not come as a surprise. We need to keep raising the air quality issue for both the health and safety of the staff who keep London running, but also for the travelling public. The Imperial College research was the largest ever research project measuring potential health issues caused by airborne dust on London Underground. Although it did not establish a direct causal link between PM 2.5 exposure and sickness, there was a correlation between PM 2.5 levels and sickness levels. The work of local and second-stage (Functional Council and Safety Council) reps on this issue is commendable. That work needs to develop and continue. Ultimately we must demand that the employer ensures proper ventilation systems to minimise risk. The battle is only just warming up. 4)United Kingdom, London. CITY WHISPERS: Tactless Drax burned by its ill-timed report on the International Day of Forests MSN Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates, a 501c3 nonprofit organization. Though burning off-cuts of trees already chopped down is backed by Government, there are many who call for it to stop. Up in smoke: Drax said. Timing is, as they say, everything. So one has to wonder if Drax made the right call in releasing its annual report on the International Day of Forests. In it, the power producer, which burns wood (known as 'biomass') at its Yorkshire plant, said it sourced 8 million tons of wood from around the world and burned 6 million in 2023. 5)Scotland. Wood burning stoves causing pollution must be better regulated by SNP ministers, charity says MSN 5 Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates, a 501c3 nonprofit organization. emissions from wood burning as a fuel between 2010 and 2021. PM2.5 consists of fine particles of less than 2.5 micrometres in diameter that can. Asthma and Lung UK Scotland said many people think of wood burners as green alternatives to coal and gas without realising the health risks from. 6)Europe. Environment statistics at regional level - European Commission European Union Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates, a 501c3 nonprofit organization. Air pollution is a major cause of premature death and disease in the EU, with fine particulate matter (PM2.5) deemed to have the most severe impacts. 7)United Kingdom. Hertfordshire. New campaign uncovers shocking downside of a common home heating practice. The Cool Down. Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates, a 501c3 nonprofit organization. This winter, the Hertfordshire County Council funded a campaign to let residents know of the dangers of wood burning for heat. 8) Chile. Exploring role-playing as a tool for involving citizens in air pollution mitigation urban policies Nature. Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates, a 501c3 nonprofit organization. We propose supporting companies that sell firewood and the. In southern Chile, the use of wood-burning heaters and stoves is particularly common. Although there is no exhaustive registry, it is calculated that. 9)RAWSEP View: a cautionary, polluting tale from Connecticut. Re-Energize Connecticut - Yankee Institute Yet these jobs have materialized instead in Maine, New York, and Quebec, where wood-burning biomass and hydro-power facilities meet most of the. 10) Colorado, Vail. Letters to the Editor: Wood pellet project, Thanks to Vail Epic Promise | Sierra Sun. com Sierra Sun. Producing wood pellets so that they can be burned in burning of wood pellets in biomass incinerators is even more polluting than burning coal. Dear Editor: (March 24, 2024) Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates, a 501c3 nonprofit organization. (A previous article in this newspaper brings attention to) the ongoing attempt by the wood pellet industry to expand into California, "Golden State Natural Resources' wood pellet project and the debate over California's Forests", March 8, 2024. Producing wood pellets so that they can be burned in biomass incinerators to generate electricity is, quite simply, terrible for the planet and is something we should all be alarmed about. The pellet making process releases carbon monoxide, nitrogenous gases, and other hazardous air pollutants, as well as formaldehyde and other volatile organic compounds and burning of wood pellets in biomass incinerators is even more polluting than burning coal. Getting the pellets to the incinerators, most of which are in foreign countries, requires shipping them in fossil fuel-

powered ships, an additional source of carbon emissions. So too is the loss of forest carbon to the atmosphere during the extraction of the wood required to create the pellets. At this critical juncture in time for our planet when our lives and are planet are being so dramatically affected by climate change, we urgently need to keep carbon in the ground, not log it and then release it into the atmosphere via biomass incinerator smokestacks. The substitution of coal with wood pellets is the exact opposite of a climate solution and the narrative that it a good alternative to coal is a classic case of greenwashing. It is not cleaner than coal and, in that it takes decades to recapture the carbon lost by the burning of trees, it is not truly renewable. Truly renewable, truly clean energy resources like wind and solar should be expanded to meet our energy needs, not the wood pellet/biomass incineration industry Headlines. World. 30 Countries With the Worst Air Pollution - Yahoo Finance According to the 2023 air quality report, only 10 out of 134 countries and regions achieved the WHO annual PM 2.5 standard of 5 µg/m3. Only 9% of. United States. EPA Issues Stringent Emissions Standards for Light- and Medium-Duty Vehicles - JD Supra PM, and other criteria pollutants and their precursors. The final rule sets a PM2.5 standard of 0.5 milligrams per mile ("mg/mi") for both light. United States. Puerto Rico. Only Puerto Rico Meets WHO Air Standards in the Americas, Study Shows - Latin Times Scientifically known as PM 2.5, this fine particulate matter is considered the most risky form of air pollution for human health, according to the. California, Orange County. Crews respond to house fire in Orange County - YouTube YouTube Cocoa father dies from dangerous wood burning craft he learned online. Florida, Orlando. Cocoa father dies from dangerous wood burning craft he learned online - YouTube Cocoa father dies from dangerous wood burning craft he learned online Subscribe to WESH on YouTube now for more: http://bit.ly/1dqr14j Get more 'It was heartbreaking': Toddler recovering after being burned at Melbourne day care. YouTube. It was heartbreaking': Toddler recovering after being burned at Melbourne Cocoa father dies from dangerous wood burning craft he learned online. Wood burning craft kills 42-year-old Cocoa man - WESH The 42-year-old from Cocoa recently got into something called fractal wood burning, a craft that uses high-voltage electricity to burn designs into Illinois, Chicago. Chicago ranked 2nd for worst air pollution in 2023 among major US cities, global report says Phys.org PM2.5 can harm human health and sometimes be deadly. Initially, this particulate matter may cause a burning sensation in the eyes and nose. New York, New York City. New regulation aims to take a slice out of NYC pizza pollution - Gothamist Burning wood produces two-anda-half times more carbon emissions than gas, while coal produces about double the emissions of natural gas. Wood-fired. New York, Oneida. DEC: Annual burn ban in effect through May 14 - Oneida Dispatch burning. Since 2009, DEC enforces the annual brush burning ban from March – burn only dry, plain wood – no pressure-treated lumber or plywood. New York, Rochester. Rochester Fire Department battles blaze in garage on Bremen Street: No reported injuries 13WHAM The cause of the fire is related to the wood burning stove but is still under investigation. Ohio. Dozens of dogs dead after fire at Ohio puppy mill - NewsNation The fire's cause was determined to be one of the owners putting wood into a wood burning stove more than an hour before the fire. Northeast. Inferno caused by wood-burning stove tears through Ohio 'puppy mill' killing 70 dogs. Daily Mail. The fire is believed to have been sparked by a wood-burning stove located in the building, fire officials say. According to USA Today, the kennel. 70 Dogs Dead From Fire at Ohio Puppy Mill - AOL.com The puppy mill owner told the Johnsville Fire Department they had "placed wood in the wood-burning stove used to heat the building." 70 dogs die after fire at Ohio "puppy mill" - CBS News The TV station reported that an investigation into the blaze found it most likely started in the area of a wood-burning stove. It is not clear how. Pennsylvania, East Earl. Public Information - East Earl Township Burning Ordinance - Lancaster County | CRIMEWATCH PA_Lancaster County | CRIMEWATCH PA Fires may only consist of untreated wood, brush, and yard waste. These items are PROHIBITED (this list is not all-inclusive): aerosol cans, appliances. Texas, Austin. Air Pollution Linked to Asthma Disparities in Austin Neighborhoods American Journal of Managed Care. particulate matter (PM 2.5, PM 10), nitrogen dioxide (NO 2), and sulfur dioxide (SO 2); and racial and ethnic composition while controlling for. Neighborhood Differences in Urban Air Pollution May Affect Asthma ED Visit Rates Pulmonology Advisor. [T]hese findings suggest that air pollution variability could contribute to within-city racial and ethnic disparity in asthma morbidity. Average PM2.5, West Virginia. 8 West Virginia counties under Air Quality Advisory from wildfire smoke - WBOY.com Helicopter crash in Wood County sends 1 to the hospital. Canada, Alberta, Wood Buffalo, Fort McMurry. Wildfire smoke made Fort McMurray air worst in Canada, U.S. in 2023 - Daily Herald Tribune About 38,000 people from 48 communities were part of evacuations. Wildfires burned more than 3,643 square kilometres of land in Fort McMurray Wood. Canada, British Columbia, Kootenay. Nelson Fire & Rescue Services approves burning period for

city residents. The Nelson Daily. Purpose: The burn aims to reduce non-compostable woody debris, which includes clean, dry wood resulting from residential yard clean-up. Canada. Ottawa. Open-air fire ban issued for Ottawa CityNews Ottawa. Campfires, brush piles and wood burning outdoor fireplaces are not allowed during the ban. OFS said there will be zero tolerance enforcement while. Canada, Ontario, Fergus. Pet cats die in fire at Erin house with no smoke alarms - Wellington Advertiser wood-burning stove. Fire Chief Jim Sawkins wasn't confident about exactly how the fire started, but said either the stove door was left open, or. United Kingdom. New start-up to take over community centre - BBC Council to deter wood burning after Defra funding. 11 Feb 2024. Surrey · MP to contact health secretary over GP redundancies. 11 Jan 2024. United Kingdom, East Berkshire. Blaze destroys storage building for chainsaw shop in eastern Berks - Reading Eagle Windblown embers from an outdoor woodburning stove spared the fire. The fire sent up a tower of black smoke that would be seen for miles against. United Kingdom. United Kingdom, Essex County, Copford. Crews fit smoke alarms after two chimney fires | Essex County Fire and Rescue Service smoke alarm after finding the property did not smoke alarm either. Crew Manager Dave Farrant said: "It was pure wood to use in a log burner." Asia. 20 Most Air Polluted Countries in Asia - Yahoo Finance The report estimates that by following the World Health Organization's (WHO) guidelines for PM 2.5 levels, the global average life expectancy can South Africa. SA ranked 47 on list of most polluted countries in the world | City Press - News24 particulate matter (PM) 2.5 concentration of 19.9 μg/m3 from 23.49 μg/m3. Particulate matter concentration is the measure of air pollution. South Africa has made it to the top 50 polluted countries in the world, with a ranking of 47 out of 134 and an annual average particulate matter (PM) 2.5 concentration of 19.9 µg/m3 from 23.49 µg/m3. India. Pollution Levels Decrease But City Still Needs To Clear The Air | Ludhiana News Times of India. According to the report, at the end of the winter season, average PM 2.5 level for Ludhiana in winter (October to February) was 85.1 micrograms per. Kejriwal Remains Defensive Even As LG Saxena Raises Red Flag Over Delhi's Air Quality Republic World. PM 2.5 levels, two-fifths of which is attributable to vehicular emission. I am sure that you are aware that prolonged exposure to particulate matter. Concerns Mount As Kochi City's Air Quality Worsens - Times of India PM 2.5 levels of 22.5µg/m3 to 35 µg/m3 are a cause for concern, she said. "Most of the cities where the air monitoring systems have been installed in. Hyderabad sees record 45% spike in aerosols in 20 years: Study - Times of India These are formed when particulate matter (PM) 2.5 and 10 gets suspended in the atmosphere along with the water vapour and other coarser particles to. Hyderabad sees marginal improvement in air quality - The New Indian Express PM (Particulate Matter) 2.5 concentrations decreasing to 39.9 µg/cubic metre in 2023 from 42.4 µg/cubic metre in 2022. Despite this, PM 2.5 and PM. Air quality in Hyderabad improves, falls short of WHO guidelines Siasat.com However, data monitored by the Telangana State Pollution Control Board (TSPCB) in December 2023 reveals PM 2.5 levels of 88 µg/cubic metre in. AQI updates: Air quality falls into 'poor' category in Odisha's Angul - Sambad English PM2.5) and Talcher (air quality-moderate, index value-129, and major pollutant found-PM2.5). RELATED. 1 student dead, 3 more critically injured. Korea. PM2.5 and physical mechanisms. <u>Understanding the physical mechanisms of PM 2.5 formation in</u> Seoul, Korea: assessing the NASA/ADS This study evaluated the impact of the aerosol direct effect (ADE) on the meteorological conditions and air quality in Seoul, South Korea (Korea). Pakistan. Smog country - Newspaper -DAWN.COM PM2.5, or particulate matter 2.5, refers to tiny particles or droplets in the air that are two and a half microns or less in width. Taiwan. PM2.5 concentration highest in Yunlin County last year: Gov't data - Focus Taiwan Taipei, March 24 (CNA) Yunlin County ranked first in Taiwan for annual average concentration of particulate matter smaller than 2.5 micrometers. MOE Says PM2.5 Concentration Highest in Yunlin County in 2023 -ICRT particulate matter smaller than 2.5 micrometers in 2023. Data sh 13-micrograms per cubic meter by 2027. The ministry says the higher PM 2.5 levels in. Thailand. Alarming rise in Thailand's air pollution prompts call for dedicated committee - Thaiger They focused on the hazardous fine particulate matter smaller than 2.5 microns, commonly referred to as PM2. PM 2.5. PM2.5 and gas fireplace insert. Western Fireplace Supply Offers Advice on Gas Fireplace Inserts and a Wide Range of - WGN-TV wood burning stoves, see-through fireplaces, gas fireplace inserts, fireplace vents, pellet stove fireplace inserts, venting/chimney pipes, glass. PM2.5 and masks. Investigating the effect of the absence and presence of a mask with different porosities on ScienceDirect.com Particles with a size of 2.5 µm cause cardiac and pulmonary discomfort by settling in the respiratory system. In this research, the absorption of PM. PM2.5 and higher stroke risk. More exposure to artificial, bright, outdoor nighttime light linked to higher stroke risk. American Heart Association. People with the highest levels of exposure to particulate matter 2.5 (PM2.5 is primarily emissions from combustion of gasoline, oil, diesel fuel. Nighttime

outdoor light, air pollution linked to elevated stroke risk - Healio 2.5 μ m or less (PM2.5), particulate matter with aerodynamic diameter of 10 μ m or less (PM10) and NO2. During 127,877 person-years of follow-up. PM2.5 and wearable tech. Researchers uses wearable tech to study effects of wildfire smoke on firefighters. Fire Rescue 1. Cheong said wildfire smoke from wood contains some of the same dangerous chemicals as cigarette smoke, which can cause respiratory.



