Episode 56AV to 56AZZ

Episode 56AV March 28, 2023

Residents Against Wood Smoke Emission Particulates (see RAWSEPresidents.wordpress.com and Scroll Down for PDFs of articles with U R L's to search on, and on the website are links to 10 minute Tiktok and Youtube videos and 30 minute podcasts on Spotify and Podbean).

Ep 56AV Comment to E P A, Alabama, Georgia, Louisiana 1 of 2 Ep 56AW Louisiana, Massachusetts, Missouri 1 of 2 Ep 56AX Missouri 2 of 2, Washington, Australia, Canada, U K 1 of 2 Ep 56AY U K 2 of 2, Europe, India Ep 56AZ Japan Ep 56AZZ Example of Comment to E P A deadline 3 28 2023

United States

Comment to the EPA by 3/28/2023

Last day is 3/28/2023 to comment online to request the Environmental Protection Agency (E P A) bring down the Particulate Matter of 2.5 micrometer size (PM2.5) safe limit to 8 micrograms per meter cubed annually and 25 micrograms per meter cubed daily.

Comments on the proposed action must be received on or before March 28, 2023. You may submit comments, identified by Docket ID Number EPA-HQ-OAR-2015-0072, by any of the following means:

• Email: a-and-r-Docket@epa.gov. Include the Docket ID No. EPA-HQ-OAR-2015-0072 in the subject line of the message.

Instructions: All submissions received must include the Docket ID No. for this rulemaking. Comments received may be posted without change to <u>https://www.regulations.gov</u>, including any personal information provided.

For information or questions regarding the reconsideration of the PM NAAQS, please contact Dr. Lars Perlmutt, Health and Environmental Impacts Division, Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Mail Code C539-04, Research Triangle Park, NC 27711; telephone: (919) 541-3037; fax: (919) 541-5315; email: perlmutt.lars@epa.gov.

Currently, EPA has primary and secondary standards for PM2.5 (annual average standards with levels of 12.0 μ g/m3 and 15.0 μ g/m3, respectively; 24-hour standards with 98th percentile forms and levels of 35 μ g/m3) and PM10 (24-hour standards with one-expected exceedance forms and levels of 150 μ g/m3). Alabama

RAWSEP View: This Alabama article about controlled burning is a booster for the practice, accepting the questionable theory that setting fires will stop fires. This article implies that the bobwhite bird flourishes because of controlled burns.

Thriving With Fires - NASA Earth Observatory

NASA Earth Observatory

... and distinct whistle, the charismatic quail thrives in the frequently burned pine wood ... In March 2023, burning in the region was under way.

Excerpts edited by RAWSEP for brevity and clarity.

Thriving With Fires.



March 14, 2023

In the Southeast, fire <u>has long been used</u> as a tool to manage pine forests and forest undergrowth.

On March 14, 2023, the <u>Moderate Resolution Imaging Spectroradiometer</u> (MODIS) on NASA's <u>Aqua</u> satellite acquired this image of smoke streaming from <u>several fires</u> in Alabama, Georgia, and northern Florida. Red dots indicate the locations of <u>active fire detections</u> observed by the <u>Visible Infrared Imaging Radiometer Suite</u> (VIIRS) on the NASA-NOAA <u>Suomi NPP</u> satellite.

research using MODIS data has found that cropland and prescribed fires were responsible for <u>77 percent of the total</u> <u>active fire detections</u> within the U.S. and were most abundant in the South and Southeast.

In the MODIS image, smoke can be seen coming from the Talladega National Forest in the southern foothills of the <u>Appalachian Mountains</u>. According to the U.S. Forest Service, a prescribed burn of 1,200 acres in the Oakmulgee District of the forest <u>was planned for March 14</u>. The Oakmulgee District of the Talladega is home to Alabama's <u>largest</u> <u>contiguous longleaf pine forest</u>. Another plume of smoke can be seen coming from Conecuh National Forest, near Alabama's southern border. The Forest Service planned a prescribed burn on March 14 of <u>3,299 acres</u> within the forest. frequent burning (typically every one to two years) promoted healthy quail populations.

NASA Earth Observatory image by Lauren Dauphin, using MODIS data from NASA

EOSDIS LANCE and GIBS/Worldview and VIIRS data from NASA EOSDIS LANCE, GIBS/Worldview, and the Suomi National Polar-orbiting Partnership. Bobwhite quail photo

References & Resources

Audubon Northern Bobwhite (Colinus virginianus). Accessed March 23, 2023.

Johnson, A., et al. (2002) <u>The historical foundations of prescribed burning for wildlife: a southeastern perspective</u>. In: Proceedings: the role of fire for nongame wildlife management and community restoration: traditional uses and new directions. Gen. Tech. Rep. NE-288. Newtown Square, PA: U.S. Dept. of Agriculture, Forest Service, Northeastern Research Station. 11-23.

Lin, H. W., et al. (2014) <u>Management and climate contributions to satellite-derived active fire trends in the contiguous</u> <u>United States</u>. Journal of Geophysical Research: Biogeosciences, 119(4), 645-660. Accessed March 23, 2023. NASA Earth Observatory (2014, October 19) <u>Fires in the Southern United States</u>.

United States Forest Service (2023) <u>Alerts and Notices for Alabama, March 2023</u>. Accessed March 23, 2023. Weber, D. A., et al. (2022) <u>Northern Bobwhite and Fire: A Review and Synthesis</u>. National Quail Symposium Proceedings Vol. 9, Article 63.

Georgia, LaGrange, West Point Lake

RAWSEP View: This Georgia article about controlled burning is a booster for the practice, accepting the questionable theory that setting fires will stop fires. Mother Nature is invoked to justify controlled burns. Human caused fires

excluding official controlled burns are not mentioned in this article. Quote "While these actions impact air quality in the short term, they ultimately help to improve the ecosystem." Human health is secondary to continuing this practice of controlled burns. Soot (PM2.5) can come from residential wood burning, as well as (biomass) wood burning but that is not mentioned in this article.

OUR VIEW: Glad it was a short burn season - LaGrange Daily News

| LaGrange Daily News

As the weather warms, many of you may wonder why all of a sudden, you started to see a smoke haze and smell wood burning.

Excerpts edited by RAWSEP for brevity and clarity.

OUR VIEW: Glad it was a short burn season March 25, 2023. FROM STAFF REPORTS As the weather warms, many of you may wonder why all of a sudden, you started to see a smoke haze and smell wood burning. That is mostly due to the prescribed or controlled burning throughout the county and West Point Lake. These fires are lit intentionally. Reducing these elements that provide fuel to fires. essential for certain species and help restore the ecosystem. While these actions impact air quality in the short term, they ultimately help to improve the ecosystem. Luckily, this year we will not have to endure the haze and smoke for too much longer because there is only one more wildlife reduction burn scheduled for this season. Why such a quick season? In short, Mother Nature gave us a break.

Louisiana, St. James

RAWSEP View: This article is indirectly about "The Environmental Protection Agency is considering new standards for the maximum amount of fine particulate matter". The article emphasizes that reducing Particulate Matter of 2.5 micrometer size (PM2.5) will benefit racial minorities and the elderly. PM2.5 is described as being in the outdoor air, while RAWSEP know that PM2.5 can infiltrate the homes of near neighbors of wood burning neighbors whose stacks emit particulates from wood burning stoves operated INDOORS.

https://www.nytimes.com/2023/03/24/climate/air-pollution-pm25-healtheffects.html?action=click&pgtype=Article&state=default&module=styInclimate&variant=show®ion=MAIN_CONTENT_1&block=storyline_levelup_swipe_recirc

Episode 56AW

Cleaner Air Helps Everyone. It Helps Black Communities a Lot.

New York Times

Excerpts edited by RAWSEP for brevity and clarity.

Americans over 65 who are already exposed to some of the dirtiest air in the United States, according to a new study The research could inform a crucial Environmental Protection Agency decision to tighten limits on fine particulate matter. New RESEARCH. Cleaner Air Helps Everyone. It Helps Black Communities a Lot. A new study quantified the benefits of pollution reduction in terms of race and class. St. James, La., one of several Mississippi River towns dotted by chemical plants and oil refineries. March 24, 2023. The Environmental Protection Agency is considering new standards for the maximum amount of fine particulate matter in outdoor air. A recent study examined how the benefits of stricter limits would be distributed across American society. What's new in this research. Implementing stricter limits on fine particulate matter could reduce mortality rates by up to 7 percent for Black and low-income Americans over 65 who are already exposed to some of the dirtiest air in the United States. Black communities in particular, are disproportionately exposed to harmful air pollutants like PM 2.5 no more than 2.5 micrometers in diameter. The new research, published Friday in The New England Journal of Medicine, found that tightening the limit on fine particulate matter by 4 micrograms per cubic meter of air would result in a 4 percent reduction in the mortality rate for higher-income white adults, and also would result in a reduction up to 7 percent for higher-income Black adults, lower-income white adults and lower-income Black adults. Soot can come from construction sites, smokestacks, diesel trucks, power plants and other industrial activity. Wildfire smoke is also a major source of particulate matter pollution. Change in guidance could prevent 4,200 premature deaths each year. new research reveal that a stricter 8 micrograms would make A REAL DIFFERENCE. The Biden administration's effort to address environmental justice, Michael Regan, the E.P.A. administrator, has said. In a separate study last year, researchers uncovered stark disparities between white Americans

and people of color. A study from 2020 <u>quantified how air pollution ignores borders</u>: In most states, about half of the premature deaths caused by poor air quality are linked to pollutants that blow in from other states. urban neighborhoods that were <u>subject to redlining</u>, the discriminatory practice of withholding banking and other services from nonwhite communities, in the 1930s tended to <u>have higher levels of harmful air pollution eight decades later</u>.

Massachusetts, Northampton, Hampshire Gazette

John Howard: Disturbed by wood-burning at hospital - Daily Hampshire Gazette

Daily Hampshire Gazette

... Hampshire Gazette that Cooley Dickinson Hospital is partially heating the hospital by burning wood! I am a long-term patient at the hospital.

Excerpts edited by RAWSEP for brevity and clarity.

Disturbed by wood-burning at hospital.

3/24/2023 Letter to the Editor.

I was very disturbed to read in the March 21 Daily Hampshire Gazette that Cooley Dickinson Hospital is partially heating the hospital by burning wood! I am a long-term patient at the hospital. In the same issue of the Gazette was a long article from the UN on the climate change crisis. Basically, in order to survive we humans need to stop burning up things that put carbon dioxide into the air! It is a surprising idea that the hospital is creating the very diseases it treats! Air pollution causes ischemic heart disease, stroke, chronic obstructive pulmonary disease (COPD), lung cancer and acute lower respiratory infections in children. What is the hospital thinking, burning the very thing that helps us with climate change — trees? They do a wonderful job of taking CO2 out of the air and providing the nature that we all love and appreciate. I would like to suggest the hospital investigate geothermal energy. Several of the local colleges have begun geothermal projects for their campuses. The Inflation Reduction Act and other state and federal incentives go along way to financing this old/new form of energy.

Missouri Department of Natural Resources (DNR) (and Nebraska N D E E), E P A Region 7

EPA Press Office

Mar 27, 2023

here: https://epa.mediaroom.com/index.php?s=20300&unsub=1&hide_page_content=1

EPA Announces \$3M Each to Missouri and Nebraska to Fund Innovative Projects That Tackle Climate Pollution U.S. Environmental Protection Agency, Region 7 - 11201 Renner Blvd., Lenexa, KS 66219

Iowa, Kansas, Missouri, Nebraska, and Nine Tribal Nations

Contact Information: Shannan Beisser, beisser.shannan@epa.gov, 816-520-1949

LENEXA, KAN. (MARCH 27, 2023) – Today, the U.S. Environmental Protection Agency (EPA) announced \$3 million each to Missouri and Nebraska to develop innovative strategies to cut climate pollution and build clean energy economies across these states.

Earlier this month, EPA <u>announced</u> the availability of the funds, which are a part of the first allotment of funding from the Climate Pollution Reduction Grants (CPRG) program created by President Biden's Inflation Reduction Act. All 50 states, District of Columbia, and Puerto Rico are eligible to receive \$3 million in CPRG planning grants.

"These \$3 million Climate Pollution Reduction Grants will allow Missouri and Nebraska to plan for climate impacts with the speed in which this pressing issue demands," said EPA Region 7 Administrator Meg McCollister. "We hope that all states will follow their lead in leveraging the historic Inflation Reduction Act funds to protect communities and create jobs."

The Missouri Department of Natural Resources (MoDNR) and the Nebraska Department of Environment and Energy (NDEE) will participate in this new program that provides flexible planning resources for the states to develop and implement scalable solutions that protect people from pollution and advance environmental justice.

"As we begin planning this effort, we look forward to engaging partners and stakeholders from across Missouri," said MoDNR Director Dru Buntin. "Missouri's plan will help industry to finance voluntary projects that will enhance their ability to meet the state's future energy needs. We will also work to provide new tools and funding opportunities for projects to reduce pollution and improve the environment for all Missourians. Finally, we are committed to improving community engagement efforts so that everyone has a seat at the table." MoDNR and NDEE will use these funds to develop a climate action plan in collaboration with municipalities and organizations in their states, and to conduct meaningful engagement, especially with low-income and disadvantaged communities.

Later this year, EPA will launch a \$4.6 billion CPRG implementation grant competition to implement projects and initiatives outlined in the climate action plans developed using funding from the CPRG planning grants. Missouri and Nebraska will be eligible to receive funds from this competition, as will the other states that submit their intention to apply prior to the March 31 deadline.

More on Climate Pollution Reduction Grants

The CPRG planning grants will support states, territories, tribes, municipalities, and air agencies in the creation of comprehensive, innovative strategies for reducing pollution and ensuring that investments maximize benefits, especially for low-income and disadvantaged communities.

These climate plans could include:

Greenhouse gas emissions inventories.

Emissions projections and reduction targets.

Economic, health, and social benefits, including to low-income and disadvantaged communities.

Plans to leverage other sources of federal funding including the Bipartisan Infrastructure Law and Inflation Reduction Act.

Workforce needs to support decarbonization and a clean energy economy.

Future government staffing and budget needs.

In program guidance released earlier this month, EPA describes how the Agency intends to award and manage CPRG funds to eligible entities, including states, metropolitan areas, tribes, and territories.

Episode 56AX

By summer 2023, EPA regional offices expect to award and administer the funding agreements.

Next Steps

This funding for climate planning will be followed later this year by \$4.6 billion in implementation grant funding that will support the expeditious implementation of investment-ready policies created by the CPRG planning grants, programs, and projects to reduce greenhouse gas emissions in the near term.

Through the CPRG program, EPA will support the development and deployment of technologies and solutions that will reduce greenhouse gas emissions and harmful air pollution, as well as transition America to a clean energy economy that benefits all Americans.

Learn more about Climate Pollution Reduction Grants

Read CPRG Planning Grant Program Guidance

Sign up for notifications about Climate Pollution Reduction Grants

More on Inflation Reduction Act Funding

President Biden's Inflation Reduction Act includes historic funding to combat climate change while creating good-paying jobs and advancing environmental justice. Earlier this year, EPA announced \$550 million toward the new Environmental Justice Thriving Communities Grantmaking program, and \$100 million for environmental justice grants to support underserved and overburdened communities. Additionally, the Greenhouse Gas Reduction Fund will award nearly \$27 billion to leverage private capital for clean energy and clean air investments across the country.

Washington State, Kitsap County, Olalla

Outdoor burning is unhealthy, and county must take action - Kitsap Sun

Kitsap Sun

Wood smoke contains many chemicals, such as benzene, benzo(a)pyrene and dibenz(a,h)anthracene, carbon monoxide, formaldehyde, organic gases ...

Excerpts edited by RAWSEP for brevity and clarity.

Letter to the Editor.

Outdoor burning is unhealthy, and county must take action

Anjali Banerjee, Olalla

Wood smoke contains many chemicals, such as benzene, benzo(a)pyrene and dibenz(a,h)anthracene, carbon monoxide, formaldehyde, organic gases (including aldehyde gases and other respiratory irritants), nitrogen oxides, polycyclic aromatic hydrocarbons (PAHs), and dioxin. All of these are toxic. EPA researchers estimate the lifetime cancer risk from wood smoke to be 12 times greater than from a similar amount of cigarette smoke.

We live in an unincorporated area of Kitsap County, where outdoor burning is still allowed with a permit. We are forced to keep our windows and doors closed on sunny days when a burn ban is not in effect. The air is nearly always smoky. We invested in air purifiers, and yes, we have spoken with our neighbors and so on. We've done everything we're supposed to do — but nothing ever changes.

Within city limits, outdoor burning is prohibited. We need to extend that prohibition to nearby unincorporated residential areas, where the population density is increasing, so that we can go outside into our own gardens without breathing toxic air billowing over from our neighbors' properties. Puget Sound Clean Air Agency needs to do a far better job of educating the general public about the dangers of wood smoke. Alternatives to burning include chipping, composting, affordable curbside pickup or drop-off at a recycling center. Anjali Banerjee, Olalla

Canada, Ontario, Orangeville

RAWSEP View: This tradition results in exposing your family to PM2.5 pollution. PM2.5 is particulate matter of 2.5 micrometer size, the perfect size to infiltrate the lung and produce a cascade of health problems. The residential is also emitting particulates that harm the health of near neighbors.

The woodcutter's philosophy - Orangeville Citizen

Orangeville Citizen |

I distinctly remember our Grandparents having a big black cast iron wood burning cook stove in the kitchen of their home that they used to cook ...

Excerpts edited by RAWSEP for brevity and clarity.

The woodcutter's philosophy When we were young, our late Father, during an early spring moment one Saturday afternoon on our bush property as our family culled and cut down dead trees in the slowly melting snow to harvest as firewood for our home, once espoused this profound little piece of manly philosophy over lunch to his three growing boys: ?A man who cuts his own firewood is twice warmed?. And that's very true. For those of you who may not know what he meant by that, he meant that you are firstly warmed by the physical effort of cutting the wood yourself, and then later on you yourself are secondly warmed by the heat from the burning of that same wood as you burn it in your wood stove or fireplace at home.

Australia, Canberra

RAWSEP View: It is ironic that residential wood burning is sentimentalized by some, even when residential wood burning particulates of 2.5 micrometer size (PM2.5) are the perfect size to infiltrate the human lung, causing a cascade of human health problems. Wood smoke is 90% PM2.5, and the Commissioner for Sustainability and the Environment in Canberra, Australia has called for the Canberra government to set a date for a ban on wood heaters.

https://www.abc.net.au/canberra/programs/drive/canberra-wood-heaters-

ban/102138162?fbclid=IwAR1MHaHuNHX430qNPrxv8pwktOSTuizpTtNBtaCHbaRIW4GJZyXineoQdgs

Excerpts edited by RAWSEP for brevity and clarity. Canberra's beloved wood heaters could have numbered days <u>ABC</u> <u>Radio Canberra</u> Broadcast Wed 22 Mar 2023 Anecdotal evidence suggests Canberrans love nothing more than spending a cold winter's night in front of a roaring fire. But the environmental and health evidence is piling up to suggest this isn't good for us. Australia Canberra Territory (A C T) Commissioner for Sustainability and the Environment Dr Sophie Lewis has called on the A C T Government to set a date for a ban on wood heaters, like it has done for gas. She's also calling for more information about the scale of the problem, including more air quality monitoring and an audit to understand how many wood heaters there are in the Territory.

U K, Lambeth

RAWSEP View: This article refers to PM2.5 pollution from traffic, although percentage of U K PM2.5 pollution from residential wood burning exceeds PM2.5 pollution from U K traffic. Also, using an air purifier means that you are expecting to experience PM2.5 from wood burning and other sources, rather than eliminating residential wood burning at the source.

https://www.bbc.com/news/uk-england-london-65025489?fbclid=IwAR0IYI2BOXafLOQtVsLtKFDo2V5aZFScHZ8bGpJfR-0S0LIVVTiXhIXiJTY

Excerpts edited by RAWSEP for brevity and clarity.

Air pollution: Lambeth students build filters for their classrooms.

March 26, 2023

The systems were created by pupils at Elmgreen School in Lambeth. BBC News Students at a school near one of London's most polluted roads have built air pollution filters for their classrooms.

Pupils from Elmgreen School in Lambeth, south London, created the devices using kits that cost about £200. The school is located about 45m from the South Circular road, which has been found to have high levels of PM2.5. PM2.5 is a measure of air pollution associated with conditions including asthma, heart disease and lung cancer. Students assembled the low cost-systems alongside campaign group Mums for Lungs and researchers from the University of Nottingham. The system can be easily assembled without specialist training. Each kit, known as a Corsi-Rosenthal Box, uses smart technology to ensure the filtration system only operates when pollution levels are high. It was designed during the Covid-19 pandemic, with the goal of reducing the levels of airborne viral particles were high. "Pollution is more something you associate with outside so you don't really think of it as being an issue in the classroom." Image source, Mums for Lungs. According to <u>data published by City Hall in 2021</u>, 98% of London schools are in areas where air quality is considered toxic, compared with 24% outside the capital. Excessive levels of air pollution have been found to stunt lung growth and worsen chronic diseases.

Episode 56AY

U K, Leicestershire

RAWSEP view: The salient phrase in this article is that "stoves and log burners produce more toxic emissions than all of the UK's cars combined, according to government data.".

Fresh warning to wood burning stove owners in clean air crackdown - Leicestershire Live

Leicester Mercury

Excerpts edited by RAWSEP for brevity and clarity.

Council speaks out over of wood burning stoves and told residents how they can lower their environmental impact. Fresh warning to wood burning stove owners in clean air crackdown

Council speaks out over of wood burning stoves and told residents how they can lower their environmental impact. A council has warned residents who own <u>wood burning stoves</u> that the pollution it produces needs to be reduced. It comes following reports stoves and log burners produce more toxic emissions than all of the UK's cars combined, according to government data.

While <u>wood burners</u> can heat a room quickly, they produce the most toxic pollutant to human health, PM2.5, and are linked to nearly 50 percent of people's exposure to <u>cancer-causing chemicals</u> found in air pollution particles within urban areas.

Wood burning stoves alternative with smokeless fuel costing 75p an hour to run

Those living in smoke control areas, all of which <u>can be found here</u>, should already be exclusively burning <u>DEFRA</u> <u>approved fuels</u>.

Europe

RAWSEP View: This article concedes that "renewable" doesn't conjure images of wood smoke pollution in most people's minds, but renewables in fact include biomass(wood) burning. "EU accused of incentivizing environmental harm". This article approaches the use of wood as decimating Carbon Sinks which are forests, but does not address the PM2.5 pollution from wood burning directly. The fallacious theory of Carbon Neutral wood burning is explained again in this article. "But Martin Pigeon of Brussels-based forest protection campaign group Fern argues the subsidy setup is "insane" as it means "EU citizens are paying energy companies to burn forests in the midst of a climate and biodiversity crisis." Forest groups again align with RAWSEP in opposing using biomass for burning, but not because wood burning causes air pollution that affects human health, but because wood burning hastens climate change and threatens biodiversity. The means of argument are different between Forest groups like FERN and RAWSEP, but the aim of eliminating wood burning is the same. "(EASAC) says scientific study says replacing coal with wood pellets increases "atmospheric levels of carbon dioxide for substantial periods of time." In restricting what gets burned, the Commission is getting pushback from individual member states, who state the cost of compliance and the cost of the Ukraine war.

EU weighs up future of wood-burning as renewable energy – DW – 03/24/2023

DW

As Europe races to replace Russian fossil fuels with cleaner power sources, EU lawmakers are weighing up the future of firewood as a renewable ...

Excerpt edited by RAWSEP for brevity and clarity.

EU weighs up future of wood-burning as renewable energy

March 24, 2023

As Europe races to replace Russian fossil fuels with cleaner power sources, EU lawmakers are weighing up the future of firewood as a renewable energy source. The debate is getting heated. https://p.dw.com/p/4Ofaz EU replacement of <u>Russian fossil fuels</u> is underway. The International Energy Agency says bids to beef up energy security <u>"turbocharged" growth of green power in 2022</u>, and EU parliamentarians hope to ramp up <u>renewables</u> targets to reach 45% of bloc-wide energy consumption by 2030.

The word "renewable" often conjures up images of wind farms or solar panels — less so scenes of burning trees. But biomass, which includes firewood, plants and other organic materials, makes up 60% of the EU's renewable energy mix according to the European Commission. As the bloc now reviews its landmark renewable power legislation, a political battle over firewood's future is playing out in Brussels. Biomass: How clean is it? EU accused of incentivizing environmental harm. Because new trees can be planted after others have been chopped down, firewood gets the renewable seal of approval under EU law. That means member countries can subsidize wood burning, as long as certain sustainable sourcing rules are met. But Martin Pigeon of Brussels-based forest protection campaign group Fern argues the subsidy setup is "insane" as it means "EU citizens are paying energy companies to burn forests in the midst of a climate and biodiversity crisis." The climate impact of wood-burning is contested. European Academies Science Advisory Council (EASAC) says scientific study suggests the trend to replace coal with wood pellets as a means of generating electricity actually increases "atmospheric levels of carbon dioxide for substantial periods of time." A 2019 EASAC report says carbon emissions associated with woodburning to be evened out range takes years to decades or even centuries. Destroying ancient forests in the name of 'green energy'. EU institutional showdown over future of firewood subsidies The European Parliament wants to limit subsidies for burning wood taken directly from forests, and instead restrict state support to secondary wood products like sawdust. the proposal is "the parliament's way of trying to limit the unsustainable and inefficient use" of wood. EU member states, meanwhile, prefer a looser definition of which type of wood can be subsidized. European Commission promises tighter forest sustainability rules. The European Commission has also put forward plans to tighten laws on which firewood qualifies for subsidies. A European Commission spokesperson said the EU Commission launched legal action against all 27 member states in 2021 for failing to complete this process or failing to notify Brussels of completion. "We are closely monitoring this process and stand ready to take enforcement actions, if needed," the spokesperson said.

Asia

India

RAWSEP View: The same European Union article was also published in India

EU weighs up future of wood-burning as renewable energy source - The Indian Express

The Indian Express

The climate impact of wood-burning is contested. The EU officially counts wood and other biomass as carbon neutral, based on the premise that CO2 ...

An Indian view of the European Union article excerpts were edited by RAWSEP for brevity and clarity. EU releases its Synthesis Report: What are the key takeaways. The new report has urged governments and policymakers to take urgent action to avoid the worst consequences of climate change. New Delhi. March 21, 2023. Key takeaways from the report

Aditi Mukherjee, another author of the report, said, "Even though our per capita emissions are less, and we have historically, much less responsibility. But the reality is India is at the forefront of impacts. We simply cannot say that because we haven't emitted much, we are not the ones to take action. I think the report makes it clear. Everybody has to take action according to their national context and circumstances urgently."

Apart from highlighting the urgent need of limiting the use of fossil fuel, the report urges governments and policymakers to increase finance to climate investments, expand the clean energy infrastructure, reduce nitrogen pollution from agriculture, curtail food waste, adopt measures to make it easier for people to lead low-carbon lifestyles and much more.

Madeleine Diouf Sarr, Chair of the Least Developed Countries (LDC) Group, said, "We know what the solutions are. Renewables, storage, electrification – they are already gaining a place in many parts of the world. But not enough. We need to move faster, with rich countries leading the way. It is disappointing that climate finance growth has slowed since 2018 when it should have accelerated. The largest gaps are in the developing world. But so too are the largest opportunities."

Episode 56AZ

Japan

RAWSEP View: Japan is going to count and disclose the stack emissions from Biomass (wood) burning plants in Japan starting in April 2023. RAWSEP can then calculate the percentage of PM2.5 emissions that come from wood burning in Japan compared to the overall PM2.5 emissions that come from Japan. RAWSEP thought this could be a way of roughly estimating what wood (biomass) emissions percentage is NOT being counted and disclosed by European Union countries. But since Japan seems to have a greater geothermal resource than the European Countries and could therefore use wood burning as less of a share of their energy which produces emissions, it seems that any estimation of European Union wood burning emissions as a percent of total emissions would be underestimated using the model of Japan.

However, this article goes into the reasons why Japan is NOT using its geothermal energy up to what would be expected. Powerful local interests, Japan's owners of hot spring resorts, have blocked the use of geothermal power on a greater scale in Japan. "Tradition" is one of the arguments hot spring resort owners use in their pushback against the use of geothermal power. Pollution from biomass (wood) burning affecting human health is not considered, as the profits of hot spring owners is the paramount concern.

https://www.nytimes.com/2023/03/22/climate/japan-hot-springs-geothermal-energy.html

New York Times

Excerpts edited by RAWSEP for brevity and clarity.

Geothermal Power, Cheap and Clean, Could Help Run Japan. So Why Doesn't It?

For decades, new plants have been blocked by powerful local interests, the owners of hot spring resorts, that say the sites threaten a centuries-old tradition. March 22, 2023. A treasured getaway frequented for centuries. Japan sits on so much geothermal energy potential, if harnessed to generate electricity, it could play a major role in replacing the nation's coal, gas or nuclear plants. "a threat to our culture," "If something were to happen to our onsens,"he said, using the Japanese word for hot springs, "who will pay?" Japan, an archipelago thought to sit atop the third-largest geothermal resources of any country on earth, harnesses puzzlingly little of its geothermal wealth. It generates about 0.3 percent of its electricity from geothermal energy. An older man in a black jacket stands outdoors by a white case that

resembles a chest freezer. The lid is open, exposing what appears to be wires, hoses, pumps and sensors. Viewed from above, a row of low buildings runs alongside a winding road, while behind it and up a hillside, steam rises from a small collection of industrial pipes and equipment. In a pre-emptive move, Mr. Sato has fit Asunaroso with monitoring equipment that tracks water flows and temperatures in real time, and is pushing for onsens across the country to do the same. He has led the opposition to geothermal development as the chairman of an organization that translates loosely as the Society to Protect Japan's Secluded Hot Springs. Bureaucrats in Tokyo, Japan's giant electrical utilities and even the nation's manufacturing giants have been no match. Tokyo-based Electric Power Development Company, also called J-Power, which operates just one geothermal plant in Japan, accounting for 0.1 percent of its power generation. The utility has been forced to give up on a number of geothermal projects in past decades. Geothermal power plants, on the other hand, draw on wells drilled deeper in the earth's crust, pumping up steam and hot water to power giant turbines that generate electricity. Developers say that because plants draw from sources deep beneath onsen springs, there is little possibility one will affect the other. Japan, the world's fifth-largest emitter of planet-warming gases, needs more clean energy to meet its climate goals. https://climateactiontracker.org/countries/japan and to rein in its dependence on fossil fuel imports. Much of its nuclear power program remains shuttered after the 2011 Fukushima nuclear disaster. The Japanese government, which seeks to triple the country's geothermal capacity by 2030, has tried to smooth the way for more projects by opening up geothermal development in national parks and speeding up environmental assessments. If Japan were to develop all of its conventional geothermal resources for electricity production, it could provide about 10 percent of Japan's electricity, according to the Institute for Sustainable Energy Policies in Tokyo. That would be more electricity than Japan generated from hydropower, solar, wind or nuclear in 2019. A big geothermal plant. It's the nation's largest. But it's also four decades old, and Kyushu Electric, the regional utility, hasn't been able to build plants of a similar scale since. Yuzawa, in the snowy northern province of Akita, is a rare example of a hot spring town that has embraced geothermal energy. Japan had hoped for more Yuzawas. The nation opened its first commercial, large-scale geothermal power plants in 1966, and in the following decades operators added about a dozen more, including one in Yuzawa. But with rising local opposition from hot spring inns, Japan has added almost no geothermal capacity since the 1990s. That's even as Japanese manufacturing giants, like Toshiba, have come to dominate the global market for geothermal turbines. Very little of their business is on their home turf. Even in Yuzawa, though, there has been controversy. Since late 2020, a local inn has had to periodically close after its spring dwindled. Yuzawa city maintains the city's geothermal development wasn't the cause. Still, geothermal energy has become a part of Yuzawa city's fabric, a Yuzawa resident said. "I think it's possible for both hot springs and geothermal to coexist."

Episode 56AZZ

Example of Comment to send to the EPA on PM2.5 levels by March 28, 2023

Email: a-and-r-Docket@epa.gov. Include the Docket ID No. EPA-HQ-OAR-2015-0072 in the subject line of the message. Instructions: All submissions received must include the Docket ID No. for this rulemaking. Comments received may be posted without change to <u>https://www.regulations.gov</u>, including any personal information provided.

March 27, 2023

Hello Environmental Protection Agency (EPA),

Attached are five PDFs of recent Residents Against Wood Smoke Emission Particulates (RAWSEP) episodes which are against the Particulates of 2.5 micrometer size (PM2.5) from Residential wood burning effects on the health of near neighbors. These episodes include scientific research paper URLs and RAWSEP comment on the research, as well as RAWSEP comment on news (and news URLs) on the PM2.5 pollution of wood burning, biomass and residential. More PDFs found at rawsepresidents.wordpress.com, Scroll down to see PDFs by month since April 2022. COMMENT

Please change the limit for Particulate Matter of 2.5 micrometer size (PM2.5) from 12 micrograms per meter cubed to 8 micrograms per meter cubed, bringing the limit closer to the World Health Organization (WHO) standard of 5 micrograms per meter cubed. Indoor residential wood burning is like choosing NOT to wear a mask against the spread of COVID 19 at the height of a pandemic before vaccines are available. Deaths happened that did not have to happen when people refused to wear masks. I believe your constitutional right to swing your fist ends, when your fist hits my face. Ending residential wood burning is the aim of Residents Against Wood Smoke Emission Particulates, RAWSEP, my

organization for the last 16 years. Just because it is hard to make individual residents take personal responsibility for their role in air pollution is not a reason to NOT have ordinances against INDOOR residential wood burning. I think my organization has analogies to MADD Mothers Against Drunk Driving, because of the need to educate about the dangers of continuing both practices. Indoor residential wood burning, especially in cities, is not a tradition. Biomass burning, mostly wood burning, was enshrined as renewable and given subsidies in only the last FEW DECADES, although scientists object. This year the European Union ended most subsidies for Biomass slash Wood burning. A recent Panorama TV documentary exposed the fact that the 2nd largest Biomass slash Wood Burning Plant in the world, in England, Drax, is highly polluting, and is decimating forests in Canada and the Southern United States to feed its polluting wood burning appetite.

I have a website RAWSEPresidents.wordpress.com. I have Tiktok <u>https://www.tiktok.com/@rawsepresidents</u> and <u>https://www.tiktok.com/@user869894886?lang=en</u> and YouTube videos

https://www.youtube.com/@rawsepresidents4370 and Spotify

https://open.spotify.com/show/32hfC477jEeeDbQoTsu82l

and Podbean https://rawsepresidents.podbean.com/4 podcasts and a Facebook page

https://www.facebook.com/search/top/?g=rawsepresidents

The City of Madison was recently given nearly half a million dollars by the Biden Administration to fight particulate pollution. The solution to the problem of Residential Wood Burning is to give a PurpleAir PM2.5 monitor to any resident of the City of Madison, Wisconsin, who complains that wood smoke from a Neighbor is infiltrating their yards and homes. The \$249 Purpleair monitor I purchased myself proves daily that in my own yard I breathe 3 times the current Environmental Protection Agency healthy limit of particulate matter of 2.5 micrometer size, PM 2.5 during the cold months in Wisconsin. Wood smoke is 90% PM 2.5. The current practice of letting this pollution continue if the indoor residential wood stove is certified is an abject failure in containing hyper-localized air pollution that affects the health of near neighbors. PM2.5 is the perfect size to infiltrate the human lung setting off a cascade of human health problems and early deaths.

My name is Linda Karr and I am a resident of Madison Wisconsin who has lived 60 feet away from wood burning neighbors for the 18 years I have owned the house I bought for \$84,000, which proves I am low income. One occupant 60 feet away operated three wood stoves for 7 of those 18 years, and after I asked the Health Department to shut down the wood stove he had in his garage next to gas fueled cars he burned from remaining two wood stoves for an additional 9 years. The buyer of his house burned from a wood stove in his house for 2 years and has in the past few months added a wood stove in his garage next to gas fueled cars. If I notify the health department at this time, under local ordinances I will have the wood stove in his garage shut down, but not the wood stove in his house.

I routinely breathe 3 times over the current Environmental Protection Agency level of particulates of 2.5 micrometer size (PM 2.5) from the wood smoke that enters my yard and infiltrates my home, because I am a near neighbor of these wood burning neighbors. I use three air purifiers throughout the cold months in Wisconsin in a 672 square foot house. I live in a city where natural gas lines are connected to the house of the wood burning neighbors. The wood burning is done when the natural gas heat is turned down and the wood stove is used for ambience. The wood burning neighbor burns wood as a hobby, and owns a house assessed at twice the assessment of my house. It is often the case that wood burning neighbors are more affluent than their neighbors.