

Episodes 56CR thru 56CZZ

Episode 56CR. April 21, 2023. "The Foot-draggers" issue. 1) Heritage Foundation versus PM2.5 limits, 2) Burning Man versus Nevada geothermal power, and 3) Sierra Club pro "Carbon Neutral" prescribed burns.

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, Podbean, podcasts.google.com, Amazon Music Prime (free for Prime subscribers), Cast Box, and Pocket Cast (Pocket Cast is only free on the phone App)

Ep 56CR Heritage Foundation 1 of 2 **Ep 56CS** Heritage Foundation 2 of 2, California 1 of 2 **Ep 56CT** California 2 of 2, Burning Man 1 of 2 **Ep 56CU** Burning Man 2 of 2, Montana **Ep 56CV** New Jersey, Utah 1 of 2 **Ep 56CW** Utah 2 of 2, Australia 1 of 2 **Ep 56CX** Australia 2 of 2, Brazil **Ep 56CY** United Kingdom **Ep 56CZ** Europe, Germany 1 of 2 **Ep 56CZZ** Germany 2 of 2, Asia, Health Effects of PM2.5

United States

RAWSEP View: Just as the Biden Administration proposal to regulate PM2.5 emissions from car exhaust of cars rolling off American assembly lines has the GOAL of 67% electric cars sold from U S manufacturers by 2032, the Environmental Protection Agency (E P A) has the GOAL of getting wood fires extinguished in the U S in the near future, for the same reason as elimination of gas-powered cars, to regulate 2.5 emissions from wood burning and from car exhaust. The GOAL of the E P A is NOT to make wood stoves clean, which is impossible, but to eliminate wood stoves as a product being sold in the U S, because that is one of the only two ways to meaningfully regulate PM2.5 emissions from wood burning. In addition, the second meaningful way to regulate PM2.5 emissions from existing wood burning appliances is to eliminate each existing wood burning appliance in use in the United States, one by one, if necessary. Governments should 1. hand out PM2.5 monitors to any near neighbor of a residential wood burner who complains of the PM2.5 that enters his or her yard and infiltrates his or her home, because of proximity to the polluting stack of a residential wood burner. And governments should 2. Pass laws that make use of the online historic data from each PM2.5 monitor placed in the yard of a near neighbor of a wood burner, as evidence to shut down existing wood burners. If PM2.5 emissions breach the "safe" limit set by the E P A (which could be either 8 micrograms per meter cubed annually or 25 micrograms per meter cubed daily) the GOAL of the government should be that the data used would shut down a specific wood burner.

The GOAL of any government seeking to improve air quality for its citizens should be to provide recourse for its citizens to have their complaints about air quality which affects their health be listened to, and their problems solved by government regulation of air quality. The interests of the gas-powered vehicle lobby and the wood burning appliance lobby and their profits should not be a primary government concern, although the efforts of lobbyists in the past have confounded adequate regulation of PM2.5 pollution through loopholes to compliance with auto emissions limits and loopholes to wood burning emissions limits. This failure of the wood stove certification program is explained in a report by the Office of the Inspector General (O I G), watchdog of the E P A, which explained in February 2023 that lobbyists for the wood burning industry have exploited loopholes to such an extent that the U S E P A wood stove certification program is "flawed". The E P A certifies and allows continued sales of wood stoves that are highly polluting. A complaint-driven use of PM2.5 monitors in the yards of near neighbors could right some of the wrongs of the previous U S E P A wood stove certification system.

Again, real climate change science and air pollution emissions science from auto emissions and wood burning emissions is being attacked by the Heritage Foundation, lobbyists for the wood burning industry, in this Heritage Foundation article below. Note all the ways the Heritage Foundation falsely denies climate change, some listed in Wikipedia article excerpts below.

Excerpt from the Wikipedia article on the Heritage Foundation edited by RAWSEP for brevity and clarity.

The Heritage Foundation is an American [conservative think tank](#) based in [Washington, D.C.](#) which took a leading role in the [conservative](#) movement during the presidency of [Ronald Reagan](#), whose policies were taken from Heritage's policy study [Mandate for Leadership](#) and is among the most influential public policy organizations in the [United States](#). The Heritage Foundation's headquarters building, is on [Massachusetts Avenue](#) on [Capitol Hill](#). The Heritage Foundation was founded in 1973. Growing out of the new business activist movement, and discontent with [Richard Nixon](#)'s embrace of the "[liberal consensus](#)", it advanced conservative activism. Coors was a primary early funder. Heritage advocated for pro-business policies, [anti-communism](#), [neoconservatism](#) and the [Christian right](#). Climate change denial. The Heritage Foundation rejects the [scientific consensus on climate change](#). The Heritage Foundation is one of many [climate change](#)

[denial](#) organizations that have been funded by ExxonMobil. The Heritage Foundation strongly criticized the [Kyoto Agreement](#) to curb [climate change](#), saying American participation in the treaty would "result in lower economic growth in every state and nearly every sector of the economy." They projected that the 2009 [cap-and-trade](#) bill, the [American Clean Energy and Security Act](#), would result in a cost of \$1,870 per family in 2025 and \$6,800 by 2035; on the other hand, the non-partisan [Congressional Budget Office](#) projected that it would only cost the average family \$175 in 2020. RAWSEP View: Note all the ways the Heritage Foundation falsely denies climate change and denies the importance of emissions from wood burning causing harm to human health, in the Heritage authored article below. The profits of the wood burning industry are being protected by the Heritage Foundation in this article. The vast majority of commenters at the E P A hearings on lowering "safe" limits of PM2.5 from 12 and 35 to 8 micrograms per meter cubed annually and to 25 micrograms per meter cubed daily are not referred to in this article. The handful of business lobbyists who spoke against the lowering of PM2.5 safe limits in February 2023 are who Heritage is toadying to in the article below. Heritage Foundation article excerpts edited by RAWSEP for brevity and clarity.

RAWSEP View: The E P A is not expecting residential wood burners to use industrial grade technology to control emissions from residential wood burning. The E P A is expecting that any residential wood burning above E P A "safe" limits will be detected by PM2.5 monitors placed in the yards of near neighbors who complain of PM2.5 from their neighbors' wood burning. The neighbors' yards would be the fence line, and logically, unsafe levels of PM2.5 measurements at the fence line would be the evidence to prove that the wood burning appliances will be shut down. Expensive industrial grade technology such as carbon capture is absurd to use, since Carbon Capture is expensive and doesn't work, not on either industrial biomass burning stacks and not on residential wood burning stacks. Simply stopping burning wood itself can achieve the goal of limiting particulate emissions from residential wood burning. The only thing standing in the way of achievement of cleaner air from limiting PM2.5 emissions, is the greedy profit motive of the biomass industry and the wood burning industry, as supported by the Heritage Foundation. Already, it is more economical to generate energy from geothermal, solar and wind sources, than from biomass or wood burning. The United States needs to invest in growing those clean, economical industries and leave the polluting methods of energy generation, gas-powered cars, and residential wood burning, in the rear view mirror, and in the past. The Heritage Foundation is looking in the rear view mirror nostalgically, and looking back to a past that never was. The past was polluted, and the future can be cleaner, if there is some change.

Refutation of claims of the Heritage Foundation as lies, lie by lie. 1. SCIENCE NOT SHAKY. The science of climate change is not "shaky". The science of particulate pollution causing harm to human health is not "shaky". Particulate matter of 2.5 micrometer size, PM2.5, is the perfect size to infiltrate the human lung, setting off a cascade of human health problems. 2. PM2.5 is real, and dangerous. The Heritage Foundation panders to willfully ignorant readers when it writes "You may not even know what PM2.5 is—and in fact EPA doesn't analyze the chemical makeup of PM2.5—but they're sure it's killing you, even at low doses."

RAWSEP note: The particulate size itself, 2.5 micrometers, makes PM2.5 in the air dangerous, and able to enter the lungs and infiltrate the human body.

Episode 56CS

Continued RAWSEP View on Heritage Foundation Article: Analyzing the exact chemical makeup of all PM2.5 before enforcing limits on emission of PM2.5 is not necessary to know that PM2.5 is harmful and dangerous. If given the leisure time to analyze the chemical makeup of all PM2.5 emissions emitted in the world, to eventually gain additional knowledge of specific chemical composition everywhere in the world, will only reinforce the science that shows that PM2.5 is dangerous to human health. Further analysis of PM2.5 will NOT show it is safe for humans to breathe. Willful obstruction by foot dragging on complying with regulations on a dangerous pollutant makes further air pollution inevitable. What does it profit for the Heritage Foundation to realize further profits from gas-powered cars and residential wood burning appliances, if they, like all humans on the globe, then gain only more air pollution? 3. The Heritage article states, "The EPA didn't regulate PM2.5 before 1997". Stop the presses! Let's go back to 1996! This point is absurd. The E P A should regulate pollution based on the best available science without kowtowing to the lobbyists of pre-1997 or pre-2023. 4. The economic argument of the Heritage Foundation is for the economic benefit of the few, the manufacturers of gas-powered vehicles and wood burning appliances, which are in the process of rightfully being relegated to the past, for the benefit of our clean air. 5. These preceding 4 examples point out the obstructive and illogical arguments the Heritage Foundation is making. It is best to use one's time to focus on creation of clean air rather than the economic arguments of the few for preservation of their polluting way of life.

[EPA's Latest Act of Soft Despotism Against the American People | The Heritage Foundation](#)

The Heritage Foundation

Keep in mind we're talking about something commonplace, including smoke from natural wood fires and dust from driving on dirt roads.

Excerpts edited by RAWSEP for brevity and clarity.

This means regulators would control mundane things like whether you can burn wood in your fireplace without industrial-grade technology to filter the exhaust.

Key Takeaways

The EPA is using shaky science to tighten regulations on ambient levels of tiny particulate matter in the air—from dust to fireplace smoke to car exhaust.

This time, if we give in to the “trust The Science” crowd, we risk handing over the master key that will allow the EPA to overregulate just about everything we do. The “no threshold” theory is a blank check for new, stricter regulations whenever the administration feels like it. The [Environmental Protection Agency](#) is using [shaky science](#) to tighten regulations on ambient levels of tiny particulate matter in the air—from dust to fireplace smoke to car exhaust—in other words, essential byproducts of industrial activity and daily life. If the final rule, which is expected in the coming months, is anything like the proposed rule, the EPA will continue to give itself increasing authority to regulate more of American life.

[EPA Air Pollution Proposal Stirs Debate - Eos.org](#)

Eos.org

PM2.5 consists of airborne particles 30 times smaller than the diameter of a human hair. When inhaled, the particles travel deep into the lungs, ...

[Particulate Matter/Clean Air Act National Ambient Air Quality Standard - JD Supra](#)

JD Supra

Note that the PM NAAQS includes both fine particles (PM 2.5) and coarse particles (PM10). Primary particulates or soot are emitted directly in the ...

[1 in 3 Americans breathe unhealthy air, new report says - Grist](#)

Grist

And particulate matter pollution bypasses the human body's natural ... those smaller than 2.5 microns across, also known as PM 2.5 — can lead to a ..

[The use of asthma and allergy medicines is associated with exposure to smoking - Nature](#)

Nature

Some studies have evaluated the association between air pollutants, such as particulate matter with a diameter smaller than 2.5 and 10 micrometres (PM

[NASA Launches TEMPO To Track Air Pollution On A Whole New Level - CleanTechnica](#)

CleanTechnica

PM 2.5 pollutants, or particles with a diameter of less than 2.5 micrometers, are of great interest to scientists. Less than 1% of the atmosphere ..

Arizona

[News Flash • Maricopa County, AZ • CivicEngage](#)

Maricopa County

Wood burning in residential fireplaces, chimeneas, outdoor fire pits, ... This includes individuals and businesses which have burn permits for ...

[CA WFO PHOENIX Warnings, Watches, and Advisories - Alton Telegraph](#)

Alton Telegraph

AIR QUALITY ALERT DUE TO ELEVATED PARTICULATE MATTER LEVELS FROM ... Exposure to high particle pollution levels can cause serious health.

California

[Particulate matter | National - Barron News-Shield](#)

Barron News-Shield

Think dust, smoke, soot, and microscopic drops of liquid. The two types that are typically monitored are PM-10 and PM 2.5. PM-10 includes aerosols ...

California, Sierra Club

RAWSEP View: The air pollution effects of any wood fire are ignored by this Sierra Club article. Traditions of wood burning, whether it be controlled burn or residential wood burning, are enshrined again in this article, without attention to the health effects of breathing the PM2.5 generated by any wood fire. Brief lip service to health effects of wood smoke is paid in one sentence at the end of this article "Forest managers have to take care that prescribed burning won't threaten people's houses or choke public places with smoke." The debunked theory of Carbon Neutral wood burning is again revived in this article. The research that is exciting to the author of this Sierra Club article concerns **"In a severe fire, (a living tree) gets incinerated, and that carbon that was in the tree trunk is now in the atmosphere," said Hemes, "but that's not what we're measuring."** In this article of interest to the Sierra Club, researchers (again) are measuring how long it takes for the CO2 to be replaced (how long before the debunked idea of Carbon Neutrality is realized), the Sierra Club ignoring the (Carbon) particulates that are created immediately (and CO2 released immediately) when any wood fire occurs.

Sierra Club

[Some Fires Are Better Than Others | Sierra Club](#)

Sierra Club

... is one of the first to look at the carbon opportunity cost of lost photosynthesis, rather than focusing on carbon released from burning wood.

For a long time, the Karuk, the Yurok, the Mono, and many other tribes across California [challenged](#) the belief long held by forest managers across the state that allowing small, controlled fires in forests increased the risk of runaway wildfires. **Scientific research has backed up those tribes, showing that small, managed low-intensity fires reduce the risk of larger, unplanned fires burning out of control.** According to [research published this month](#) in Proceedings of the National Academy of Sciences, allowing small fires has a climate benefit too. The bigger a forest fire, the longer it takes for that forest to regain its carbon-capturing ability. It's a finding with big implications for California's plan to [use its forests to reduce the state's carbon emissions](#) and [achieve carbon neutrality by 2045](#).

California, Shasta County, Burney

RAWSEP View: Is there a hopeful trend toward less biomass plants in California? **Biomass-generated electricity peaked in 1993, when 66 plants existed in California.** Now, 40 years later, there are only 30 biomass plants in California, generating 160 less megawatts of electricity than in 1993, 640 megawatts now versus 800 megawatts in 1993. This article from Burney in Shasta County, California states that wood burning is clean power. However, this biomass (wood) burning, like all wood burning, produces 90% PM2.5 particulates of 2.5 micrometer size, PM2.5, the perfect size to infiltrate the human lung, producing a cascade of human health problems. The PM2.5 air pollution from this new biomass plant is not mentioned in this article. The "clean" title for the plant apparently comes from the untrue designation of wood burning as Carbon Neutral.

Episode 56CT

Continued RAWSEP View of braking ground for new Burney, California Wood Fired Power Plant.

"State officials said the energy plant is considered clean, renewable energy because it uses wood waste from the forest." A variation on wood burning is provided by **a liquid hydrocarbon called cyclopentane that is heated by burning plant**

materials, which turns into a gas, turns back into a liquid and then the cyclopentane can be reused. New burning plant materials (wood) are always needed.

Burney is an unincorporated town and census-designated place (CDP) in Shasta County, California. Its population is 3,000 as of the 2020 census, down from 3,154 from the 2010 census. Burney is located on State Route 299, about 4 miles west of its junction with State Route 89.

[Shasta County to get 'clean' power plant north of Burney](#)

Record Searchlight

Most biomass plants burn forest slash such as limbs, small trees, and other plant materials. The heat generated from burning the wood waste creates ...

Excerpts edited by RAWSEP for brevity and clarity.

Shasta County to get 'clean' power plant north of Burney.

A Woodland-based bioenergy company broke ground Tuesday on a first-of-its-kind wood burning plant in Shasta County. It will be built north of Burney and will burn wood waste from the surrounding forest to generate electricity sold to Pacific Gas and Electric Company (PG&E).

The \$25.7 million plant will generate 3 megawatts of power continuously, enough to power about 3,000 homes, according to Hat Creek Bioenergy, which is developing the plant with West Biofuels of Woodland.

It is expected to be operating and supplying PG&E with power by spring 2024.

State officials said the energy plant is considered clean, renewable energy because it uses wood waste from the forest.

There are three other biomass plants in Shasta and Lassen counties: Burney Forest Power in Burney, Honey Lake Power near Susanville, and Shasta Sustained Resource Management in Anderson. The Anderson biomass plant produces 55 megawatts of electricity, enough to power 62,600 homes.

Most biomass plants burn wood, forest slash such as limbs, small trees, and other plant materials.

The new bioenergy plant will use a liquid hydrocarbon called cyclopentane that is heated by burning plant materials. The heated liquid turns to a hot gas that is used to turn a turbine that generates electricity. After powering the turbine, the material is cooled to a liquid and used again on a continuous cycle.

"So that fluid's just continuously flowing for six months and every six months you shut it down, you check everything and then you turn it back on,".

" We basically have wood chips in, power out,".

The bioenergy plant is being built on a 342-acre site and is expected to generate 60 part-time jobs during construction and another 22 associated jobs.

Biomass-generated electricity peaked in 1993, when 66 plants in California generated 800 megawatts of electricity. As of 2023, there are currently about 30 plants in California, generating 640 megawatts, according to the California Energy Commission.

Colorado, Aspen

[Quick response to chimney fire in Aspen; no injuries | AspenTimes.com](#)

Aspen Times

The main body of fire was burning in the wall near the wood-burning stove and was just beginning to spread when firefighters located it. Upon arrival, the initial engine reported no smoke or flames showing from ...

Connecticut

[American Lung Association Assesses the State's Air Quality - NBC Connecticut](#)

NBC Connecticut

The American Lung Association recommends avoiding wood burning and burning trash and making sure you are using the cleanest transportation methods ...

Idaho, Boise

[Fire danger in the high mountains is intensifying: That's bad news for humans, treacherous ...](#)

Alton Telegraph

... eye on the high mountains – regions once considered too wet to burn. ... wetter high mountain landscapes rarely burn, vegetation and dead wood ...

Fire danger in the high mountains is intensifying: That's bad news for humans, treacherous for the environment
April 19, 2023

Excerpts edited by RAWSEP for brevity and clarity.

As wildfire risk rises in the West, wildland firefighters and officials are keeping a closer eye on the high mountains – regions once considered too wet to burn.

The growing fire risk in these areas became startling clear in 2020, when Colorado's [East Troublesome Fire](#) burned up and over the Continental Divide to become the state's second-largest fire on record. In 2021, California's [Dixie Fire](#) became the first on record to burn across the Sierra Nevada's crest and start down the other side.

Fire risk has intensified in every region across the West over the past four decades, but the sharpest upward trends are in the high elevations.

High mountain fires can create a cascade of risks for local ecosystems and for millions of people living farther down the mountains.

While the risk is rising fastest in the high mountains, most of the West is now at increasing risk of fires. With continuing greenhouse gas emissions fueling global warming, this trend of worsening fire danger is expected to intensify further.

Nevada, Las Vegas, Reno

RAWSEP View: The "Burning Man" convention leaders have sued to stop a geothermal energy project in Nevada. The headline reads "Burning Man" cheers Reno County, Nevada's overturning of drilling for a geothermal project permit. Geothermal energy is clean energy. A convention which calls itself "Burning Man" can be expected to organize against clean energy. If a convention is dedicated to destroying things by burning them, not even burning things for heat since this takes place in a hot desert, rather than creating clean energy, using the Nevada desert for geothermal energy projects, which would create clean, particulate-free energy, would not seem important to oblivious energy consumers like attendees at "Burning Man". What is the purpose of "Burning Man", except to thumb its nose at the rest of society, apparently, by being useless as well as polluting? It is easier to destroy via "Burning Man" than to create. The 1970's film "Eat my Dust" must be part of some "Burning Man", film festival. Retro energy guzzling Dune Buggies chew up the "scenery" of the desert's protected parks. The Burning Man convention put burning things in the center of all activities, and burning is done on a stage. It should be considered a waste of Nevada taxpayer money for the Black Rock Department of Public Works to pay a Playa Restoration Crew to work cleaning up after Burning Man for four weeks after each Burning Man event. Even the ironically named CoolingMan promotes polluting activities, as part of Burning Man. CoolingMan supports Carbon Offsets to the pollution Burning Man generates, which is "buying off" the pollution, but not stopping the pollution to begin with. Particulate matter of 2.5 micrometer size, PM2.5, the perfect size to infiltrate the human lung, setting off a cascade of human health problems, is not discussed in the Wikipedia article about Burning Man, nor in the article about a Geothermal project being scuttled at the behest of the Burning Man organization. Wood smoke is 90% PM2.5 and burning of solid fuels including wood, and as well as burning fossil fuels for entertainment should be regulated out of existence, to protect human health and slow climate change.

https://en.wikipedia.org/wiki/Burning_Man

Excerpts from Wikipedia edited by RAWSEP for brevity and clarity.

Walking or bicycling into the event is not allowed. Burning Man takes place in the middle of a large [playa](#), not inhabited by humans, but the area around the playa is home to many animals and plants. Residual trash has increased over the years, Fire is a primary component of art exhibits and events, (but) materials must be burned on a burn platform. From 1990 through 1999, burning took place directly on the playa, leaving burn scars. The burn scars did not disappear with annual winter rains and flooding. In 2000, Burning Man organizers declared fires had to be elevated from the playa surface to protect it. The burn scars were eradicated in 2000 by the DPW clean up crew. On the last day of the event, public shared burn areas are prepared for participants to use. It is an ongoing educational process each year to inform the public not to burn toxic materials for the protection of the environment and participants.

Episode 56CU

Continuation of Wikipedia Excerpts, edited by RAWSEP for brevity and clarity, about Burning Man

The [Bureau of Land Management](#), which maintains the desert, has very strict requirements for the event. These stipulations include removal of burn scars, dust abatement, and capture of fluid drippings from participant vehicles. For four weeks after the event has ended, the Black Rock City Department of Public Works (BRC – DPW) Playa Restoration Crew remains in the desert, cleaning up after the temporary city in an effort to make sure that no evidence of the event remains. Criticism. Negative effects on the environment. Image. The Man burns at Burning Man, 2014. Burning Man's carbon footprint is primarily from transportation to the remote area. The CoolingMan organization has estimated that the 2006 Burning Man was responsible for the generation of 27,000 tons of carbon dioxide, with 87% being from transportation to and from the remote location. [The Sierra Club](#) has criticized Burning Man for the "hundreds of thousands" of plastic water bottles that end up in landfills, as well as ostentatious displays of flames and explosions. Burning Man's 2007 theme, "Green Man," received criticism for the artwork Crude Awakening, a 99-foot oil derrick that consumed 900 gallons of jet fuel and 2,000 gallons of liquid propane to blast a mushroom cloud 300 feet high into the sky. In an attempt to offset some of the event's carbon footprint, 30- and 50-kilowatt solar arrays were constructed in 2007 as permanent artifacts, providing an estimated annual carbon offset of 559 tons. The [Burn Clean Project](#) is a volunteer organization that has helped replace the use of fossil fuel with biodiesel. Gentrification. Burning Man has attracted a number of billionaires and celebrities, many of them from [Silicon Valley](#) and Hollywood. It has become a networking event for them, with [Tesla Motors](#) CEO [Elon Musk](#) once stating that Burning Man "is Silicon Valley." These billionaires have paid for more luxurious camps to be set up in recent years. "plug-n-play" or "turnkey" camps, they in general consist of lavish RVs and luxury restroom trailers that are driven into the city and connected together to form de facto gated areas. These billionaires then fly in to the airport on private planes, are driven to their camps, served by hired help (nicknamed "sherpas"), and sleep in air-conditioned beds. Despite allowing the rich to participate in Burning Man per the "radical inclusion" principle, many traditional attendees have spoken out against their exclusive practices. It has been stated that the rich conflict with the "radical self-reliance" of Burning Man, and other principles, it has also been stated that permitting the wealthy to attend is still beneficial for Burning Man. Nevada lawmakers have modified the state's entertainment and sales tax code to include such nonprofit organizations like Burning Man that sell more than 15,000 tickets. An individual ticket (including taxes) cost \$424 in 2016. Even tickets sold under Burning Man's low income program are subject to these taxes. Including transportation, food, camp fees, clothing and costumes, and gifts, [CNBC](#) estimated in 2016 that the total cost of attending could range from \$1,300 up to \$20,000. In 2017, [Money](#) magazine estimated an average total cost of \$2,348 to attend. According to the racial makeup of Burning Man attendees in 2014, 87% of them identified themselves as white, 6% as Hispanic / Latino, 6% as Asian, 2% as Native American, and 1% as black. When interviewed by [The Guardian](#) about these figures, a Burning Man representative replied, "I don't think black folks like to camp as much as white folks... . We're not going to set racial quotas.... This has never been, imagined by us, as a utopian society."

A cultural anthropologist said that Burning Man was never a utopia in the first place.

[Coolingman - Overview, News & Competitors](#) <https://www.zoominfo.com/c/coolingman/352600181> WebCoolingMan is an all-volunteer, non-profit organization with the mission of building bridges between climate science, art and community. To do so, CoolingMan supports climate-related artworks, and helps events, groups and individuals take direct actions to ...

[Burning Green? Start here: coolingman.org | Burning ...](#) <https://journal.burningman.org/2007/07/black-rock...> WebJul 23, 2007 · CoolingMan's portfolio includes non-CO2 offsets to support a range of technology options, match emission profiles, and achieve rapid benefits. CoolingMan ...

[Burning Man cheers county's overturning geothermal permit - FOX5 Vegas](#)

FOX5 Vegas

Burning Man cheers county's overturning geothermal permit. In this Aug. 26, 2002 file photo the sun rises behind a wood and neon statue,

RENO, Nev. (AP) — County commissioners have rescinded an energy company's permit to drill exploratory wells for a geothermal project in the Nevada desert near the site of the annual Burning Man counterculture festival about 110 miles (177 kilometers) north of Reno.

Excerpts edited by RAWSEP for brevity and clarity.

Burning Man cheers county's overturning geothermal permit

People walk toward the temple at Burning Man near Gerlach on the Black Rock Desert on Aug. 31, 2012.

Friday, April 14, 2023. RENO — County commissioners have rescinded an energy company's permit to drill exploratory wells for a **geothermal** project in the Nevada desert near the site of the annual Burning Man counterculture festival about 110 miles (177 kilometers) north of Reno. Officials for the Burning Man organization [have filed suit in U.S. District Court to block Ormat Technologies' exploration](#) in the Black Rock Desert say the move puts the project on hold indefinitely. The Washoe County Commission voted 3-2 this week to overturn the permit that the county's Board of Adjustment approved in January to allow for the drilling of up to 13 geothermal test wells in the area near Gerlach, a town of about 130. Ormat Technologies, a Reno-based company, is already involved in a lengthy federal court battle over a geothermal power plant it wants to build about 100 miles east of Reno. In the desert north of Reno, Ormat initially proposed a pair of geothermal power plants with overhead power lines and several miles of pipelines but withdrew that proposal in 2020 and replaced it with a smaller exploratory project to determine whether such development was commercially feasible. The Bureau of Land Management approved the exploratory project with the test wells last October. All exploration wells and equipment would be placed on BLM-managed land. "Ormat would seek BLM permission for further development if, and only if, the project proves the commercial viability of the geothermal resources," Ormat said. Clara Andriola, the commission's newest member who was appointed last week by Republican Gov. Joe Lombardo to fill a vacancy, joined Commissioners Jeanne Herman and Mike Clark in voting to rescind the permit. Chairwoman Alexis Hill and Commissioner Mariluz Garcia voted in support of the permit.

Indiana, Valparaiso

[Air Quality Alert in effect - WIMS Radio](#)

WIMS Radio

... level ozone and particulate matter are predicted to reach unhealthy levels. ... 30 of each year while PM 2.5 action days can occur year-round.

Maryland

[UMD to Lead National Study of Wildfire Impacts on Infants](#)

Maryland Today - The University of Maryland

Wildfire smoke now comprises between 25-40% of all fine particulate matter (or PM 2.5) air pollution, overtaking previous offenders like power ...

Montana

[Montana's air gets worse in annual report - Daily Montanan](#)

Daily Montanan

In the past, communities and states that relied on wood burning to heat homes and businesses were often singled out for similar problems with air ...

Episode 56CV

New Jersey

New Jersey, Gloucester

[Wildfire Destroys 257 Acres In South Jersey, 85% Contained | Gloucester Daily Voice](#)

Daily Voice

A wildfire continued to burn in Burlington County overnight, authorities said. The New Jersey Forest Fire Service was making progress on the fire, ...

River Road wildfire. Mount Holly Fire District No. 1

Excerpts edited by RAWSEP for brevity and clarity.

The New Jersey Forest Fire Service was making progress on the fire in Washington Township.

The fire was about 85% contained on Wednesday morning April 19.

Overnight crews worked to monitor and improve containment lines in addition to extinguishing any hotspots near the fire perimeter.

New Jersey, Kanouse Wildfire

[Large North Jersey Brush Fire Continues Burning | Cumberland Salem Daily Voice](#)

Daily Voice

Fresh Start Stolen From Single NJ Mom Severely Burned By **Wood-Burning Stove**. The Kanouse Wildfire, as it's called, had been 40% contained earlier ...

New York

[Berks County outdoor burn ban goes into effect Sunday - Yahoo News](#)

Yahoo News

Open burning is defined as the outdoor ignition and subsequent burning of any combustible material, including garbage, leaves, twigs, wood, ...

[Good Question: Are fruit farmers exempt from the state burn ban? - WHEC.com](#)

WHEC.com

A representative from the DEC says: "Organic agricultural wastes may be burned on-site where they are grown or generated, including brush and wood ...

[Air quality health advisory issued for Western New York - Niagara Frontier Publications](#)

Niagara Frontier Publications

Reduce or eliminate outdoor burning and attempt to minimize indoor sources of PM 2.5 such as smoking. A toll-free air quality hotline ...

[Air Quality Health Advisory Issued for Long Island, New York City Metro, Lower Hudson ...](#)

New York State Department of Environmental Conservation

Additional information on ozone and PM 2.5 is available on DEC's website and on DOH's website. To stay up-to-date with announcements from DEC, ...

[DEC issues Air Quality Health Advisory for WNY - WKBW](#)

WKBW

reduce or eliminate outdoor burning and attempt to minimize indoor sources of PM 2.5 such as smoking.

[Air quality health advisory issued for Friday, affecting 46 counties in New York, including Suffolk](#)

RiverheadLOCAL

Additional information on ozone and PM 2.5 is available on DEC's website and on DOH's website. Tomorrow's Air Quality Health Advisory regions consist.

Pennsylvania

RAWSEP View: Penn Medicine, located at the University of Pennsylvania in Philadelphia and the University of Louisville (U of L) in Kentucky, collaborated on a study which showed that PM2.5 had adverse effects on sleep.

[Study Links Air Pollution, Heat, Noise & More to Reduced Sleep - Penn Medicine](#)

Penn Medicine

... higher bedroom levels of air pollution (particulate matter <2.5 micrometers or PM2.5), carbon dioxide, noise, and temperature were all linked

[Reduced sleep linked to air pollution, heat, carbon dioxide and noise - UofL News](#)

UofL News

... (particulate matter <2.5 micrometers or PM2.5), carbon dioxide, noise and temperature were all linked independently to lower sleep efficiency.

Excerpts edited by RAWSEP for brevity and clarity, and relation to PM2.5

Reduced sleep linked to air pollution, heat, carbon dioxide and noise.

APRIL 18, 2023

Participant data from the Green Heart Project at UofL's Christina Lee Brown Envirome Institute (CLBEI), led by director Aruni Bhatnagar, were utilized in the new sleep study. A group of 62 participants were tracked for two weeks with activity monitors and sleep logs. Higher bedroom levels of air pollution ([particulate matter <2.5 micrometers](#) or PM2.5),

was linked to lower sleep efficiency. The study was a collaboration between Penn Medicine of Philadelphia and the University of Louisville, Kentucky's (UofL's) CLBEI. The researchers recruited participants from the CLBEI's National Institutes of Health-funded Green Heart Project that investigates the effects of planting 8,000 mature trees on the cardiovascular health of Louisville Kentucky residents. A quickly changing environment due to growing urbanization and climate change seems to have made it harder to get a good night's sleep. For each of the environmental variables measured, the researchers compared sleep efficiency during exposures to the highest 20 percent of levels versus lowest 20 percent of levels. Through this analysis, they found that high PM2.5 was associated with a 3.2 percent decline in sleep compared to low PM2.5.

RAWSEP View: No recorded rise in PM2.5 may have been due to no hyper-localized PM2.5 monitor being located close to the fire in Philadelphia.

[Health Department Provides Update on Hunting Park Air Quality | City of Philadelphia - Phila.gov](#)

Phila.gov

The fire caused no recorded rise in the amount of particulate matter, or PM 2.5, or other criteria pollutants at any of the City's monitors.

RAWSEP View: If a fire is perceived by neighborhood passerbys as a house fire, the PM2.5 being emitted probably contains large amounts of PM2.5, a particulate harmful to human health, also present in house fires.

[Man puts wood in coal stove, draws fire response - The Shenandoah Sentinel](#)

The Shenandoah Sentinel

Smoke can be seen coming from a chimney on West Chester Street on April 17, 2023. SHENANDOAH – A man using ...

Man puts wood in coal stove, draws fire response.

Excerpts edited by RAWSEP for brevity and clarity.

April 17, 2023.

Smoke can be seen coming from a chimney on West Chester Street on April 17, 2023.

SHENANDOAH – A man using wood to light his coal stove on West Chester Street created a smoky scene and drew the fire department to the steep southside alleyway Monday afternoon.

Shenandoah firefighters were called to 201 West Chester Street just before 5pm for a reported house fire.

Heavy smoke could be seen coming from the chimney of the double-block fronted on South Highland Street.

The resident had **put wood in his coal stove**, which created the smoky conditions and prompted passerbys to report a possible house fire. Within minutes, the Shenandoah Assistant Fire Chief determined there was no active house fire and cancelled responding fire apparatus.

Utah

RAWSEP View: Utah Physicians for a Healthy Environment (UPHE) commented about the article below, written by a 4th year medical student in Utah, "Younger children are more susceptible to the negative impacts of poor air quality. Indoor air quality can be 2-5 times worse than outdoor air quality, [according to the EPA](#), and children spend around 900 hours every year in school. A Utah Department of Health and Human Services program is making those hours as healthy as possible by providing air purifiers for classrooms."

UPHE is helping coordinate the program for free air purifiers for Utah K-12 schools and state licensed daycares. [Please click here for more information on the program.](#)

Excerpts edited by RAWSEP for brevity and clarity

https://www.sltrib.com/opinion/commentary/2023/04/14/jenna-marie-tiller-drag-queens-or/?fbclid=IwAR3zs9Glujctxi5thZ2CYAxIzeuZ2MrMXVnQ1zxqJsWzh0P8y_kU0H1cMDA&eType=EmailBlastContent&eld=27baa55-c1df-4e88-a17e-8a7299712b54

Episode 56CW

Continuation of Utah Article by 4th Year Medical Student, excerpts edited by RAWSEP for brevity and clarity.

April 14, 2023. Billy is 6 years old. He comes in to see a health care provider with his mother. The health care provider is a 4th year medical student. "What am I seeing you for today, Billy?" Billy is bright, but he is having a really difficult time learning math. The health care provider and the mother talk about health risks in the family, genetics. They skip to health habits. Billy loves to play outside and gets exercise. "Do you know how much air pollution Billy is exposed to per day?" "How is the air quality where you live? Remind me of your zip code" The mother rattles off her ZIP code and it is in a rough part of town. The health care provider reviews the ZIP codes. People in Billy's zip code are exposed to some of the highest rates of pollution in the Salt Lake Valley, in Utah. "Doctor, I don't understand, why are you asking about air?" Billy's learning difficulty and brain development are likely impacted by air quality specifically in their ZIP code. Billy is being exposed to higher levels of air pollutants, which are neurotoxic, especially on a developing brain. The health care provider scribbles on her prescription pad, "stop being poor". "Move to a wealthy neighborhood. Breathe less "bad air." The health care provider knows this is the reality for many of her patients. The latest research has shown a link between air pollution exposure and poor academic performance in children.

In Utah, [a study done in Salt Lake County](#) researched the level of exposure to air pollution for children at school. Results of this study have shown a "Disproportionate exposure in public schools based on race/ethnicity and socioeconomic status (which) is concerning given that air pollution has negative impacts on children's health and academic performance." Children in Utah are being exposed to neurotoxins that will impact their entire life.

Vermont

RAWSEP View: Why would this letter writer reject Heat Pumps? He is unconcerned with the air pollution of wood burning. He claims that heating with wood is cheaper. Old, failed ideas pile up in this letter to the editor in Vermont. The truth is that Carbon Neutral wood burning is a lie. Carbon Capture is expensive but is usually subsidized by taxpayers, so this letter to the editor argues for continued wood burning despite the cost to the health for citizens of Vermont. The letter writer simply states that wood burning does not cause air pollution, in the face of scientific evidence to the contrary. The letter writer simply, because it seems economically advantageous for him, ignores scientific evidence.

[Letter to the editor: Done right, isn't wood-burning carbon-neutral? - VTDigger](#)

VTDigger

From what I've read and heard, if you burn properly dried wood, and your wood-burning appliance is working properly, wood-burning is carbon-neutral.

Letter to the editor: Done right, isn't wood-burning carbon-neutral?

April 19, 2023

I read a commentary on the Affordable Heat Act and the writer states that wood-burning is more harmful to the environment.

I think the state should focus more on **carbon-neutral wood heating** appliances that are much cheaper than heat pumps and still work when the power goes out.

RAWSEP View: Carbon Neutral wood burning is a lie, as scientists have repeatedly stated. It takes centuries or decades to replace trees that are cut down, and in the meantime, the pollution of burning the wood does not magically disappear because someday a tree may grow to maturity in place of the burned tree. Carbon offset payments by polluters only mean the real carbon emissions are not counted if industry or residential wood burner fees are paid for "carbon offsets", buying off a polluter's use of pollution in payments to the government. Old, failed ideas pile up in this letter to the editor in Vermont. Carbon Capture is expensive, doesn't work, and citizen taxpayers or their so-called "representatives" can sometimes be fooled into subsidizing Carbon Capture by biomass (wood burning) industry lobbyists. Stopping Carbon pollution to begin with, by not burning solid fuels, such as coal and wood, or any fossil fuel, is the answer to stopping air pollution. The solar suggestion is partially correct, but the combination of solar and biomass makes this a weak suggestion because the suggestion illogically combines the environmentally correct idea of solar power with the environmentally incorrect idea of biomass burning.

RAWSEP View: "Transform Ryegate" uses the magical idea of negative emission power station to argue for continued wood burning at Vermont's two wood-burning electrical plants. The idea is that the wood burning should continue

because it is financially attractive. The emissions are not counted, so the emissions are real, but are “negative emissions” because wood burning is Carbon Neutral, a notion that has been debunked for many years by scientists.

[Letter to the editor: Transform Ryegate and Vermont Yankee for jobs and climate - VTDigger](#)

VTDigger

... Vermont's two wood-burning electrical plants, McNeil, and Ryegate, thereby transforming them into negative-emission power and storage stations.

Excerpts edited by RAWSEP for brevity and clarity.

April 15, 2023

Here is the gist of recent recommendations to the Vermont Climate Council and several editorials in Vermont papers, calling for the **profitable renovation of Vermont's two wood-burning electrical plants**, McNeil, and Ryegate, thereby transforming them into negative-emission power and storage stations.

A similar plan for Vermont Yankee, a third Vermont wood burning power plant, is also financially attractive and will certainly create more jobs, profits, and climate benefits.

Virginia

[Northern Virginia Electric Cooperative's effort to sell renewable energy credits fails in ...](#)

Cardinal News

Wood-burning co-op's effort to sell renewable energy credits in Virginia fails to muster support in General Assembly.

Wisconsin, Janesville

[City of Janesville Reminds Residents of Fire Danger, Burning Regulations | City News](#)

Janesville

These wood-burning campfire pits must have all lids and screens in place while kindled. Of note, residents may not have recreational fires if wind.

Wyoming, Cheyenne

[DEQ Deploys BAM Trailer for Air Quality Monitor in Laramie County - The Cheyenne Post](#)

The Cheyenne Post

... particulate matter of 10 micrometers or less (PM10), particulate matter of 2.5 micrometers or less (PM2.5), and meteorological parameters.

Canada, British Columbia

British Columbia, Kamloops

[Planned burn happening north of Kamloops next week - KamloopsBCNow](#)

KamloopsBCNow

Crews will be burning wood debris in the Evergreen Estates area, ... Burning will proceed only if conditions are suitable and allow smoke to ...

[BC Wildfire Service set to burn hundreds of piles of wood debris in Myra Bellevue Park](#)

Castanet

Smoke could rise from Myra Bellevue Park as early as next week. The BC Wildfire Service is planning to burn up to 200 piles of wood debris in Myra ... However, smoke and/or flames may be visible from Kelowna and the surrounding areas. The exact timing of the burns will depend on factors such as snow ..

British Columbia, Vancouver

[Fire breaks out at popular Vancouver Cantonese restaurant \(VIDEOS\) | News - Daily Hive](#)

Daily Hive

... dark and black smoke fumed out of a popular restaurant in Vancouver. ... The plastic and wood burning is what caused the fire to look “more ...

New Zealand, Taupo

[Winter Is Coming! Let's Burn Smoke-free For Better Air Quality In Taupō - Scoop](#)

Scoop

As the temperature starts to drop, Taupō District households fire up their wood burners to heat up their homes. Unfortunately, Waikato Regional ...

Australia, Canberra

[Probing the polls: No love for wood-heater ban plans and where do you belong in Canberra?](#)

Riotact

In last week's poll, we asked: Do we need to ban wood heaters to stop woodsmoke pollution? A total of 1578 readers participated. Your ...

Episode 56CX

Australia, Victoria

RAWSEP View: Like farmer's burning stubble in India, in Australia the same tradition of farmer's stubble burning is allowed. There are cleaner alternatives to farmer's burning stubble, as there are alternatives to residential wood burning. In Victoria, Australia, those clean alternatives, in order to avoid air pollution, are not employed.

[Private and planned burns to rise as weather cools - Mirage News](#)

Mirage News

Smoke from wood heaters will often settle in the local area from where they are burning. “This localised smoke or smoke haze can often be...

Excerpts edited by RAWSEP for brevity and clarity, regarding farmer's stubble burns and residential wood burning. Private burns to rise as weather cools. Hundreds of Victorians in Australia are undertaking private burn-offs as fire restrictions are easing across the state. Farmers and private landholders will ignite stubble burns on their properties. Combined with weather conditions that will prevent smoke from dispersing into the upper atmosphere, it's predicted that smoke may hang over the city and parts of Victoria throughout these periods.

“This time of year sees a large amount of smoke coming from the necessary burn-offs that our farmers and rural property holders complete,” “These are part of traditional farming practices where burning off of crop stubble is often needed to kill off weeds and return nutrients and carbon back into the soil.” As the weather cools, smoke will also come from the many thousands of wood heaters households rely on for their autumn and winter heat source. Smoke from wood heaters will often settle in the local area from where they are burning. “This localised smoke or smoke haze can often be misinterpreted as coming from planned burns from a long way away, but this is not always the case,”.

Although fire restrictions are coming to an end, Victorians are urged to continue [registering their burn-offs](#) so that if someone reports smoke to Triple Zero, the incident will be cross-checked with the burn-off register.

For a list of government planned burns which will occur in this season, in addition to farmer's burn offs and residential wood burning, residents can consult [Planned Burns Victoria](#)

If you see smoke and want to know if it is a planned burn or a fire, visit [emergency.vic.gov.au](#), check the VicEmergency App or call the VicEmergency Hotline on 1800 226 226.

Visit [EPA AirWatch](#) for information about current air quality throughout Victoria. Tips for looking after your health when there is smoke can also be found on [EPA's website](#).

To farmer's doing stubble burn-offs and residential wood burners:

Keep your burn off safe and legal:

Check fire restrictions in your area and always [register your burn](#) or call 1800 668 511

Check and monitor weather conditions – particularly wind.

To avoid unnecessary calls to emergency services, notify your neighbors beforehand.

Leave a three-meter fire break, free from flammable materials around the burn.
Have sufficient equipment and water to stop the fire spreading.
Never leave a burn-off unattended – stay for its entire duration.
If your burn-off gets out of control, call '000' immediately.

South America, Brazil

[Economic and racial disparities of the weather impact on air quality in Brazil - Nature](#)

Nature

Fine particulate matter of diameters smaller than 2.5 μm (PM2.5) itself contributes to approximately two million premature deaths per year, ranking it ...

April 19, 2023

Excerpts edited by RAWSEP for brevity and clarity on the subject of PM2.5 exposure only, leaving out the subject of weather.

Economic and racial disparities of the weather impact on air quality in Brazil

Introduction

Air pollution is a major environmental risk to health. The World Health Organization (WHO) estimates that every year approximately 4.2 million people die prematurely due to exposure to ambient air pollution. Fine particulate matter of diameters smaller than 2.5 μm (PM2.5) itself contributes to approximately two million premature deaths per year, ranking it as the 5th leading cause of worldwide mortality. Even low levels of air pollutants have been associated with substantial health effects.

in the US, the average PM2.5 concentration for the black population was 13.7% higher than that of the white population and 36.3% higher than that of the Native American population. In another study, it is shown that the disparities in exposure to PM2.5 vary across the US states, in which non-Hispanic Black populations have at least 5% higher exposures than average in 63% of states, while Hispanic and non-Hispanic Asian populations have higher exposures in 33% and 26% of states, respectively. In contrast, non-Hispanic White populations did not experience higher exposures in any states. Additionally, 10% increase in the proportion of people with lower socioeconomic status was associated with increases in particulate matter components in the US, including a 20% increase in vanadium and an 18.3% increase in elemental carbon. The economically disadvantaged population in England had PM10 levels that were 2.6 $\mu\text{g}/\text{m}^3$ higher compared to the least deprived population. In The Netherlands, the difference in PM10 levels was 0.3 $\mu\text{g}/\text{m}^3$. In Britain, there was a change in the difference between the mean concentrations for PM10 in the most deprived areas and the least deprived areas over time. Specifically, in 2001, the concentration in the most deprived areas was 10.5% higher than in the least deprived areas, but by 2011, this difference had increased to 14.2%.

These exposure disparities studies have contributed to pollution-related regulations, especially in the US. The main novelty of our work is related to the study area—Brazil. The lack of environmental studies in low- and middle-income countries is a critical limitation for the complete understanding of the environmental equity as a social movement to address the unfair exposure of poor marginalized communities worldwide. Brazil has a critical challenge related to land use (e.g., agriculture, deforestation etc.), which is also linked to air pollution, weather change and socioeconomic factors. Brazil has a considerable difference in the quality of health/environment and healthcare across different populations (influencing health/environment equity in negative ways), which is an important determinant of environmental justice.

Results

We found that the Asian group was the most exposed group to PM2.5 with 15% more exposure compared to the Pardo population, the least exposed group. Disparities in PM2.5 exposure varied across different regions and ethnic groups in Brazil. In the North region, Pardo were the most exposed group to PM2.5, while in the South region, Blacks were the most exposed. In the Northeast, Midwest, and Southeast regions, Asians were the most exposed group to PM2.5. In the USA, although low-income group and black communities have been identified as the group most exposed to PM2.5 in several studies, these results may not be homogeneous over space and time. In the U S, in some regions and periods white communities and high-income group are the most exposed to PM2.5. For example, while in the Mid-West and Mid-Atlantic regions in the USA the white and Asian populations are exposed to higher levels of PM2.5 than the black population, in the Southeast region, the black populations are exposed to the highest level of PM2.5. Among the American states, it is shown that the disparities in exposure to PM2.5 vary substantially, with non-Hispanic Black populations experiencing at least 5% higher exposures than the national average in 63% of states, while Hispanic and

non-Hispanic Asian populations have higher exposures in 33% and 26% of states, respectively. Non-Hispanic White populations, on the other hand, did not experience higher exposures in any state. In China, characteristics of the exposure and inequality of PM2.5 was different from the USA and similar to our study, which higher income subgroup and majority ethnic group have the most significant exposure to PM2.5. A review study in the World Health Organization European Region found mixed results on the social inequalities in exposure to ambient air pollution. In Australia, overall, it is estimated that socio-economic disadvantage populations may be inequitably exposed to PM2.5.

Episode 56CY

United Kingdom

RAWSEP View: Not enough hyper-localized PM2.5 monitors were used, close to each stationary source of air pollution, which could be a residential wood stove. That means this American Lung Association (ALA) report is not comprehensive in counting PM2.5 emissions from residential wood burning's PM2.5 emissions.

U K, London, The Guardian

[Nearly 120 million people in US exposed to unhealthy levels of soot and smog – report](#)

The Guardian

Other sources include fossil fuel-powered cars and trucks, power plants, wood-burning stoves and agricultural burns. Pittsburgh and Lancaster in ...

Nearly 120 million people in US exposed to unhealthy levels of soot and smog – report. American Lung Association's study also found great disparity between coasts, with 10 of 11 most polluted counties in California

April 19, 2023

The climate crisis has upended progress on improving air quality, with one in three Americans currently living in areas with harmful levels of pollutants known to increase the risk of medical emergencies, pregnancy complications and premature death, new research reveals.

Almost 120 million people in the US are still exposed to unhealthy levels of soot and smog, according to the [annual report](#) by the [American Lung Association \(ALA\)](#), which found that **people of color are almost four times more likely to live in the most polluted places than white Americans.**

The extent to which access to clean air is racialized is stark; **people of color account for 54% of those living in counties with failing air quality, despite accounting for just over 40% of the general population.**

The **zip code lottery** spotlights decades of **racist housing** and environmental policies, which have incentivized and enabled polluting infrastructure like highways and railroads, fossil fuel projects and manufacturing plants to be located close to Black, Latin and Indigenous communities.

And despite overall improvements in air quality and pollution-related deaths over the past 50 years, the report also highlights a **widening disparity between air quality in eastern and western states, especially for** fine particulate matter or PM2.5.

Ten of the 11 most polluted counties are in [California](#) where the climate breakdown is fueling **wildfires** and rising temperatures that are undermining efforts to improve air quality in places like Fresno, San Bernardino, Tulare and Los Angeles.

Katherine Pruitt, lead author and the ALA's national senior policy director said "Since around 2017, heat and drought driven by climate change has been undoing some of the progress that we should have made and been able to retain." The US Environmental Protection Agency (EPA) was mandated by the 1970 Clean Air Act to set health-based limits for a toxins: fine particulate matter, among six toxins in total. Since then, overall emissions have fallen by 78%, according to the EPA, yet **progress has stalled and poor air quality continues to cut tens of thousands of lives short in the US every year.**

Globally, air pollution is responsible for almost 7m premature deaths annually, [according to the World Health Organization](#).

The ALA's 24th annual state of the air report uses data from 2019 to 2021 to grade city- and county-wide exposure to the most widespread air toxins, including PM2.5 or soot, using three measures: year-round levels and daily spikes of PM2.5 (Seventy-one million people live in counties which do not monitor air quality and so are excluded from the report.)

Overall, almost 64 million people lived in areas that experienced unhealthy daily spikes in PM2.5 pollution, the highest number in a decade.

Eight of the 10 worst performing counties for daily particle spikes were in California which in 2021 recorded almost 9,000 wildfires – a major source of these microscopic particles which are blown for miles and can trigger asthma attacks, heart attacks and strokes, as well as lung cancer. Other sources include fossil fuel-powered cars and trucks, power plants, wood-burning stoves and agricultural burns.

Pittsburgh and Lancaster in Pennsylvania are the two worst metro areas for daily PM2.5 spikes east of the Mississippi River. While several urban, industrialized eastern and midwestern states such as New Jersey, New York and Ohio which once dominated the ALA dirtiest air list, have cut emissions.

There is hope of fighting back against the climate-fueled regression.

incentives to electrify the transport system in the Inflation Reduction Act plus several proposals by the EPA to tighten the outdated smog and soot standards and mandate lower emissions from vehicles and power plants are in the works.

The report ranks Wilmington, North Carolina; Bangor, Maine; Lincoln, Nebraska; Rochester, New York and Honolulu, Hawaii among the country's cleanest cities.

U K, London

[New review shows harmful health impacts of pollution before birth through to old age](#)

Greater London Authority

The children who travelled by car breathed more air pollution than those who walked along quiet roads, with the greatest PM2.5 concentrations being ...

U K, Wales

[Backlash over Brecon Beacons name change - Yahoo News UK](#)

Yahoo News UK

The park's management claimed the association with a wood-burning, carbon-emitting blazing beacon was “not a good look” as the name was dropped in ...

[The ridiculous renaming of the Brecon Beacons - spiked](#)

Spiked

The word 'beacons' refers to the wood-burning braziers that small settlements used to light on elevated ground to warn neighbouring communities of ...

[Brecon Beacons to be renamed in response to climate change - The Times](#)

The Times

The image of wood-burning braziers, from which the name Brecon Beacons is taken, is no longer appropriate as it aims to be net zero by 2035.

[A Welsh name change is seeing right-wingers getting angry at some hills - Indy100](#)

Indy100

... and ditch the images and references to wood-burning, carbon-emitting beacons which no longer align with the park's ethos.

[Brecon Beacons National Park changing name to show action on climate change](#)

The Independent

The park's managers said the present name referencing wood-burning, carbon-emitting beacons no longer fits the ethos of the park.

[Brecon Beacons National Park changing name to show action on climate change - AOL UK](#)

AOL UK

The park's managers said the present name referencing wood-burning, carbon-emitting beacons no longer fits the ethos of the park. Story continues.

[National Park to change its name to cut link with wood-burning and emissions - Daily Mail](#)

Daily Mail

From today, the Brecon Beacons National Park will adopt the Welsh name of Bannau Brycheiniog National Park - pronounced Ban-eye Bruck-ein-iog - or ...

Excerpts edited by RAWSEP for brevity and clarity.

LONDON. A British national park, which attracts millions of visitors every year, has ditched its **burning beacon logo** and changed its name to reflect its Welsh-language roots in a rebranding designed to **strip out any association with carbon emissions**. Brecon Beacons, covering around 520 square miles (1,350 sq km) of mountainous South and Mid Wales, will now be known as Bannau Brycheiniog, park authorities announced. Translated into English, the name means "The Peaks of Brychan's Kingdom," referring to King Brychan who ruled that area of Wales during the 400's A D. The park's landscape, which is used to train Wales' elite SAS soldiers, attracts more than four million visitors per year. "An old name for a new way to be. A name from our past to take us into our future," The overhaul also included a new green and white logo to replace a brightly burning beacon. "We're an environmental organisation. We're trying to cut carbon and push to net zero. So, **having a carbon burning beacon just isn't a good look,**" the park's Chief Executive said. The park also said there was **no evidence beacons, once lit on peaks or coastlines to warn of an imminent attack, had ever been used in the area,** and so the Welsh name better reflected its heritage.

Episode 56CZ

Europe

Estonia

[New government bans burning wood chips at Auvere power plant | News - ERR](#)

ERR

However, efforts are being made to reduce the demand for our pellets in Europe. Eesti Energia is to be banned from burning wood directly from the ...

RAWSEP View: It is possible that wood burning bans in Estonia could lead to use of cleaner heating methods such as geothermal, solar and wind power plants (which are lower cost to operate than biomass power plants) tied to an electrical grid, and use of Estonian home electric Heat Pumps which have no or low particulate emissions.

[Eesti Energia: Auvere wood chip burning ban may affect electricity prices | News - ERR](#)

ERR

If restrictions on wood chip burning are introduced, oil shale and natural gas will be used to make electricity instead. This may well lead to ...

Germany

RAWSEP View: 5 competitors for wood in Germany against the wood-burning industry, were interviewed for the article below: 1)environmentalists like BUND who want to conserve and protect living trees, 2)the wood building industry, 3)the timber industry which supplies wood to wood builders, 4)residential wood burners, and 5)the government when it wants to preserve conifers to slow climate change. It is not clear to RAWSEP if DWHR, a wood building industry lobby in Germany, considers wood burning carbon neutral or not.

The first competitor was represented in the article as 1)Nicole Uhde, a BUND forest expert. BUND is Friends of the Earth Germany. In German: Bund für Umwelt und Naturschutz Deutschland. BUND is a grassroots NGO with more than 480,000 members and supporters. It was founded in 1975 to promote nature conservation and protect the environment. BUND gets involved in policy making processes on environmental issues, climate, transport, chemicals, and agriculture. It supports renewable energies and is opposed to nuclear energy. As a part of the Friends of the Earth network, it lobbies in Brussels and Berlin.

The second competitor for wood was 2) President of the German Wood Building Industry Council (DWHR), Erwin Taglieber. One of the websites of Erwin Taglieber states "Living with wood. This is the fantastic building material with which we build or renovate houses, realize halls, build kindergartens and homes for the elderly, make staircases and furniture." 3) This article also describes the concerns of the timber industry in their role of supplying wood to wood builders, not to the wood burning industry. 4) This article also describes the concerns of German fireplace owners, another way of referring to German residential wood burners. This article also lists facts about 5) wood use and wood scarcity in Germany. 6) This article also lists the German government concerns about conifer loss contributing to climate change.

1) BUND Non-government organization (NGO) view: "We can no longer afford to burn our forests. They are already burning all over the world," says BUND forest expert Nicola Uhde. She wants to preserve and expand the biological diversity of the forests. The felling of wood must be reduced very significantly for this, as well as the combustion both on an industrial scale and in private households. The BUND demands a felling moratorium for older mixed beech forests. Uhde says: "We have to put an end to the fairy tale that burning wood is climate-neutral. The moment it is burned, the CO2 that has been bound for decades is released in one fell swoop." RAWSEP View: The BUND representative does not address the problem of particulate emissions of 2.5 micrometer size, PM2.5, the perfect size to infiltrate the human lung, setting off a cascade of human health problems. Wood burning emissions are 90% PM2.5 size.

2) DWHR wood building industry view: Wood from German forests is in demand. Industrial builders users of wood experienced significant price increases in the past year, because of availability decline. Wood was no longer available everywhere at low prices in the past year, because of the war in Ukraine. The President of the German Wood (Builder) Industry Council (DWHR), Erwin Taglieber, recently called for a "change in the times for wood too" and means by this less complicated access to domestic wood. "We suffer from excessive bureaucracy and sometimes also from a culture that prevents the use of wood (for building)." RAWSEP View: The president of DWHR is not concerned particularly with climate change from loss of conifers, nor from PM2.5 emissions effect on human health, in this article.

3) Timber suppliers to wood building industries' view: A supplier of wood to the wood building industry, the timber industry representative of HRH, complains: Environmentalists like the timber industry who supply the wood building industry, take a critical view of wood scarcity for building. One out of six felled trees was burned, last year. As in previous years, more than half of felled hardwood ended up in flames. Wood fired power plants are competitors for scarce wood with home and commercial property builders. The timber industry complains about high prices and too little supply of hardwood. The general manager of the timber industry association HDH, sees the companies caught between logging bans and competition from demand for residential firewood. The association complains that while oak and beech wood in the forests is increasing, furniture and parquet factories are getting less wood. The timber association industry HDH therefore rejects the construction of new wood-fired power plants without combined heat and power generation, as well as inefficient stoves in private households. However, they do not want a ban on pellet heating systems. The bare slopes in the Harz Mountains and other low mountain ranges must be reforested with more climate-stable tree species than mixed forests, says the timber industry. RAWSEP View: The general manager of the timber industry association HDH is not concerned particularly with climate change from loss of conifers, nor from PM2.5 emissions effect on human health, in this article.

4) Residential wood burner view: Wood from German forests is in demand. Residential users of wood experienced significant price increases in the past year, because of availability decline. Wood was no longer available everywhere at low prices in the past year, because of the war in Ukraine. RAWSEP View: The average German residential wood burner is not concerned particularly with climate change from loss of conifers. RAWSEP View: The average German residential wood burner does not address the problem of particulate emissions of 2.5 micrometer size, PM2.5, the perfect size to infiltrate the human lung, setting off a cascade of human health problems. 90% of Wood burning emissions are of PM2.5 size. Near neighbors of residential wood burners are in the hyper-localized path of the PM2.5 emitted from each indoor residential wood stove. Near neighbors of residential wood burners in Germany, as in every country of the world, should be supplied with a PM2.5 monitor and if the monitor shows that the stationary source of PM2.5 pollution, the wood burning stove of their near neighbor emits PM2.5 exceeding government limits, into the yard and infiltrating the home of the near neighbor, the polluting wood stove should be shut down by the government.

5) German Government tabulates wood scarcity in Germany. A third of Germany is covered with forest. The German Federal Statistical Office estimates are that 3.8 billion cubic meters of standing wood stock in Germany is valued at 52

billion euros. In its "Forest Strategy 2050", the German federal government assumes that under sustainable conditions, 73 million cubic meters of wood can be felled annually. Damaged wood due to drought is added to the loss of forests. Current felling of 78.7 million cubic meters of forest is higher due to drought in recent years. In 2022, the "damaged wood" accounted for over half of all logging, at 44.7 million cubic meters. Spruce have been heavily attacked by bark beetles in the drought of recent years. More than two thirds (67.1 percent) of the felled volume of forest was softwood such as spruce, fir, and Douglas fir. Recently, softwood accounted for 70 percent loss due to damaged wood. The Thünen Institute for Forest Ecosystems expects a further increase in bark beetle infestation and reduced ecosystem functions.

Episode 56CZZ

Continuation of RAWSEP View of German article about scarcity of wood, from 5 German perspectives.

6)The German government view, which concludes this article: The Federal Environment Agency explains that sustainable forest management now means more than securing quantities of wood. Another goal includes improving the climate impact of forests. The **near-natural forests required for reducing climate change can only be found on a third** of the German forest area. In the Forest Strategy 2050, the government assumes that the proportion of deciduous (leafy) trees will increase as a result of climate-related forest conversion, which cannot compensate for the loss of usable conifers. Conifers are mostly evergreen trees and shrubs having needle-shaped or scalelike leaves and including forms (such as pines) with true cones and others (such as yews) with an arillate fruit, that fruit which is a specialized outgrowth from a seed that partly or completely covers the seed. Conifer trees would increasingly have to be imported into Germany, according to the German government, if usable conifers in Germany are lost to climate change.

[Energy: Too bad to burn - The fight for wood News - indonewyork](#)

indonewyork

Energy: Too bad to burn - The fight for wood. BUSINESS; 14 Nisan 2023 - 20:30; 8. Wood from German forests is in demand. Wood from German forests ...

<https://www.indonewyork.com/business/energy-too-bad-to-burn-the-fight-for-wood-h83466.html>

Wood from German forests is in demand. Builders as well as the increasing number of private fireplace owners experienced significant price increases in the past year, the raw material was no longer available everywhere at low prices, also because of the war in the Ukraine. So it is not surprising that **in 2022 more wood was felled in German forests for energy production than at any time since German reunification**. Environmentalists like the timber industry take a critical view of the development, albeit for different reasons.

keep reading ==> <https://www.indonewyork.com/business/energy-too-bad-to-burn-the-fight-for-wood-h83466.html>

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India Education Diary

While using a wood-burning stove, large amounts of particulate matter and ultrafine dust are released into living rooms.

Sweden, Stockholm

[Stockholm tops ranking as greenest city in the world](#)

City Monitor

Do cities prioritize cars over people and the climate? The average city in a low-income country has air pollution levels of 27.8µg/m³ of PM 2.5 – fine ...

Switzerland

[Swiss greenhouse gas emissions rise in 2021 - Le News](#)

Le News

Notably, flight emissions, wood burning heating systems and emissions associated with imported goods and services are not included.

Ukraine

RAWSEP View: Ukraine is so deprived of clean home heating alternatives, even in cities, after bombing from Russia, that Ukrainians who previously had the cleaner alternatives of, for instance, natural gas heating, have to now resort to wood burning for heat. This is no example for the rest of the world to follow, if not in a bombed out war zone. The missionary couple in the following story should be spending their money to bring any possible clean heating alternative to Ukraine, not bringing wood for wood burning stoves, which will further pollute the air and bring illness and early death to Ukrainians in the path of the PM2.5 air pollution from wood burning.

[Missionary Couple Serves Ukraine on Two Fronts - News - Assemblies of God](#)

News - Assemblies of God

... capital within three days, Gerald stayed in the basement of their house and had a truckload of wood delivered to stock the wood-burning stove.

Asia

India

[Eyes in the sky to track Bengaluru emissions | Deccan Herald](#)

Deccan Herald

Of the seven stations of the Karnataka State Pollution Control Board (KSPCB), two do not monitor PM 2.5, the fine particles that cause 15 lakh ...

[Faltering health due to air pollution | Kashmir Images Newspaper](#)

Kashmir Images Newspaper

... including dust, dirt, soot, smoke, and Fluid drops are also included. ... from diesel engines, cooking stoves, wood burning, and forest fires.

[Utrecht University Researchers Find High Concentrations Of Ultrafine Dust In Living Rooms ...](#)

India Education Diary

While using a wood-burning stove, large amounts of particulate matter and ultrafine dust are released into living rooms.

Nepal

[EDITORIAL; Worse air in Valley - The Himalayan Times](#)

The Himalayan Times

The IQ air report is based on the US AQI parameter, which measures concentration of particulate matter (PM)2.5 and PM10.

Thailand

[Smog coming from the North, says PSU professor - The Phuket News](#)

The Phuket News

"The PM 2.5 smog situation will continue until the wind and rain change, especially the change in the southwest monsoon winds will cause stronger ...

[Protecting yourself from the harmful effects of haze | Thai PBS World](#)

Thai PBS World

On April 7, the levels of particulate matter 2.5 or PM 2.5 in Bangkok and surrounding provinces ranged from 33 to 57 micrograms per cubic meter of ...

PM2.5 and Health (wood smoke is 90% PM2.5)

PM2.5 and Dementia

[New Data Indicate Link Between Air Pollution and Dementia Risk - HCPLive](#)

HCPLive

A meta-analysis could be performed on 14 studies for particulate matter <2.5 µm in diameter (PM 2.5), one of the most harmful air pollutants.

[Here's why living near busy, polluted roads could lead to dementia - Study Finds](#)

Study Finds

Sources of fine particulate matter exposure include diesel fumes, wood smoke, brake pads, tires, and road dust. The EPA's current annual ...

PM2.5 and Bone Density

[Bone-Bashing Effects of Air Pollution Becoming Clearer - Medscape](#)

Medscape

Some have found associations of lower bone density, osteoporosis, and fracture risk with higher concentrations of PM2.5. Air pollution 'speeds up osteoporosis' in postmenopausal women.

PM2.5 and Depression

[Air Pollution and Depression - Psychology Today](#)

Psychology Today

... nitrogen dioxide, ozone, and particulate matter are known hazards to ... air pollutants included in their analysis were PM2.5, O3, and NO2.

PM2.5 and Heart Health

[Polluted air affects heart health: Research - Peoples Gazette](#)

Peoples Gazette

"Concentrations of particulate matter (PM)2.5, PM10, and nitrogen dioxide (NO2) were gathered from the Voivodeship Inspectorate for Environmental ...

PM2.5 and lung cancer

[Health, like dying of lung cancer without ever having smoked - BreakingLatest.news](#)

BreakingLatest.news

The fine particles of PM 2.5 penetrate deep into the lungs, pass through the bronchioles and reach the bloodstream. They are 2.5 microns in diameter.

PM2.5 and sleep

[Air pollution linked to poor quality sleep - AirQualityNews](#)

Air Quality News

... high temperature with a 3.4% decline compared to low temperature, and high PM2.5 with a 3.2% decline compared to low PM2.5.