

Episode 56EJ May 22, 2023. “The 14th Amendment, future President Kamala Harris and those working to slow Climate Change” and “The Breathe London network” issue.

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 30 minute Youtube videos and Spotify podcasts as well as podcasts on Amazon Music Prime (free for Prime subscribers), podcasts.google.com, Cast Box, and Pocket Cast (Pocket Cast is only free on the phone App. Pocket Cast can be played on Apple phones.)

The 14th amendment reads “No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any State deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws.” A president would argue in court that the 14th Amendment invalidates the statute that limits the federal debt’s size. If the courts declare the debt limit statute unconstitutional, the U.S. could keep paying its bills indefinitely, thus preventing a potential default and the resulting economic damage.

Vice President Kamala Harris went on the “Stephen Colbert” show, on March 16, 2023, and told one funny story about being Vice President. <https://www.youtube.com/watch?v=XXMkn6eldlc> at Minute 2:20. Vice President Kamala Harris never used her ornamental fireplace in her official office. When she was recently out of the office, an aide decided to surprise her by lighting the Vice President’s fireplace for her. But Kamala Harris’ punchline was “He didn’t open the flue!”. Kamala Harris’ Vice Presidential office was flooded with smoke and she was not able to return to work there for many hours, until her office aired out. Thank you Vice President for using your precious time to point out the polluting effects of residential wood burning on real human beings, which is what Residents Against Wood Smoke Emission Particulates does on a near daily basis, in hopes of stopping residential wood burning completely, replaced by clean residential heating sources like Heat Pumps. Wood smoke is 90% PM2.5 and wood burning produces more PM2.5, particulate matter of 2.5 micrometer size, and CO2, than coal burning, and wood burning produces 450 times the PM2.5 than natural gas burning. PM2.5 is the perfect size to infiltrate the human lung and set off a cascade of human health problems, like lung cancer and asthma, and early deaths. Near neighbors of residential wood burners should be given PM2.5 monitors by their Health Departments when neighbors complain of wood smoke from residential wood burning in their neighborhood. Those near neighbors should put the PM2.5 monitors in their yards, and the data measurements at that fence line, the neighbor’s yard, collected even overnight and on weekends when wood burning is often done, should be used to shut down each residential wood stove, one by one if necessary for human health and to slow climate change. The measurement of the limit of pollution should be the Environmental Protection Agency’s (E P A’s) own current limits for PM2.5 of 12 micrograms per meter cubed PM2.5 annually and 35 micrograms per meter cubed PM2.5 daily, and the change to new standards of 8 daily and 25 daily expected In 2023 or 2024. PurpleAir PM2.5 monitors cost \$249 and are used alongside official E P A PM2.5 monitors on U S Airnow maps of Smoke and Fire already, correlated to the E P A monitors with a simple mathematical formula, so PurpleAir monitors are the logical brand of PM2.5 monitors for the government Health Departments to purchase for near neighbors of residential wood burners. Measurement of actual stack emissions measured at the fenceline should replace the current practice of certifying wood stoves, which the Office of the Inspector General (O I G), the watchdog of the E P A, in a February 2023 report stated was deeply flawed and resulted in wood stoves being certified and continued to be sold which were highly polluting. The reason for flaws in the wood stove certification program was because of successful lobbying by the wood stove industry for loopholes for highly polluting wood stoves. Replacement of wood stove certification with PM2.5 measurements during wood stove use would result in shutdown of wood stoves one by one, if necessary, cleaner air, slowing of climate change and protection of human health, especially of the health of near neighbors of residential wood burners.

One strategy for President Biden’s reelection campaign is to put Vice President Kamala Harris front and center in all campaign ads and materials. As President Biden’s choice of successor, Kamala Harris is inspiring, hardworking and in touch with concerns of everyday American people. I know that concern about the environment and human health crosses party lines, and that is why some Independents and Republicans are listening to or reading the script of this podcast right now, but to be entirely truthful, the Democratic Party is the party that pushes Climate Bills and their

funding over the line to success and where we can look for leadership in the future on this issue. Join the Democratic Party to find your good ideas about slowing climate change and protecting human health represented in legislation.

President Biden used the G7 summit in Hiroshima, Japan on May 19 to 21, 2023 for several purposes. He used some of the time to network with the G7 countries on how best to obtain and continue to obtain precious metals for use in manufacture of U S electric cars and for battery energy storage for clean renewable (wind, solar and geothermal) energy to charge electric cars and clean electric residential heating devices such as Heat Pumps. Partnerships beyond the U S partnership with Canada were explored, such as a new partnership with Australia. Excerpts from three articles about the G7 summit follow, with analysis emphasizing the meeting's focus on clean energy sourcing, from countries other than China.

World

RAWSEP View: There is a G7 meeting in Hiroshima Japan May 19-21, 2021. The Group of 7 (G7), intergovernmental organization that originated in 1975 through informal summit meetings of the leaders of the world's leading industrialized countries are the United States, the United Kingdom, France, West Germany, Italy, Canada, and Japan. Lithium, cobalt, nickel, and graphite are needed for batteries for electric vehicles and renewable energy storage.

<https://www.cnn.com/2023/05/19/china/g7-summit-russia-china-agenda-intl-hnk/index.html>

G7 leaders gather on China's doorstep to seek unified response to Beijing's threat

CNN

Friday May 19, 2023.

Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates.

The G7 gathered in [Japan on Friday](#), with the authoritarian powers of China and Russia that dominating the agenda. The [annual Group of Seven \(G7\) summit](#), this year in Hiroshima, will seek to project a unified response to China, in a world shaken by [Russia's ongoing war on Ukraine](#). Last month, French President Emmanuel Macron [caused](#) consternation in Western capitals after he said, following a warm visit to Beijing, that Europe must not become "just America's followers" and get "caught up in crises that are not ours" when asked about the prospect of China invading Taiwan. Days later, the [G7 foreign ministers](#) said that there was "no change" in the G7 bloc's position on Taiwan. Concerned about Beijing's military posturing in East Asia, Japanese Prime Minister Fumio Kishida has [warned](#) publicly that "Ukraine today may be East Asia tomorrow." Japan doubled its military spending and is in talks to [open a NATO liaison office](#) – the first of its kind in Asia and a sign of deepening ties between Western and Asian democracies. China [sent a naval flotilla](#) on a 12-day trip around Japan's main islands. At a meeting of G7 finance ministers in Japan last week, US Treasury secretary Janet Yellen [called for](#) "coordinated action" by G7 nations against Beijing's use of "economic coercion." European Commission President Ursula von der Leyen [said](#) in Brussels Monday, cited Beijing's recent punishment of the [Baltic state](#), Lithuania, for opening a new trade office with Taiwan. With US President Joe Biden [cutting short of his Asia trip](#) to address a debt limit crisis, [a summit of Quad leaders from the US, India, Australia and Japan could now take also place in Hiroshima instead. The informal security dialogue is widely seen as a counter to China's aggressive posture in the region.](#)

Beijing [lashed out](#) at accusations of its "economic coercion". China is hosting its [own summit with Central Asia countries](#).

RAWSEP View: Leaders of the G7 nations, who are gathering in Japan this week, agree that the world's reliance on China for more than 80 percent of processing of minerals leaves their nations vulnerable to political pressure from Beijing. Some U S partnerships or potential partnerships with nations other than China across the world. 1)Canada 2)Japan 3)European Union 4)Australia (planned partnership) 5)Chile (planned partnership, for lithium) Chile, a major producer of lithium, [nationalized its lithium industry](#) in a bid to better control how the resources are developed and deployed, as have Bolivia and Mexico. Biden 6)Indonesia (potential partnership, for nickel) Indonesia, which is the world's biggest nickel producer, has floated the idea of joining with other resource-rich countries to make an OPEC-style producers cartel, an arrangement that would try to shift the power to mineral suppliers. Indonesia has also approached the United States in recent months seeking a deal similar to that of Japan and the European Union. Indonesia [has progressively stepped up restrictions](#) on exporting raw nickel ore, requiring it to first be processed in the country. Some U.S. officials

argue that failing to strike new agreements with resource-rich countries in Africa and Asia could leave the United States highly vulnerable.

<https://www.nytimes.com/2023/05/21/business/economy/minerals-electric-cars-batteries.html>

The U.S. Needs Minerals for Electric Cars. Everyone Else Wants Them Too.

The United States is entering an array of agreements to secure the critical minerals necessary for the energy transition, but it's not clear which of the arrangements can succeed.

The Chaerhan Salt Lake in Golmud, China, where brine is processed to extract lithium and other minerals.

May 21, 2023.

Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates.

For decades, a group of the world's biggest oil producers has held huge sway over the American economy and the popularity of U.S. presidents through its control of the global oil supply, with decisions by the Organization of the Petroleum Exporting Countries determining what U.S. consumers pay at the pump.

As the world shifts to cleaner sources of energy, control over the materials needed to power that transition is still up for grabs.

China currently [dominates global processing of the critical minerals](#) U.S. officials are looking to other countries to expand for [lithium, cobalt, nickel, and graphite](#). The minerals are needed in electric cars and in batteries for storing solar power.

Japan, Europe and other nations, [meeting in Hiroshima](#), agree that the [world's reliance on China for more than 80 percent of processing of minerals](#) leaves their nations vulnerable to political pressure from Beijing. The G7 Group of 7 countries reaffirmed the need to for mineral supply chains and resilient sources. The United States and Australia announced a partnership. Japan [has signed a critical minerals deal](#) with the United States, and [Europe is in the midst of negotiating one](#). But like the United States, Japan and Europe have greater demand for critical minerals to feed their own factories than supply to spare. The U S has been pushing forward a "[minerals security partnership](#)," with 13 governments for public and private investment in mineral supply chains. European officials have been advocating a "buyers' club" for critical minerals with the G7 countries, with common labor and environmental standards. Biden administration officials are weighing whether to give [Indonesia](#) some kind of preferential access, either through an independent deal or as part of a trade framework the United States is negotiating in the Indo-Pacific. Such a deal is also likely to trigger stiff opposition in Congress, where some lawmakers [criticized the Biden administration's deal with Japan](#). President Biden's climate law, which provided tax incentives for investments in the electric vehicle supply chain, needs critical minerals for the final assembly of batteries. There is limited success in increasing the number of domestic mines that would supply those new factories. "The United States is not going to be able to go this alone". [U.S. officials say that the global supply of lithium alone needs to increase by 42 times by 2050](#) to meet the rising demand for electric vehicles. While innovations in batteries (such as energy storage for recharging using iron air batteries) could reduce the need for certain minerals, for now, the world is facing dramatic long-term shortages. The European Union, Canada, and other governments have introduced subsidy programs to better compete for new mines and battery factories. Administration Officials are exploring changes needed to develop U.S. capacity, like faster permitting processes for mines, as well as closer partnerships with mineral-rich allies, like [Canada, Australia and Chile](#). The White House said it [planned to ask Congress](#) to add Australia to a list of countries where the Pentagon can fund critical mineral projects, criteria that currently only applies to Canada. The chief external affairs officer at Talon Metals, which [has proposed a nickel mine in Minnesota](#) to supply Tesla's North American production, said that adding a top ally like Australia, which has high standards of production regarding environment, labor rights and Indigenous participation, to that list was a "smart move." While the Biden administration is looking to streamline the permitting process in the United States for new mines, getting approval for such projects can still take years, if not decades. Auto companies, which are major U.S. employers, have also been warning of projected shortfalls in battery materials and arguing for arrangements that would give them more flexibility and lower prices. The [G7 nations, together with the countries with which the United States has free trade agreements, produce 30 percent of the world's lithium chemicals and about 20 percent of its refined cobalt and nickel, but only 1 percent of its natural flake graphite](#).

<https://www.csmonitor.com/World/Asia-Pacific/2023/0521/G7-summit-ends-Ukraine-in-focus-as-Zelenskyy-meets-world-leaders>

G7 summit ends: Ukraine in focus as Zelenskyy meets world leaders.

A three-day Group of Seven meeting focused on support for Ukraine's war effort, security challenges in Asia, and outreach to the developing world.

Associated Press

May 21, 2023 | HIROSHIMA, JAPAN

Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates.

Ukrainian President Volodymyr Zelenskyy huddled with some of his biggest backers as the Group of Seven summit closed in Hiroshima on Sunday, building momentum for his country's war effort even as Russia [claimed a battlefield victory that was quickly disputed by Ukraine](#). The [Ukrainian leader's in-person appearance](#) in his trademark olive drab underscored the centrality of the war for the G7 bloc of rich democracies. It stole much of the limelight from other priorities, including security challenges in Asia and [outreach to the developing world](#), that the leaders focused on at the three-day gathering. Biden sought to [reassure world leaders that the U.S. would not default](#) because of the debt limit standoff that has cast a large shadow over his trip. Two U.S. allies — South Korea and Japan — [furthered efforts to improve ties](#) colored by lingering anger over Japan's brutal 1910-1945 colonization of the Korean Peninsula. Japan's Kishida and South Korean President Yoon Suk Yeol [visited a memorial to Korean victims](#), many of them slave laborers, of the Aug. 6, 1945, Hiroshima atomic bombing. The G7 group commented on China, the world's No. 2 economy. The group [urged China to pressure Russia to end the war in Ukraine](#) and "support a comprehensive, just and lasting peace." "We're not looking to decouple from China, we're looking to de-risk and diversify," Biden said. Some [survivors of the 1945 atomic bomb attack](#) and their families worried that Zelenskyy's inclusion at the summit overshadowed that priority. The G7 leaders also discussed efforts to strengthen the global economy and address rising prices that are squeezing families and government budgets around the world, particularly in developing countries in Africa, Asia, and Latin America. They reiterated their aim to pull together up to \$600 billion in financing in a program meant to offer countries an alternative to China's investment dollars.

<https://www.nytimes.com/2023/05/20/world/asia/g7-leaders-biden.html>

This Year's G7 Summit Doubles as a Club for Unloved Leaders

The relatively weak approval ratings for President Biden and his Group of 7 partners highlight the fragility of free societies facing deep political divides.

President Biden and other Group of 7 leaders on Miyajima island on Friday. Most are struggling for support at home.

May 20, 2023.

Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates.

They come from far corners of the globe, speak different languages, span the ideological spectrum and range in age from 43 to 80. In [this year's summit meeting](#) in Hiroshima, Japan, leaders can commiserate over their domestic troubles and trade ideas for how to get back into the good graces of their voters. [Survey data compiled by Morning Consult](#) in recent days indicated that the leaders of only four out of 22 major countries studied had approval ratings above 50 percent: Narendra Modi of India, Alain Berset of Switzerland, Andrés Manuel López Obrador of Mexico, and Anthony Albanese of Australia. Mr. Modi, who is in Hiroshima as an observer, is the envy of the town with a 78 percent approval score, though this is in a country where religious divisions are exploited for political gain and the prime minister's top political opponent [was kicked out of Parliament](#) for defamation. No G7 leader, by contrast, could muster the support of a majority. Prime Minister Giorgia Meloni of Italy, elected just last fall, fared best with a 49 percent approval rating, followed by Mr. Biden with 42 percent, Prime Minister Justin Trudeau of Canada with 39 percent, Chancellor Olaf Scholz of Germany with 34 percent, Prime Minister Rishi Sunak of Britain with 33 percent and Prime Minister Fumio Kishida of Japan with 31 percent. President Emmanuel Macron of France trailed the pack with a dismal 25 percent. Mr. Kishida of Japan, with the approval rating of his cabinet, hit 52 percent. That was the first time it surpassed 50 percent in eight months, fueling speculation that he may [call a snap election](#). The president of Freedom House, a Washington-based organization that encourages democracy around the world said "Biden could be paving the streets with gold and half the country would disapprove. Obviously, democracies need to do a better job, but there's little evidence that authoritarians can do a better job." Freedom House tracks democracy nation by nation, and has found that [freedom has retreated around the world 17 years in a row](#), amid rollbacks in places like Hungary and Poland. While former President Donald J. Trump has [called for "termination" of the U.S. Constitution](#) to return him to power, Mr. Biden often says that he sees his mission as defending democracy. Mr. Macron, who won re-election just last year with 58.5 percent of the

vote, saw his support plummet when he [pushed through an increase in the retirement age](#) to 64 from 62, touching off violent street protests. A poll released this month found that Mr. Macron [would lose a rematch to Marine Le Pen](#), the far-right leader he defeated last year. Likewise, if elections were held now, recent surveys show that Mr. Sunak's Conservative Party would lose to the Labour Party in Britain, Mr. Trudeau's Liberal Party would lose to the Conservative Party in Canada, and Mr. Scholz's Social Democratic Party would lose to the Christian Democratic Union in Germany. Some political veterans attribute the weakness of the G7 leaders to economic anxiety following the Covid-19 pandemic. "There seems to be a wave of dissatisfaction sweeping our democracies," said a former prime minister of Sweden. "I think the return of inflation, long gone, might have something to do with this." Inflation has certainly sapped support for Mr. Biden. "Unlike authoritarian leaders, if democratic leaders don't get the job done, they'll be voted out," he said. "Accountability is a strength of democracies, not a weakness."

United States

Arizona, Maricopa County

[Maricopa County pollution levels rise along with Saturday, Sunday temperatures](#)

YourValley.net

Also, wood burning fireplaces, outdoor fire pits and similar outdoor fires are prohibited in Maricopa County. For more: www.CleanAirMakeMore.com.

California

[Under threatening skies – Part III: How building, business, housing sectors are responding](#)

Air Quality Matters - Science Blog

... air quality data – PM 2.5 · Taking stock - Part II: California - a frontlines leader in taking on GHG · Trackless trains: Is that the future?

California, Laguna Beach

RAWSEP View: Wildfire are also a tradition it California, which fire departments across the state are concerned about. The fire department of Laguna Beach is concerned about fire pits there, also for reasons of public safety.

[Laguna Beach responds to community issues regarding South Laguna beach operations](#)

Los Angeles Times

The council decided to move forward with a plan for a mix of wood-burning and propane fire pits, with a plan to put mitigation measures in place.

Laguna Beach responds to community issues regarding South Laguna beach operations.

The Laguna Beach City Council looked at a push for fire pits at Aliso Beach.

May 20, 2023.

Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates.

Having assumed control of the associated beaches (Aliso, Camel Point, Laguna Royale, Table Rock, Thousand Steps and West Street) from the county of Orange on March 1, the city is heading into its first summer overseeing the additional territory. Marine safety personnel have executed 25 rescues since the city took over South Laguna beaches, per a staff report. They have also rendered medical aid to 237 people, carried out 940 preventative actions and conducted more than 6,000 ordinance enforcement measures. The Laguna Beach City Council looked at several community issues concerning those beaches during its regular meeting Tuesday, including the installation of warning signage, a push for fire pits at Aliso Beach, the location of the Pride lifeguard tower at West Street Beach, and continued advocacy for enforcement against the breaching of the Aliso Beach berm. Councilman Alex Rounaghi encouraged the city to be upfront with beachgoers by informing them of the natural hazards occurring off South Laguna beaches. "Obviously, we don't want to fearmonger [or] limit access to the coast, but I just think people, when you're visiting the beach, you want to be able to know how dangerous it is," Rounaghi said. "It's not Disneyland down there." Several residents told the City Council that fire pits had been a longstanding tradition at Aliso Beach prior to their removal during the coronavirus

pandemic. They were part and parcel of [group outings such as drum circles](#). Fire Chief Niko King said Aliso Beach is located in the very high fire hazard severity zone. The council decided to move forward with a plan for a [mix of wood-burning and propane fire pits](#), with a plan to put mitigation measures in place. Council members expressed a desire to strike a balance between preserving heritage and protecting against hazards such as high wind events. “It sounds like there’s a consensus there to have staff come back with a [combination of some wood fire pits and some propane fire pits](#), and obviously with direction of the [fire] chief to develop whatever suggestions he can in terms of location and conditions that will minimize fire risk,” Mayor Bob Whalen said. “There is a long history and tradition there that I think we can respect.”

Colorado and Montana

[Smoke from Canada wildfires prompts air quality alerts in Colorado, Montana | WNCT](#)

WNCT

DENVER (AP) — Smoke from dozens of raging wildfires in western Canada has drifted south into the United States and prompted the states of Colorado ...

Colorado, Denver

[Denver area wakes up to hazy skies as smoke from Canadian fire drifts south | WNCT](#)

WNCT

The arrival of the wildfire smoke temporarily put Denver in the top 5 of ... to use a blunt, heavy tool that splits the wood but doesn't cut it.

Georgia, Rome

[Wood-burning transfer station back for consideration Monday; Rome ethics discussion set ...](#)

The Rome News-Tribune

The Rome City Commission is set to decide Monday on a controversial wood waste transfer station proposed for Technology Parkway.

Wood-burning transfer station back for consideration Monday; Rome ethics discussion set for closed session.

The Rome City Commission is set to decide Monday on a controversial wood waste transfer station proposed for Technology Parkway.

Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates. During the regular meeting, the board will consider — for the second time — a rezoning application that would allow operation of a wood waste transfer station on Technology Parkway. The property is zoned for light industrial use. However, heavy industrial classification is needed for the facility at which logs and [wood debris would be hauled in by commercial trucks for incineration](#). [Berry College](#) contends the operation is banned by deed restrictions and there are now also objections from the Rome-Floyd County Development Authority and [some adjoining property owners](#). The planning commission initially recommended approval, unanimously, but [had not seen the Berry opposition letter](#). City Commissioners sent the application back to be reconsidered by the citizen board. A motion to recommend denial was defeated by a split vote early this month so — due to a technicality — it goes to the elected board with a recommendation for approval.

Missouri

[Rep. Emanuel Cleaver wants the federal government to throw out Missouri's regional haze plan](#)

KCUR

... installed air quality monitors to measure particulate matter (PM 2.5), ... to our current standards, on target air quality days for PM 2.5.”

[Critics of Missouri's regional haze plan want the federal government to throw it out - STLPR](#)

STLPR

“We have had, according to our current standards, on target air quality days for PM 2.5.” Missouri regulators argue its plan to address regional ...

[Kansas City area residents warned of air quality problems from KCK recycling center fire](#)

The Kansas City Star

Updated May 19, 2023 1:42 PM ... The monitors measure particulate matter 2.5, which can be inhaled and cause respiratory problems as well as ...

Nebraska and Wisconsin

RAWSEP View: This article mentions that PM2.5 is produced by fossil fuel burning but does not mention that PM2.5 is produced by residential wood burning. It is self-evident that that wood smoke from wildfires is the same as wood smoke from residential wood burning, but it bears stating that the levels of CO2 and PM2.5 produced from biomass (wood) burning for industry, residential wood burning for heat or cooking and wildfire wood burning, those levels of pollutants are higher than for coal burning, for instance, and particulate levels for wood burning are 450 times higher than for natural gas burning.

[How wildfires in Alberta lead to poor air quality in the Midwest | Weather - KXLY.com](#)

KXLY.com

Wildfire smoke carries fine particulate matter, or PM 2.5, a tiny but dangerous pollutant, as CNN previously reported.

[How wildfires in Alberta lead to poor air quality in the Midwest | CNN](#)

CNN

Published 3:24 PM EDT, Sun May 21, 2023 ... Wildfire smoke carries fine particulate matter, or PM 2.5, a tiny but dangerous pollutant, ...

How wildfires in Alberta lead to poor air quality in the Midwest.

_CNN

Sunday May 21, 2023

Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates.

Smoke from wildfires in Canada hangs over Minneapolis on Thursday, May 18.

CNN —

Residents of the central United States experienced poor air quality and smoke over the weekend. The potentially dangerous air has a far-off source: the wildfires raging in Canada.

[Smoke from Canadian fires is pouring into the US and could linger for days.](#)

The fires have [ravaged western Canada](#), with more than 10,500 people evacuated from communities across Alberta. The effects of the fires extend far beyond Canada, with poor air quality emerging in states as far away as Missouri and New York. While all fires produce smoke, the bigger the fire, the more smoke it can produce. Wildfire smoke was measured to rise as high as 1 to 2 miles above the surface during the 2018 Camp Fire in California, [according to NASA](#). As the smoke moves away from its heat source, the air will eventually cool and the smoke can sink, keeping it in the troposphere, the layer of the atmosphere closest to the surface of the Earth. The Eagle Wildfire burns near Fox Creek, Alberta, on Saturday, May 13, 2023. Government of Alberta Fire Service. Several states, including Nebraska, Washington, Montana, and Wisconsin, announced air quality alerts early Friday. The National Weather Service in Omaha [tweeted](#) the smoke would continue to create red-colored sunsets and sunrises. The service in Tacoma [reported](#) the smoke would be “pushed eastward in time for the weekend.”

[Wildfire smoke contributes to more deaths in the Eastern US than the West, study shows.](#)

As of Sunday afternoon, the US Environmental Protection Agency’s [Air Quality Index](#) reported “unhealthy” levels of air quality in parts of Montana and North and South Dakota. On Sunday morning, the National Weather Service office in Grand Forks, North Dakota [confirmed](#) “high level smoke” would continue throughout the day. Similarly, the weather service in Sioux Falls, South Dakota, [reported](#) “thick smoke well above the surface layer” would move into the area on Sunday. Poor air quality caused by the smoke would mostly affect those “that are particularly sensitive to particle pollution,” they said. Smoke from wildfires can affect the health of people living far from where the fires themselves ignited. A [2021 study](#) conducted by epidemiologists from Colorado State University found long-term exposure to wildfire

smoke leads to roughly 6,300 additional deaths each year, with the highest numbers found in the most populous states. Wildfire smoke carries fine particulate matter, or PM 2.5, a tiny but dangerous pollutant, as [CNN previously reported](#). When inhaled, the particulate matter travels deep into lung tissue, where it can enter the bloodstream. PM 2.5, which comes from sources such as smoke, fossil fuel plants and cars is linked to a number of health complications including asthma, heart disease, chronic bronchitis, and other respiratory illnesses.

New Mexico

[NMED Provides Funds To Goodwill Industries To Go Electric - Los Alamos Daily Post](#)

Los Alamos Daily Post

There will be a 100% reduction in oxides of nitrogen (NOX) and fine particulate matter (PM2.5) emissions from the combustion of diesel fuel.

Canada, Alberta

[Alberta has endured some of the worst air quality in the world this week due to wildfire smoke - CBC](#)

CBC

High levels of particulate matter from wildfire smoke pushed Grande ... Dr. Raj Bhardwaj explains how tiny particles in wood smoke affect the body ...

[Alberta has endured some of the worst air quality in the world this week due to wildfire smoke - CBC](#)

CBC Lite | News

Higher levels of airborne fine particulate matter than some of the most ... tiny particles in the air — less than 2.5 microns in diameter

Canada, Alberta, Calgary

[Campgrounds busy despite record temperatures, smoke over long weekend | Calgary Herald](#)

Calgary Herald

Families were seen on Friday afternoon using propane stand-ins in lieu of wood-burning campfires and making the most of their getaways with ...

Canada, Alberta, Edmonton

[Wildfires smoke out events marking beginning of May long weekend in Edmonton](#)

The Globe and Mail

... a smoky odour not unlike a provincial park campground, where wood-burning fires are now banned throughout the province due to the fire risk.

Canada, British Columbia, Vancouver

[Thinking of lighting a beach fire? Don't. They're banned in Metro Vancouver](#)

North Shore News

The ban is meant to protect the public from the effects of wood smoke ... The seasonal prohibition doesn't apply when wood burning is the only ...

Thinking of lighting a beach fire? Don't. They're banned in Metro Vancouver

Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates.

Campfires, including fires on the beach, are banned year-round in Metro Vancouver, over both concerns about fire hazard and air quality. Jeremy Duncan, assistant chief of West Vancouver Fire and Rescue, said fire crews in West Van have doused four beach fires in the past two days – including two in the same location. Often people will walk down to the beach and see a firepit and figure it's a good place for them to light a fire, he said. But **“they're not allowed in Greater Vancouver,”** he said. Concerns include flying embers, fires that haven't been thoroughly extinguished, and

smoke contributing to poor air quality at a time of year when that's often already challenging. Metro Vancouver's annual ban on use of indoor wood-burning stoves and fireplaces also went into effect this week and lasts until Sept. 15. The ban is meant to protect the public from the effects of wood smoke during a time when indoor heating is used less frequently. The seasonal prohibition doesn't apply when wood burning is the only source of heat in a residence, during an emergency, and for those living off-grid in rural parts of the region. Outside the Lower Mainland, campfires are still allowed in many areas of the province, although anyone heading out of town should still check local government and BC Parks regulations for any additional restrictions. Campfires can't be bigger than half a metre by half a metre in size. Campfires must never be left unattended and must be thoroughly extinguished before leaving the area. In Metro Vancouver, the fire danger rating in North Shore regional parks including Capilano River is expected to be moderate over the weekend.

Canada, Prairie States (Alberta, Saskatchewan, and Manitoba)

The term "Great Plains" usually refers specifically to the United States portion of the ecozone while the Canadian portion is known as the Canadian Prairies. In Canada it covers southeastern Alberta, southern Saskatchewan, and a narrow band of southwestern Manitoba, these three provinces collectively known as the "Prairie Provinces".

[Events that mark beginning of May long weekend on Prairies get smoked out by fires](#)

Times Colonist

... a smoky odour not unlike a provincial park campground, where wood-burning fires are now banned throughout the province due to the fire risk.

[Events that mark beginning of May long weekend on Prairies get smoked ... - Yahoo Canada Style](#)

Yahoo Canada Style

[Events that mark beginning of May long weekend on Prairies get smoked out by fires](#)

rdnewsnow.com

... where wood-burning fires are now banned throughout the province due to ... as nearly 100 wildfires continue to burn throughout the province.

[Events that mark beginning of May long weekend on Prairies get smoked out by fires](#)

Toronto Star

[Events that mark beginning of May long weekend on Prairies get smoked out by fires](#)

rdnewsnow.com

Canada, Maritime Provinces (New Brunswick, Nova Scotia, and Prince Edward Island)

[Western wildfire smoke over the Maritimes Friday - CTV Atlantic](#)

CTV Atlantic - CTV News

The smoke is comprised mostly of tiny particulate matter designated as PM(2.5) with a width of 2.5 microns or smaller. That is about 30 times smaller ...

The Maritimes, also called the Maritime provinces, is a region of Eastern Canada consisting of three provinces: New Brunswick, Nova Scotia, and Prince Edward Island. The Maritimes had a population of 1,899,324 in 2021, which makes up 5.1% of Canada's population. [Wikipedia](#)

United Kingdom

U K, London

<https://www.breathelondon.org/apply?fbclid>

12/9/22

[Mayor of London and Bloomberg Philanthropies announce second round of London community groups to receive free sensors to monitor and tackle local air pollution.](#)

The Breathe London Community Programme

Your air, your ideas, your community.

What is the air like where you live work or play? With a Bloomberg Philanthropies sponsored Breathe London Node, now you can know.

Join inspiring communities taking action to improve air quality right across London.

What is the Breathe London Community Programme?

The Breathe London Community Programme is an exciting three year programme which aims to **provide sixty fully funded Breathe London Nodes** to community groups and organisations across London.

The programme is run by The [Environmental Research Group at Imperial College London](#) with funding provided by [Bloomberg Philanthropies](#).

The current round is the 3rd and final round, we have 20 Nodes to give away.

What are we looking for?

We're looking for groups with a passion to monitor and improve air quality in their area. We know from [research](#) that exposure to air pollution in London varies by age, relative deprivation and ethnicity with those in more deprived areas suffering higher exposures than those in less deprived areas.

The Breathe London Community Programme is open to everyone but we are particularly keen to encourage applications from groups in areas most affected by pollution.

We are looking for projects that:

Can lead to an improvement in local air pollution or a reduction in exposure to pollution (or both).

Include a strong aspect of community involvement.

Are representative of the diversity of London.

We have produced a [Guide](#) which goes through some of the things to consider before applying for a Breathe London Node (note that we will help with placement of Community Programme Nodes on TfL infrastructure).

We'll also be looking to showcase successful groups on the website as part of our [Community Stories](#) feature.

How are applications assessed?

Applications will be assessed by an independent panel.

Some of the things we are looking for are:

Project Aims - We are looking for projects which define a clear need, set achievable goals, and show a pathway to achieving them.

Community Support - We are looking for groups and individuals that are part of a supportive local community that will help them to achieve their goals.

Diversity - London is one of the most diverse cities in the world. We are looking for applications from a diverse range of backgrounds, nationalities, and cultures. We are particularly keen to hear from communities in socially disadvantaged areas.

Impact - We are looking for applications which show how improving air quality could bring benefits their community.

Long-term engagement - We are looking for groups and individuals who have the passion to commit to the programme and go beyond, creating projects, activities and events that will have a lasting impact in their community.

Try to address each of these criteria in your application.

What do you get from us?

We will assist you with installation of your Node and can advise on suitable locations, either remotely or in-person depending on available capacity.

We will provide technical support of your Node including a daily check of its data performance Vs the reference network and the rest of the Breathe London network.

All data produced by the sensors is public and freely available on our website. You can access and download these data at any time and use them for your own projects at your own discretion.

You will be joining a vibrant community of **40 other groups in the Programme**. We have regular virtual and in-person meetings with all the communities that are part of the programme. These events offer a chance for groups to share knowledge and experience and to ask us questions on data and interpretation.

We are delighted to have support from [TSIP](#) helping to foster connections and knowledge exchange between the groups.

What do we expect from you?

Our aim is to **democratise air quality monitoring** and create a community of groups who support each other and share their experiences and ideas.

To help realise this, we will ask all participants to create a profile on the Breathe London community platform (community.breathelondon.org) with the group's name, a brief description of the community and project aim. This

network will allow groups to stay connected with each other and to share their experience with the wider London community.

We want the Breathe London Community Programme to serve as an inspiration to groups right across London and the UK. We will ask you to share your experiences a minimum of once every three months by posting on your profile (of course you can post as often as you like!). These posts can be anything, from a short reflective paragraph to a more artistic video – you decide! These posts will help our community grow and also help us report back to our funder about how the programme is going.

Attendance at virtual and in-person meetings is very much recommended. We encourage you to attend as many of them as you can, so you can expand your network and share your experiences.

What is the timeline?

Applications opened on Monday April 17th, 2023.

Applications close at midnight June 30th, 2023.

Judging will take place in July.

Round 3 sensors will be awarded in early August.

About the Breathe London network

Who runs the Breathe London network?

The Breathe London network is run by the [Environmental Research Group at Imperial College London](#) - the same group who run the [London Air Quality Network](#). The group combines air pollution science, toxicology and epidemiology to determine the impacts of air pollution on health and has over 20 years of experience running large urban air quality monitoring networks.

The Breathe London Nodes are provided by our partners [Clarity Movement Co](#), an air quality sensor company based in California. The Clarity team leverages expertise in air sensing technology, IoT devices, and data analytics to provide a reliable low-cost hardware + software air quality monitoring solution. The Clarity Node is currently deployed in over 85 cities across 50+ countries.

How is the network funded?

In February 2020, the Mayor of London [decided to fund](#) a four year continuation of the pilot phase of the Breathe London network. This was put out to competitive tender in September 2020. This funding covers the roll-out of 100+ sensors at schools, hospitals and co-location sites across London for four years.

Bloomberg Philanthropies have donated funding to sponsor Breathe London Nodes for under-served demographic groups in London and for Imperial to research and evaluate the impact of the community-led monitoring programme on the lives of Londoners.

How is the Breathe London network different to other air quality networks?

For the last few decades, most air quality monitoring around the world has been undertaken by central or local governments using reference-grade instruments. These reference networks have served as the foundation stone for research, policy development, health impact analysis and continue to play a vital role in our understanding of air quality. Data from reference networks in London such as London Air, Air Quality England and Defra are shown alongside Breathe London data on the homepage map.

Reference-grade analysers are accurate but they are expensive to buy and maintain, usually requiring roadside infrastructure to house them. This has meant that air quality monitoring has been out of reach for most citizens and community groups.

The Breathe London network aims to address this by offering affordable, easy-to-install and maintain air quality sensors to anyone. Small sensors are not as accurate as reference-grade analysers, but by combining their data with the [London Air reference network](#), we aim to provide Breathe London users with the best possible data set from their Nodes.

A hybrid network of reference-grade analysers alongside citizen and community-led monitoring is a paradigm shift in air quality monitoring and one which we hope will serve as a blueprint for cities around the world.

Who makes the Breathe London Nodes?

We have partnered with [Clarity Movement Co](#), a sensor company based in California. Clarity developed the [Node-S](#) a light, compact device measuring PM_{2.5} particulate and nitrogen dioxide (NO₂) which can run on either mains or solar power. The Node-S has been deployed in 85 cities in more than 50 countries around the world and undergone [evaluation](#) by [South Coast Air Quality Management District](#) in California and [Airparif](#) in Paris.

All Breathe London Nodes are co-located with London Air reference monitors before being deployed. You can read more about network quality assurance on our [network accuracy](#) page.

What happens to the data?

All scaled and processed data will be available to download here on the individual Node info pages and through the [API](#). You can read more about how we process data on the [network accuracy](#) page.

I'd like to join the network, what do I do?

There are two ways to join the network:

For groups, individuals, and organisations with funding, you can head straight to the [Breathe London Shop](#).

Alternatively, the [Breathe London Community Programme](#) is open for groups to apply for up to 60 fully funded Nodes over the next three years.

Breathe London for Individuals

What is the air quality like on your street? How does it vary through the day? What effect has that recent road closure had on air quality?

With a Breathe London Node now you can know.

Navigating the terrain of small sensors available on the market can be challenging: there's no recognised certification scheme, sensors can break and it's hard to know if your data is comparable with other sensors out there.

The Breathe London network solves this by providing an affordable, easy to maintain sensor backed by a dedicated team of researchers at Imperial College London and data improved by correction to the London Air Quality Network of reference analysers.

If you have funding in place you can head to the [Breathe London shop](#) to purchase your Node today.

Alternatively, our [Community Programme](#) is giving away 60 funded Nodes over the next three years to groups across London.

We're excited to see how groups and individuals can use community-led air quality monitoring to advocate for grassroots improvement in air quality across the city.

Breathe London for Community Groups

All around the world community groups are taking action to make their communities cleaner and greener. From play streets to parklets, the school run to fun runs, grass-roots communities are finding ways to reduce the impact of poor air quality in new and inspiring ways every day.

Whether you're looking to measure the impact of road closure schemes, cycling and walking campaigns or just looking to highlight air quality in your community; the Breathe London Node is a great way for communities to deploy a small, reliable air quality sensor backed by a dedicated team of scientists at Imperial College London.

Every Breathe London Node is co-located at a London Air Quality Network (LAQN) reference site and checked by researchers before deployment. Once deployed, the data from every Node is continually cross-checked against the LAQN reference network so that users receive the best data set possible. Being part of a larger network also allows groups to benchmark their data against the wider network to help provide context.

If your group has funding in place you can head to the [Breathe London shop](#) to purchase your Node today.

Alternatively, our [Community Programme](#) is giving away 60 funded Nodes over the next three years to groups across London.

We're incredibly excited to see how groups with a passion to improve air quality use Breathe London Nodes to help make their communities cleaner and greener.

Europe

<https://eurocities.eu/latest/air-quality-still-troubling-for-cities/?fbclid>

Air quality still troubling for the cities (of Katowice, Poland and Riga, Latvia)

19 May 2023

Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates.

Air quality remains a pressing concern for cities, and one which contributes to disease around the world, according to the World Health Organisation (WHO). This is further supported by [data from the European Environment Agency](#), which shows that in the European Union people are exposed to air pollution levels above those recommended by the WHO.

Talking to city representatives at the recent [Eurocities Environment Forum](#),

In Riga, Latvia, air quality monitoring stations check air quality at various points around the city, feeding back data to a central terminus. However, as the Climate Advisor in the city of Riga, points out, "we are trying to find how to do this better, because the **current data basically tells us about certain hotspots, but we want to see the whole picture**, so we can reduce the overall exposure to air pollution."

In addition to road traffic, one thing that both Riga, Latvia, and Katowice, Poland, are focused on is the **heating systems** people use in their homes.

Riga is implementing new regulations based on its air quality data for different parts of the city; for example, in the areas where the highest levels of pollution exist, **people are restricted from using fossil-fuel sourced heating methods if alternatives are available.**

In Katowice, where, as in much of the rest of Poland, one of the main sources of air pollution comes from people's homes, **residents are offered financial incentives to trade in their carbon-based heating sources for modern electric heating and heat pumps.**

"And, despite the Russian aggression in Ukraine, which brought a lot of other concerns, we were very surprised that 2022 was our record year," says the Deputy Mayor of Katowice, Poland, who is responsible for energy and environment.

"We've now introduced a new regulation to get the last 10,000 or so of these remaining heat sources updated, and so improve our urban air quality, **which can involve a fine if people refuse to update their systems."**

The data relayed by the city's 127 air monitoring stations, which are located at municipal sites such as kindergartens, schools, and other public buildings, is accessible by the public. And to help give a more comprehensive view of this, the city is also talking with industry, as well as companies such as IBM, via an ongoing project on how to expand this network.

Similarly, in an effort to increase the public's knowledge about air quality in the city, Riga has teamed up with local NGOs in the city to launch a joint debate between the municipality and residents on actions to take to improve the city's air quality. It also plans to launch a climate communication campaign this autumn that will focus on the importance of **sustainable behaviour change** in order to solve climate change challenges as quickly as possible.

EU, a change-maker "it would be good to have more guidelines and support on how to do this."

The [Mayors Alliance for the European Green Deal](#), strives to show that a sustainable transition is possible with mayors and cities on board.

Spain, Extremadura

<https://www.theguardian.com/world/2023/may/19/villages-evacuated-wildfire-ravages-south-west-spain-extremadura?fbclid>

Villages evacuated as 'very large' wildfire ravages south-west Spain.

Hundreds of firefighters struggle to contain blaze across at least 7,500 hectares in northern Extremadura.

Friday, May 19, 2023.

Hundreds of civilian and military firefighters are tackling a wildfire in south-west [Spain](#) that has burned across at least 7,500 hectares (18,500 acres) of land and forced the evacuation of more than 500 people since it began on Wednesday evening. Efforts to fight the "very large and difficult" fire in the Las Hurdes and Sierra de Gata areas of northern Extremadura are being hindered by strong winds, according to the regional government, which says the blaze was started deliberately.

PM2.5 and health effects. (90% of wood smoke is PM2.5)

[A scary study shows a connection between ADHD and the stranger factor](#)

SIV TELEGRAM MEDIA

According to research, every 10 micrograms of PM 2.5 polluted particles, the chance of a positive ADHD diagnosis increases by 65%.

A scary study shows a connection between ADHD and the stranger factor.

May 19, 2023.

Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates.

Research recently published in the journal Nature Mental Health shows that exposure to particulate matter air pollution and attention deficit hyperactivity disorder (ADHD) in children are linked.

the study "[Different association patterns among particles with ADHD symptoms](#)" They analyzed data from thousands of Chinese children and concluded that there is a relationship between air pollution and the spread of disease.

Data from more than 164,000 children who were observed. According to research, every 10 micrograms of PM 2.5 polluted particles, the chance of a positive ADHD diagnosis increases by 65%. And in the case of PM1 particles (even smaller) per cubic meter, the proportion of children increased by 74%.

“From this study we can provide evidence so that countries can develop a standard in the future. Any level of air pollution can increase risks to human health,” the researchers say.

Pollution from wildfires and neurological health

Moreover, scientists estimate that there is a link between fires caused by PM 2.5 particles generated by combustion and further deterioration in human health.

“Smoke from wildfires is a serious problem all over the world right now, especially in Australia, the US, Canada, Brazil and South Asia,” said Professor Yuming Gu of Monash University in Australia, one of the study’s authors.

We found that PM2.5 associated with wildfire smoke poses a greater health risk than PM2.5 not associated with fire.

This means that we also need to take care of reducing the health effects of smoke from wildfires.”

The research calls for more measures of particulate air pollution to be supported by governments. “Our findings highlight the potential importance of atmospheric particle concentrations, sizes, compositions and sources in protecting children’s neurological health.”

[How heat waves are tied to the warming climate - The Daily Progress](#)

The Daily Progress

Particulate matter refers to airborne pollutants that can be inhaled and ... The two types that are typically monitored are PM-10 and PM 2.5.