

Episode 56FB June 11, 2023. The “Air-Gen”, “Kamala Harris’ Fireplace Problem” and “Canadian Wildfire news” Issue.

Residents Against Wood Smoke Emission Particulates, see RAWSEPresidents.wordpress.com and click on the nearest right icon for the latest month, June 2023, of PDFs of articles with U R L’s to search on, to the right of that, Bingo for RAWSEP, Crosswords for RAWSEP, EndWoodSmokeJeopardy and EndWoodSmokeMonopoly Games with a RAWSEP Flyer, the “Un-Twist-it” Game, and icon 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 works on Apple phones) and, below those icons, icon links to monthly PDFs of articles with URL’s to search on, from May 2023 to May 2022.

## AIR GEN

In our continuing search for alternatives to residential wood burning, a new method of generating energy is being discussed in The Week, a weekly News Aggregator Magazine in their June 16, 2023, issue on page 21 in an article titled “Harvesting energy from the air”.

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

Scientists have found a way to generate clean energy from the humidity in air. Just as the water droplets in a cloud can produce a lightning bolt, the air-powered generator, or “Air-Gen” uses ambient moisture to generate electricity. The “Air-Gen” is a thin film dotted with tiny holes called nanopores. When water in the air passes through the holes, it creates an electrical charge imbalance, forming a constantly running battery. Stacking more than one “Air-Gen” may amplify the power of one “Air-Gen”. RAWSEP View: So, this is a battery, a tiny battery, which complements the usage of a very large, very heavy battery for storage, the “Iron-Air” battery which could be used to charge electric cars and to power the electric grid for up to 72 hours if there was a power blackout of that time period from wind, solar or geothermal sources. The “Iron-Air” Battery is an innovation described in the PBS documentary “Chasing Carbon Zero”. “Air Gen” could be stacked on top of each other, with a billion taking the space of a refrigerator, which could partly power a home. What follows is a URL for “Air-Gen” published on February 28, 2020.

<https://newatlas.com/energy/air-gen-water-vapor-electricity/>

Air-gen tech harvests humidity to generate electricity  
February 18, 2020

An illustration depicting the protein nanowire film, with one of the electrodes visible at top  
UMass Amherst/Yao and Lovley labs

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

We've already heard about so-called "[fog harps](#)" that use thin wires to collect airborne water droplets, providing drinking water even in arid regions. Well, an experimental new device also uses wires to capture water vapor, although it proceeds to generate electricity. At the University of Massachusetts Amherst, the air-powered generator (or "Air-gen") incorporates a film made of nanowires. That film is sandwiched between two flat rectangular electrodes, although the one on top covers only part of the film, leaving the rest exposed to the air. Produced by the bacteria *Geobacter*, the nanowires are made of an electrically conductive protein. Because of this quality – along with their surface chemistry and the small size of the pores between them – the wires generate an electrical current between the two electrodes, whenever they absorb water vapor from the air. This is described in the journal [Nature](#). Several years ago, MIT [developed a system](#) that generated electricity utilizing ambient water vapor, although it incorporated a series of water-repelling and water-attracting conductive plates.

## HEAT PUMPS

<https://www.utilitydive.com/news/heat-pump-sales-topped-gas-furnaces-United-States/652277/?fbclid=>

US residential heat pump sales pass gas furnaces for first time as interest in efficiency tech surges: IEA  
June 7, 2023

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

Global energy demand rose 1% in 2022 but the rate of energy efficiency improvements was double the average of the past five years boosted by “surging” sales in more efficient technologies like heat pumps and electric vehicles, the International Energy Agency said in a [report](#) Wednesday. In the United States last year, residential heat pump sales exceeded gas furnaces for the first time, making up [53% of heating system sales](#). Sales of electric vehicles grew [55% last year in the United States](#), and in the first quarter of this year made up [more than 7% of new car sales](#). Globally, EVs made up 14% of new car sales in 2022 and could reach 18% this year, IEA said. Retrieved from [International Energy Agency](#).

United States

The fact that Kamala Harris described her fireplace as a problem, and how she described the problem, was so nice we are giving you the URL twice. Kamala Harris appeared on the Stephen Colbert Show in the Spring of 2023, and described a problem which ended with her Vice Presidential Office being clouded with wood smoke from a fireplace, making it temporarily uninhabitable. The story starts at minute 2:20 at this URL <https://www.youtube.com/watch?v=XXMkn6eldlc> RAWSEP has also similarly gushed about Venn diagrams, like Kamala Harris was captured on film doing.

<https://www.nytimes.com/2023/06/06/magazine/vice-president-gaffes.html#commentsContainer>

Why Are the Language Police Obsessed With Vice Presidents?

They make countless public appearances that will be mostly ignored — unless there’s something to poke fun at. June 6, 2023.

Kamala Harris delivered (a speech) on April 25 at Howard University, (saying) “I think it’s very important, as you have heard from so many incredible leaders, for us, at every moment in time, and certainly this one, to see the moment in time in which we exist and are present, and to be able to contextualize it, to understand where we exist in the history and in the moment, as it relates not only to the past but the future.” RAWSEP View: As a proponent of the descriptive, inclusive, run-on sentence that closely resembles the way real humans speak, RAWSEP loves the way Kamala Harris speaks. Kamala Harris also often finds humor amid the pathos she experiences on a regular basis. Finding humor within dry subjects is almost universally seen as a mark of intelligence. Kamala Harris finds the humor while performing her duties as Vice President of the United States.

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

Harris’s (public utterances are sometimes) intentional wordplay. Consider [these lines from March](#): “During Women’s History Month, we celebrate and honor the women who made history, throughout history — who saw what could be, unburdened by what had been.” Harris’s pauses make her intentions clear. Last year she took flak for describing herself, at the start of a meeting, as “a woman sitting at a table wearing a blue suit” — which seems less odd once you learn that she was speaking about the anniversary of the signing of the Americans With Disabilities Act and seeking to accommodate visually impaired people. If Harris is searching for an inspirational V.P. story, she needn’t look far. Biden’s time in the office actually helped burnish a goofy charm; he was seen not just as folksy or avuncular but, in some corners, paradoxically cool. (The Onion spent those years crafting a satirical version of him as a guy who might be found in a White House driveway, shirtless, in jean shorts, [washing a Trans Am](#).) This is the woman seen, in some clips, singing [“Wheels on the Bus” at a campaign vehicle](#) and then cackling with laughter, or [gushing about Venn diagrams](#). One Twitter user racked up likes by positing that her meandering sentences [resemble the dense philosophy of Friedrich Hegel](#). The problem: She [does “prosecutorial”](#) better than “endearing cartoon.” In a viral eight-minute clip from 2019, she was said, in the exaggerated parlance of televisual conflict, to have “demolished” Attorney General William Barr during a Senate hearing following the publication of the Russian-interference report by Robert Mueller, the special counsel. “Has the president, or anyone at the White House, ever asked or suggested that you open an investigation of anyone?” she opens. “It seems you’d remember something like that and be able to tell us,” she prompts. She speaks pointedly, directly, repeating herself only for emphasis. In clips like this, she seems to thrive on confrontation, on pursuing opponents until they’re the ones grasping for a cogent response. (“I find it off-putting to just engage in platitudes,” she said in [one interview with The Times](#); that shows.)

News Stories

RAWSEP View: Residents Against Wood Smoke Emission Particulates think it is important to note the following news story from Toronto, Canada. The mayor of Toronto, Canada, while Canadian Wildfires rage encourages burning wood to

produce energy, and the Mayor of Toronto has made wood burning a pillar of the new, absurdly named, “green” economy. Burning wood itself creates conditions conducive to further climate change and therefore further wildfires. Burning wood for energy emits the same pollution as wildfires emit, including more CO2 and particulates (PM2.5) than coal burning emits. PM2.5, particulate matter of 2.5 micrometer size, is the perfect size to infiltrate the human lung, producing a cascade of human health problems and early deaths. Wood burning is 90% PM2.5

[While fires rage Doug Ford announces program to burn more wood - The Toronto Star](#)

The Toronto Star

The Doug Ford government has taken a climate threatening practice — burning wood to make energy — and made it a pillar of the new green economy.

Arizona

Arizona, Phoenix

[Even with pollution advisory, Phoenix still has better air than East Coast - AZCentral](#)

AZCentral The advisory places restrictions on wood burning in residential areas of Maricopa County, and prohibits the use of leaf blowers.

Arizona, Phoenix

[Massive pallet fire burning in Phoenix - YouTube](#)

YouTube

Firefighters are battling a massive pallet fire burning near 35th Avenue and Buckeye ... DIY Wood Burning Technique - That's not Shou Sugi Ban!

California

United States, Fortune magazine

[New Yorkers are getting a faceful of California-style wildfire ash—thanks to hundreds of ... - Fortune](#)

Fortune The U.S. Environmental Protection Agency said hazy skies, reduced visibility and the odor of burning wood are likely, and that the smoke will ...

California, Ellisville

[Businessman pitches Ellisville leaders on plan to burn, dispose of downed limbs | News](#)

Laurel Leader-Call

Scott Kelly proposed his renewable wood solution at the Ellisville City Board meeting to seek its approval for a potential partnership with his ..... that produces considerably less smoke than most wood-burning machines.

Colorado

Colorado, Boulder County, Loveland, Marshall Fire

[Boulder County authorities: Marshall Fire started with two separate fires; no criminal charges](#)

Loveland Reporter-Herald

The first fire — the burning of scrap wood and tree branches — had been ... that the residents intended to let the fire burn out and bury it.

Colorado

[Smoke in the air? Beware, and don't trust your nose - Colorado State University News](#)

Colorado State University News

Smoke generally loses the smoke smell over the course of about a day. If you're near the fire, it smells like a campfire — that wood-burning smell.

Connecticut, Norwalk, The Hour

[Most garden plants will bounce back from exposure to smoke and ash. How to care for ... - TheHour](#)

TheHour

Smoke from wildfires that has polluted the air across swaths of the ... Bes Kaba, the owner of SoNo Wood Fired in South Norwalk, heats up a. Smoke from hundreds of wildfires burning in Canada drove down air quality ...

[Unhealthy air quality - CT.gov](#)

CT.gov

Health Effects of PM 2.5 Air Pollution. When air quality reaches Unhealthy levels, individuals with respiratory or heart disease, the elderly, ...

Georgia

[Georgia PSC reverses course, pulls support for plan to burn tires to produce energy](#)

Georgia Recorder Exhaust from Georgia Renewable Power's wood-burning biomass plant in Madison County prompted state legislators to pass a law in 2021 against ...

Illinois, Alton

[Canada wildfires are leading to air-quality alerts in US. Here's how to stay safe - Alton Telegraph](#)

Alton Telegraph The EPA said hazy skies, reduced visibility and the odor of burning wood are likely, and that the smoke will linger for a few days in New England.

Indiana

Indiana, Fort Wayne

[Wildfires smoke prompts Air Quality Action Days for entire state - WANE 15](#)

WANE 15

Avoid burning wood in fireplaces or wood-fired boilers and any other unnecessary fires · Reminder: Indiana's open burning laws make it illegal to burn ...Indiana 105 [Air Quality Alert for Indiana Due to Wildfire Smoke](#)

Indiana

[Air Quality Action Days issued throughout Indiana due to Canadian wildfires - CBS 4](#)

CBS 4 IDEM encourages Hoosiers to reduce creating fine-particle pollution by avoiding burning wood in fireplaces or wood-fired boilers or any ...

Indiana

[IDEM issues Air Quality Action Days this Thursday and Friday | Register Publications](#)

Register Publications Avoid burning wood in fireplaces or wood-fired boilers and any other unnecessary fires. · Reminder: Indiana's open burning laws make it illegal to burn ...

Indiana

Maryland

Maryland, Talbot County, Easton

[Boxes near wood stove ignite; fire damages garage | News | stardem.com](#)

Star Democrat

EASTON — Combustible materials next to an active wood burning stove started a fire that damaged a detached garage Tuesday in Easton.

Massachusetts

Massachusetts, Massachusetts Institute of Technology (MIT).

[Q&A: Are far-reaching fires the new normal? | MIT News](#)

MIT News - Massachusetts Institute of Technology Selin: The pollutant of most concern in wildfire smoke is fine particulate matter (PM2.5) – fine particles in the atmosphere that can be inhaled ...

Massachusetts, Worcester

[Here's what you need to know to stay healthy as wildfire smoke descends on Worcester](#)

Worcester Telegram

With wildfire smoke and its tiny particles, you can't judge the risk just by ... "When you breathe air with wood smoke in it, you inhale the fine ...

New Hampshire, Public Radio

[NH could still be affected by Canada's wildfire smoke, experts say - NHPR](#)

NHPR

But she said people also need to be aware of keeping their indoor air clean. She said, when indoors, people should not smoke, burn wood, incense or ...

New Jersey

New Jersey, North New Jersey

[North Jersey, NYC air quality hits rare red alert as Canada wildfire smoke takes toll](#)

northjersey.com Much of New York and North Jersey was shrouded by the smoke, and residents could detect a strong odor of burning wood throughout the region. The smoke ..

New Jersey, Rockaway

[Smoke On The Water, And Everywhere Else - The Wave | Rockaway](#)

The Wave | Rockaway

There were no smells of wood burning getting through the mask. Then I took the mask off to enter my car. In the few seconds it took.

New Mexico, Albuquerque

[The US and Canada saw dangerous smoke this week. It's a routine peril for many ... - KOAT](#)

KOAT

Fine particulate matter, sometimes denoted as PM 2.5, refers to airborne particles or droplets of 2.5 microns or less. That's far smaller than a human ...

New York

[Air quality warnings issued across much of New York for Canada fires. It'll likely persist](#)

recordonline.com

Another plume has started to move downstate from north-central New York, where there were unhealthy levels of PM 2.5. SUBSCRIBER EXCLUSIVE. News ...

New York, Rochester

[What to Know About an Air Quality Advisory | Health Hive](#)

Health Hive - Rochester Regional Health

PM2.5 comes from many different types of particles, including but not ... People who are exposed to higher levels of fine particulate matter might ...

New York, New York City

[New Yorkers should wear face masks outside in smoky air, NYC says - Lohud](#)

Lohud. State officials have warned residents about breathing in fine particulate matter, or PM 2.5, derived from the fires that can be hazardous.

New York, Syracuse

[Central NY under thick haze of smoke from Canada wildfires - syracuse.com](#)

Syracuse.com There was also a smell of burning wood in the air. James McClendon | [jmccclendon@syracuse.com](mailto:jmccclendon@syracuse.com).

Downtown Syracuse rests under a thick haze of smoke ...

New York, New York City

[New York City air quality reaches dangerous levels due to Canadian wildfire smoke](#)

ABC7 New York Smoke from hundreds of wildfires burning in Canada continues to create dangerous ... reduced visibility and the odor of burning wood are likely, ...

New York, Oswego

[When will the smoke clear? Expect some relief by tomorrow, says meteorologist - WRVO](#)

WRVO "wood smoke can put individuals who are immunosuppressed at increased risk for respiratory infection."-

@UR\_Med pulmonologist and air pollution ...

France

[Smog from Canada wildfires blankets New York - France 24](#)

France 24 ... in Central Park -- said his eyes and throat had been "stinging" from the harmful haze, which he likened to the smell of a wood-burning fire.

New York, New York City

[ER visits spike amid wildfire smoke: asthma, breathing problems - New York Post](#)

New York Post

The pollutant of greatest concern during wildfires is called PM 2.5, or particulate matter that's 2.5 microns wide or smaller. image of new york city

New York, New York City

[NYC air quality: The latest data, maps and charts - Gothamist](#)

Gothamist

Asthma-related ER visits in NYC · Air quality index, real-time across the U.S. · The EPA's guide to air quality levels · Particulate matter 2.5 (PM2.5) ...

New York

[Wildfire Smoke From Canada Is Choking New York: What Is the Health Impact? - The Quint](#)

The Quint

Firstly, wildfire smoke contains elements like chemicals, metals, plastics, and PM 2.5 particles which are not the healthiest to inhale.

United States, Northeast

[Capitalist greed drives increasing wildfires seen in Northeast US - Liberation News](#)

Liberation News

... and the air was thick with the smell of burning wood. In Syracuse, New York, where the smoke was worst on June 6, school districts canceled ...

North Carolina

[DEQ Forecasts Code Red or Orange Air Quality for All NC on Wednesday](#)

NC DEQ - NC.gov

DAQ monitors and forecasts ozone and PM2.5 daily using the Air Quality Index (AQI), along with the corresponding AQI color codes to help North ...

North Carolina

[Code Red: Today's air is unhealthy -- if you enjoy breathing - NC Newsline](#)

NC Newsline The NC Department of Environmental Quality issued the alert based on levels of very fine particulate matter, known as PM 2.5. PM 2.5 – which is ...

North Carolina, Wake County

[UPDATE: Some NC Counties Forecasted to have Code Orange Air Quality on Friday](#)

NC DEQ - NC.gov

Localized but very high fine particulate matter readings in Wake County ... As weather pushes more smoke away from North Carolina, PM2.5 and ozone ..The rest of the state is forecast in the Code Yellow range for fine particulates, also known as PM2.5. Additionally, Mecklenburg and Union ....

North Carolina, Greensboro

[Campfire vs Wildfire smoke - WFMY News 2](#)

WFMY News 2

The EPA explains it this way; the smoke from burning wood is made up of particulate matter. This is solid and liquid droplets and they can be made ...Either way, it's wood smoke and the EPA says it's not good for you. Consumer Reports looks at smokeless fire pits.

Ohio

Ohio, Columbus

[Ohioans advised to take precautions due to poor air quality from Canadian wildfires](#)

The Statehouse News Bureau

Avoid using candles, gas, propane, wood-burning stoves, fireplaces and aerosol sprays. Frying or broiling meat, smoking tobacco products, ...

Ohio, Wood County

[Wildfire smoke reaches Ohio – Don't panic but be aware of effects on at-risk populations](#)

BG Independent News

But the particulates from the wildfires in Canada and Michigan are looming in the air locally – even if they can't be seen, explained Wood County ...

Ohio, Cleveland, Fox8 News

[Air Quality Alert: The latest smoke forecast - FOX 8 News](#)

FOX 8 News

Purchase air purifiers for rooms you spend the most time in; Stay inside; Wear an N95 mask; Don't burn candles or use wood-burning stoves; Avoid ...

Ohio, Cincinnati, WCPO

['Particulate matter' from wildfire smoke triggers Air Quality Alert in region - WCPO](#)

WCPO

Avoid using candles, gas, propane, wood-burning stoves, fireplaces, and aerosol sprays. Frying or broiling meat, smoking tobacco products, ...

Ohio, Mahoning

[What Ohio health officials are saying about the smoke from Canadian wildfires](#)

Mahoning Matters

Other precautions include: Spend time in a room you can close off from outside air. Avoid using candles, gas, propane, wood-burning stoves, fireplaces ...

Pennsylvania

Pennsylvania, Philadelphia

[Health Department Recommends Residents Take Precautions Due to Wildfire Smoke](#)

Phila.gov

This is one of the pollutants that the Health Department monitors during large fires in Philadelphia. PM 2.5 are tiny particles in the air that reduce ...

Pennsylvania, Philadelphia

[Canadian smoke is filling Philly's skies and is expected to persist through Wednesday](#)

Philadelphia Inquirer The smoky smell was so evident that Montgomery County reported a "significant" number of 911 calls about a "burning odor. ... by Anthony R. Wood.

Pennsylvania, Philadelphia

[Thinking about going outside? Here's what to know about the risks from breathing wildfire smoke](#)

Philadelphia Inquirer

The particles in the air — known as PM 2.5 — are particularly dangerous because they are small enough that they can travel deep into the lungs and ...

Pennsylvania, Philadelphia, WHYY

[How wildfires and climate change impact headache and migraine symptoms - WHYY](#)

WHYY

The particulate matter found in wildfires, known as PM 2.5, is even smaller than a strand of hair — and is more robustly associated with adverse ...

Pennsylvania, Pittsburgh

[The U.S. and Canada saw dangerous smoke this week. It's a routine peril for many ...](#)

Pittsburgh Post-Gazette

2:17 PM. WASHINGTON — Thick, smoky air from Canadian wildfires made for days of misery ... Fine particulate matter, sometimes denoted as PM 2.5, ...

Rhode Island

[Air quality alert extends to Friday as smoke and haze remain - ABC6](#)

ABC6

Significant haze, reduced visibility, and the smell of burning wood have been present, while orange skies have affected areas like New York City.

Rhode Island, Providence, ABC6

[Canada wildfires lead to air-quality alerts in US, here's how to stay safe - ABC News](#)

ABC News June 6, 2023, 12:01 PM ... including the detection of fine-particle pollution — known as “PM 2.5” — which can irritate the lungs.

Texas

Texas, Fort Worth

[How a DIY air cleaner with Fort Worth roots can help during wildfire season](#)

Fort Worth Star-Telegram

Wildfire smoke contains tiny particles known as PM 2.5, which can cause ... To clean the air of any type of particulate matter, whether it be from ...

Virginia, University of Virginia (U V A)

[Best Health Advice for Smoky Skies: Stay Inside and Wear a Mask When Outdoors](#)

UVA Today - The University of Virginia

The major component to both the poor visibility and health problems associated with wildfires is fine particulate matter, measured as PM 2.5. This is ...

Washington, DC

Reuters

Though a smell of burning wood lingered, the skies were brighter on Thursday morning than on Wednesday, but as evening approached, the haze ...

United States, Washington Post

[What's in wildfire smoke? - The Washington Post](#)

The Washington Post

The particulate matter — solid particles and liquid droplets ... wildfire smoke will likely be the dominant source of PM 2.5 particles in the U.S. ...

Washington, DC

[Why wildfire smoke turns the sky orange, according to science - The Washington Post](#)

The Washington Post

“The particles are the residue of the wood, leaves and pine needles that burned in Canada.” Some of the particles are large, but most are microscopic ... As Canadian wildfires poured smoke plumes over the United States this week ...

Washington, DC

[The US and Canada saw dangerous smoke this week. It's a routine peril for many ... - WOODTV.com](#)

WOODTV.com

WASHINGTON (AP) — Thick, smoky air from Canadian wildfires made for days of misery in New York City and across the U.S. Northeast this week.

United States, Great Lakes

[Wildfire smoke can harm human health, even when the fire is hundreds of miles away](#)

Great Lakes Now

Being exposed to wood smoke won't independently cause someone to have a heart attack, but if they have underlying risk factors,

United States Northeast

Northeast

[Low Air Quality Across U.S. Northeast Due to Canada Wildfires: What to Know | Time](#)

TIME

June 6, 2023. including the detection of fine-particle pollution — known as “PM 2.5” — which can irritate the lungs.

[Hazardous Air Chokes Northeastern States - NASA Earth Observatory](#)

NASA Earth Observatory

The fine particulate matter (PM2.5) in this pollution is small enough to enter the lungs and can lead to health problems.

United States, Southeast

[John Dyck Show and Shine brings vehicles and spectators to ECS - DiscoverEstevan.com](#)

DiscoverEstevan.com



Smoke could make a comeback in the southeast over the weekend ... Wood Burning. calendar-ico Wed, Jun 7, 7:00 PM .

United States Media

United States, ABC News

[Here's how to stay safe from wildfire smoke amid reduced air quality - ABC News](#)

ABC News The CDC advises people avoid using candles, gas, propane, wood-burning stoves, fireplaces or aerosol sprays and don't fry or broil meat, ...

United States, AP News Service

[For many cities around the world, bad air an inescapable part of life | AP News](#)

AP News Fine particulate matter, sometimes denoted as PM 2.5, refers to airborne particles or droplets of 2.5 microns or less. That's far smaller than a ...

United States, The Guardian

[Tens of millions under air quality alerts in US as Canada fire smoke drifts south | Pollution](#)

The Guardian The US Environmental Protection Agency (EPA) said hazy skies, reduced visibility and the odor of burning wood are likely, and that the smoke will ...

United States, NASA Earth Observatory

[Canadian smoke update - Wildfire Today](#)

Wildfire Today

For Ottawa on June 7, AirNow sensors identified a hazardous air quality index (AQI) in the 400s for PM 2.5 (particulate matter that is 2.5 ...

United States, Nature magazine

[Regional source apportionment of trace metals in fine particulate matter using an ... - Nature](#)

Nature

An observation-constrained hybrid model is developed to resolve regional source contributions to trace metals and other primary species in PM2.5. In ..

United States, PBS

[How wildfire smoke can threaten human health, even when the fire is hundreds of miles away - PBS](#)

PBS Fires in Canada have sent smoke across several U.S. states, ... Being exposed to wood smoke won't independently cause someone to have a heart ...

United States, Red Cross

[What You Should Do as Canadian Wildfire Smoke Moves Across Parts of U.S. - Red Cross](#)

Red Cross

Smoke from wildfires burning in Canada is moving into parts of the U.S., ... Avoid using candles, gas, propane, wood-burning stoves, fireplaces, ...

United States, Reuters

[.U.S. East Coast blanketed in eerie veil of smoke from Canada fires | Reuters](#)

Reuters The air smelled like burning wood. Wildfire smoke has been linked with higher rates of heart attacks and strokes, increases in emergency room ...

United States, US News

[Smoke From Canadian Wildfires Blackens Skies, Prompts Air Quality Alerts in Much of U.S.](#)

USNews.com "Exposure to elevated levels of fine particulate matter [PM 2.5] can also worsen medical conditions such as asthma and heart disease.

United States, Voice of America (V O A).

[US States Under Air-Quality Alerts as Canadian Smoke Drifts South - VOA](#)

VOA

Smoke from the hundreds of wildfires blazing in eastern Canada has drifted ... cities were a uniform gray, and the air smelled like burning wood.

United States, Youtube

[Smokeless fire pits | No wood fire smoke is good for you - YouTube](#)

YouTube

What's the difference between this wildfire smoke and the campfire smoke we sit around to do our s'mores? The answer is, what's in the smoke of ...

Canada, British Columbia, Wood Buffalo National Park

[Fire grows near Pine Lake, in Wood Buffalo National Park | CBC News](#)

CBC

Crews are working to limit the spread of a wildfire burning near Pine Lake in Wood Buffalo National Park on June 1, 2023.

Canada, CBC

[Rain giving Hamilton and area reprieve from wildfire smoke: Environment Canada - CBC](#)

CBC

"The third one, the pollutant that's been concerning us for the past few days, is PM 2.5 — particulate matter at 2.5 microns or less," Cheng said

Canada, CNBC

[Some delivery workers biked 50 miles in the thick of the NYC wildfire smog: 'It's an ominous feeling'](#)

CNBC

Wood says that free personal protective equipment would have made a difference. But he also notes that the wildfire smoke is just one example of ...

Canada, Toronto

[While fires rage Doug Ford announces program to burn more wood - The Toronto Star](#)

The Toronto Star

The Doug Ford government has taken a climate threatening practice — burning wood to make energy — and made it a pillar of the new green economy.

United Kingdom, Drax

[Drax faced with UK biomass sustainability investigation and US pollution notice as Selby ...](#)

The Chemical Engineer

And, when burned, wood releases far more carbon into the atmosphere than burning coal, say almost 800 scientists who called for restrictions on ...

United Kingdom, Staffordshire

[Staffordshire firefighters warn wood burner owners after accidental blaze - Express & Star](#)

Express & Star

Station Manager Duncan Cole, said: "If you're burning wood, make sure that it is completely dried.

Don't burn unseasoned, wet, soft or tanalised ...

China, Jiangsu

[The interactive effects of extreme temperatures and PM2.5 pollution on mortalities in Jiangsu ...](#)

Nature

In spite of the decreasing air pollution level, fine particulate matter (PM2.5) is still related to the largest amount of premature death worldwide.

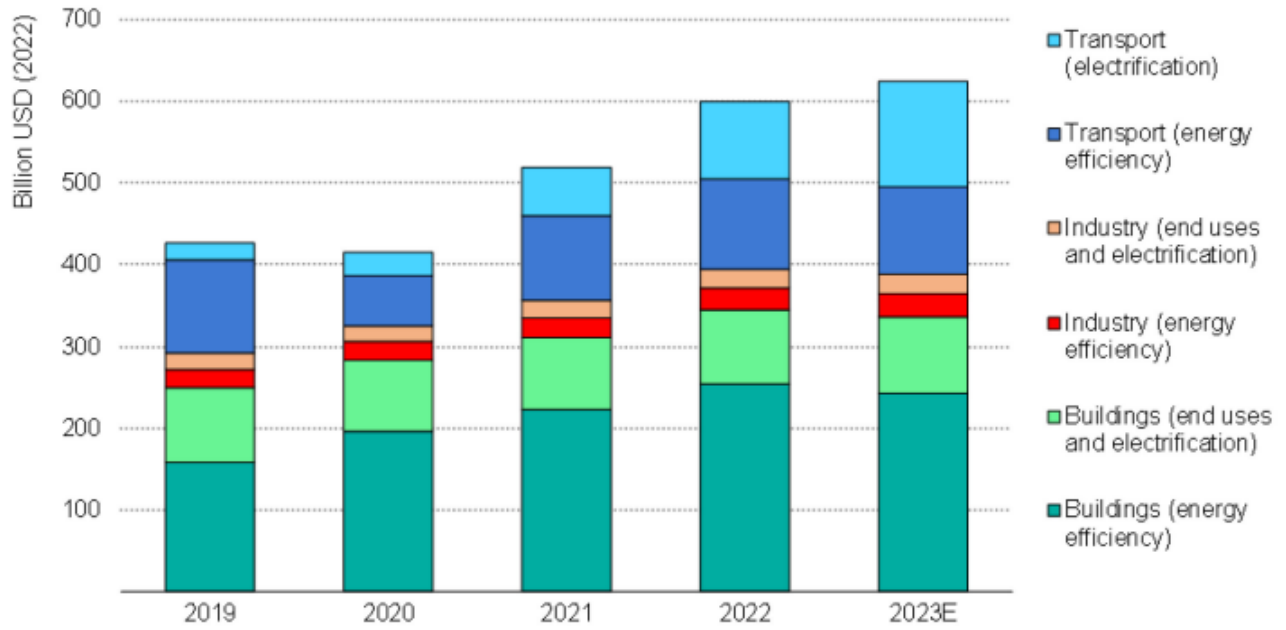
India, Kolkata

[PM 2.5 count in Kolkata air rises by 85% in a year, lens on emission & biomass burning](#)

Times of India

The alarming statistics compared the data of particulate matter (PM) 2.5 microns, considered the most toxic of air pollutants, collected from ...

## Global energy efficiency-related investment, 2019-2023E



IEA. CC BY 4.0.



