Episode 56FK June 22, 2023. Massachusetts Bill Hearings 6/28/2023 to close Woody Biomass Burning Loopholes & the Wicked Witch's guard, explained again.

RAWSEP View: Quotes from the article below: EPA data show residential and commercial wood heating account for <u>83%</u> of fine particulate emissions in the Massachusetts heating sector. Environmental activists call wood-burning a "double whammy" for the climate, releasing stored carbon into the atmosphere while burning the very trees needed to absorb the carbon. Laura Haight, U.S. policy director for the nonprofit Partnership for Policy Integrity, called the bills "common sense. We should not be using Massachusetts subsidies intended to clean up our air and benefit our climate to subsidize these polluting sources of energy," Haight asserted.

RAWSEP View: Massachusetts State Senate Bills S.2136 and S.2137 will have hearings on 6/28/2023. This session of the Massachusetts State Legislature is in the process of closing loopholes in Massachusetts' clean energy laws that still subsidize burning wood (provide payments to wood burners) for heat and energy. When the term "biomass" is used it pertains to industry. When the term "woody biomass" is used it seems to pertain to wood, (and possibly to residential wood burning as an alternative energy supply?)

Last year the Massachusetts renewable energy portfolio standard dealing with biomass burning was passed by the Massachusetts Legislature, but it had loopholes that allowed subsidies for woody biomass burning to continue to receive subsidies. <u>https://www.mass.gov/renewable-energy-portfolio-standard</u>

This year loopholes around wood burning for heat and energy, to be closed by the Massachusetts Legislature, are: Wood for heat

https://malegislature.gov/Bills/193/S2136 Bill S.2136193rd (Current)

Bill S.2136

SECTION 1. Section 11F3/4 of Chapter 25A of the General Laws, as appearing in the 2020 Official Edition, and as amended by Section 34 of Chapter 8 of the Acts of 2021, is hereby further amended in clause (i) of subsection (c) by striking the words "biomass fuel; and (11)".

SECTION 2. This act shall take effect upon its passage.

An Act to remove woody biomass from the greenhouse gas emissions standard for municipal lighting plants

By Mr. Gomez, a petition (accompanied by bill, Senate, No. 2136) of Adam Gomez and Orlando Ramos for legislation to remove woody biomass from the greenhouse gas emissions standard for municipal lighting plants. Telecommunications, Utilities and Energy.

<u>View Text Print Preview Download PDF</u> Bill Information Presenter: <u>Adam Gomez</u> Status: Referred to <u>Joint Committee on Telecommunications, Utilities and Energy</u> Displaying 4 actions for Bill S.2136, same as Bill S.2137 S. 2136 Regarding Heating with wood, and S. 2137 Regarding Wood for energy https://malegislature.gov/Bills/193/<u>S2137</u>

Bill <mark>S.2137</mark>193rd (Current)

Bill S.2137

SECTION 1. Section 11F1/2 of chapter 25A of the General Laws, as appearing in the 2020 Official Edition, is hereby amended by adding at the end of subsection (a) the following:- For intermediate or large generation units, no woody biomass fuel shall be considered an alternative energy supply.

SECTION 2. This act shall not apply to any biomass facility qualified by the department of energy resources as an alternative energy unit pursuant to section 11F1/2 of chapter 25A of the General Laws as of January 1, 2023. SECTION 3. This act shall take effect upon its passage.

An Act limiting the eligibility of woody biomass as an alternative energy supply.

By Mr. Gomez, a petition (accompanied by bill, Senate, No. 2137) of Adam Gomez, Orlando Ramos, and Jack Patrick Lewis for legislation to limit the eligibility of woody biomass as an alternative energy supply. Telecommunications, Utilities and Energy.

Regarding energy from wood. View Text Print Preview Download PDF

#### Bill Information

#### Presenter: Adam Gomez

Status: Referred to Joint Committee on Telecommunications, Utilities and Energy

#### **Bill History**

#### **Petitioners**

Displaying 4 actions for Bill S.2137 and Bill S. 2136

Date	Branch	Action
2/16/2023	Senate	Referred to the committee on Telecommunications, Utilities and Energy
2/16/2023	House	House concurred
6/6/2023	Joint	Hearing scheduled for 06/28/2023 from 10:00 AM-01:00 PM in A-2
6/14/2023	Joint	Hearing scheduled for 06/28/2023 from 01:00 PM-05:00 PM in A-2

#### Massachusetts

Bills Aim to Close Biomass Loopholes in MA Clean Energy Laws / Public News Service

**Public News Service** 

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

Bills Aim to Close Biomass Loopholes in MA Clean Energy Laws

Burning wood releases fine particulate matter, which is easily inhaled and can lodge deep in the lungs, where it can cause chronic heart and lung disease and trigger asthma attacks, heart attacks, and premature death. Why you can trust Public News Service.

Wednesday, June 21, 2023

Environmental and community health advocates in Massachusetts are backing new legislation they say will close loopholes in the state's clean energy laws and end renewable energy subsidies for burning woody biomass. Lawmakers ensured wood-burning power plants were no longer eligible for credits through the state's <u>Renewable</u> <u>Energy Portfolio Standard</u> last session but loopholes in the state's clean energy laws still subsidize burning wood for <u>heat and energy</u>. Laura Haight, U.S. policy director for the nonprofit Partnership for Policy Integrity, called the bills "common sense." "We should not be using Massachusetts subsidies intended to clean up our air and benefit our climate to subsidize these polluting sources of energy," Haight asserted. Haight pointed out burning wood is a major source of fine particulate emissions, which are a serious health hazard. EPA data show residential and commercial wood heating account for <u>83% of fine particulate emissions</u> in the Massachusetts heating sector. Environmental activists call woodburning a "double whammy" for the climate, releasing stored carbon into the atmosphere while burning the very trees needed to absorb the carbon. "Our laws were not perfect to begin with," Haight noted. "But we are learning from the science and we are correcting them." Haight has high hopes for the legislation as Gov. Maura Healy supported both proposals during her run for office. The Telecommunications, Utilities and Energy Committee has <u>scheduled two</u> <u>hearings</u> on the bills for June 28.

RAWSEP's recent Episode 56FGb June 18, 2023. "Taylor Swift, kindness and fairness, and the guard in the Wizard of Oz" referenced the movie "The Wizard of Oz". The main points in the episode were: The Guard in the Wizard of Oz was one of the Wicked Witch's guards, who changed allegiance after he was released from some sort of servitude to the Wicked Witch, or some sort of dedication to tradition, after Dorothy accidentally melted the Wicked Witch with a pail of water, while dousing the broom that the Wicked Witch was setting the Scarecrow's arm on fire with. The RAWSEP editor found obvious parallels between residential wood burning and the actions of the Wicked Witch of the West in setting the Scarecrow's arm on fire. Dorothy was the victim as a near neighbor of residential wood burning, who monitored the situation and took action to stop the burning. To continue this humorless analogy, Professor Marvel/The Wizard hiding behind a curtain was analogous to a government official perpetuating the lie that wood burning was carbon neutral, and the flying monkeys were analogous to wood burning industry lobbyists who transmit the lie that wood burning is carbon neutral. The Wicked Witch pays the flying monkeys with subsidies for wood burning based on the lie that wood burning is carbon neutral.

Is it more fun to believe the conspiracy theory that the first 43 minutes of "The Wizard of Oz" and first 43 minutes of Pink Floyd's "Dark Side of the Moon" were synchronized lyrically, tonally, and thematically? Perhaps. But Dark is easy to synchronize to nearly everything if things are seen in a bad light. Light and clarity, leading to understanding and solving of problems, is harder to synchronize in the human mind.

It is more fun, and reflects better on human nature, to believe that "The Wizard of Oz" is a tale of triumph of good over evil. Burning wood is evil and stopping it is good. That is why Episode 56FGb's reference to the guard in the Wizard of Oz was made by RAWSEP. Please do not misunderstand what are important points to make, and what are distractions to the points that have to be made to advance the progress of civilization. Don't interpret only from the dark side. Don't believe in conspiracy theories on the internet!

On the internet there is a conspiracy theory (possibly a conservative survivalist or dark" theory) that there is a 43 minute synchronicity between the movie "The Wizard of Oz, and Pink Floyd's "The Dark Side of the Moon" <u>https://www.nytimes.com/interactive/2023/06/21/magazine/dark-side-of-the-rainbow-pink-floyd-wizard-of-oz.html</u> Pink Floyd, 'The Wizard of Oz' and Me

#### Synchronicity of 43 minutes

The inside story of a Times reporter's strange role in a foundational moment in early internet culture: "The Dark Side of the Rainbow."

The New York Times

June 21, 2023

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

Pink Floyd band members have, over the years, denied that Pink Floyd intentionally structured its 1973 album to align with the 1939 film. (As Alan Parsons, the recording engineer who helped create "The Dark Side of the Moon," pointed out in a 2020 interview, "We didn't have VCRs back then.") Everyone agrees that you're supposed to time the start of the music to the roars of the MGM lion, (with most favoring the third roar). For the next 43 minutes, the two works seem to merge and play off each other. The synchronicities start mildly, like "All you touch and all you see" when Dorothy grabs a farmhand's arm, then the alarms from "Time" blare as the film cuts to the evil Miss Gulch coming to get Toto, and Professor Marvel urging Dorothy to go home at "Home, home again." After the tornado scene Dorothy opened the door into Technicolor Oz just as the cash-register noises kick off "Money." In the next track, the black-dressed Wicked Witch appeared and confronted the blue-dressed Dorothy to the lyrics "Black ... and blue." Some synchronicities are tonal, as when the tornado sequence seems choreographed to wordless vocals in "The Great Gig in the Sky". Click play to listen to the synced audio. In conclusion, the album's closing heartbeats play as Dorothy listens to the Tin Woodman's chest. It wasn't just a big album and a popular movie. The Library of Congress <u>estimated</u> in 2000 that "The Wizard of Oz" had been seen by more viewers than any other film in history. "The Dark Side of the Moon" was one of the best-selling albums of all time: It holds the record for the album with the <u>most weeks on the Billboard 200 chart</u> making a 981st appearance just last month.

RAWSEP: Does everyone wear blinders for some reason, and use the words "fossil fuels" instead of "wood burning" when discussing wildfires and wildfire pollution, which are obviously, wood burning and wood burning pollution? Are these mothers afraid to take responsibility for their role in wood burning in fireplaces and wood stoves, and are these mothers stubbornly tied to wood burning themselves? They see an orange haze in the sky from wood burning, and start phoning each other to talk about "fossil fuels" and making industries change, when if fossil fuels change to biomass burning, the pollution from industrial plants will be worse, with more particulates than fossil fuel burning! Wood burning produces more CO2 and PM2.5 than coal burning and produces 450 times more PM2.5 than natural gas burning. PM2.5, particulate matter of 2.5 micrometer size, is the perfect size to infiltrate the human lung, setting off a cascade of human health problems and early deaths. PM2.5 is 90% of wood smoke.

Inside Climate News Email Newsletter

June 21, 2023

As Wildfire Smoke Recedes, Parents of Young Children Worry About the Next Time <u>https://insideclimatenews.org/news/13062023/wildfire-smoke-children-health-risks/?utm\_source=</u> Young children and toddlers are especially susceptible to pollutants in wildfire smoke. Concerned parents ponder a world in which that happens "routinely."

#### June 13, 2023

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

A boy, 3, and his sister, 5, standing outside their family's home in New York last week, wearing masks to protect themselves from wildfire smoke from Canada that was blanketing the city. For once, one mother in New York wasn't the only one in her family talking about the effects of climate change on children. Usually, Johnson finds herself initiating conversations about the specific perils of global warming when it comes to young people. But last Tuesday morning, as the skies above her Brooklyn neighborhood turned ashen gray, and then a Martian orange, her phone began to buzz with activity. "Everybody I talked to was talking about the smoke," said a 36-year-old mother of a 5-year-old and a 13month-old. Canadian wildfires blanketed much of the eastern half of the United States Some parents arranged for early pick-ups from school or kept their children home entirely. Others resorted to masking and operating air filters day and night. And even as smoke began to clear in many areas during the weekend, there was a widespread apprehension that what much of the country witnessed last week was the start of something that might become more common if the most dire effects of climate change are not addressed. "The wildfires tend to be in the West. The floods have been in the South. This felt really like you can imagine this being something that happened routinely. And that's super upsetting and super alarming." The Environmental Protection Agency's website, airnow.gov—which features an interactive map of smoke and fire conditions around the country, featured a special alert on the hazy conditions beginning Wednesday. Two months ago, the agency issued a report, "Climate Change and Children's Health and Well-Being in the United States," about extreme heat events, flooding and poor air quality. If the average temperature increases by 4 degrees celsius, that could result in 90,000 new cases of asthma and 15,000 emergency room visits for asthma and could affect birth outcomes. The New York mother is a member of a group called <u>Climate Families NYC</u>, an organization fighting for an end to fossil fuels. Another mother's 5-year-old said, 'You know, now we have to wear masks outside. Before we were wearing masks inside,". Children actually inhale more polluted air than adults. and that's one of the reasons why the EPA recommended that they wear masks outdoors last week. the young are typically closer to the ground, and air pollution can even harm brain development. The interim director of The Center for Climate, Health and the Global Environment at Harvard T.H. Chan School of Public Health, said a child's metabolism runs faster than an adult's. Back in New York, one mother said Monday that her mom friends now routinely check the air quality and text with updates. "I do really think that everybody is taking notice of this."

#### Wildfire Haze Adds To New York's Climate Change Planning Needs

https://insideclimatenews.org/news/13062023/wildfire-new-yorks-climate-change-planning/?utm\_source=

Among the takeaways for city officials: Last week's wildfire-driven air pollution increased outdoor workers' exposure to PM2.5 and ground ozone.

June 13, 2023

Smoky haze from wildfires in Canada diminishes the visibility of the Empire State Building on June 7, 2023 in New York City. New York topped the list of major cities in the world with the worst air pollution on Tuesday night, June 6 as smoke from the fires blanketed the East Coast.

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

Amidst an orange sky and air that smelled of campfire smoke, a man offered Central Park carriage tours to those who passed by. While some people wore masks to protect against the unusual haze that clouded Manhattan, the carriage driver did not. He'd left for work without it. The New York City Mayor kept schools open but <u>canceled all outdoor</u> <u>activities for NYC public school students</u>. The New York Department of Health <u>recommended residents spend more time</u> <u>indoors and close their home windows</u>. The New York State Department of Environmental Conservation issued an air quality health advisory for New York City until midnight the following evening. The advisory remained in place until Friday night. <u>many criticized the city's response time to the "smoke wave</u>" as a sign that the city is unprepared. <u>TREEAge</u>, a youth-led nonprofit that advocates for environmental justice policies in New York City. The New York State Department of Labor <u>suggested workers who become sick use paid sick leave accruals</u>, if available. Throughout the air quality advisory, <u>when New York momentarily became the city with the worst air quality in the world</u>, many outdoor workers remained on the job all over town. Mayor Adams advised vulnerable residents to wear N95 or KN95 masks. According to the Environmental Defense Fund, <u>higher temperatures and droughts can increase the frequency of</u> <u>wildfires</u>. " Smoke from wildfires contains particulate matter, fine particles that are invisible to the eye. The smallest of the particles, with diameters less than 2.5 microns, cause the greatest health impacts. These particles are categorized as

PM2.5 and are small enough to enter the lungs and diffuse into the bloodstream. Researchers have linked PM2.5 to increased asthma attacks, respiratory and cardiovascular conditions. Data Portal reported that in 2020 there were 597,000 adults aged 18 and older who live with asthma in the city, The climate crisis disproportionately impacts Black and brown communities and low-income communities. These communities also face increased long-term exposure to air pollutants in their everyday lives and jobs. One study found people of color are exposed to higher concentrations of poor air quality regardless of region or income. The study research showed that nearly all major emission categories contributed to systemic PM2.5 exposure for people of color. In October 2017, extreme fires in California prompted scientists to consider the impact of wildfire smoke on children. Throughout the years, wildfires have burned close to superfund sites, releasing toxins, throughout the United States. On June 12, the New York City Department of Health announced that, while no health advisory remained in place, residents should still take precautions as air quality can still vary and reach levels unhealthy for those with heart and breathing problems.

Arizona

The Arizona Department of Environmental Quality has issued an Ozone High Pollution ...

Arizona Emergency Information Network - az.gov

Wood burning in residential fireplaces, chimeneas, outdoor fire pits, and similar outdoor fires is prohibited in Maricopa County. This includes ...

California, San Diego

Brush fire near Boulevard burns 37 acres, prompts evacuations - CBS 8 CBS 8

... around 11:30 a.m. in the East County area of San Diego following reports of plumes of smoke rising near Black Wood and Old Mine roads.

California, Tehama County

Tehama County joins woodsmoke reduction program - Red Bluff Daily News

Red Bluff Daily News

RED BLUFF — The Tehama County Board of Supervisors Tuesday authorized the Air Pollution District's participation in the California Woodsmoke ...

Colorado, Golden

Improve Golden's air quality by swapping out wood burning stoves

the Golden Star

Caption: When the furnace broke in freezing weather, they were glad to have a wood burning stove and a newspaper subscription. (Jennifer Bardsley) ...

Minnesota, Marshall

Air Quality Alert Issued Until 9:00 p.m. Thursday (Not Canada's Fault this Time) - Marshall Radio

Marshall Radio

Reduce or eliminate activities that contribute to air pollution, such as outdoor burning, and use of residential wood burning devices. Reduce ..

Australia

Reduce Smoke Pollution from Your Property This Winter | Mirage News

Mirage News

Council is encouraging residents to do what they can to reduce smoke from their property this winter. Wood heaters can create smoke pollution in ...

China

Short-term exposure to PM2.5 increases hospital admission risks and costs in China

Medical Xpress

In a worrying revelation for global health, fine particulate matter, specifically particles with an aerodynamic diameter of less than 2.5  $\mu$ m, ...

India

Dogs likely to bite on hot, sunny, smoggy days: Harvard study - Hindustan Times

Hindustan Times

Jun 21, 2023 05:41 PM IST ... The study found that there was no effect of Particulate Matter 2.5 (PM2.5), which are the tine particles or droplets ...

Health Effects and PM2.5 from Wood Smoke

Exposure to air pollution increased length of hospital stays for Covid-19 patients

Air Quality News

The team took data on levels of NO2, soot and PM2.5 at the patients' home addresses before they were hospitalised with Covid-19.

How Does Air Pollution Compromise the Human Immune System? - AZoCleantech.com

AZoCleantech.com

The researchers used data from three pollutants—nitrogen dioxide, soot, and fine particles (PM2.5)—at the patients' residence address before they ...

Air pollution, even at low levels, made Covid worse for patients and hospitals - EurekAlert!

EurekAlert!

The research team used data on levels of three pollutants – nitrogen dioxide, soot and fine particles (PM2.5) – at the patients' home addresses ...

What Happens If the Supreme Court Ends "Chevron Deference"? - NRDC

NRDC

The Particulars of PM 2.5. May 20, 2022 ExplainerNew Delhi, California, India, United States. Why particulate matter...matters.

National Academy of Science

Air quality equity in US climate policy | PNAS

PNAS

These pollutants sometimes consist of, or subsequently form, fine particulate matter (PM2.5), which causes and exacerbates a wide variety of other ...

POOR AIR QUALITY LEADS TO LONGER HOSPITAL STAYS FOR CHILDREN WITH ...

PR Newswire

PRNewswire/ -- Children with asthma spend more time in the hospital when there is a greater amount of particulate matter (PM 2.5) - tiny pieces of ...

Residents Against Wood Smoke Emission Particulates, see https://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, Games such as 1)Bingo for RAWSEP, 2)Crosswords for RAWSEP, 3)EndWoodSmokeJeopardy.

4)EndWoodSmokeMonopoly Games, 5) a RAWSEP Flyer, 6)the Un-Twist-it Game, and 7)"Vending Machines for PM2.5 monitors", 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.



# **Climate and Children's Health Risks**

Because children have higher respiration rates than adults toddlers typically take as many as 40 breaths per minute, twice as much as those over 18—they are especially vulnerable to poor air quality events. Here are some other risks:



### EXTREME HEAT

Extreme heat exposure can impair learning and cognition; sleep; mental health; kidney, liver and respiratory function. It may increase emergency department visits and incidences of preterm birth and low birth weight, heat stroke and death.



### SEASONALITY

Changes to seasons may increase exposure to aeroallergens like pollen, leading to higher rates of seasonal allergies and asthma. These changes may affect opportunities for outdoor recreation and play.



# **AIR QUALITY**

Climate-driven changes to PM<sub>2.5</sub>, ozone, dust and wildfire smoke may increase emergency department visits, new asthma cases, general respiratory illnesses, preterm birth and low birth weight.



## FLOODING

Flood exposure may lead to greater rates of home damage and loss, drowning, stress and mental health impacts, and exposures to waterborne pathogens and mold.



### INFECTIOUS DISEASE

Climate change may expand the ranges and active-season lengths of insects and ticks that carry vector-borne diseases, such as Lyme disease.