

Episode 56ED May 10, 2023. The “Atlanta, Georgia Public Service Commission approves burning tires along with wood in Biomass Plants” 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.)

United States

Colorado, Golden

[Concerns swirl over Golden's air quality](#)

the Golden Star

Concerns came following this spring's industry debris burning. ... such as wildfire smoke, open burning of slash, residential wood smoke, ...

Georgia

RAWSEP View: Is it a “tradition to burn tires for energy”? No, but burning tires in the street is a “tradition” most recently practiced in the Middle East as a method of cowing, disorienting, and terrorizing ordinary citizens during armed protests. Burning tires is very dangerous for the environment. When you burn tires, they produce thick black smoke that contains high levels of pollutants like cyanide, carbon monoxide, sulfur dioxide, benzene, styrene, and 1,3-butadiene. Black smoke from sources such as auto salvage yards or tires can have more of that fine particulate and toxic chemicals, including asbestos, aldehydes, acid gases, sulfur dioxide, nitrogen oxides, polycyclic aromatic hydrocarbons, benzene, toluene, styrene, metals and dioxins. In 1993 a journalist wrote “Tires have a relatively high energy content (so less oil is needed) and they emit less sulfur pollution than coal. Soot or particulate matter is heavier, but with proper scrubbers on smokestacks, there's no reason why tires can't burn as cleanly as, say, this newspaper (like burning wood).” Headlines from 2021, 2022 and 2023 about tire burning as a method of terror, terrorizing others, and tire burning as protest follow.

[‘The fire releases our anger’: Tire-burning becomes ...](#)

[the Times of Israel](#)

[https://www.timesofisrael.com > the-fire-releases-our-a...](https://www.timesofisrael.com/the-fire-releases-our-a...)

Mar 10, 2021 — 'The fire releases our anger': Tire-burning becomes hallmark of Lebanon protests. Amid economic and political crises, Lebanese demonstrators ...

[Terror attack in Samaria: 'I escaped through the burning tires](#)

[Israel National News](#)

<https://www.israelnationalnews.com> › news

Dec 4, 2022 — Terrorists block road with burning tires, hurl rocks at tour guide driving home for weekend.

[Palestinian terror cell arrested in Jenin before carrying out ...](#)

[Jerusalem Post](#)

<https://www.jpost.com> › Arab Israeli Conflict

Apr 11, 2023 — Additionally overnight, Israeli forces arrested a Palestinian in a-Ram. During the arrest, Palestinians rolled burning tires and threw stones at ...

RAWSEP View: Why is Residents Against Wood Smoke Emission Particulates discussing tire burning? More Georgia Biomass (wood burning) plants could soon burn a new fuel: scrap tires. Why is this allowed in Georgia, why is it happening? Some reasons given for tire burning were that A) Georgia Power plans to source more electricity from biomass (wood burning) plants. B) biomass industry representatives requested the approval of an “alternative fuel” (tires) to improve the reliability and profitability of their projects, and C) adding tire scraps to wood burning fuel was said to help balance the inconsistent heat content of wood.

“You can have a more stable boiler and a more stable electrical product coming out of it,”. Environmental and health effects of tire burning were not considered by the proponents of tire burning. Residents Against Wood Smoke Emission Particulates is concerned about the environmental and health effects of tire burning, which seem to be even worse than the effects of wood burning. Burning wood seems to be a slippery slope down which the biomass industry can descend to attempt to pollute more and more with tire burning under cover of the “green” label.

RAWSEP View: The parties and issues in this dispute over the Atlanta, Georgia Public Service Commission vote 4 to 1 to allow tire burning in wood burning plants breaks down into ten parties and topics.

1)The one Public Service Commission member, out of five, who voted against tire burning in the wood burning plant. Chairman Tricia Pridemore was the lone dissenter on each of the two votes for allowing tire burning. PSC Chair Pridemore panned burning tire scraps, noting the “great strides” the state has made to clean up its energy mix. “Burning tires, in my opinion, is a step backward,” she said.

2) One of the four who voted for burning tires in the wood burning plant, the District 1 Commissioner, proposed the change, and said the environmental groups raised “compelling reasons to take another look at this,” but said he was not ready to commit to next steps. “I was following what advice I was given by our legal team,” he said. At the PSC’s session in the first week in April, the District 1 Commissioner proposed expanding the list of allowable biomass fuels to include both the burning of tire scraps and natural gas, and also moved to cap the amount of tires that plants can mix into their boilers at 20% of a unit’s total heat input. The motions passed 4-to-1,

3) The three other PSC commissioners who also voted for tire burning in the wood burning plant. A PSC order finalizing the change was issued April 21. Recent votes by the Georgia Public Service Commission (P S C) have stretched the definition (of “biomass” fuel to include tires as biomass fuel), potentially allowing facilities to add scrap tires and even natural gas to the mix (with wood which) they burn to produce electricity. The quest to add tires to the list of approved fuels began when discussion turned to Georgia Power’s plan to source more electricity from biomass plants.

4) The biomass industry. During a recent PSC meeting, biomass industry representatives came to the podium one after the other with a similar request: To improve the reliability and profitability of their projects, the approval of an “alternative fuel” would be helpful. The alternative they suggested was scrap tires, known in the power industry as tire-derived fuel (TDF).

5) The federal Environmental Protection Agency (E P A). Federal EPA guidance suggests that recycling tires, when possible, is a cleaner option than burning their scraps for energy.

The federal Environmental Protection Agency (EPA) recognizes TDF as a viable alternative to fossil fuels or as a supplement to burning coal or wood. Tire remnants are already burned in at least one biomass-to-electricity plant run by a company called Green Power Solutions in Dublin, Georgia. Tires are also used as fuel in some industrial manufacturing facilities that require lots of heat, like cement kilns. The general manager of Green Power Solutions told commissioners that adding tire scraps to its fuel mix helps balance the inconsistent heat content in biomass materials. “You can have a more stable boiler and a more stable electrical product coming out of it,” he said.

6) The Georgia Environmental Protections Division (G E P D). The Green Solutions general manager declined to provide emissions data but said the (tire burning along with wood burning) plant complies with state standards. Any new biomass facilities seeking to burn TDF would need to first obtain permits from the Georgia Environmental Protection Division.

6) Georgia Power (G P). Even Georgia Power says it’s not on board with the change. “Although Georgia Power will follow whatever the Commission ultimately orders, Georgia Power does not support adding tire-derived fuel to its 2022 Integrated Resource Plan,” a Georgia Power spokesman said. That plan requires the company to add 140 megawatts of biomass to its electricity portfolio in the coming years. If the commission’s order stands, only projects that successfully bid to fill Georgia Power’s biomass needs could potentially burn tire scraps.

7) Residents near the plant. Residents near some wood pellet processing facilities in Georgia have [raised concerns about exposure to chemicals and other environmental impacts](#). Climate scientists have also warned that biomass [is more harmful to the environment](#) than advertised. Biomass is, however, generally considered, (as a result of Greenwashing, and the flawed argument of Carbon Neutrality of wood burning) a more climate-friendly energy source than fossil fuels like coal or natural gas.

8) Environmental activists. “You grew up your whole life being told not to burn tires,” said the executive director of Georgia Interfaith Power and Light (GIPL). “We work with faith groups all across the state doing river cleanups pulling tires out of rivers and waterways, and I don’t think that the people cleaning up those tires want them to be burned.” In late April, the Southern Environmental Law Center (SELC) and the Sierra Club sent a petition to the commission asking it to revoke its order. No lawsuit has been filed yet. They argued that the PSC failed to show that allowing electricity to be generated by burning tires was in the public interest. Environmental groups say the five-member elected utility regulator skirted its normal processes to push the change through without adequately considering potential pollution impacts.

9) Is there a need for burning tires for electricity instead of burning wood for electricity? Is there a shortage of wood because Georgia-grown wood is being sent to the United Kingdom and Europe for their biomass plants? Georgia is one of the country’s top producers of wood pellets and other organic material that is burned in biomass power plants, particularly overseas.

10) Is tire burning environmentally friendly?

10a) Those who say tire burning is not environmentally friendly. Burning biomass [contributes roughly the same amount of heat-trapping emissions as fossil fuel combustion](#). While some tire rubber is derived from plants, modern tires also contain synthetic rubbers made from fossil fuels. Burning tires is also [known to produce a host of potentially hazardous air pollutants](#). These people, including scientists say wood burning is not Carbon Neutral. Planting new trees in place of trees that are burned does not magically erase the CO2 and particulates of 2.5 micrometer size, PM2.5, that wood burning emits. Residents Against Wood Smoke Emission Particulates are concerned that PM2.5 is the perfect size to infiltrate the human lung and produces a cascade of human health problems and early deaths. CO2 and PM2.5 from wood burning also contributes to climate change. Wood burning produces more CO2 and PM2.5 than coal burning, and produces 450 times the PM2.5 than natural gas burning. And it can take decades or centuries for trees to grow enough to get to the size of trees that are cut down and burned, and in the meantime pollution from burning trees continues.

10b) Those who say tire burning is environmentally friendly. Those arguing that wood burning is environmentally friendly because wood burning is Carbon Neutral, and possibly arguing that tire burning is Carbon Neutral if some of the tire is made from plant material. The Carbon Neutral Theory, disputed by scientists but embraced by some politicians, argues that, as trees and plants that are burned grow back, the new trees can — in theory — pull the carbon dioxide that was released back out of the air, creating a sustainable loop that adds fewer greenhouse gases to the atmosphere.

[More Georgia biomass plants could soon burn a new fuel: Scrap tires - Atlanta Journal-Constitution](#)

Atlanta Journal-Constitution

When scientists think of a “biomass” fuel, organic materials like wood pellets, timber scraps or other plant matter that can be burned typically ...

More Georgia biomass plants could soon burn a new fuel: Scrap tires.

May 10, 2023.

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

Biomass power plants produce electricity through a crude process that involves burning organic material in boilers to produce steam. Biomass is more widely used for power in Europe than in the U.S., though Georgia Power’s long range energy plans approved by the PSC require the utility to purchase more electricity from biomass facilities in the years ahead.

Nevada

[Health District, University of Nevada, Reno form Air Quality Partnership - Washoe Life](#)

Washoe Life - Washoe County

... wood-burning devices, wood and metal sanding, painting and coating, ... incinerators, and emergency generators that burn oil or gas fuels.

Health District, University of Nevada, Reno form Air Quality Partnership

May 8, 2023

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

Reno, Sparks, Nev. – The Washoe County Health District, Air Quality Management Division (AQMD) and the Nevada Business Environmental Program (B E P) at the University of Nevada, Reno are pleased to announce a new partnership to provide air quality compliance and permitting assistance for the Washoe County business community.

The main benefits for businesses and residents of this partnership include:

Compliance assistance with air quality regulations

Air quality permitting and registrations.

Information on workshops & events

Other air quality related questions

The AQMD has several programs and services to the community, including ambient air monitoring, permitting and compliance, planning and public education, which includes the [Keep It Clean programs](#). Additionally, any business with a stack, dust collector, vent, or air emissions control unit – like a baghouse or thermal oxidizer – is likely to need a Washoe County air quality permit. Common activities that generate air pollutants include abrasive blasting, **wood-burning devices, wood** and metal sanding, painting and coating, solvent use, construction and demolition that generates dust or asbestos, boilers, furnaces, incinerators, and emergency generators that burn oil or gas fuels.

Whether it's a small construction company looking for information on dust control and permitting requirements or a large-scale manufacturing company starting up operations in Washoe County, BEP is available to help. All BEP services are provided confidentially and at no charge to the businesses seeking assistance.

BEP advisory services are available over-the-phone, through email and online meetings, and through on-site assistance visits.

Keep an eye out for a variety of new air quality regulatory and permitting workshops to be offered throughout 2023 on topics such as minor stationary source permitting, dust control, annual emissions reporting, and air quality requirements for gasoline dispensing facilities.

As any business considers a new location or installing a new process, contact BEP early to assess potential permitting requirements. To get in touch with BEP for your environmental regulatory compliance and permitting inquiries visit <https://unrbep.org>.

Europe

Denmark

Danish Wind Pioneer Keeps Battling Climate Change

Henrik Stiesdal helped design the first modern wind turbines. A thousand patents later, he's a green tech entrepreneur rolling out new innovations.

A wind turbine that Henrik Stiesdal helped design spins near his office in Give, Denmark.

May 3, 2023.

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

The contemporary wind power industry, which has spawned hundreds of thousands of spinning rotors generating electricity without putting greenhouse gases into the air, was to a great extent born in a notoriously windy region of Denmark called Jutland.

It was here almost 50 years ago, after the 1973 oil embargo cut energy supplies to much of the West, that inventors and machinists began comparing notes about ways to harness the wind that sweeps across this flat expanse separating the North Sea from the islands that form the rest of Denmark. And while countless people have played a role in refining the machines that stud coastlines, plains, and mountain ridges, perhaps no one has had more influence than a Jutlander named Henrik Stiesdal. As a young man of 21, he built a rudimentary machine to generate electricity for his parents' farm. He was later co-designer of an innovative three-bladed turbine that set the stage for what has become a multibillion-dollar global industry. His inventions have led to about a thousand patents, and Mr. Stiesdal is widely seen as a pioneer in this very Danish field.

Mr. Stiesdal's company, like many start-ups, is losing money, he said, but he hopes to break even by next year. He thinks he has a good chance of success because the technologies he is nurturing are suited to a small country like Denmark, which has just under six million people. The products are not especially high tech or labor intensive, he said, but depend on a hands-on approach and a well-educated work force produced by a widely accessible university system. "In many ways," he said, "they resemble what I did as a pioneer 45 years ago."

Africa

[Air pollution is a hidden pandemic in Africa - tips on how to reduce your exposure and help combat it](#)

The Conversation

... Solid waste management · Clean air · PM 2.5. 0 Comments. Comments are open on selected articles and must comply with our community standards.

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

[Air pollution](#) threatens human health, health systems and economic activity. It is the [second leading risk factor for death](#) across Africa, contributing to an estimated 1.1 million deaths on the continent in 2019.

The continent has an urban population of [over 500 million](#). This is projected to be over [700 million by 2026](#). In the face of such enormous numbers and a seemingly insurmountable problem, it can feel difficult for ordinary people to protect themselves or make a difference.

Read news coverage based on evidence, not tweets.

Get newsletter.

Air pollution's many threats

Our research highlights the fact that air pollution is a multifaceted and complex issue to tackle. Intervening can span different ministries such as transport, environment, and health. Acting on one sector can affect a different sector, so it is important to clarify the role and responsibilities of all actors.

Our findings point to the need for more policy interventions. These include policies that address changes in peoples' behaviour.

Based on our insights, we've come up with the following list of practical tips.

Practical tips to reduce exposure

These four suggestions will go some way to protecting your health.

Avoid exercising outdoors when pollution levels are high. If possible, exercise indoors during this time.

Avoid having children and other vulnerable groups such as elderly people with asthma) where there's cooking. This is particularly true if solid biomass fuels like firewood, charcoal, dung and crop residues and being used as fuel.

Ensure home cooking areas are properly ventilated, especially for homes using solid biomass fuels.

Avoid open trash burning.

Promote efforts to raise health literacy about how air pollution increases diseases such as asthma and stress.

Buy from businesses that follow air quality guidelines and aim for net zero targets

Get communities involved in local interventions to decrease air pollution.

Support the installation of sensors to collect air quality data and monitor the pollution levels.

Communicate daily air pollution forecasts to let people know when the air is unhealthy in the community. This can be through local radio and TV weather reports, newspapers and through community WhatsApp groups.

Introduce cleaner-burning fuels and improved stoves that burn solid fuels more efficiently.

China

[Review Emphasizes Need to Tackle Air Pollution - AZoCleantech.com](#)

AZoCleantech.com

Ambient fine particulate matter (PM_{2.5}), which consists of minute particles suspended in the air with a diameter of less than or equal to 2.5 μm, ...

Review Emphasizes Need to Tackle Air Pollution

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May 9, 2023.

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

Air pollution is a severe threat to public health worldwide. Ambient fine particulate matter (PM_{2.5}), which consists of minute particles suspended in the air with a diameter of less than or equal to 2.5 μm, is a major air pollutant connected to health hazards. The WHO recommends that yearly PM_{2.5} levels not exceed 5 μg/m³.

However, current PM_{2.5} levels in China substantially surpass this limit, accounting for nearly 1.4 million additional deaths due to PM_{2.5}. Even as the government attempts to reduce its PM_{2.5} footprint, it is beneficial to grasp the most recent developments in the epidemiology of PM_{2.5}-related disorders, particularly cardiopulmonary diseases.

Scientists from the Chinese Center for Disease Control and Prevention have recently reviewed the most recent epidemiological achievements related to the cardiopulmonary repercussions of PM_{2.5} in the Chinese population, thanks to extensive collaborative efforts. The review, published on February 5th, 2023, in the [Chinese Medical Journal](#), focuses on how PM_{2.5} influences morbidity, mortality, and risk factors for cardiovascular and respiratory disorders.

Li, T., et al. (2023). Ambient fine particulate matter and cardiopulmonary health risks in China. Chinese Medical Journal.

doi.org/10.1097/CM9.0000000000002218.

Source: <https://journals.lww.com/cmj/pages/default.aspx>

India

[Ujjwala, LPG Policy Confine Women to Dark Smoke Chambers | NewsClick](#)

NewsClick

In contrast, a higher proportion of urban households relied on LPG as cooking fuel. While 86% of urban households used LPG, only 7% relied on wood and ...

[Ujjwala, LPG Policy Confine Women to Dark Smoke Chambers](#)

RAWSEP View: This article critical of Modi, India's Prime Minister, says that PMUY is not working, and women are still relegated to cooking over wood stoves because the price of Liquid Petroleum Gas (LPG) skyrocketed when subsidies for LPG were discontinued. In May 2016, Ministry of Petroleum and Natural Gas (MOPNG), introduced the 'Pradhan Mantri Ujjwala Yojana' (PMUY) as a flagship scheme with an objective to make clean cooking fuel such as LPG available to the rural and deprived households which were otherwise using traditional cooking fuels such as **firewood**, coal, cow-dung cakes etc. **Usage of traditional cooking fuels had detrimental impacts on the health of rural women as well as on the environment.** The scheme was launched on 1st May 2016 in Ballia, Uttar Pradesh by Hon'ble Prime Minister of India, Shri. Narendra Modi. The target under the scheme was to release 8 Crore LPG Connections to the deprived households by March 2020. On 7th September 2019, Hon'ble Prime Minister of India handed over the 8th Crore LPG connection in Aurangabad, Maharashtra. The release of 8 Crore LPG connections under the scheme has also helped in increasing the LPG coverage from 62% on 1st May 2016 to 99.8% as on 1st April 2021. Ujjwala 2.0: Additional allocation of 1.6 Crore LPG Connections under PMUY Scheme with special facility to migrant households. The scheme was launched in Mahoba, Uttar Pradesh by Hon'ble Prime Minister of India, Shri. Narendra Modi. The article below concludes by saying "The objective of providing access to clean fuel and safeguarding women's health through PMUY **contradicts government policies that cause the price of LPG cylinders to shoot through the roof.** In effect, this deprives households of access to a clean cooking fuel. The pain of women that Modi claimed to help assuage with the help of PMUY has instead been aggravated by the withdrawal of the (LPG) subsidy (after a few years)." The National Statistical Office's (NSO) 2019 figures showed that households in rural areas and deprived communities **continue to have restricted access to LPG.** The NSO's Time Use Survey revealed that 47% of rural households are still dependent on wood and dung cakes, exposing women to smoke and harmful pollutants and resulting in severe and long-term health issues.

[Jmesh Yadav](#) | May 9, 2023

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

[Politics](#)

[India](#) The objective of providing access to clean fuel and safeguarding women's health through PMUY contradicts policies that cause the price of LPG cylinders to shoot up.

Prime Minister Narendra Modi [claimed](#) at the Pradhan Mantri Ujjwala Yojana (PMUY) launch in Uttar Pradesh's Ballia district on May 1, 2016: "The scheme will not only help reduce cost for each family but also lead to improvement in women's health."

Modi [said](#) that the experience of his mother cooking for him on a traditional stove (chulha) inspired him to alleviate the pain of women compelled to use traditional stoves. However, the scheme's performance and his government's policy contradict its objectives and the speech, which professed emotional connection and the desire to help poor women. This reality can be better understood from the government data rather than its narrative.

Government Data bely claims.

The National Statistical Office's (NSO) 2019 figures showed that households in rural areas and deprived communities [continue to have restricted access to LPG](#). The NSO's Time Use Survey revealed that 47% of rural households are still dependent on wood and dung cakes, exposing women to smoke and harmful pollutants and resulting in severe and long-term health issues.

Besides, gender norms burdening women with gathering fuel for traditional stoves prevent them from accessing education, jobs and timely medical care. In contrast, a higher proportion of urban households relied on LPG as cooking fuel. While 86% of urban households used LPG, only 7% relied on wood and dung cake.

In rural India, only one-third of Scheduled Tribe (ST) households and one-half of Scheduled Caste (SC) households used LPG as the primary cooking fuel. For Other Backward Classes (OBC) and "other" category (apart from STs, SCs and OBCs), the corresponding proportions stood at 55% and 59%, respectively. However, it was found that a comparatively higher proportion of SC and ST urban households were dependent on non-LPG cooking sources.

[The LPG cylinder price has now been left to the open market devices](#). Hence, with the subsidy pegged at a fixed amount and the market price of LPG cylinders soaring, the widening gap between market price and subsidy falls burdensomely on households consuming LPG. The impact of the increasing financial burden greatly limits the capacity of poor households to refill cylinders.

The objective of providing access to clean fuel and safeguarding women's health through PMUY contradicts government policies that cause the price of LPG cylinders to shoot through the roof. In effect, this deprives households of access to a clean cooking fuel. The pain of women that Modi claimed to help assuage with the help of PMUY has instead been aggravated by the withdrawal of the subsidy.

The Ujjwala (bright) scheme, combined with the government's policy on domestic LPG, has actually confined women to the dark smoke chambers of choolhas. Therefore, the PMUY's failure in achieving its objectives has added the scheme to the list of several other gimmicks that resulted in the opposite of what their names suggest.

PM2.5 and Health Effects (Wood smoke is 90% PM2.5)

[New Study Links Air Pollution To Dementia - Forbes](#)

Forbes

The pollutants cited in the study are fine particulate matter (PM 2.5) and nitrogen dioxide (NO2) "associated with accelerated age-related ...

[Unhealthy air and poor diet increase risk of preterm birth, study finds - News Medical](#)

News Medical

PM2.5 might be inversely associated with PTB when considered with total and saturated fats in the second trimester. Imprecise ICRs reflected a ...