

Episode 57Bj January 3 2024 Resolution. The economic case for Heat Pumps replacing wood burning.

In Episode 57Bj Resolutions to disseminate scientific facts, exercise efficiently, point out any unnecessary economic hardships imposed by politicians in 2025, and find out more about PurpleAir PM2.5 monitors and how they could be employed to stop indoor residential wood burning. United States. **RAWSEP View.** The main resolution and inner resolve of Residents Against Wood Smoke Emission Particulates in 2025 is stopping indoor residential wood burning. What happened in 2024 makes this resolution easier to attain. Heat Pumps that work down to 40 degrees below zero double as air conditioners and lower monthly electricity bills immediately are the clean and now attainable for all income groups alternative to indoor residential wood burning because of Heat Pump rebates of up to \$8000 based on a sliding income scale. Smart electrical grids that reach all rural areas in the United States are closer to being attained in the United States because of Inflation Reduction Act funds disbursement. That same government money is also going to researching better long term battery storage of the clean energy sources of wind solar and geothermal which in the best case scenario could replace industrial wood burning. More people are aware that the scientifically debunked theory of Carbon Neutrality of Wood Burning which has undergirded continuation of wood burning is false and promotes harmful emissions of PM2.5 and CO2 but at the same time allows the harmful CO2 and PM2.5 emissions to be uncouncted in each country's count of whether the country is meeting its Climate Goals. The move toward eventual ban of indoor residential wood burning in the United Kingdom and the move toward more daily wood burning bans in the western United States shows that at least those government entities recognize the need to stop indoor residential wood burning for the sake of human health although they are taking half measures at this time. If residences are built without fireplaces or without places for wood stoves as we go forward the general public will not be deprived and public health will be enhanced. If fireplaces and wood stoves used now for inefficient heating are replaced with Heat Pumps public health will be enhanced. Facing the reality that wood burning emits 2.8 times the CO2 and PM2.5 as the fossil fuel coal burning and the reality that wood burning emits 450 times the PM2.5 as the fossil fuel natural gas burning will allow the words fossil fuel burning and wood burning be mentioned in the same breath as air pollutants and allow the environmental movement to announce that both those types of unnecessary and highly polluting burning need to be ended for the sake of public health and for the sake of slowing climate change. The new way to look at unnecessary air pollution is that not only corporations need to stop burning fossil fuels but individuals need to stop burning wood. This knowledge that one incremental change away from wood burning can give individuals a sense of empowerment and give them a sense of solidarity with environmentalists and environmentalism that is seeking to improve and clean the collective air we all breathe. Looking ahead the barriers to achieving the goal of ending indoor residential wood burning are false solutions to the air pollution generated by indoor residential wood burning put forth by the wood burning industry. Burn wise is a foolish and false slogan as are other slogans that mimic those words. Just do not burn wood to begin with. Burning wood is not a physically addictive activity since wood does not contain nicotine as cigarettes do so no 12 step program is required to just stop burning wood. Indoor residential wood burning should be treated similarly to car speeding whether alcohol impaired or not through a residential neighborhood. The odds of hitting a pedestrian are higher when speeding through a residential neighborhood and that is why radar guns are employed to identify individual speeders and stop them and either fine them or eventually take away individual driving privileges. The idea is to prevent the harm of a car hitting a pedestrian hitting another car or even hitting a house. In the case of indoor residential wood burning a resident owned PurpleAir PM2.5 monitor hyper locally hanging from the eaves of a neighbor of an individual indoor residential wood burning can measure the concentration of PM2.5 in the air similarly to how a radar gun can measure the speed of an individual car. There are numerous scientific studies that show PM2.5 causes heart lung and other internal organ damage and those scientific studies also show heightened rates of early death from PM2.5.

air pollution Disseminating this scientific knowledge to the general public is also a RAWSEP New Years resolution

United States. New York Times [RAWSEP View](#) Do not imitate the following Resolution I made without checking with your physician first and possibly using a heart rate monitor during exercise but since most New Years resolutions are about exercise let helpfully me insert here excerpts about a 10 minute per week method new to me of getting quick health enhancing results I didn't know what a burpee was before but using my Yoga mat for quick HIIT movements was way better than listening to my breathing during slow Yoga in my humble opinion [Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates a 501c3 nonprofit organization](#) To make 10 minutes count you will have to work hard High intensity interval training workouts or HIIT which involve bursts of high intensity effort followed by short rest periods are almost unmatched in their efficiency HIIT increases blood volume and red blood cell count which can help boost energy while improving overall health and athletic performance If you're not sure how far to push use a heart rate monitor and keep yourself just under 100 percent of your maximum you can expect your muscles to burn and you shouldn't be able to talk by the end of each interval Overview Time 10 minutes Intensity High What you'll need Two dumbbells around five to 10 pounds for beginners If you're new to HIIT start with once a week You can mix them with walking or jogging More experienced athletes can do this work out two to three times per week or whenever you can fit in a 10 minute session Adjust for you For an easier workout try them without weights at first You can increase the weight as your fitness improves but make sure you can maintain the high intensity during every 30 second session Stop if you feel lightheaded or dizzy and avoid HIIT workouts if you have a cardiac condition Optional Warm up Before beginning do 20 seconds of each movement at a low intensity Move slowly to get your body used to the movement pattern If using weights during the workout do the warm up without any weights HIIT Rounds Sequence Complete this three movement sequence three times For each movement Do as many repetitions as you can in 30 seconds and count the number you do Try to increase that number in each subsequent round Burpees 30 seconds on; 30 seconds rest Make it easier Take a lunge step backward setting your knee on the ground Lower your body to the floor and then stand back up Thrusters 30 seconds on; 30 seconds rest Make it easier If you are nervous about squatting sit back into a chair and stand raising your arms overhead as you stand Goblet squats 30 seconds on; 60 seconds rest Make it easier Squat as low as feels comfortable sitting back into a chair if necessary Try to be out of breath about 15 seconds in then unable to talk by the end Most of us can afford to push the pace and often the barrier is emotional not physical When you think you are working at 100 percent of your maximum heart rate oftentimes you're closer to 70 Always be sure to maintain good form If you can't keep the correct form bending at the waist and rounding your back in the squats for example take a break for a few seconds During your rest periods take slow deep breaths and walk in little circles or march in place

January 3 2025 Substack Heather Cox Richardson [RAWSEP View](#) Economic hardship under a new Trump administration could make it harder for the average American to reap the benefits of clean home heating solutions which contribute incrementally to clean air for all Hopefully the general public will be able to note the reality that Trump is raising their prices which he made a fingers crossed promise not to do [Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates a 501c3 nonprofit organization](#) President Joe Biden awarded twenty Americans the Presidential Citizens Medal which is given to those who have performed exemplary deeds of service for their country or their fellow citizens Biden chose these particular individuals because he believes these Americans are bonded by their common decency and commitment to serving others and that the country is better because of their dedication and sacrifice recipients included the chair and vice chair of the House Select Committee to Investigate the January 6th Attack on the US Capitol informally known as the January 6th Committee Representative Bennie Thompson D MS and former representative Liz Cheney R WY Biden praised Thompson for defending the rule of law with unwavering integrity and a steadfast commitment to truth He praised Cheney for raising her voice and reaching across the aisle to defend our

Nation and the ideals we stand for Freedom Dignity And decency He added Her integrity and intrepidity remind us all what is possible if we work together While Biden focuses making progress together in a unified America Trump and Elon Musk are doubling down on dividing Americans On New Year's Eve Musk changed his avatar to one using symbols favored by the far right Some of his supporters saw the changes as a signal of supporting the right wing AfD party in Germany The abrupt Trump and Musk elevation of culture wars echoes the formula Republicans have used for the past forty years to distract from the reality that between 1981 and 2021 Republican embrace of supply side economics moved \$50 trillion from the bottom 90% to the top 1% Distracting voters kept the country focused on cultural issues rather than economic ones That focus may distract Republican voters from the reality that Trump has promised to swing the country away from Biden's investment in rebuilding the middle class Biden's focus on employment meant that unemployment dropped dramatically during his term more people got access to affordable health care labor unions showed historic growth and real wages went up so much that workers now have the highest real hourly wages since the 1960s Good news for workers was good news for everyone The country's economic growth was more than double that of any other country in the Group of 7 G7 economically advanced democracies But Trump has been very clear that he rejects this system and intends to take the country back to supply side economics in which the government encourages the concentration of wealth at the top of the economy Those who embrace this theory argue that wealthy investors will use their money more efficiently than they could under government regulation Musk the world's richest man has eclipsed Trump himself as the face of the incoming administration If Trump does not bring down prices as he promised and now has downplayed if he imposes tariffs that will force poorer and middle class Americans to pay for the tax cuts he has promised to the wealthy and corporations if Republicans cut Social Security Medicare and Medicaid to balance the budget; all while Musk continues to pull down billions of dollars in taxpayer money the rhetorical formula that worked for so long might finally break

United States [RAWSEP View and Key Excerpts](#). Tesla produces batteries to store wind solar and geothermal energy long term but that technology has not yet been perfected and that technology is being researched by companies other than Tesla. Hopefully those alternative companies will gain the majority of the market for batteries that support clean energy generation. [Key RAWSEP Excerpts from the article below](#). Tesla sells batteries used to store renewable energy at homes and businesses Sales of those products soared 60 percent from the third quarter and more than four times from a year earlier enough to store 11 gigawatt hours of energy Investors do not seem to be concerned that Musk's vocal support of Trump and right wing leaders in other countries has alienated potential Tesla buyers who tend to be people who lean left politically Trump has promised to dismantle federal programs that benefit Tesla including subsidies for battery manufacturing in the United States and a \$7500 tax credit for electric car buyers Analysts expect sales of Teslas and other electric models to spike in the coming months as buyers in the United States rush to take advantage of the incentives before they disappear Musk has said that removal of the incentives will hurt competitors more than it does Tesla [Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates a 501c3 nonprofit organization](#) A sales dip in 2024 was the first ever for Tesla which pioneered the electric car market in the United States Jan 2 2025 rivals in China Europe and the United States introduced dozens of competing electric models giving buyers more choice Tesla delivered 1789226 vehicles worldwide during the year a slight decline from 1808581 in 2023 Tesla shares were down 6 percent in afternoon trading on Thursday Tesla began selling the Model 3 sedan in 2017 arguably the first battery powered car with the price performance and range to attract large numbers of mainstream buyers Tesla still accounts for nearly half of all electric cars sold in the United States But carmakers like BYD in China General Motors Kia Hyundai Volkswagen and BMW have challenged Tesla's dominance often with models that have newer designs and lower prices Tesla sales declined even as overall sales of electric vehicles in the first 11 months of 2024 rose 2.5 percent Tesla has promised to begin selling a car in 2025 for as little as

\$25000 expanding the number of people who could afford an electric vehicle But the company has not displayed a prototype and Musk has provided few details about the product

Germany In Jab at Musk Scholz Condemns Foreign Interference in German Election **RAWSEP View**

Another RAWSEP New Years resolution is to approach each video as a chance to counteract right wing internet dissemination of false information which deprives the public of the knowledge it needs to make the right decisions to protect their health and public health from the air polluting emissions of indoor residential wood burning RAWSEP can learn from observing the right wing tactics of Musk and determine how best to counter that form of harmful and inane online interference in an election The equivalent of attacks on stopping indoor residential wood burning that the Burn Wise program employed instead of simply stopping indoor residential wood burning to the present attack on a German socialist led government which has supported clean energy more than any right wing government will seems to be the insertion into newspaper stories of the false crisis of inability of wind farms to collect energy during still wind days and inability of solar panels to collect energy at night This false crisis story is fed to newspapers by researchers employed by Drax the largest wood burning energy plant in the United Kingdom Drax researchers then label still winds and cloudy skies by a German moniker perhaps to weaken support for the present German government before the February German election In reality it is now easy and cheap to switch from indoor residential wood burning to Heat Pumps In reality if long term battery storage is used any lull in wind speed or in solar collection due to cloudy skies can be solved by banking wind and solar energy in long term storage batteries. In reality it is now easier to work toward clean energy that benefits public health and slows climate change under the present German government Living in a clean energy economy will save the average German money In reality Germany has experienced the economic effects of COVID a Putin shut off of natural gas access and various other factors that have nothing to do with the German government Changing from a government that like the Biden Administration in the United States seeks to work for all economic classes with emphasis on the lower and middle classes to a government that works for the rich in Germany will have negative economic repercussions that endorsements like Musk's distract from Distraction from economic issues to Musk himself and his unexplainable cultural neofascist support does nothing to lower prices for average Germans From the article headline Chancellor Olaf Scholz said Germany's election would not be decided by the owners of social media channels in the Scholz annual New Year's Eve address Where Germany goes from here will be decided by you the citizens **Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates a 501c3 nonprofit organization** Reporting from Berlin December 31 2024 The annual New Year's Eve speech by Germany's chancellor is traditionally heavy on national unity reflections on the past 12 months and calls for optimism While all those ingredients were present in this year's televised address by Chancellor Olaf Scholz he also included an oblique reference to a non German who has taken a strong some might say baffling interest in the country's politics Elon Musk Germany faces stalled economic growth with Scholz calling for solidarity while acknowledging that life had become more expensive for many Snap federal elections will be held on Feb 23 2025 As the German public prepares to go to the polls Musk a key adviser to Trump has spoken out on social media and in a newspaper opinion essay in favor of the far right Alternative for Germany party or AfD His support of the group which has neo Nazi ties and is under surveillance by domestic intelligence for being extremist has rattled lawmakers and prompted criticism from mainstream leaders across the political spectrum Scholz did not call out Musk by name but one carefully worded section seemed to be squarely aimed at him In our debates it won't be the person who yells loudest who will decide where Germany goes from here Rather that will be up to the vast majority of reasonable and decent people Polls suggest the conservative Christian Democratic Party is on track to win the election but the AfD is in second place with around 20 percent A government spokeswoman said Musk was trying to influence the German election which she called a German affair Musk's attempts to sway German voters have unified lawmakers from the center left and center right in condemnation Friedrich Merz who is the head of the right leaning Christian Democrats C D U and leading the polls called

Musk's endorsement overbearing and presumptuous I cannot remember a comparable case of interference in the election campaign of a friendly country in the history of Western democracies Lars Klingbeil a co chairman of Scholz's Social Democrats S P D went as far as to compare Musk with President Vladimir V Putin of Russia Both want to influence our elections and specifically support the anti democratic AfD They want Germany to be weakened and plunged into chaos Because political campaigns are largely financed by the German state donations play a much smaller role in Germany than they do in the United States By law it would be illegal for Musk as a non German or non European Union citizen to donate more than 1000 euros about \$1000 directly to the AfD

World. PurpleAir Blog [RAWSEP View](#) In 2025 make a resolution to find out what a resident owned PurpleAir PM2.5 monitor can do for you To RAWSEP the main reason to own a PurpleAir PM2.5 monitor is to collect evidence of air pollution from nearby indoor residential wood burning and use that evidence to shut down indoor residential wood burning one wood burning appliance at a time if necessary. Ways to use this PurpleAir PM2.5 evidence. Remember that the United States annual safe limit for PM2.5 is now 9 micrograms per cubic meter. Remember that the United States safe limit for PM2.5 in a 24 hour period is now 35 micrograms per cubic meter. Remember that the World Health Organization W H O safe limit for PM2.5 annually is now 5 micrograms per cubic meter. Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates a 501c3 nonprofit organization

What is an Air Quality Index AQI? December 26 2024 An Air Quality Index AQI is a scale that conveys the health impact of air quality This is what an AQI is designed to do It takes the micrograms per cubic meter and turns it into something meaningful If you look at the US EPA AQI for example which we'll talk more about below you'll see that it displays values from 0 to 301 and higher Logical breakpoints in the scale increments of 50 correspond with health recommendations If the US EPA AQI is at 37 for instance air quality is good But if it's at 137 the air is unhealthy AQIs allow you to process air quality data in a way that makes sense and assists you in making relevant decisions about your health The US EPA Air Quality Index AQI While there are a number of AQIs available on the PurpleAir map the default selection is the US EPA AQI This is an air quality index created by the United States Environmental Protection Agency and its goal similar to that of other AQIs is to convey health based air quality information to the public 1 to 50 Air quality is satisfactory and air pollution poses little or no risk 51 to 100 Air quality is acceptable However there may be a risk for some people particularly those who are unusually sensitive to air pollution 101 to 150 Members of sensitive groups may experience health effects The general public is less likely to be affected 151 to 200 Some members of the general public may experience health effects; members of sensitive groups may experience more serious health effects 201 to 300 Health alert The risk of health effects is increased for everyone 301 and higher Health warning of emergency conditions everyone is more likely to be affected The US EPA AQI uses a tiered and colored system to reflect the health effects of current air pollution The first tier is green for good air quality and the last tier is maroon for hazardous air quality This association with colors allows for a quick and easy understanding of air quality The US EPA AQI and PurpleAir As mentioned above the EPA AQI is the default selection on the PurpleAir map This means that as you navigate to the map and look at the sensors in your area you'll be looking at EPA AQI data The numbers correspond with the 0 to 300 scale and the colors do as well However it is important to note that the PurpleAir map as well as sensors with colored LEDs use a dynamic color system that gradually changes the color of a sensor as its AQI value increases or decreases This means that if your sensor is at 49 on the AQI it is going to be much more yellow than green Additionally while AQIs often take multiple pollutants into account PurpleAir sensors only measure particulate matter So when you look at AQI data on the PurpleAir map those numbers are being produced using only PM values Check out the PurpleAir map to view EPA AQI data from sensors near you and expand your knowledge of air quality!