

Episode 57DEF February 18 2025 Washington State Wood Burning Appliance emissions Rules stricter

In Episode 57DEF 1 World 2 United States Heat Pumps and Heat Pump Rebates 3 California 4 Colorado 5 Michigan 6 North Carolina 7 Oregon 8 Texas 9 Vermont 10B Washington State Legislative committee advances new standards on wood stoves wood burning devices like wood stoves and fireplaces so that the Washington State Department of Ecology would issue standards that match those of the EPA 10C Washington State wood burning stoves Still legal but with stricter emissions rules 11 Washington DC Heat Pumps and Heat Pump Rebates 12 Australia 13A United Kingdom Camden and wood burning crackdown It is Camden versus the wood burners! **RAWSEP View this new crackdown includes a crackdown on wood burning on Camden canal boats** From the article headline Camden New Journal Environment chief Councilor Adam Harrison CAMDEN has announced a crackdown on burning wood to improve the air quality in the borough Consultation over smoke zone 13B United Kingdom Drax wood burning power plant subsidies have been cut in half but extended to 2031 from 2027 Further subsidies to wood burning power plant deeply concerning 13C United Kingdom London Pizza oven caused fire at luxury London hotel **RAWSEP View This article does not mention that the PM2.5 air pollution emitted from operation of a wood burning pizzeria sicken the near neighbors on a regular basis** 14 Europe 15 Sweden 16 Laos 17 Thailand 18 PM2.5 and human health Main Content

1 World Heat Pumps Growth Trends in the Residential Air to Water Heat Pump Market 2025 2029 GlobeNewswire The residential air to water heat pump market is forecast to grow by \$949 billion during 2024 2029 accelerating at a CAGR of 69% during the

2A United States Heat Pumps C & C Heating & Air Conditioning says new heat pump technology helps homeowners save money Morningstar These advancements make heat pumps a viable option even in cold climates providing an energy efficient and eco friendly alternative to traditional United States Heat Pumps 5 Things to Know Before Getting a Heat Pump CNET In 2023 heat pumps outsold gas furnaces for the second year in a row Heat pumps do a better job than air conditioners and are more efficient than United States Heat Pumps The Heat Pump Water Heater Payback Contractor Magazine For contractors and consumers alike alleviating the potential financial burden from heat pump water heater initial costs is key How can rebates United States Heat Pumps Homeowners in this region can collect \$800 for a new water heater Yahoo rebate if you install a qualifying heat pump water heater The website lists prerequisites and requirements to qualify for the rebate For example United States Heat Pumps HVAC expert gives honest breakdown of hidden heat pump costs MSN Heat pumps work by moving hot and cold air around making them an effective all in one system versus having separate heating and cooling systems United States Heat Pumps It is Time to Stop Overcharging Heat Pump Customers Electrified Heating Rates Can Help RMI Implementing electric heat and heat pump rates that more accurately reflect customer costs can save customers money and encourage wider adoption United States Heat Pumps Work sport Subsidiary Terravis Energy Unveils Revolutionary Heat Pump Eliminating Morningstar heat pump system Heat pumps are an answer to inefficient and outdated heating sources The AetherLux product line has achieved a significant

2B United States Heat Pumps The Cool Down Homeowners can collect \$10000 from the government for this groundbreaking HVAC tech The Cool Down Rebate Program This fund covers up to \$14000 for low to moderate A heat pump can save you thousands of dollars in heating and cooling Homeowners in this

area can collect \$3150 to upgrade their inefficient water heaters The Cool Down Stacking with the federal rebate of up to \$2000 can give you as much as \$3150 toward a brand new heat pump water heater rebate one option is Concerned homeowner seeks advice after installing ultra efficient appliance to lower bills The Cool Down After qualifying for a \$10000 rebate for an electric heat pump installed with a 0% interest loan and a \$2500 federal tax credit the resident Homeowners in this region can collect \$800 for a new water heater The Cool Down Homeowners in Austin Texas can get an \$800 rebate if they upgrade to a heat pump water heater

3A California Palo Alto Help Build a Greener Community One Home at a Time City of Palo Alto Electric appliances like heat pump water heaters heat pump HVACs electric vehicles solar panels and induction stoves are more efficient than

3B California Sacramento and Riverside County Breaking Canyon wood Dr Wood Fire reported in Riverside County on Feb 17 2025 Wood Fire has been burning on private land Currently there is no information on the containment of the fire and the cause of it

4A Colorado Breckenridge Idiot Corner Summit County finds perfect window for wood pile and landfill burns YouTube 628 USFS on Burning Slash Piles in Breckenridge Colorado Summit County Television Summit County finds perfect window for wood pile and landfill burns in Colorado CBS News The Summit Fire and EMS Officer said that is especially true with burning things on our Colorado landscape

4B Colorado Kiowa County EarthTalk What is so bad about wood pellet biomass energy? KiowaCountyPressnet Kiowa County Press Many eco advocates question just how sustainable producing and burning wood pellets really is A recent report by Chatham House a London

5A Michigan Detroit We do not take breathing for granted Residents tell regulators to deny DTE Zug Island permit Planet Detroit PM 2.5 can lodge deep within the lungs PM 2.5 standard in 2023 All of them were above the new lower EPA standard

5B Michigan Grand Rapids Casco County SHAES rescues dog family after wood burner fills home with smoke FOX 17 A family found themselves pushed out of their home when the wood burner overheated says South Haven Area Emergency Services SHAES rescues dog family after wood burner fills home with smoke FOX 17 CASCO TOWNSHIP Mich A family found themselves pushed out of their home when the wood burning stove overheated in Casco Township

6 North Carolina Energy Saver NC rebate program could help WNC residents save thousands The Mountaineer The rebates will make it more affordable for households to install cost saving measures such as heat pumps electrical panels and insulation

7 Oregon Bend Smoke alarms alert homeowners to flue fire in Bend home Central Oregon Daily A couple in northwest Bend was alerted by smoke alarms to a fire in their wood stove flue allowing them to escape safely

8 Texas Heat Pumps Simple fixes could save you money and keep you warm HVAC specialist says FOX West Texas heat pump systems should change their A C settings to emergency heat Dooley compared it to pressing a recirculation button in a car A heat pump

9 Vermont Burlington Efficiency Vermont offers rebates on appliances heat pumps Burlington Free Press  
The savings come from bundling rebates for weatherization heating systems and other efficient  
appliances often based on heat pump technology

10A Washington State 14 Popular Backyard Features That Are Now Illegal MSN Outdoor wood boilers  
which are used to heat homes and water by burning wood were once considered an eco friendly heating  
solution **Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood  
Smoke Emission Particulates a 501c3 nonprofit organization** The New York Times February 18 2025 1  
Outdoor wood boilers which are used to heat homes and water by burning wood and are similar to wood-  
burning fire pits emit large amounts of smoke and particulate matter into the atmosphere according to  
the Environmental Protection Agency In densely populated areas and **RAWSEP interjects in any  
residential area and in any area** they can contribute significantly to pollution worsening the air quality in  
regions that are already struggling high pollution levels **and RAWSEP interjects in any region** In addition to  
their harmful environmental impact they emit smoke that can be trapped in low lying areas As cities and  
states work to improve air quality outdoor wood boilers have become a target for bans or restrictions  
People seeking an alternative to these boilers often turn to cleaner energy sources such as electric or  
propane-powered heating systems **or RAWSEP interjects Heat Pumps with in 2025 come with rebates of  
up to \$8000 based on a sliding income scale** 5 Wood-Burning Fire Pits Wood-burning fire pits have fallen  
out of favor in many areas due to concerns about air quality and pollution When wood burns it produces  
smoke that contains harmful particles **and RAWSEP interjects wood burning emissions are 90 percent  
PM2.5 particulate matter of 2.5 micron size the perfect size to infiltrate the human lung leading to a  
cascade of human health problems and early deaths** In some places it is now illegal to use wood-burning  
fire pits at all during certain times of the year The fine particulate matter released into the air can  
aggravate respiratory issues such as asthma and bronchitis 13 Unpermitted Outdoor Kitchens Many  
municipalities have cracked down on unauthorized outdoor kitchens requiring homeowners to apply for  
permits before building or face penalties

10B Washington State Legislative committee advances new standards on wood stoves wood burning  
devices like wood stoves and fireplaces so that the Washington State Department of Ecology would issue  
standards that match those of the EPA **RAWSEP Key Excerpt showing stances of Democrats versus  
Republicans on the bill Perhaps it will be harder economically for wood stove sellers but it is not more  
economical to burn wood rather than say operate a Heat Pump that in 2025 usually is offered with a Heat  
Pump Rebate of up to \$8000 based on a sliding income scale** Democratic supporters of the bill argue it  
will promote better air quality while Republican opponents are concerned it could make lives harder  
**Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke  
Emission Particulates a 501c3 nonprofit organization** February 14 2025 KXLY com FOX 13 Seattle WA The  
Brief Senate Bill 5174 aims to align Washington air quality standards for wood stoves with those  
published by the EPA The bill will only apply to new stoves being built not ones that are already in homes  
Voted on by the Senate Committee on Environment Energy & Technology Senate Bill 5174 would update  
the Washington air quality standards around wood burning devices like wood stoves and fireplaces  
Requested by the Department of Ecology the agency would issue standards that match those published  
by the US Environmental Protection Agency as it existed on January 1 2025 Prime sponsor State Senator  
Sharon Shewmake D-Bellingham said the standards would only apply to new wood burning devices and

existing devices would not have to be changed or removed **RAWSEP View is that this bill does not go far enough but it is a step forward for the State of Washington** Unfortunately the Democratic Washington State Senator said My intention was never to take away wood stoves and the bill would implement a voluntary program for manufacturers to certify their devices meet federal standards Federal Office of the Attorney General OIG is the Watchdog of the Environmental Protection Agency EPA The OIG found that EPA is approving deficient test reports lacks robust oversight fails to address known violations and allows non-compliant devices to be sold said Kathy Taylor with the Washington Department of Ecology These flaws in EPA oversight program puts families in Washington at risk of buying in reality is a stove that might harm their health or contribute to unhealthy air quality in their community The updated standards ultimately passed out of committee on a party-line vote They now move to the Senate Committee on Rules for their consideration of whether to bring the bill to a floor vote

10C Washington State wood burning stoves Still legal but with stricter emissions rules **Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates a 501c3 nonprofit organization** My Northwest com TVW Feb 14 2025 Washington State Democratic Representative Sharon Shewmake introduced legislation that would introduce regulations around wood-burning stoves

11 Washington DC Heat Pumps Thinking of buying a heat pump? Here is how you can save money The Washington Post The Trump administration has paused home energy rebates of up to \$14000 per qualifying household But the funding could be unfrozen soon

12 Australia Sydney Air pollution exceeds limits poses significant health concern for Pacific Island people study UNSW Sydney 2.5 and 10 microns PM2.5 and PM10 exceeded in both Fiji and the Solomon Islands over the course of the study The findings are based on four studies

13A United Kingdom Camden and wood burning crackdown It is Camden versus the wood burners! **RAWSEP View this new crackdown includes a crackdown on wood burning on Camden canal boats** From the article headline Camden New Journal Environment chief Councilor Adam Harrison CAMDEN has announced a crackdown on burning wood to improve the air quality in the borough Consultation over smoke zone **Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates a 501c3 nonprofit organization** February 11 2025 Environment chief Councilor Adam Harrison CAMDEN has announced a crack-down on burning wood to improve the air quality in the borough Burning wood and solid fuel emits harmful pollutants and PM2.5 particles that are bad for the environment and human health Air pollution is the most significant environmental risk to health in the UK It is responsible for 109 premature deaths in Camden every year Only a small number of households burn wood including with the use of luxury stoves but the impact is distributed across the borough and the London Camden environment chief Councilor Adam Harrison said Since 2000 Camden has been designated a smoke control area which prohibits the emitting of smoke from buildings Now it has proposed to extend the area to incorporate the whole borough including people living in canal boats on the waterways In a smoke control area you are only allowed to burn certain authorized fuels unless using an appliance exempted by the Department for Environment Food and Rural Affairs Defra and it is an offence to emit smoke from a chimney He added We want no one in the borough to experience poor health because of the air they breathe We were the first local authority to adopt the World Health

Organization air quality guidelines RAWSEP interjects of 5 micrograms per cubic meter of PM2.5 annually and have set an ambitious target of achieving these limits Camden borough-wide no later than 2034 The marketing of wood burning is as an eco-friendly appliance but all forms of solid fuel heating modern wood burning appliances produces air pollution that can damage our health Chimney smoke from canal boats makes up a small contribution to the overall emissions in Camden but represents a serious health risk for the boating community and for people living and working alongside the Regent Canal Objections and feedback on the proposal should be raised by Thursday 20 March Visit [consultationswearecamden.org/supporting-communities/smoke-control-order-2025](https://www.consultationswearecamden.org/supporting-communities/smoke-control-order-2025)

13B United Kingdom Drax wood burning power plant subsidies have been cut in half but extended to 2031 from 2027 Further subsidies to wood burning power plant deeply concerning Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates a 501c3 nonprofit organization MSN February 17 2025 Scaling back of payments to Drax in North Yorkshire has been welcomed by Environmentalists who have raised concerns over news that wood-burning power station Drax will continue to receive subsidies but welcomed a reduction in payments The Government has announced that from 2027 when the existing payments for the North Yorkshire biomass power plant are due to run out a new support scheme will come into effect until 2031 which reduces electricity generation halves subsidies from the UK government and imposes new sustainability requirements But one environmentalist added Given the net zero economy is the fastest growing sector in the UK cash would be better spent transitioning workers out of polluting jobs into the sustainable clean industries of the future Rick Parfett senior policy adviser on climate at World Wildlife Fund UK WWF-UK said The Government statement that this is not a long-term solution and it is deeply concerning to see taxpayer money continuing to flow to the single largest polluter in the UK when we know we can decarbonize the power sector without it He called for stiff penalties for non-compliance and regulators who are fully empowered to hold the company to account adding that the Government should focus on rolling out genuine renewables and insulating homes to cut carbon and bills Green Party co-leader Adrian Ramsay also called for funds to be redirected towards insulation saying Drax has benefitted from over £6 billion in subsidies since 2012 and neither taxpayers nor the environment can afford a penny more The money should be used to help fund a national scheme of home insulation But an analyst with energy think tank Ember said the announcement is good news for consumers and bad news for Drax The new subsidies end after four years are much lower than previous subsidies and with far more restrictions This is one way to reduce consumer bills in the long term it is important that the Government forges ahead with building a modern power system to bring down costs for households for good The senior deputy general secretary of the Prospect trade union responding to the Government announcement of changes to subsidy arrangements at Drax said the new agreement provides savings for consumer as well as security for the workers at Drax

13C United Kingdom London Pizza oven caused fire at luxury London hotel RAWSEP View This article does not mention that the PM2.5 air pollution emitted from operation of a wood burning pizzeria sicken the near neighbors on a regular basis Chiltern Firehouse Burning wood falling from a pizza oven and started the fire the London Fire Brigade says Chiltern Firehouse luxury hotel blaze caused by falling wood from pizza oven Fire broke out on Valentines Day partially destroying London venue that had been due to host Bafta party Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against

**Wood Smoke Emission Particulates a 501c3 nonprofit organization** BBC Feb 17 2025 A fire that tore through a luxury London hotel popular with celebrities was caused by wood falling from a pizza oven The Chiltern Firehouse which had been due to host a post-Bafta film awards party on Sunday evening was partially destroyed by the fire on Friday The Marylebone venue was formerly a fire station which was repurposed as a five-star hotel and restaurant which is a regular celebrity haunt Firefighters successfully contained the fire preventing it from spreading to neighboring properties About 100 people were evacuated The blaze which was tackled by about 125 firefighters using 20 fire engines

14 Europe Heat Pumps Will Never Be As Cheap As Gas Boilers Says CEO YouTube heat pump firm Aira The Government wants most homes to switch to heat pumps by 2050 but will not ban gas boilers until heat pumps are cheaper

15 Sweden The Conversation In Sweden heat pumps are an established technology used to heat homes outside of dense urban areas served by heat networks

16 Laos UNHEALTHY LEVEL OF AIR POLLUTION THREATENS LIVES IN LAOS Bernama PM 2.5 the fine particulate matter that causes smog is an air pollutant containing tiny particles with a diameter of less than 2.5 micrometres

17A Thailand Do not forget your face masks! 15 districts in Bangkok still have high PM 2.5 levels Nation Thailand Orange air quality level Potential health impacts General public Wear protective gear such as a PM 2.5 mask when going outside Limit strenuous 17B Thailand Suan Dusit Poll reveals public opinion on PM 2.5 dust problem Nation Thailand PM 2.5 is particulate matter that is less than 2.5 microns in diameter The sample consisted of 1255 people surveyed online and in the field 18 PM2.5 and Asthma Effect of PM2.5 exposure on susceptibility to allergic asthma in elderly rats treated with allergens Nature Fine particulate matter of 2.5 micron size PM2.5 is a prevalent atmospheric pollutant that is closely associated with asthma Elderly patients have a high PM2.5 and Brain Cells LLNL Studying Impact of Wildfire Smoke on Brain Cells Health independent news com wood smoke on brain endothelial cells which line the blood brain barrier The research team found that wood smoke exposure induces immune PM2.5 and cancer Ambient air pollution and the risk of cancer evidence from global cohort studies and ScienceDirectcom Our analysis revealed that the presence of particulate matter PM2.5 PM10 NO2 and NOx substantially impacted the risk of developing cancer MR PM2.5 and cognition Air pollution harms cognition just hours after exposure study finds News Medical The direct model hypothesizes that nasally inhaled air pollutants like PM2.5 may directly affect cognition by translocating along olfactory neurons to PM2.5 and firefighters City council considers ordinance to help keep firefighters safe MSN Fire Captain Vet Why Every Kitchen Needs This Blanket 9 Types of Wood You Should not Burn The Family Handyman PM2.5 and Human Biomarkers Human Biomarkers of Exposure to Forest Fire Emissions Identifying and Utilizing Biomass ACS Publications American Chemical Society Methoxyphenols have been studied as potential urinary biomarkers of wood smoke and bushfire exposure PM2.5 and risk Nearly everyone breathes bad air This is what you can do to lower your risk ABC News The Walt Disney Company The tiniest of these known as PM 2.5 because they are less than 2.5 microns in diameter can infiltrate the human lung NY1 Fine inhalable particles known as particulate matter are among the most dangerous