

Episode 56XG August 23 2024. Canada maps tracking wildfires. Batteries for Electric Vehicles improve.

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for much higher energy density faster charging times and a reduction of fire risk. Other battery makers such as Blue Solutions of France Factorial Energy of Massachusetts and Solid Power of Colorado among others are working on their own solid state systems with timelines that would have their products on the market by about 2030. Nissan is working on solid state batteries for a public rollout by 2029. Tesla is a special case saying little about plans to develop such batteries. Battery startups need to publicize their progress to be able to raise money from investors and attract industry partners. Is there a need for solid state batteries when semisolid could be good enough? There are many ways to improve on current battery technologies without making the leap to a solid state design. From a consumer's point of view the important things are the vehicle's range charging time reliability and price. Expect to see high end models by 2027 and 2028 with about double today's typical ranges. By about 2030 the long ranges will be available on cars which the average consumer is more likely to drive. When a typical EV has more range than a typical gasoline model has on a tank of gas and when an EV costs about the same or less than its gasoline equivalent that may be the beginning of the end for the gasoline powered internal combustion engine. 2B United States. E & E News and The Inside Climate News Newsletter. How the Presidential Election May Affect FERC's Grid Policy Donald Trump if elected president could name a chair of the Federal Energy Regulatory Commission who may undermine this year's landmark rule to streamline planning of interstate power lines. RAWSEP View The Federal Energy Regulatory Commission is an independent agency of the United States government that regulates the interstate transmission and wholesale sale of electricity and natural gas and regulates the prices of interstate transport of petroleum by pipeline. Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates a 501c3 nonprofit organization. But a Trump appointee is unlikely to have enough support from other FERC members to overhaul the streamlining rule right away. If Harris is elected the commission would likely continue on its current path of maximizing its authority to encourage interstate power lines which is essential for delivering electricity from renewable energy plants. 2C United States. The Inside Climate News Newsletter. Harris Stirs Hope for a New Chapter in Climate Action. Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates a 501c3 nonprofit organization. Kamala Harris if elected president would likely follow through on the promise of the Inflation Reduction Act and continue the Biden administration's rapid progress on addressing climate change and encouraging development of renewable energy. This is close to the opposite of what to expect under a second Donald Trump term. 3 Georgia. The Inside Climate News Newsletter. Georgia Voters Could Make or Break Their State's Clean Energy Jobs Boom. Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates a 501c3 nonprofit organization. Georgia has been a bipartisan success story by attracting jobs in renewable energy and electric vehicles under the leadership of President Joe Biden and Georgia Governor Brian Kemp. But this progress is at risk in the presidential election as Donald Trump has said he would like to repeal aspects of the Inflation Reduction Act which is a key part of the manufacturing boom in Georgia and other states. Georgia voters will play an outsize role in deciding what happens because of the likelihood that the winner of the Georgia's electoral votes will win the presidency. 4 Hawaii. The New York Times. She Survived the Maui Wildfires. She Couldn't Survive the Year After. A Hawaiian woman was working as a janitor when wildfires destroyed everything she had. RAWSEP View Perhaps the wood smoke emission problem can be combined with a housing problem. If housing after fires or housing in general were provided to survivors of fires or if housing combined with

clean energy for heating homes to indigent former wood burners then in aggregate the air would be cleaner for near neighbors in whatever neighborhood survivors of fires and or former indoor residential wood burners land in. That would be win/win for both near neighbors of former indoor residential wood burners and for former indoor residential wood burners. Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates a 501c3 nonprofit organization. August 21 2024. On August 8 2023 A Hawaiian woman hid in a storage room surrounded by mops buckets and brooms. The woman did not leave for two days. When she finally emerged starving and disoriented the neighborhood where she lived was gone. The woman 69 wandered the charred streets for a few hours before encountering a police officer who took her to a hotel that had been turned into a shelter. Eventually she would move into a beachfront hotel along with more than 1,000 of Maui's 8,000 displaced survivors. One year ago the deadliest wildfire in the United States in over a century turned Lahaina on Maui into a town of ash and ghosts. Buses still did not run in September. Streetlights did not shine. Stores left standing were shuttered. Employees and customers did not populate the Lahaina Gateway. But the woman still showed up to her janitorial job every day unsure of where she would eventually live. Each year millions of people in the United States are displaced from their homes because of fires hurricanes and other weather related disasters and then find themselves struggling to rebuild their lives as this Hawaiian woman did. After she was rehoused at a hotel the woman had told her daughter that she lived in a hotel with her own room bed and balcony view. But most fire evacuees had been notified that they would be moved out of the hotels by the summer and waves of survivors had been told to check out. Lahaina had a severe housing shortage and some survivors relocated to far off neighborhoods. To catch a bus she had to cross a Highway and cut across a parking lot where a bus driver picked up passengers. The woman was hit by the bus. The woman died three days before her 70th birthday. 5 Illinois Chicago and Washington State. The New York Times. The vice president at a rally in Milwaukee on Wednesday. Harris goes light on climate policy. Green leaders are OK with that. Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates a 501c3 nonprofit organization. In the 2020 presidential election climate activists demanded that Democratic candidates explain in detail how they planned to tackle the planet's greatest environmental threat. But in the weeks since Vice President Kamala Harris ascended the Democratic ticket she has mentioned climate change only in passing. I am not concerned said Governor Jay Inslee of Washington a Democrat who made climate change the centerpiece of his own 2019 bid for the presidency. Mr. Inslee said he believed it was more important for Ms. Harris to draw a distinction between her and her Republican rival former President Donald J. Trump than to drill down on policy nitty gritty. I am totally confident that when she is in a position to effect positive change she will Governor Inslee said. 6 Maine. Floating Wind Turbines. The Inside Climate News Newsletter. Biden Administration Issues First Floating Wind Research Lease to the State of Maine. Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates a 501c3 nonprofit organization. The Department of the Interior has issued a lease to the state of Maine to do research on floating wind turbines and install 12 turbines in waters off its coast. Construction would not begin for several years allowing time to understand how to handle engineering of floating turbines that are held in place by cables as opposed to turbines on fixed foundations. Floating wind turbines are not a new technology but they have yet to be deployed in the United States. 7A Michigan and Tennessee. Prioritizing electric commercial vehicles. The Inside Climate News Newsletter. Ford Delays New EV Plant and Cancels Electric Three Row SUV Excerpts edited by

RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates a 501c3 nonprofit organization. Ford is recalibrating its EV strategy delaying the start of production at a new Tennessee plant and ceasing plans for an electric three row SUV. The company had previously planned to start vehicle production at the plant next year but now will just be making battery cells there with vehicle production to begin later. Ford said it is prioritizing development of gas electric hybrid models and electric commercial vehicles. 7B Michigan. Firefighters still battling large Detroit mulch fire The Detroit News Officials report a particulate matter PM2.5 of 97 bordering close to the 100 to 150 range for air qualities considered unhealthy for sensitive Mulch fire in Detroit sends smoke and air quality concerns into nearby Windsor Canada. CTV News Windsor It was just like burning wood like a campfire. A woman who was interviewed said I could smell it from my back porch. I thought somebody was having a The 5 worst Michigan counties for air quality Planet Detroit Number of air quality alert days in 2023 12 days for PM 2.5 Asthma rate in 2021 to 2022 Unknown. 8 New York Utica and Rome. PM2.5 and new construction. **RAWSEP View** This new infrastructure build is needlessly polluting with wood smoke. From the article. **Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates a 501c3 nonprofit organization.** Oneida Indian Nation breaks ground on \$50 million expansion at Madison County casino Rome Sentinel woodburning fireplace The expansion will also double the size of the Fireside Lounge while adding a 360degree view of the woodburning fireplace. 9 Washington Hoquiam. Environmental Groups Ask State Board To Suspend Permit for Industrial Wood Pellet Facility. Earthjustice. **Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates a 501c3 nonprofit organization.** A wood pellet plant would release fine particulate matter wood dust volatile organic compounds and other hazardous air pollutants. Five Northwest and national environmental groups have asked the Washington Pollution Control Hearings Board to suspend an air permit for an industrial scale wood pellet plant in. The groups argue that construction and operation of the facility should be put on hold until the legal challenge is resolved. Residents are concerned Grays Harbor plant could cause environmental and human health harm before state hearings board rules on legality of its air permit. Contacts Earthjustice, (907) 277-2555, emanning@earthjustice.org NRDC, (310) 434-2391, awingate@nrdc.org Legal document Olympia Washington. The Olympic Region Clean Air Agency issued the air permit to Pacific Northwest Renewable Energy (PNWRE) in May, allowing the company to construct the first industrial-scale wood pellet plant in the region. PNWRE plans to produce more than 440,000 tons of wood pellets annually and operate the facility around the clock. The pellet plant would sit adjacent to Grays Harbor National Refuge and just over a mile from Hoquiam schools. The errors in the PNWRE air permit mean that it seriously underestimates hazardous air pollution said an Earthjustice senior attorney. Friends of Grays Harbor, Grays Harbor Audubon, Twin Harbors Waterkeeper, NRDC (Natural Resources Defense Council), and Wild Orca, represented by Earthjustice, challenged the air permit. The groups assert that the permit grossly underestimated the amount of harmful pollutants that the proposed wood pellet plant would release, including fine particulate matter wood dust. This pollution can cause respiratory health issues like asthma. Just this week, the National Institute of Environmental Health Sciences funded a new study to assess how wood pellet plants similar to the one proposed by PNWRE have impacted air pollution for Mississippi communities said a representative of the Natural Resources Defense Council (NRDC). We expect this major new study will offer regulators exactly the information they need to make the informed decision to reject PNWRE's proposal and protect Washington's communities and environment. 11

American Samoa. New York Times. Climate workers wanted. Rising seas and worsening storms fueled by climate change had brought new problems to American Samoa. **RAWSEP View** this article is about climate workers who are needed to fix various environmental issues after the fact of climate harm. Hopefully if wood burning is stopped the preventable pollution caused by unnecessary wood burning will be prevented in the first place and wood burning will not further contribute to hastening this type of climate change necessitating a fix. **Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates a 501c3 nonprofit organization.** Saltwater was seeping into the islands' fresh water supply shutting down schools and leading to boil water notices. In December the issue caused a nearby hospital to close all nonessential services for nearly a week. American Samoa didn't have enough workers to fix its water issues. But this summer the American Samoa Power Authority became one of nine entities across the country to receive funding under a \$60 million federal program intended to help train workers to combat the growing challenges of climate change. Electricians may need to learn to install solar panels construction workers may need to deal with new engineering requirements and bankers may need to manage climate risk. NOAA's work force program isn't the only funding for jobs included in the I.R.A. Hundreds of millions of dollars are also available to hire employees in the National Park Service and workers to expedite clean energy projects in rural America as well as to train a new generation of Indigenous workers through the Indian Youth Service Corps. Last year the Biden administration also launched the American Climate Corps to put 20,000 young Americans into jobs addressing global warming. There are more than a dozen large projects being funded and studied by the Army Corps of Engineers to elevate and floodproof thousands of structures across American Samoa. All nine NOAA recipients are still waiting on the arrival of grant funding which they hope will arrive by the end of September. 12 Canada Saskatchewan Regina. New York Times. This RAWSEP editor holds Regina Saskatchewan dear to her heart. **Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates a 501c3 nonprofit organization.** Maps Tracking Air Quality and Smoke From Wildfires Updated August 23 2024. Smoke forecast 7 a.m. Friday Source National Oceanic and Atmospheric Administration Notes Data is as of 3 a.m. Eastern on August 23. Forecast is based on models and may underestimate smoke because of cloud cover or other obstructions. Contours show estimates of wildfire smoke near the surface. Smoke and haze lingers over sections of North America as polluted air spreads from wildfires. This is the current status of air quality across the United States and Canada. (Here's a guide to understanding air quality readings. Source AirNow Note Data is as of 3 a.m. Eastern on August 23 2024 Cities Air quality A.Q.I. Regina Saskatchewan Unhealthy 178 El Paso Unhealthy 177 Edmonton Alberta Unhealthy for some 147 Dallas Moderate 74 Arlington Texas Moderate 74 Plano Texas Moderate 74 Irving Texas Moderate 74 Garland Texas Moderate 74 New Orleans Moderate 73 Long Beach Calif. Moderate 67 Source AirNow · Data is as of 3 a.m. Eastern on August 23 2024 Smoke and particulate matter can travel miles from their origin. Much of the smoke that has plagued the Northeastern United States this summer can be traced back to fires burning in Canada; fires in the Pacific Northwest and Alberta have helped push haze into the Midwest Where wildfires are burning Recent burning Previously burned Source NASA Notes Data is as of 338 a.m. Eastern on August 23. Areas marked in red indicate where active burning was detected within 24 hours of the most recent fires reflected on the map. Exact fire boundaries may differ from the map by 500 meters or more. Correction July 24 2024 An earlier version of a chart with this article misstated the Canadian province for the city of Regina. It is Saskatchewan not Saskatoon. 13 United Kingdom. Pregnant

people and fetuses not being protected from wildfire risks report The Guardian particulate matter that can penetrate lungs and even get into the bloodstream. Growing research shows that exposure to PM 2.5 from wildfire smoke 14 India Mumbai. Survey finds nearly half of Mumbai's bakeries using wood; pitches for cleaner fuels Hindustan Times Burning scrap wood releases harmful volatile organic compounds and particulate matter into the air which leads to asthma and other diseases BEAG has said India News Business Standard This practice releases harmful particulate matter (PM2.5) into the air which leads to asthma and other diseases ptinews.com wood as fuel in Mumbai's bakeries warning. The environmental impact is staggering with an estimated 80,381 kg of PM 2.5 emitted annually from just 72 of the surveyed bakeries. 15A PM2.5 and asthma. Short term Wildfire Pollution Promotes Asthma Hospitalizations Medscape In part this provided a chance to measure an increase of fine particulate matter (PM2.5) air pollution from wildfires and also to track what 15B PM2.5 and diabetes. Study links fine particulate matter exposure to increased risk of gestational diabetes News Medical PM2.5 comprises various substances such black carbon (BC) with varying toxicity associated 15C PM2.5 and lupus. Genetics long term air pollutant exposure combine to increase lupus risk Healio The study employed a land use regression model to estimate concentrations of air pollutants including PM2.5