Episode 56MQ December 7, 2023. NEJAC and WHEJAC public comment synopsis. United States IRA spurs world action.

RAWSEP View: The main argument of Residents Against Wood Smoke Emission Particulates is that PM2.5 emissions from indoor residential wood burning enter the yards and infiltrate the homes of near neighbors, sickening the near neighbors. The rest of society benefits from near neighbors sounding the alarm and working to shut down indoor residential wood burning, because each wood burning device, even in a residential home contributes to the total PM2.5 pollution in the air, affecting the health and lives of the entire United States, and the world, and not just affecting health but hastening climate change. Burnwise, mouthpiece of the indoor residential wood stove industry, on United States government websites, supporting indoor residential wood burning if only done in a certain way (this parsing of wood burning, to burn only dry wood, et cetera, is not monitorable, not calculable as to the benefit and any benefit is so minimal to be useless as advice to wood burners). The advice that is scientific is don't burn wood to begin with. There are clean alternatives for home heating, especially in 2023, when Heat Pumps are somewhat subsidized, and especially in 2024 when Heat Pump rebates will be offered by the United States government for up to $8,000, based on a sliding scale. RAWSEP is also writing a grant with the help of Expert Match at the United States Department of Energy (DOE) to offer a RAWSEP rebate for the bulk of the remainder of cost for changing from an indoor residential wood stove to a Heat Pump, based, as the Federal rebate is, on a sliding income scale, although the sliding scale may be different, possibly reaching to more moderate incomes. The main argument for indoor residential wood burning seems to be economic, so being offered rebates for change to clean energy for home heating may be the only incentive current indoor residential wood burners need to change to cleaner methods of home heating. The second aim of the RAWSEP grant is to be able to hand out free PurpleAir PM2.5 monitors to any near neighbor of an indoor residential wood burner whose PM2.5 wood burning emissions enter the yard and infiltrate the home of the near neighbor, sickening them, or requiring the near neighbor to stay inside the near neighbor's sealed home running multiple air purifiers to avoid sickness and early death. With Coast to Coast, RAWSEP videos show that calculating the percentage of PM2.5 in the yards of near neighbors greatly exceeds the Environmental Protection Agency's own National Ambient Air Quality Standards (NAAQS) for 12 micrograms per cubic meter, 25 micrograms per cubic meter and 35 micrograms per cubic meter for excessive periods of time in a three day period. That calculation of percent above NAAQS in a three day period should be used as evidence for probably local Health Departments to shut polluting and harmful indoor residential wood stoves down, stove by stove if necessary. Currently, if a wood stove is certified "safe" by the EPA, the pollution is discounted and ignored and not allowed as evidence to shut down polluting wood stove use. The United States government should use this method of calculating percent in a three day period, following the Coast to Coast Excel data sheet calculation example, correlating PurpleAir PM2.5 data to Regulatory EPA PM2.5 data standard using the simple mathematical formula PA (PurpleAir) times 0 514 plus 1 8304 This formula is already used to place PurpleAir PM2.5 data side by side with EPA regulatory PM2.5 data on U S EPA AirNow Maps of Smoke and Fire. PurpleAir PM2.5 monitors are also located hyper-locally in the yards of near neighbors, close enough to detect and identify the source of PM2.5 pollution, indoor residential wood burners in a residential neighborhood. EPA regulatory monitors do not need to be used, and according to a NEJAC government speaker on Tuesday 12/5/2023, using $100,000 monitors are overkill for this simple monitoring with clear results that are easy to understand. This RAWSEP Coast to Coast example could be used instead of continuing to certify inevitably polluting wood stoves as safe. The Office of the Inspector General (O I G) in a February 2023 report stated that the wood stove certification is "failed" because of the lobbying of the indoor residential wood stove industry, resulting in giant loopholes within even the lax New Source Performance Standards (NSPS) wood stove emission data modeling for each model of an indoor residential wood stove, by the EPA. Use real time real world air pollution monitoring instead of data modeling. 10 United States Attorney Generals are suing the EPA to even comply with a 2023 rules for updating standards, which the EPA says they cannot comply with updating until the earliest in 2027. RAWSEP's editor attended on Tuesday 12/5/2023 a NEJAC public comment meeting and Wednesday12/6/2023 a WHEJAC public comment meeting. NEJAC was given on 11/18/2023 8.8 million dollars by the Biden Administration to study monitoring emissions from wood burning appliances. RAWSEP's editor was able to make a three minute public comment to NEJAC on Tuesday, and asked a NEJAC member how the 8.8 million dollars would be spent. The comment RAWSEP's editor made was essentially the same as RAWSEP Episode 56MO. RAWSEP's editor on Wednesday at the WHEJAC meeting was able to hear from many other commenters on other environmental toxins harmful to residential communities across the United States. WHEJAC Speaker number 19, Jane Williams of California Communities against Toxics, did make a brief remark in support of lowering PM2.5 limits. RAWSEP's editor was placed number 54 of 54 on a list of public speakers for WHEJAC on Wednesday and only 26 commenters were called on to speak at the meeting. 13 speakers, or half the speakers given time to speak, spoke about Ethylene Oxide. Ethylene oxide

(EtO) is produced in large volumes and is primarily used **as an intermediate in the production of several industrial chemicals**. PM2.5 is also a toxic chemical, and one that enters the human body easily. PM2.5 from indoor residential wood burning has been shown in numerous recent scientific and medical studies to cause many types of cancer and cause heart attacks and stroke, among many other illnesses. There seems to be a need to repeat again that wood burning emits more CO2 and PM2.5 than coal burning. Wood burning emits 450 times the PM2.5 than Natural Gas burning. PM2.5 is particulate matter of 2.5 micrometer size, the perfect size to infiltrate the human lung, setting off a cascade of human health problems and early deaths. RAWSEP's editor will submit written comments to NEJAC and WHEJAC about indoor residential wood burning PM2.5 emissions that are harmful to health and the environment and also upload examples from Coast to Coast as a way to provide an avenue for near neighbors to obtain relief from proximity to such pollution. United States. The New York Times. December 7, 2023. U.S. Spending on Clean Energy and Tech Spurs Allies to Compete. Other governments, are trying to counter the Biden administration's industrial policies with their own incentives. https://www.nytimes.com/2023/12/07/business/economy/clean-energy-us-europe.html Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates, a 501c3 nonprofit organization. The United States is dangling tax breaks, grants, and other financial incentives to attract new factories making solar panels, semiconductors, and electric vehicles. That spending is pushing governments from Europe to East Asia to try to keep up in the global subsidy race. Companies that make batteries, hydrogen, and semiconductors "country shop," to find the most welcoming home for their technologies. **A European company with factories in Norway and Georgia.** Freyr Battery, a company founded in Europe that develops lithium ion batteries for cars, ships, and storage systems, was partway through building a factory in Norway when its executives learned that the Inflation Reduction Act was under development. In response to the law, the company shifted production to a factory in Georgia. "we've shifted our focus," (said) Freyr's chief executive officer. "The scaling will happen in the United States, and that's because of the Inflation Reduction Act." (Freyr) was keeping the Norwegian factory ready for a "hot start," meaning that production could scale up there if local policies become friendlier. The company is talking about how they can compete with the United States. **Canada** is included in the clean energy law's benefits and has mining operations that the United States lacks. the chief executive at Brunswick Exploration in Montreal, said Canada's lithium industry stood to benefit as battery manufacturing moved to the United States and companies looked for Canadian sources of lithium. **In Europe,** the competition seems more zero-sum. America's clean energy bill was the most influential legislation introduced by any country and other governments were not able to replicate "the sheer scale" of it. "Other countries can't match that fiscal firepower. Obviously, that's a threat to the E.U. or other countries." The United States has new trade agreements allowing foreign partners to share in some of the clean energy law's benefits. **The European Union.** Ursula von der Leyen, president of the European Commission, presented the European Union's Green Deal Industrial Plan in Brussels in February after the United States enacted the Inflation Reduction Act. In addition to the Green Deal Industrial Plan, the bloc has approved a significant green stimulus program as part of an earlier pandemic recovery fund, and additional spending for green industries in its latest budget. Business leaders and analysts said the frustration in the European Union stemmed partly from the conflict with Russia. The combination of higher energy prices and tougher competition from the United States and China has pushed down foreign direct investment in Europe and sparked other fears. the president of BusinessEurope, said the companies his group represented had "a very strong reaction" to the Inflation Reduction Act. "We fully support the underlying direction with the green transition, but it came at a sensitive moment," he said. Europe also proposed a "chips act" last year, though its size is significantly smaller than the American program's. **The United Kingdom.** The competition has also given rise to anxieties in smaller economies, like Britain, about the ability to keep up. "The U.K. is never going to compete on money and scale at the same level as the U.S., E.U. and China because we are firstly under fiscal constraints but also just the size of the economy," British officials have made it clear that they don't intend to offer a vast array of subsidies, like the United States, and are instead relying on a more free-market approach with some case-by-case interventions. **Japan.** A minerals agreement signed with Japan in March will allow Japanese facilities to supply minerals for electric vehicles receiving U.S. tax credits. American officials have been negotiating with Europe for a similar agreement since last year. Biden administration officials (said) that the Inflation Reduction Act does not signal a turn toward American protectionism and that climate spending is badly needed. Even with such significant investments, the United States is likely to fall short of international goals for curbing global warming. John Podesta in a conversation said the U.S. spending had ultimately spurred action from other partners, including a green industrial policy that Europe introduced early this year. **Japan, South Korea and Taiwan.** Japan and South Korea have proposed their own plans to subsidize green industries. In the technology industry, South Korea and Taiwan both approved measures in 2023 offering more tax breaks to semiconductor companies, and Japan has been setting aside new subsidies for major chipmakers like

TSMC and Micron. Japan. TSMC is building a $7 billion plant in Kikuyo, Japan. Japan has been setting aside new subsidies for major chipmakers like TSMC and Micron. **China** has been pumping money into manufacturing semiconductors, solar panels, and electric vehicles to defend its share of the global market and prop up its weakening economy. The Biden administration says the United States investments deal with climate change and make the United States less dependent on risky Chinese supply chains.



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Canada's lithium industry stands to benefit as battery manufacturing moves to the United States and companies look for nearby sources of raw material.