

Episode 16 July 30th, Twenty twenty two.

1 The U.S. Midwest.

Mary.

Mary submitted a question to a discussion of the Climate Bill being negotiated in the U.S. Senate. Particulate pollution from residential wood burning, and particulate pollution from industrial biomass (wood) burning is 90% PM 2.5, the particulate of 2.5 micron size, the perfect size to infiltrate the human lung and cause a cascade of human health problems. Wood burning produces thousands of times more particulates than natural gas burning, and it is a little-known fact that wood burning produces more particulates than coal burning. This bill would increase the percentage of energy generated in the U.S. by wind, and solar for both industrial use and for residential heating and increase the number of homes that have heat pumps and better insulation, reducing the need for traditional home heating appliances which are polluting. These improvements will only bring into higher relief the pollution of any continuing industrial biomass (wood) burning and any continuing residential wood burning. Are subsidies for the biomass (wood) burning industry going to be halted, as the European Union took steps toward doing in May 2022? Will the EPA lowering its standard for PM 2.5 from 12 to 8 to get closer to the WHO standard of 5 micrograms per meter cubed be reinforced by elimination of residential wood burning because of its documented high levels of PM 2.5 pollution?

2 The U.S. Northeast.

Noel.

Noel noted that the Public Health Air Quality Act of 2022, Senate Bill 4510, is Congressional Legislation Introduced to Expand Fence-line and Ambient Air Monitoring introduced by Congressman Rochester of Delaware and Senator Duckworth of Illinois. The aim of the bill is To protect clean air and public health by expanding fence-line and ambient air monitoring and access to air quality information for communities affected by air pollution, to require hazardous air pollutant monitoring at the fence-line of facilities whose emissions are linked to local health threats, to ensure the Environmental Protection Agency (EPA) promulgates rules that require hazardous air pollutant data measurement and electronic submission at fence-lines and stacks of industrial source categories, to expand and strengthen the national ambient air quality monitoring network, to deploy air sensors in communities affected by air pollution, and for other purposes. PM 2.5 is mentioned in this Congressional bill. Noel is interested in the word FENCELINE in the bill. Noel is most interested in the section of the bill that discusses the air monitoring to the fence-line of industrial plants and perhaps of residential properties, which would expand monitoring beyond the stacks of polluting industries and perhaps residences. Secondly, Noel is interested in the section of the bill which discusses EXPANDING EPA RULES to strengthen their air quality monitoring network and DEPLOY AIR SENSORS to communities affected by air pollution, and for other purposes. The legislation addresses Clean Air Act monitoring issues.

Noel noted that, in a move that shocked and confused veteran groups Wednesday night, 41 Senate Republicans blocked the Burn Pit bill's passage, including 25 who had supported it a month ago. Activist and comedian John Stewart erupted in fury when U.S. Senate Republicans blocked a bill to provide healthcare for veterans exposed to toxic burn pits while serving abroad. "I am not used to the cruelty," Stewart told reporters outside the Senate during a news conference called by the bill's advocates. The military burn pits bill, which initially passed the 100-member Senate with the support of 34 Republicans and all 50 Democrats, would expand access to health services and disability benefits for veterans who were exposed to toxic smoke from the U.S. military's use of burn pits to dispose of waste on foreign bases until the mid-2010s. The bill will return to the floor for another vote next Monday, Senate Democratic Leader Chuck Schumer said on Thursday.

3 The U.S. West Coast.

Wendy.

Wendy noted that In Idaho, rebates are being offered for old wood stoves which are replaced with cleaner burning wood stoves or NATURAL GAS UNITS. Wendy noted that Wildfire smoke in a Wood River Valley in Idaho compromises air quality. Wendy noted that In Oregon, a man who was suspected of purposefully setting forest fires in a remote section of woods was tracked down and confronted by three local residents who tied him to a tree until authorities could arrest him, police say. Local residents encountered the suspected arsonist in the remote area not far from where the fires had been set. "It was reported that the suspect became very combative with the three residents and had to be tied to a tree to subdue him." said law enforcement. The suspect was lodged with two counts of Arson in the First-Degree ... and Reckless Burning," and was also lodged for "probation violation." Wendy noted the quote of a columnist who said about his lifestyle "It wasn't much of what white people call a "lifestyle:" no heat or hot water, just a **wood-burning** stove".

4 In Canada, Cameron noted no recent news to report.

5 In Australia, Audrey noted no recent news to report.

6 In New Zealand, Zach noted no recent news to report.

7 U.K. & Ireland.

Island.

Island noted that The House of Commons in the U.K. is discussing air quality concerns. Island noted that In Milton Keynes, U.K., fire crews issued a warning over discarding smoking materials following a blaze in a wood, Apsley Wood.

8 Germany in the European Union, and Europe.

Gerda.

Gerda noticed that In Brussels, the energy crisis rush for firewood is sending firewood prices skyrocketing.

9 Nigeria in Africa.

Nasha.

Nasha noted that in Africa, Tanzania, Rukwa Region, Nkasi District in the areas of Kirando, and Mandakelenge Island in Lake Tanganyika, the Tanganyikan Energy Minister visited all these areas, and the minister handed out 50 cooking gas cylinders to various women food vendor groups, explaining that it was only the beginning of the journey to reach a place where every household in the country will be able to use clean energy for cooking. Earlier, speaking to Kirando residents in the district, the Energy Minister said that in the ongoing rural power distribution in Rukwa region, 199 villages have already been supplied with electricity out of the 339 villages, and promised that all the remaining villages will be connected via Rural Energy Agency (REA) Project Phase III Round 2. Also, while at Kirando residents told the energy minister about the high cost of power connections. In Tanzania, Nkasi residents appeal for clean energy for cooking to the government to enable them to engage in business activities including frying fish and sardines (dagaa) for their economic wellbeing without affecting their health from wood fuel smoke. The appeal was given during the visit by the minister for energy, at Kirando and Mandakelenge Island. The minister was in the district to listen to their complaints as well as to mobilize for the use of renewable energy for cooking and inspection of the ongoing rural electrification projects in the area. A resident of Mandakelenge Island in Lake Tanganyika, thanked the government for connecting the island with electricity via submarine power cable but appealed to the minister to enable the women to get clean energy for cooking because the island was now in very short supply of wood fuel – including firewood and charcoal. Addressing the Island's residents, the energy minister said the availability of firewood and charcoal is a great challenge in the islands off the shores of Lake Tanganyika because such fuel stands to create deserts in the islands, and added that these areas are supposed to be examples in the use of clean energy for cooking.

10 India in Asia.

Ishan.

Ishan noted that In India, a study of six-layer face masks shows protection against viruses, bacteria and pollution. In Delhi, India, there has not been a good quality day in the first half of 2022. In Punjab, India, there are plans to give cash to farmers for not burning stubble. In India, the nation and states are coordinating to clean India's air. In India, Yogi's Gorakhpur is more polluted by PM 2.5 than Lucknow and Delhi.

10.5 Technology & Research Papers

A Nature article pointed out PM 2.5 health risk assessment. In Popular Science, there was an article on disaster prep which included preparation for bad air quality from wildfire smoke. There was a Time magazine article on extreme heat, which stated that extreme heat and PM 2.5 pollution is a deadly combination.

11 The Future

In future these topics will be covered. Hyper-Localized PM 2.5 Monitors or Sensors. Naming and Rating the Hyper-Localized PM 2.5 Sensors. Are Hyper-Localized PM 2.5 Monitors being used to help stop residential wood burners? Why are some Hyper-Localized PM 2.5 Monitors driven around in electric vehicles?