

Episode 56EU June 6, 2023. Biofuel emissions are similar to wood burning emissions. "Natural" but unhealthy.

<https://www.nytimes.com/2023/06/06/opinion/climate-change-biofuels-corn-ethanol.html?action>

The Climate Solution That's Horrible for the Climate (Biofuels for Internal Combustion Engines)

The New York Times

June 6, 2023.

RAWSEP View: Will a critique of biomass (wood) burning for residential heating and cooking be ignored, in this critique of biofuel burning for residential transportation? Challenging the illogical "natural logic" of arguments for biofuels (this opinion writer) and for biomass (wood) burning and residential wood burning (Residents Against Wood Smoke Emission Particulates). The points the Opinion Writer makes, followed by any similarities for points to be made about residential wood burning follow.

1) Biofuel farms use too much land. Fuel tree farming rather than using land for food crops or mature forests uses too much land. 1a) Biofuel farms cause food scarcity, requiring food imports or causes food price inflation. 1b) Biofuel farms take land away from what could be large solar arrays, or large Windfarms. Solar or Wind farms produce 100 times more energy per acre than biofuel farms. 1c) Biofuel farms take away mature forests that could be carbon sinks. Biofuel farms hasten climate change because unlike mature forests, corn farms constantly plant and reap crops, rather than allowing for a forest to take the farm's place which will store carbon the most efficiently.

2) The Environmental Protection Agency (E P A) policy has been corn-ethanol-ism. 2a) This opinion writer claims that Corn-Ethanol-ism is a bipartisan ideology, shared by Republicans and Democrats alike, and in Washington, Corn-Ethanol-ism will survive if everyone keeps pretending that biofuels are green.

3) This opinion writer claims that the United States is no longer an agrarian nation, but agrarian interests demand constant handouts. 3a) Two common reasons given for subsidies for Corn-Ethanol is that it will reduce reliance on foreign oil or will save the climate. 3b) This opinion writer thinks that Corn-Ethanol subsidies are ways to 3b1) suck up to farmers and 3b2) enrich agribusiness. 3c) This opinion writer thinks that the tax dollars of 99% of Americans are redistributed to the 1% of Americans who are farmers. This opinion writer is also critical of direct payments to farmers, countercyclical payments to farmers, loan deficiency payments to farmers, and other farm programs for farmers, as redistribution of tax dollars from the 99% to the 1%. Since the 1% was a slogan recently to apply to the ultrarich 1% of Americans, is this opinion writer trying to link agribusiness to businesses of the ultra-wealthy, and a business that doesn't need the average American's handouts? Small farmers in Wisconsin are being bought up by agribusiness, so the portrait of the average farmer as one of the 1% elite seems a little jarring in this opinion piece. The agribusiness that this opinion writer is also referring to may indeed include ultra-wealthy owners, but that is not proved or disproved in this opinion piece. It seems the opinion writer has given up on saving the "family farm" and fatalistically is saying that America is no longer an agrarian nation and the small farmer percentage of agribusiness is miniscule and can be ignored. It is probably generally true that Corn-Ethanol farmers are not small farmers.

4) An interesting point that this opinion writer makes is that Corn-Ethanol farming uses almost as much fossil fuel, from fertilizers made of natural gas to diesel tractors, industrial refineries, and other sources, as the ethanol that corn fuel replaces. 4a) Can farming itself, whether for food or (heaven forbid) for Corn-Ethanol ever not use fossil fuel energy? If society as a whole is transformed to charging electric vehicles from an efficient electric grid fueled by wind, solar, and geothermal energy, farming may not consume any more fossil fuels than the average white-collar commute to work and back. It might be a good idea for America to grow its own food locally, and become an agrarian nation again, given the costs of transport and logistics in getting food imported from other countries onto the dining tables of Americans. However, this is a "think" piece and this opinion writer is approaching the problem of Corn-Ethanol from a new perspective on several points, and it could be helpful to take his view and extrapolate to what rejecting what is now done will leave us with.

5) Leadership Part 1 of 2. The opinion writer thinks that our leaders have brought us to this point of subsidizing Corn-Ethanol, perhaps starting with well-intentioned but half-baked ideas about slowing climate change. 4a) Carbon Capture is a half-baked idea for slowing climate change. Carbon Capture so far has been unsuccessful in capturing carbon and prohibitively expensive to continue without massive subsidies. Just don't burn things. It is better not to burn fuels at all to begin with, when we have the alternatives of wind, solar and geothermal that are getting cheaper for consumers of transportation and home heating, every day. Excerpt from the article "Writing at the end of 2020, Al Gore, the 45th vice president of the United States, [found reasons for optimism](#) in the Biden presidency, a feeling perhaps borne out by the passing of [major climate legislation](#). That doesn't mean there haven't been criticisms. For example, Charles Harvey and Kurt House argue that [subsidies for climate capture technology](#) will ultimately be a waste." Besides the cost, this opinion

writer is edging near the issue of air pollution, since Carbon Capture is meant to capture CO₂ which is a major driver of climate change and PM_{2.5} which is a major contributor to pollution that causes human illness and death.

6)The opinion writer thinks that electric vehicles should be used instead of the internal combustion engine. Could the same opinion writer be persuaded that clean residential electric energy supplied by wind, solar and geothermal should be used instead of biomass (wood) burning or residential wood burning? That would be a logical progression of thought. Has the opinion writer been informed that there are now Heat Pumps to exchange for internal combustion heating from the most polluting burned heating source, wood, and the burning of the less polluting fossil fuels coal, natural gas, heating oil and stubble from fields such as corn husks?

7)The opinion writer says the first critique of biofuels was in 2008: To quote the writer “But the more damaging effect of biofuels, first revealed in a 2008 [paper](#) in the journal Science, is that they increase greenhouse gas emissions through the conversion of carbon-rich forests, wetlands and grasslands into farmland, expanding our agricultural footprint while shrinking nature’s.” The author is edging nearer to discussing air pollution including particulate pollution that affects human health and causes human deaths, but the opinion writer is still carbon-fixated here on CO₂, rather than what he should be equally or more concerned about, PM_{2.5}

8)Leadership Part 2 of 2. To quote the opinion writer “But President Biden, (saw that during the Iowa caucuses) ethanol mandates jack up the price of corn and win voters. Presidential candidates (have a) tradition of wooing Iowa farmers with over-the-top ethanol promises, (or) ‘pandering.’” Biden visited an Iowa ethanol plant last year to boast about the lavish biofuels subsidies in his Inflation Reduction Act, and to announce a new waiver allowing more ethanol to be sold in the summertime to help suppress gas prices. But his most important decision is still to come:

9)What to do about the Renewable Fuel Standard that has kept the industry afloat since the mid-2000s. The current standard requires 15 billion gallons of corn ethanol to be blended into U.S. gasoline every year. Since ethanol doesn’t make sense economically without the standard’s lucrative credits, America currently blends about 15 billion gallons a year. The standard was also supposed to mandate 21 billion gallons of so-called advanced biofuels brewed from grasses by 2022, farm wastes and other non-crop materials. But even with credits, only a quarter of the quota was met in 2022. The main exception has been 2 billion gallons of soy biodiesel, which Congress designated an advanced biofuel even though it’s made from crops, because Congress courts soybean farmers as slavishly as it does corn farmers (Or a farmer could be both a soy farmer and a corn farmer). The rules and volumes that Congress created for the Renewable Fuel Standard only extended through 2022, and Mr. Biden’s E.P.A. could revise them to advance his climate goals. **The agency could limit the standard to biofuels made from leftover restaurant grease, crop residues or other waste products that don’t use farmland.** It could create **a stricter cap** on crop-based biofuels, **as Europe has done.** For now, **the E.P.A.’s proposed rule** would actually expand soy biodiesel. **And a bipartisan group of House members has also introduced a bill to reclassify corn ethanol as an advanced biofuel so it could finally blow past the 15 billion gallon threshold.** A Texas Republican Representative argued that **“Congress must promote () the internal combustion engine.”** But internal combustion engines don’t need government support, and neither do biofuels. They’re climate nightmares masquerading as climate solutions, and they’re making life harder for some of the poorest people on earth. They’re practically in the Oxford English Dictionary under “counterproductive.”

10)There are obvious analogies between Biofuels for transport and Biomass (wood) burning. Both are obsolete, and as the opinion writer here concludes, Biofuel use is counterproductive to slowing climate change. Residents Against Wood Smoke Emission Particulates would conclude that Biomass (wood) burning and residential wood burning for heat and cooking on a hyper-localized scale are both counterproductive to slowing climate change. Because residential wood burning is done in a hyper-localized manner, affecting near neighbors most, who act as canaries in a coal mine, trapped and observed as a cautionary signal if at all, these near neighbors are mostly ignored at the peril of the whole world eventually. This opinion writer did not mention the air polluting effects of residential wood burning or even mention the air polluting effects of biomass (wood) burning, but his focus was on this Renewable Energy Standard. The Focus of Residents Against Wood Smoke Emission Particulates is on lowering the EPA “safe” limit of PM_{2.5}, particulate matter of 2.5 micrometer size, from the current annual limit of 12 micrograms per meter cubed to 8 and lowering the current 24 hour PM_{2.5} “safe” limit from 35 to 25. Also, to have the government hand out PurpleAir PM_{2.5} monitors to any near neighbor of a residential wood burner who complains of wood smoke pollution entering their yards and infiltrating their homes. PM_{2.5} is the perfect size to infiltrate the human lung, setting off a cascade of human health problems and early deaths. Wood burning emits more PM_{2.5} and CO₂ than coal burning and emits 450 times the PM_{2.5} than natural gas burning. Percentage of PM_{2.5} emissions from residential wood burning surpass PM_{2.5} emissions from traffic in many areas of the world in 2023.

Residents Against Wood Smoke Emission Particulates, see [RAWSEPresidents.wordpress.com](https://rawsepresidents.wordpress.com) and click on the nearest right icon for the latest month, June 2023, of PDFs of articles with U R L's to search on, to the right of that, Bingo for RAWSEP, Crosswords for RAWSEP, EndWoodSmokeJeopardy and EndWoodSmokeMonopoly Games with a RAWSEP Flyer, the "Un-Twist-it" Game, and icon links to 30 minute Youtube videos and Spotify podcasts as well as podcasts on Amazon Music Prime (free for Prime subscribers), podcasts.google.com, Cast Box, and Pocket Cast (Pocket Cast is only free on the phone App. Pocket Cast works on Apple phones) and, below those icons, icon links to monthly PDFs of articles with URL's to search on, from May 2023 to May 2022.