



The witness panel during the hearing before the House Subcommittee on Environment and Climate Change (Screenshot of Youtube livestream)

Today, the Subcommittee on Environment and Climate Change of the House Committee on Energy and Commerce held a [hearing](#) entitled “Building a 100 Percent Clean Economy: Solutions For Planes, Trains and Everything Beyond Automobiles.” As the title suggests, the Subcommittee’s hearing sought to probe opportunities to decarbonize the transportation sector while focusing on modes of transportation other than light-duty vehicles (or “LDVs”), such as medium- and heavy-duty trucks, buses, ships and boats, aircraft, and trains. (The Committee previously analyzed emissions from LDVs in a [hearing on June 20](#), which my colleague Julia covered in a [blog post](#) the same day).

To provide context, the House Committee on Energy and Commerce has already [announced](#) its mission to achieve net-zero greenhouse gas pollution by 2050, with the promise of crafting comprehensive climate change legislation following the ongoing slate of Committee hearings on decarbonizing the economy. In a [prefatory memorandum](#) for today’s hearing, Committee Chairman Frank Pallone, Jr. noted that the transportation sector accounts for 29% of total greenhouse gas emissions in the United States, and that vehicles other than LDVs make up around 40% of those emissions. Chairman Pallone identified the principal challenges of eliminating carbon emissions across the entire transportation sector as including (1) growing demand for non-LDV transportation services, evidenced by continued increases in vehicle miles traveled, (2) slow and infrequent turnover of vehicle fleets, (3) the limited ability to fully electrify certain non-LDV fleets due to practical considerations, and

(4) substantial investments in nationwide infrastructure for both roads and fuel supply.

The Subcommittee invited seven witnesses to discuss these challenges and to explore the potential for fuel-switching and efficiency solutions for non-LDV transportation. The tone of the hearing revealed a recognition that there are hurdles to decarbonizing trucks, planes, and ports in the short term, but the panelists and Subcommittee members indicated a strong desire to make meaningful progress on this front. Here are the highlights and key takeaways from the hearing:

- **One national program for regulatory certainty?** Dr. Wayne Eckerle of Cummins Inc., an engine manufacturer, repeatedly emphasized the need for a single uniform national standard for regulating emissions from each aspect of the transportation sector. Timothy Blubaugh of the Truck and Engine Manufacturers Association also called for a nationwide regulatory alignment of emissions standards governing heavy duty trucks and vehicles to provide regulatory certainty and establish an even competitive playing field for all industry actors. The other witnesses seemingly did not similarly prioritize national uniformity as a policy recommendation, but several Subcommittee members, mainly Representative John Shimkus from Illinois, supported Dr. Eckerle's position. The debate surrounding uniform national standards is a topical one in light of the Trump Administration's recent revocation of California's waiver under the Clean Air Act that would allow California to set its own automobile emissions standards, a decision which actually undermines the single national emissions standard agreed upon by California, the federal government, and the automobile industry years ago. Interestingly, Jeremy Baines, the president of a low-carbon diesel fuel manufacturer based in Finland called Neste US, showed his support for California's Low Carbon Fuel Standard as a low-cost and predictable policy that was instrumental in driving investments in alternative fuels, which cuts against the concerns articulated by the other industry representatives. However, the generation of alternative fuels is an isolated part of the decarbonization chain, and implementing new types of fuel or other power generation may require substantial infrastructure changes to fleets, roads, or other supporting structures, which could prove to be difficult for the industry to manage if not uniformly adopted throughout the country. Which brings me to my next point...
- **Drop-in alternative fuels can reduce emissions while preserving existing infrastructure, but may lock in emissions for a long timeframe.** Baines touted Neste's innovation in sustainable aviation fuels that can be produced as a byproduct

from a variety of waste sources. Baines not only explained the potential carbon-neutral feasibility of sustainable fuels but also promoted the “drop-in” nature of these fuels, which can be used by existing airplane engines without requiring substantial infrastructure changes. While this type of strategy is certainly easier to implement, continuing to rely on internal combustion engines and associated infrastructure would lock in these emissions for years to come, without making any progress in developing carbon-free power generation. This makes the development of drop-in fuels largely a stopgap measure, and one that should not be promoted at the expense of other options that eliminate greenhouse gas emissions altogether. Adrian Martinez with Earthjustice was the only panelist who advocated for a shift to zero carbon emissions across the transportation sector, citing his organization’s [Right to Zero campaign in California](#) as an example of achievable policy goals. Nevertheless, Baines was not the only witness who believed that internal combustion is going to remain a vital part of the power generation profile in the transportation sector moving forward; Republican Subcommittee members, primarily Representatives David McKinley from West Virginia and Billy Long from Missouri, expressed significant doubts as to the viability of a fully electrified transportation sector and raised concerns about the market impacts of striving to achieve that goal in the current economy. Additional work to identify feasible and politically palatable solutions to decarbonizing heavy-duty vehicles and other non-LDV modes of transportation will be key to overcome resistance to more effective decarbonization efforts. Speaking of the need for more work to identify decarbonization solutions...

- **There is apparent consensus that federal policies should include support for research and development, infrastructure investment, and other economic incentives. But is that enough?** Dr. Emily Wimberger, a climate economist with the Rhodium Group, stated that research and development would be vital to remove the uncertainty businesses would face as a result of rollouts of carbon neutral technologies. Most other Subcommittee members and witnesses were in agreement, including Martinez and JP Fjeld-Hansen, who testified on behalf of the National Association of Truckstop Operators. Other recommendations from the panel included federal investments in improving existing infrastructure for alternative fuels or zero-emissions technologies, which was widely considered by the panel to be the largest obstacle to future progress, and other economic incentives such as tax credits or credit multipliers for sustainable fuels under the federal Renewable Fuel Standard. Both Blubaugh and Fred Felleman, the Commissioner of the Port of Seattle, urged that any

incentives for technological advancement must be crafted holistically, rather than isolating certain components of the transportation sector. (To support this notion, Baines criticized the incentives structure of the RFS for failing to make sustainable aviation fuels on par with sustainable fuels used for ground transportation, which resulted in fuel manufacturers prioritizing the development of ground fuels over aviation fuels). Furthermore, both Felleman and Martinez advocated for stronger inter-agency coordination across federal agencies and between federal and state/local agencies, which would be instrumental in the development and implementation of effective solutions for specific transit fleets given each fleet's specialized needs. These proposed measures and policies would definitely drive forward the quest for reducing transportation emissions down to zero eventually, but there is still remaining uncertainty about how long it might take to do so under an incentives-based program rather than more direct mandates to decarbonize. Representative Earl Carter from Georgia seemed dissatisfied with the idea of mandating industry actors to decarbonize by 2050 and expressed his preference to let the market run its course with the proper incentives in place. But a long implementation timeline for these emissions reductions would be highly problematic given the human health impacts already being experienced by many communities as a result of air pollution, bringing me to my final takeaway...

- **The Subcommittee acknowledged human health impacts and environmental justice concerns... kind of.** Representative Raul Ruiz from Riverside, California spoke at the tail end of the hearing and discussed the human health impacts in his district from widespread air pollution in the Inland Empire, pollution which includes particulates from heavy-duty trucking operations and other non-LDV modes of transportation. Representative Ruiz asked Dr. Wimberger about the economic cost of these health impacts on the communities that experience them, which gave Dr. Wimberger a chance to articulate the obvious notion—previously unaddressed during the hearing—that any costs incurred by actors in the transportation industry to move toward a zero emissions future would be offset by the financial benefits to the American people resulting from fewer illnesses, diseases, and missed school and work days, among other cost savings resulting from increased air quality. Economists and politicians grappling with the financial feasibility of zero emissions measures in the transportation sector simply must consider these benefits when assessing different policy choices; after all, requiring the transportation industry to bear the cost of improving air quality in highly polluted regions simply amounts to internalizing the

externalities of their activities over the previous century. Representative Ruiz also identified the disproportionate burden these health impacts from air pollution impose on disadvantaged communities and communities of color and asked Martinez about ways the federal government could take action to protect these communities specifically. Representative Ruiz used this questioning as a way to advocate for his proposed legislation [H.R. 3923](#), entitled the Environmental Justice Act of 2019, which would require all federal agencies to prioritize resolving environmental justice concerns as part of their operational missions. It is unclear from this limited dialogue what, if any, position the Subcommittee members would take regarding environmental justice as part of future proposed climate change legislation.

Following today's hearing, the next steps will involve further deliberation about what measures to include in a comprehensive climate change bill that would address emissions from the non-LDV transportation sector. The concerns highlighted above will be key factors that must be resolved during the drafting process, in order to arrive at policy goals that would be both effective in eliminating emissions by 2050 and would not unduly disrupt the transportation sector. Time will tell as to what measures the Committee ultimately decides to propose, but one thing is for sure: decarbonizing the transportation sector in the United States within 30 years will not be easy and will require truly ambitious and comprehensive action.