Climate Week Press Release: Advanced Biofuels USA Encourages Participation in Community Climate Change Mitigation Efforts—One Community at a Time

For Immediate Release – September 23, 2021, 2021—Frederick, MD -- -- Building on her recent experience volunteering on Frederick, Maryland's City and County Climate Emergency Mobilization Work Group's subgroup on Energy, Buildings and Transportation, Advanced Biofuels USA's executive director, Joanne Ivancic, wants to encourage others to enthusiastically participate in opportunities to mold their communities' response to climate change.

Advanced Biofuels USA, a nonprofit educational organization, advocates for the adoption of renewable fuels as the immediate solution to reduce greenhouse gas emissions. Consistent with this mission, the organization points out that to make a serious dent in transportation emissions, the fossil-derived portion of fuels in all transportation and agricultural sectors should be replaced with renewables as much as possible as soon as possible.

Yet, few people in decision-making positions are familiar enough with renewable fuels to feel confident making these changes. So, when opportunities arise, those who do have experience and knowledge in this sphere should do all they can to help their communities.

The aim of the CEMWG was to explore and discover how citizens and leaders in Frederick City and Frederick County could do the following:

- Reduce Frederick County emissions of greenhouse gases such as CO2 and methane at least 50% by 2030, and 100% by 2050;
- Drawdown or sequester carbon and greenhouse gases from the atmosphere, while protecting wildlife and pollinator habitat; and
- Lessen the impact of expected climate-related changes. These include floods, storms, habitat and home destruction, and increase in disease and heat-related health risks.

About 70 volunteer participants (the effort had no funding) agreed to pay attention to science and data, to look for imaginative and innovative solutions. Although with Frederick's proximity to Washington, DC, the professional level of expertise in these areas was significant and many had worked on climate change mitigation at a regional, state or national scale, they were intent on focusing on this one community. Their report, along with extensive sources, is available for use by others thinking of similar efforts.

Electrification AND Renewable Fuels for Transportation and More

The transportation recommendations do emphasize electrification, although significant key points were made regarding renewable fuel use. These are summarized in Recommendation #16 (page 63 of Volume 1) and include:

- **Begin using renewable fuels** in municipal and County fleets and equipment as soon as possible.
- **Encourage local fuel supply businesses** (heating oil, aviation and retail/wholesale gasoline and diesel suppliers) to increase the renewable fuel options available to private consumers, businesses for fleets and equipment, and for agricultural purposes.
- **Provide consumer education, encouragement, and facilitation** of renewable fuel use in collaboration with the business and agricultural communities.
- Frederick Municipal Airport should **provide sustainable aviation fuel** as soon as possible.

The need for greater participation in these efforts is illustrated by some inconsistencies in the report which are elucidated in an article about the project by Ivancic.

For example, she points out that although the recommendation above states "*Begin using renewable fuels in municipal and County fleets and equipment as soon as possible*," Recommendation #12 states "*Transition all bus fleets to electric and enhance ridership experience*."

In addition, the transportation section includes a special highlight, "*Winning drivers over to electric school buses*" written by Ron Kaltenbaugh, President of the Electric Vehicle Association of Greater Washington DC, who served as the chair of the subgroup on Energy, Buildings and Transportation.

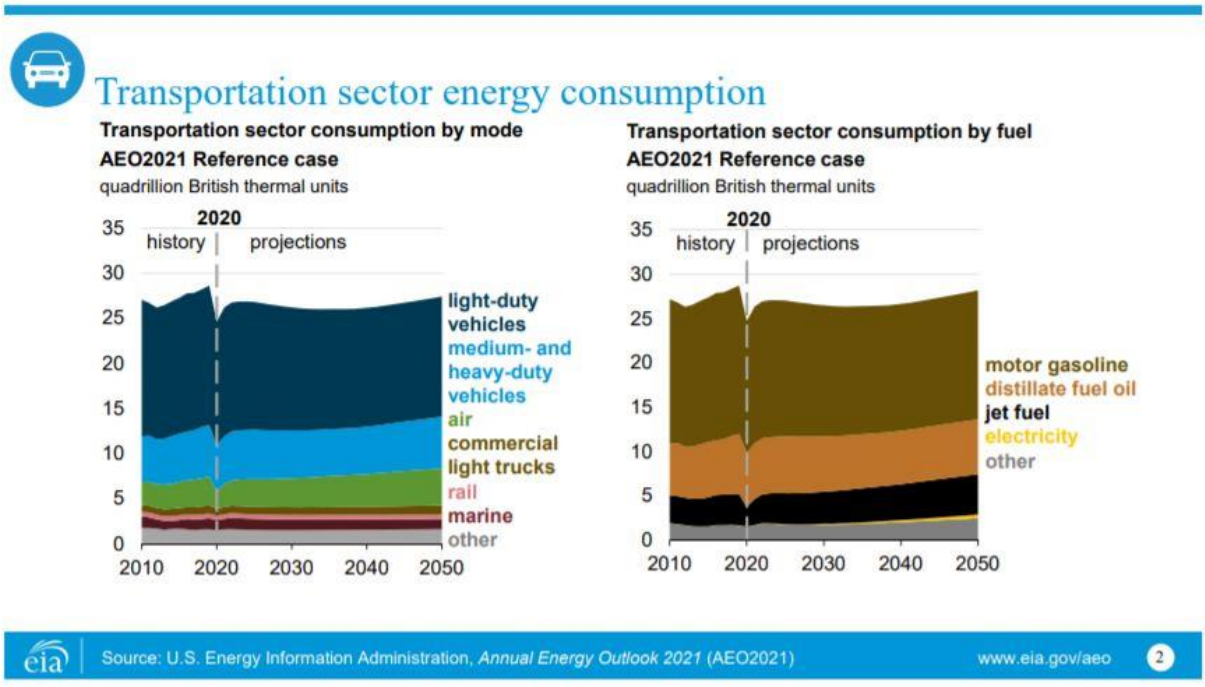
Ivancic notes, "It's a shame that the final decision to highlight electrifying school buses was made in contradiction to the only presentation to the subgroup on this topic." She was referencing a case study based on a cost-benefit analysis of school buses in near-by Howard County, Maryland in which Ahmed Abdellah compared the price and carbon reduction potential of electric school buses to the price and carbon reduction potential for diesel school buses retrofitted to use 100% renewable fuel. The retrofitted existing school buses clearly came out on top.

B100 conversion – $15,000
Electric bus- $400,000
Standard diesel bus- $50,000

Figure 5.0: The Thomas Experiment

Type of vehicle	Number available to purchase with $1.2 million	Emission reductions from standard diesel per bus	Total emission reduction
Standard Diesel Bus	24	0 lbs CO2	0 lbs CO2
B100 Conversion	80	3,315.2 lbs CO2	265,216 lbs CO2
Electric Bus	3	14,000 lbs CO2	42,000 lbs CO2

It was also unfortunate that this graphic from the US Department of Energy that clearly shows the continuing need for liquid fuels in 2050 and beyond was omitted from the final report.



“I fear that the critical urgency to convert as much fossil-based fuel as possible to renewables as soon as possible, to "defossilize" liquid transportation fuel is not adequately communicated in the

final presentation," laments Ivancic. "Thus, I want to take this opportunity to emphasize that many of us will be needing liquid transportation fuels for a long time. We should strive to use every opportunity to defossilize as much as possible as soon as possible. While we wait for electric vehicles to be affordable, available, powered by renewables using fair trade batteries, the general public should have access to the "cleanest, greenest" fuels available."

The background materials included with the article also emphasize the environmental justice impacts of forcing the use of unhealthy fossil fuels from leaded aviation gasoline and the benefits of renewable diesel and biodiesel over petroleum diesel, and the benefits of higher ethanol blends.

Ivancic encourages everyone with knowledge and understanding of renewable fuels to participate in efforts at all levels of government and private industry to bring affordable, clean renewable fuels to every community. The resources of Advanced Biofuels USA are at your service.

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Advanced Biofuels USA, a nonprofit educational organization advocates for the adoption of advanced renewable fuels as an energy security, military flexibility, economic development and climate change mitigation/pollution control solution. Our key tool is our web site, www.AdvancedBiofuelsUSA.org, with a nearly 40,000-item online library, a resource for all from opinion-leaders and advocates, decision-makers and legislators to industry professionals, investors, feedstock growers and researchers; as well as journalists, teachers and students. We prepare technology and policy assessments, brief government staff, participate in conferences and lecture. Technology neutral and feedstock and product agnostic, our work is respected around the world.

This press release can be found here: https://advancedbiofuelsusa.info/news/press-releases/

The full article is here: https://advancedbiofuelsusa.info/one-community-at-a-time-how-to-gain-real-ghg-benefits-quickly-for-least-cost-experiences-with-the-frederick-county-and-city-climate-emergency-mobilization-work-group/

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