Instructions: Please supply an abstract, in English, of no more than 400 words, fitting on a single page, submitted in Word, and using the following format, in 10 point Arial font and spacing of 1.5 lines:

Alternative Biomass Uses Can Help Sustainable Aviation Fuels Achieve On-Time Arrival

Matthew Langholtz
Oak Ridge National Laboratory
1 Bethel Valley Road
Oak Ridge, Tennessee, 37831
langholtzmh@ornl.gov

The bioeconomy can address a range of economic and environmental objectives. The 2023 Roads to Removal Report (Pett-Ridge et al 2023) finds that a US bioeconomy can abate 700-900 million tonnes of CO_2 per year. The 2023 Billion-Ton Report (USDOE 2024) finds that the US can produce 0.3-1.3 billion tonnes of biomass per year above current uses, which can be used for a range of bioeconomy goals, e.g. aviation fuels, marine fuels, energy abundance, and environmental services. An obstacle to bioeconomy development is lack of supply chains. Small-scale near-term bioeconomy opportunities can be leveraged to establish supply chains that are flexible to adapt to a range of commercialization opportunities and market conditions.