

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

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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 CO₂ 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.