

Exploring Conflict around Bioenergy from Forests: Lessons from the US and Potential Pathways Forward

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Abstract

Bioenergy from forests (BEF), derived from woody residues, is often positioned as a low-carbon alternative in the transition away from fossil fuels, yet remains contested due to its environmental and social trade-offs. These tensions have driven debate among researchers, policymakers, industry actors, and communities. In an effort to reduce conflict on this issue, The Forests Dialogue (TFD) launched the Bioenergy from Forests Initiative in 2023, creating multi-stakeholder engagement platforms to examine the conditions under which BEF can contribute to sustainable forest management and climate mitigation. Insights from focus groups, scoping and field dialogues show that expanding BEF is limited less by resources or technology and more by connected challenges across markets, communities, policy, and governance. These include weak and uncertain markets for low-value biomass, fragmented and inconsistent policy frameworks, workforce and capacity limitations, low public trust, sustainability of wood supply, and inequitable governance structures.

Together with infrastructure and implementation challenges, these factors limit the transition of BEF from localized opportunities to sustained, region-wide systems. Addressing these constraints requires coordinated engagement, policy reform and market development. Priority actions in the US identified by Dialogue participants include revising the Renewable Fuel Standard (RFS) to recognize residual woody biomass from federal lands, expanding Tribal management as a culturally grounded and ecologically robust pathway for stewardship, and leveraging stacked revenue streams—such as carbon markets, ecosystem services, wildfire risk reduction, and cultural values—to improve economic viability and strengthen social legitimacy. Building on these findings, the next phase of the initiative will convene more Dialogues in the United States. These dialogues will examine how private landownership, global biomass demand, and environmental justice concerns shape BEF systems, with the aim of identifying context-specific strategies that align market incentives,



sustainable forest management, and inclusive governance across domestic and international supply chains.

Keywords: Bioenergy, Forests, Biomass, Dialogue, Sustainability