

UNINTENDED CONSEQUENCES

How Sustainability Certification and Renewable Biomass
Mandates Threaten Nonindustrial Private Forests.

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THE ROBERT BURNS POEM “TO A MOUSE” IS A GOOD REMINDER THAT OUR BEST-LAID PLANS OFTEN GO AWRY. SO IS THE HISTORY OF ENVIRONMENTAL AND AGRICULTURAL POLICY IN THIS COUNTRY. NONETHELESS, IT’S SURPRISING TO CONSIDER HOW SUSTAINABILITY CERTIFICATION AND RENEWABLE BIOMASS MANDATES—TWO MEASURES INTENDED TO PROMOTE ENVIRONMENTALLY SENSITIVE FOREST STEWARDSHIP—COULD ACTUALLY ACCELERATE THE DEVELOPMENT OF NONINDUSTRIAL PRIVATE FORESTS.



The issue is one of market access. Sustainability certification is increasingly required to access forest product markets. However, for the small forest landowners, the costs of certification often outweigh the benefits. This catch-22 restricts market access and creates an incentive for some forest landowners to sell.

In a similar manner, the Energy Independence and Security Act closes off an important market for some private forest landowners. Specifically, the law defines “renewable biomass” in a way that excludes fuels from naturally regenerating forests, regardless of how they were grown or gathered.

If these market restrictions have a net negative impact on the economic opportunities of forest landowners, and the evidence suggests they will, they will produce the unintended consequence of hastening forest conversion.

CERTIFICATION COSTS AND BENEFITS

Forest certification is a voluntary process in which a professional forester gives written assurance that the forest management practices of a particular manager or group complies with some specified sustainability standard. The purported aim of forest certification is to connect buyers and sellers of sustainably produced forest products.

In the United States, the predominant certification systems are the Forest Stewardship Council (FSC), Sustainable Forestry Initiative (SFI), and the American Tree Farm System. The total acreage certified under SFI and American Tree Farm exceeds

the total certified under FSC, yet wood products retailers more commonly require FSC certification. According to the FSC’s website, more and more businesses and government agencies are specifying FSC certified materials in their purchasing programs; and FSC certification is the only standard approved by the United States Green Building Council Leadership in Energy and Environmental Design (LEED) accreditation program.

Under each system, sustainability certification entails direct and indirect costs to these forest owners. Direct costs are the cost of the auditor’s site visit, travel, report writing, and the certifying organization’s oversight. Direct costs for FSC certification could exceed \$5,000 annually, an amount which prices out many small forestland owners.

Indirect costs are the costs incurred to meet the sustainable forestry standards. These can include the development or enhancement of a forest management plan, investment in infrastructure and machinery in order to be able to harvest more efficiently with lower impacts, establishing chain of custody procedures, and the opportunity costs of harvesting less timber. Indirect costs vary significantly from one forest owner to the next and can easily exceed direct certification costs.

Purportedly offsetting certification costs are price premiums for certified products, increased access to environmentally sensitive markets, and improved marketing opportunities for certified producers. Unfortunately, these theorized price premiums have not materialized. The evidence suggests that buyers are unwilling to pay more for certified products, or only a very small premium for a short lived period.

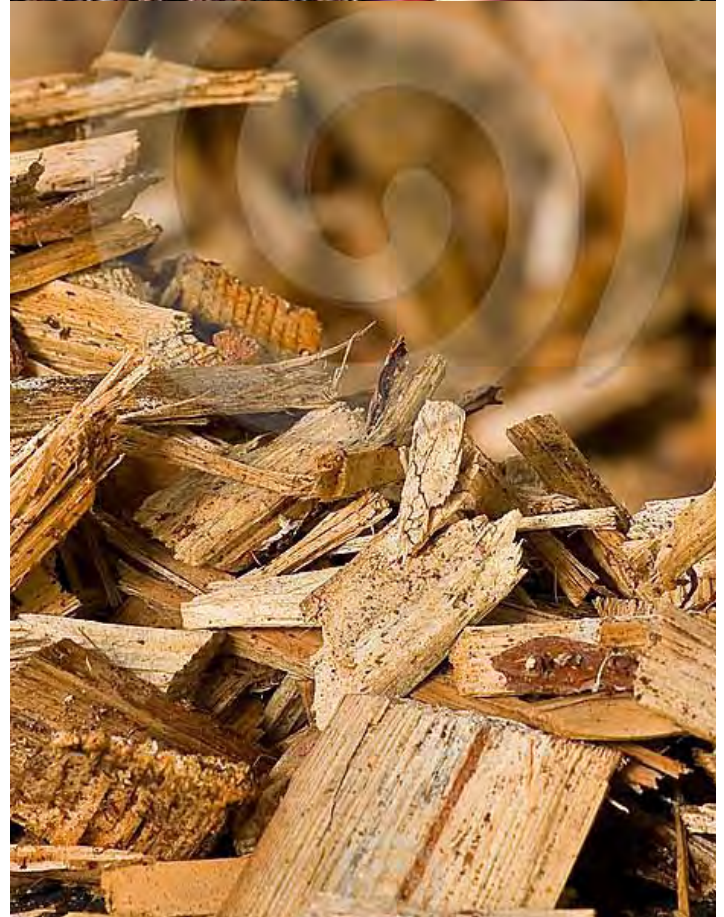


Woody BIOMASS is the residual material created as the by-product of forest management and the subsequent supply chain.

As Mark Rickenbach explains in the *Journal of Forestry*, “price premiums were an early allure of forest certification; however, they have yet to emerge on a consistent or widespread basis. Some producers have been able to achieve limited premiums (5 to 10 percent) on some sales. However, at this point there is no assured payoff for the additional cost of becoming certified.”

One explanation for why consumers are not paying a price premium for certified sustainable forest products is that end consumers were not the driving force behind sustainable certification. Instead, environmental organizations such as the Sierra Club, Rainforest Action Network, and the World Wildlife Fund organized buyers groups committed to buying only certified products after a particular date. Hansen, et al., explain more precisely that the demand for certified products comes from “large corporations that wish to avoid the risk of damaging their brand image” and from “powerful ENGOs which have a history of influencing corporate behavior through protests and other elements of what they call ‘market mechanisms.’”

The promise of enhanced market access is similarly unfulfilled. The requisite economies of scale and chain of custody procedures make it costly, if not prohibitive, for small producers to individually distinguish their product. Rather, the procurement policies of local saw mills and paper mills



are more likely to dictate whether certification is a mandatory requirement or an unavailable option.

Mandated sustainability certification, a concept that some forest policy experts see on the horizon, would create an incentive for small private forest landowners to sell their standing stocks quickly, to less discriminating buyers, or to consider selling their property altogether. This reality stands in stark contrast to the claims of price premiums and marketability made by certification advocates.

For many private forest owners, mandatory sustainability certification represents a restriction rather than an enhancement of market access and profitability. Certification adds significant cost to the forestry operations and, in some instances, unacceptable hardships and disincentives for private forest landowners. The unfortunate irony is that mandatory sustainability certification could, as a consequence, reduce the environmental and amenity values that flow from private forests.

RENEWABLE BIOMASS, NARROWLY DEFINED

In addition to the sustainability certification, renewable biomass mandates pose a hidden threat to private forests and the environmental goods and services they produce. In particular, the Energy Independence and Security Act (EISA) creates an

uneven playing field in the emerging market for woody biomass by defining “renewable biomass” in a way that excludes fuels from naturally regenerating forests.

The Renewable Fuel Standard of the EISA mandates an increasing volume of renewable fuel be blended into nation’s transportation fuel supply. The total amount of biofuels that must be added to gasoline by 2022 is 36 billion gallons, of which 21 billion gallons must be derived from non-cornstarch products such as woody biomass.

Woody biomass is the residual material created as the by-product of forest management and the subsequent supply chain. These by-products can be used as feedstock for biofuel producers and, because they generally have no other economic use, they tend to compliment rather than compete with conventional timber harvesting. Advocates of woody biomass as a substitute for fossil fuels point to its abundance and to the reduced wildfire risk associated with removing this excess biomass from healthy forests.

In relevant part, the EISA defines “renewable biomass” as “planted trees and tree residue from actively managed tree plantations on non-federal land cleared at any time prior to enactment of this sentence.” As such, woody biomass from federal forests and naturally regenerating private forests does not qualify as renewable regardless of how it was grown or gathered.



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Though the Renewable Fuel Standard creates a market for biofuels, it leaves out the nation's dominant forest ownership categories as potential suppliers. Excluding the nation's dominant forest ownership categories from the biofuels market will have several consequences.

First, the exclusion will increase the price per ton of woody biomass because fewer suppliers will be competing against each other in the marketplace. Indeed, the limitation of renewable biomass to "planted trees" excludes up to 88 percent of private forestland in the South East. Outside the South East, where forest plantations are less common, the percentage of private forest owners excluded is likely to be even higher.

Secondly, the narrow definition of "renewable biomass" will concentrate the benefits of thinning and hazardous fuels reduction on industrial private forests. To the extent these forests consist of monoculture, even-aged stands are less likely than federal or nonindustrial private forests to produce as many environmental benefits or experience as much wildfire. Whereas profitable woody bioenergy markets would encourage nonindustrial private owners to adopt more formal and frequent silvicultural treatments, that incentive is reduced or altogether eliminated without a biomass buyer. These foregone environmental improvements are a cost of excluding public and naturally regenerating forests from the biomass market.

Third, excluding naturally regenerating forests from the biomass market closes off a potential revenue stream for nonindustrial private forest owners. Many nonindustrial private forests have large quantities of small diameter trees and logging residues marketable for bioenergy production. As the Society of American Foresters notes, "this additional revenue stream from renewable biomass for forest landowners can help them keep their forests forested, rather than selling them for development." Moreover, revenue streams from complimentary forest products, like woody biomass, provide opportunities for landowners to benefit economically while simultaneously enhancing wildlife habitat, water quality, and even scenic beauty.

Mandating the use of renewable fuels contradicts free market principles and will undoubtedly raise fuel costs. Combining such a mandate with an arbitrary exclusion of renewable fuels grown on nonindustrial private forests creates a subsidy for industrial forest owners. Without the opportunity to compete on a level playing field with industrial forests, nonindustrial private forest owners are unlikely to invest in renewable biomass production. As one forestry advocate predicts, "the definition's arbitrary limits on qualifying private forest lands can only exacerbate the land-use conversion pressures faced by our smaller, private working forest landowner."

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EXPERIENCE

STABILITY

KNOWLEDGE

RELIABILITY

SUSTAINABLE WITHOUT THE CERTIFICATION, RENEWABLE WITHOUT THE MANDATE

Proponents of sustainability certification and renewable fuel mandates often fail to consider the existing sustainability and renewability of nonindustrial private forest operations. The 360 million acres of nonindustrial private forests produce more than sixty percent of the nation's annual wood harvest; and, in several regions of the country, they are the primary source of pulp, lumber, plywood and other wood products. This harvesting has not reduced total forest coverage or the environmental benefits that flow from our nation's forests. Indeed, timber growth in the U.S. has exceeded the harvests since 1952, resulting in 39 percent increase in domestic growing stock volume between 1953 and 2002.

In addition to wood products, nonindustrial private forests are also engines of environmental goods and services. Of the public goods that flow from private forests, water purification and wildlife habitat are perhaps the most significant. These lands protect water quality by slowing runoff, stabilizing soils, preventing erosion and floods, and filtering pollutants. And their contribution to water purification is significant; an estimated 25 percent of all the water flow in the United States comes from or is filtered by nonindustrial private forests.

In short, nonindustrial private forests are the quintessential example of sustainability and renewability. But their balance of economic and environmental productivity is not guaranteed, it depends on stewardship practices of forest landowners. This stewardship, in large part, depends on the ability of forest landowners to access markets for wood products and to earn enough money to stay in forestry.

The purported aim of sustainability certification and renewable fuel mandates is to enhance environmental quality. Yet, as applied to nonindustrial private forests, they could have the opposite effect. These policies should be reformed to recognize the existing high level of environmental stewardship on nonindustrial private forests. Wood product processors and retailers should exempt nonindustrial private forests from any sustainability certification requirement that imposes unnecessary costs on forest landowners. And, to the extent that the federal government mandates the use of renewable fuels, such a mandate should not arbitrarily favor one category of renewable fuel producers. ♻️

This report is commissioned by the Forest Landowner Foundation.



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