

The SFI Program and Bioenergy from Wood

Countries around the world are investing in renewable energy options as they look for ways to promote energy security and reduce consumption of fossil fuels. This has led to a global increase in the use of wood fiber as a source of bioenergy.

Third-party forest certification programs, such as the Sustainable Forestry Initiative® (SFI), promote responsible forest management so they have a potential role to play in addressing this growing demand for bioenergy feedstocks without unintended environmental impacts on forest values such as water quality, soil productivity and biodiversity.

SFI® Inc. is an independent, non-profit organization led by a Board of Directors that represents environmental, social and economic interests equally. The SFI forest management program represents the single largest certification standard in the world, and is globally recognized as supporting responsible forest management and legality.

Pullout quote:

“With adequate foresight and planning, wood biomass can play a significant role in meeting the nation’s energy needs in the 21st century, avoiding the pitfalls of the past and ensuring that the use of wood for energy contributes in positive ways to the sustainable management of both public and private forests across the country.”

From *Forest Sustainability in the Development of Wood Bioenergy in the U.S.*
Pinchot Institute for Conservation and The Heinz Center¹
June 2010

Forest Certification & Bioenergy Feedstock Production

Forest certification is one tool to address concerns regarding the use of forest fiber for bioenergy production, including the potential effects of increased extraction of fiber on soil quality, biodiversity and wildlife habitat, or the implications of land use change. For example, harvesting wood fiber for bioenergy can yield forest management benefits, such as supporting ecosystem restoration and resiliency, removing hazardous forest fuels, and controlling invasive species. It may also offer economic potential to encourage landowners to responsibly manage and maintain their forests, rather than converting them to other land uses.

The SFI 2010-2014 Standard recognizes that responsible forest management makes an important contribution to addressing climate change and adaptation to changing ecosystems. However, provisions in the Standard related to emerging issues such as bioenergy feedstock are tempered by the recognition that both science and regulatory frameworks are still evolving. As such, SFI Inc. will continually work with our partners to ensure the SFI Standard is providing forest products, whether they are lumber, paper or bioenergy feedstock, from responsible sources.

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“America’s forest owners, farmers and ranchers can play a crucial role in providing renewable energy from wood, switch grass and other agricultural products. Homegrown energy can provide jobs in rural America while reducing greenhouse gases. Markets for woody biomass in particular can be especially important in allowing the US Forest Service and other landowners to reduce the threat of catastrophic wildfire while restoring more natural conditions in our forests.”

Statement from US Department of Agriculture Secretary Tom Vilsack
January 2011

¹ From Forest Sustainability in the Development of Wood Bioenergy in the U.S. 2010 www.pinchot.org/bioenergy

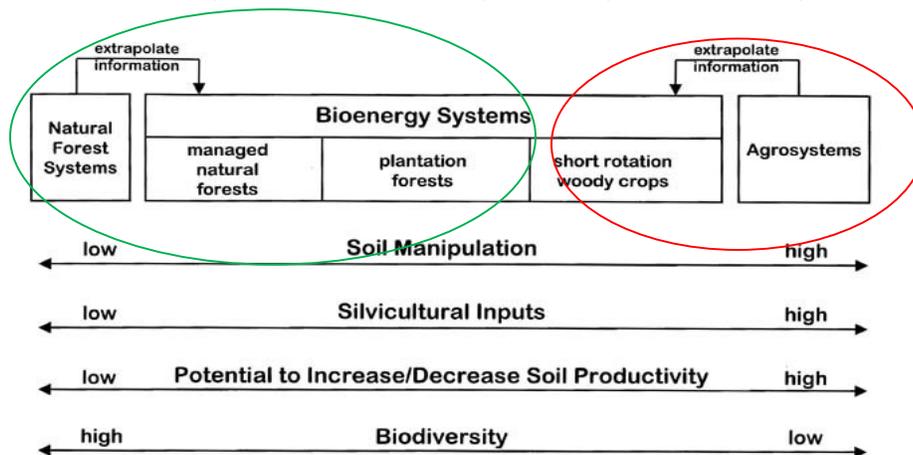
SFI Certification Requirements

The SFI Standard applies to both forest management operations that may produce bioenergy feedstocks, and also to fiber procurement activities by bioenergy facilities.

The SFI 2010-2014 Standard is made up of 20 Objectives, supported by more specific Performance Measures and Indicators. SFI Program Participants that are land managers or owners must implement Objectives 1-7 and 14-20. SFI Program Participants that procure fiber must implement Objectives 8-20. SFI Program Participants that are both land managers and procurement organizations must implement Objectives 1-20. Objectives 1-7 cover issues such as water quality, wildlife habitat, endangered species, and special sites. Objectives 8-13 are fiber sourcing requirements intended for organizations that procure fiber from non-certified land. These objectives help the procurement organizations source fiber from responsible sources where sites are replanted after harvest, endangered species are protected, trained loggers are used, and the use of best management practices is encouraged. The remaining Objectives, 14-20, set out requirements on legal compliance, research, public involvement, training, and continual improvement. All of these objectives are auditable and are supported by more detailed performance measures and indicators which are also audited by an independent third-party to ensure conformance with the Standard.

The SFI requirements, as outlined above, apply regardless of the final product produced from a forest, whether it be building materials, packaging or bioenergy feedstock. However, short rotation woody crop operations, included in the area circled in red in the diagram below, and other high-intensity forestry operations are currently beyond the scope of the SFI 2010-2014 Standard.

Spectrum of forest management systems that may produce bioenergy feedstock and associated gradients in silvicultural input and effects on soil productivity and biodiversity²



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Hold for quote from Enviva (Fiber Sourcing Certified)

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"Bioenergy is already making a substantial contribution to supplying global energy demand, and can make an even larger contribution, providing greenhouse gas savings and other environmental benefits, as well as contributing to energy security, improving trade balances, providing opportunities for social and economic development in rural communities, and helping with the management of wastes, so improving resource management."

International Energy Agency www.ieabioenergy.com/IEABioenergy.aspx

² Burger, J.S. 2002. Soil and Long-Term Site Productivity Values

What is bioenergy feedstock?

The definition of bioenergy feedstock in the SFI 2010-2014 Standard³:

Biomass used for the production of renewable energy. Biomass includes any organic products and byproducts derived from trees, plants and other biological organic matter, including limbs, bark and other cellulosic material, organic byproducts from wood pulping, and other biologically derived materials.

Box this section

Some examples of the SFI 2010-2014 Standard requirements that relate directly or indirectly to bioenergy and its role in forest management and procurement include but are not limited to the following:

Objective 1. Forest Management Planning. To broaden the implementation of sustainable forestry by ensuring long-term forest productivity and yield based on the use of the best scientific information available.

Performance Measure 1.1, Indicator 1 requires forest management planning at a level appropriate to the size and scale of the operation, including (1.1.1.h) a review of non-timber issues (e.g. recreation, tourism, pilot projects and economic incentive programs to promote water protection, carbon storage, bioenergy feedstock production, or biological diversity conservation, or to address climate-induced ecosystem change).

Objective 2. Forest Productivity. To ensure long-term forest productivity, carbon storage, and conservation of forest resources through prompt reforestation, soil conservation, afforestation and other measures.

Objective 3. Protection and Maintenance of Water Resources. To protect water quality in rivers, streams, lakes, and other water bodies.

Objective 4. Conservation of Biological Diversity including Forests with Exceptional Conservation Value. To manage the quality and distribution of wildlife habitats and contribute to the conservation of biological diversity by developing and implementing stand- and landscape-level measures that promote a diversity of types of habitat and successional stages, and conservation of forest plants and animals, including aquatic species.

Objective 6. Protection of Special Sites. To manage lands that are ecologically, geologically or culturally important in a manner that takes into account their unique qualities.

Objective 7. Efficient Use of Forest Resources. To promote the efficient use of forest resources.

Performance Measure 1.7, Indicator 1 requires a program or monitoring system to ensure efficient utilization, which may include provisions to ensure (7.1.1.d): exploration of markets for underutilized species and low-grade wood and renewable markets (e.g. bioenergy markets).

Objective 8. Landowner Outreach. To broaden the practice of sustainable forestry by forest landowners through fiber sourcing programs.

Performance Measure 8.1., Indicator 1. requires companies to provide information to landowners and guidance on: (e) management of harvest residue (e.g. slash, limbs, tops) considers economic, social and environmental factors (e.g. organic and nutrient value to future forests) and other utilization needs.

Objective 10. Adherence to Best Management Practices. To broaden the practice of sustainable forestry through the use of best management practices to protect water quality.

Objective 15. Forestry Research, Science, and Technology. To support forestry research, science, and technology, upon which sustainable forest management decisions are based.

³ SFI Definitions www.sfiprogram.org/files/pdf/Section13_sfi_requirements_2010-2014.pdf

Performance Measure 15.1, Indicator 1 requires financial or in-kind support of research to address questions of relevance in the region of operations. The research shall include some of the following issues: (f) ecological impacts of bioenergy feedstock removals on productivity, wildlife habitat, water quality and other ecosystem functions

For more information on the SFI Program and bioenergy, visit www.sfiprogram.org or contact Allison Welde, Director, Conservation Partnerships & Communications at Allison.Welde@sfiprogram.org or 202.596.3452.

Pullout quote

“The BC Bioenergy Strategy will help British Columbia and other places in North America reduce greenhouse gas emissions and strengthen our long-term competitiveness and electricity self-sufficiency. Bioenergy is absolutely critical to achieving B.C.’s climate goals and economic objectives. It turns the challenges of the mountain pine beetle infestation into new opportunities and looks to future bioenergy technologies.”

British Columbia Bioenergy Strategy www.energyplan.gov.bc.ca/bioenergy/

About SFI Inc.

SFI Inc. is an independent 501(c)(3) non-profit charitable organization, and is solely responsible for maintaining, overseeing and improving the internationally recognized Sustainable Forestry Initiative (SFI) program (www.sfiprogram.org). Across North America, more than 175 million acres/70 million hectares are certified to the SFI forest management standard, making it the largest single standard in the world. SFI chain-of-custody certification tells buyers how much certified, responsibly sourced and/or recycled content is in a product. The SFI program’s unique fiber sourcing requirements promote responsible forest management on all suppliers’ lands. SFI Inc. is governed by a three-chamber board of directors representing environmental, social and economic sectors equally.