



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.

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.

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

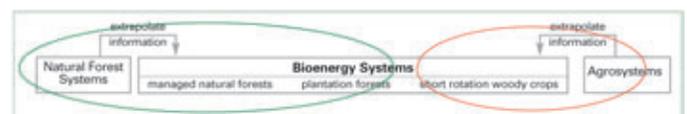
“We can no longer protect nature without thinking about energy development. Wood biomass is a renewable fuel and can be a viable replacement for fossil fuels provided it is from certified forests or is responsibly procured. Responsible sourcing of forest fiber for bioenergy increases market access for landowners who want to keep their land forested and manage it for the sustainable production of high-quality timber and other values.”

— Jimmie Powell
 Director, Government Relations, The Nature Conservancy

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 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.



What is bioenergy feedstock³?

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.

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

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

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

SFI Standard Objectives Related to Bioenergy Feedstocks

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.

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. bioenergy feedstock production).

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.

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.

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.

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



“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 Center
June 2010

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

About SFI Inc.

SFI Inc. is an independent 501c(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 180 million acres/73 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 of the fiber in a product is from certified forests, certified sourcing and/or post-consumer recycled content. 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.



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