

Setting the standard for sustainable bioenergy feedstock production

*Outcomes of the SFI Inc. and University of Toronto Bioenergy Workshop,
August 2008*

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Outline

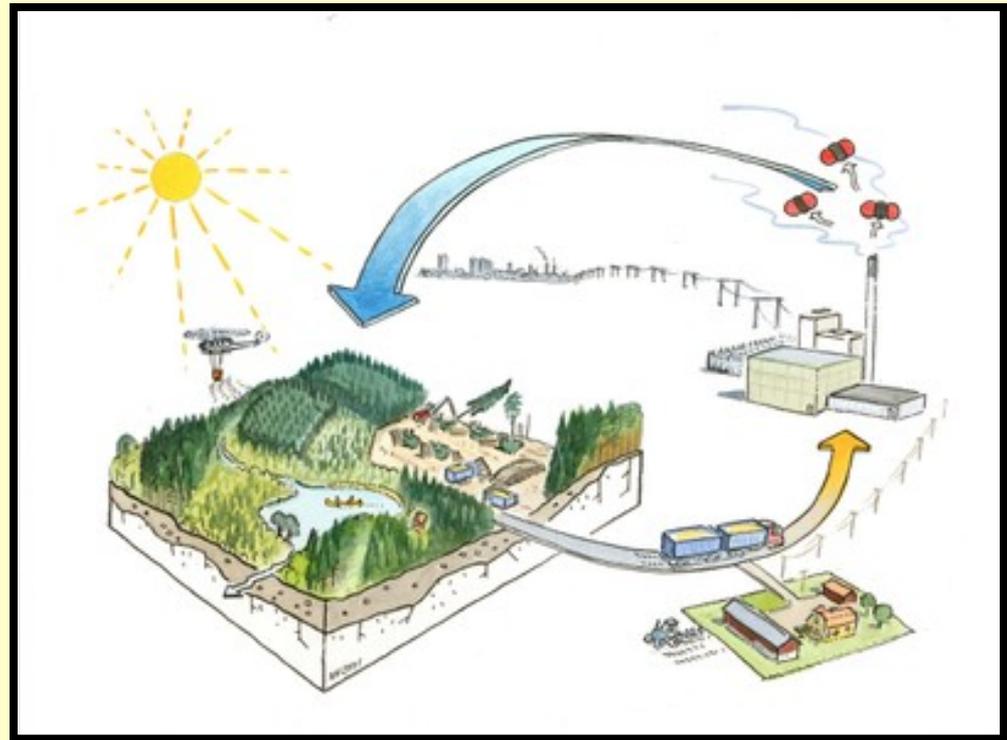


- Introduction to the emerging forest bioenergy market and the need for sustainability standards
- Purpose of the workshop
- Workshop participants
- Workshop process
- Outcomes and recommendations

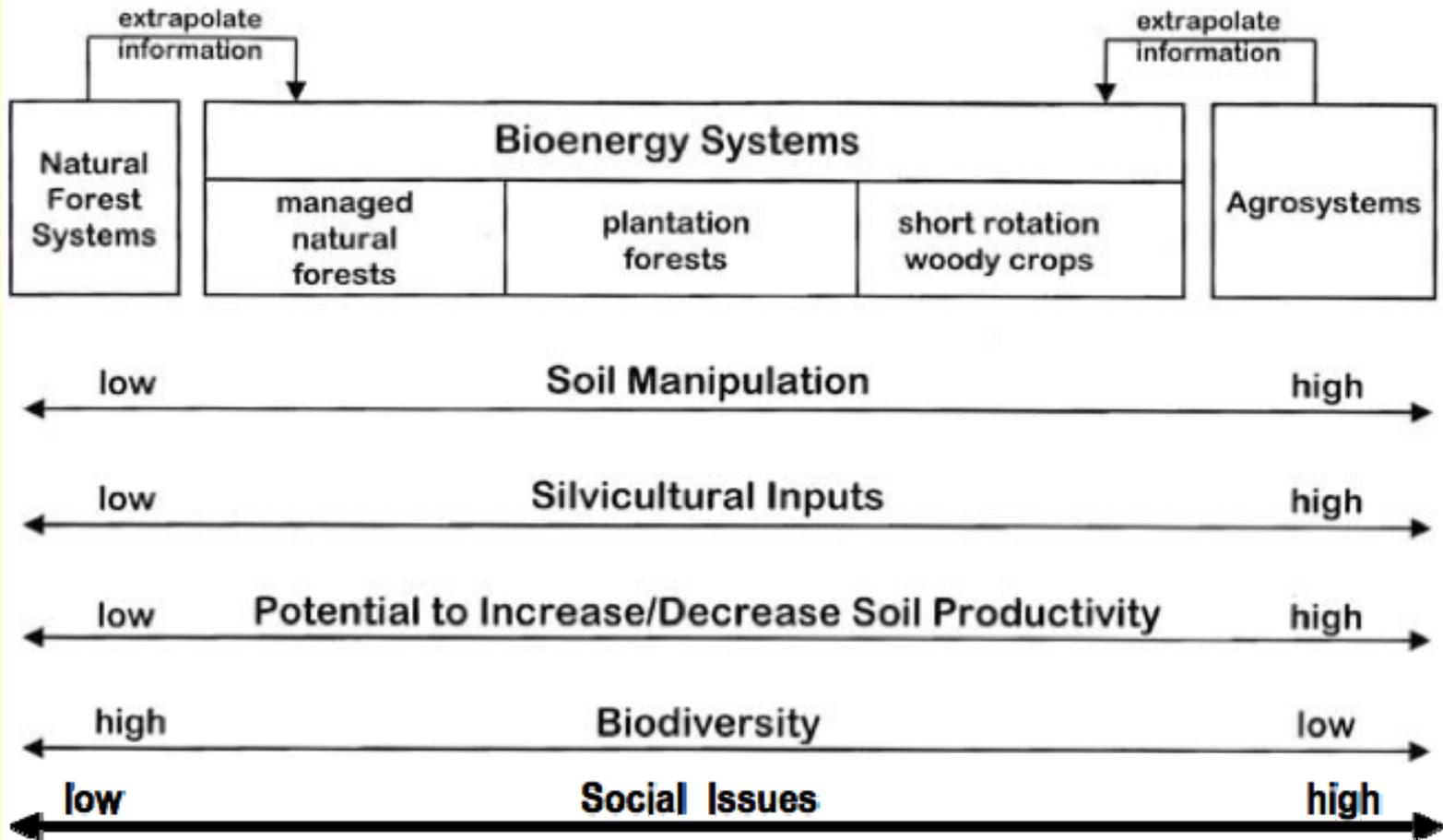


Bioenergy: an emerging forest product

- Wood fibre from managed forests can be used to provide renewable, carbon-neutral energy
- Fibre provides: fuel for wood-burning plants; wood pellets for export to the EU; feedstock for cellulosic ethanol



Potential impacts across a range of management scales



Intensities of management for forest fuel production (Burger 2002; adapted by Cantrell, 2008)

Ambitious targets for bioenergy production worldwide



2010 – target year for increased biofuel use in EU

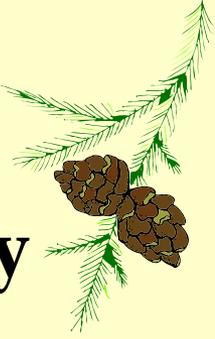
2020 – EU calls for 10% fuel use to be met by biofuels

2030 – US Department of Energy goal to displace 30% of gasoline with biofuels

2013 – cellulosic ethanol may become commercially viable (*US Agriculture Secretary Shafer*)

2025 – US goal to obtain 25% of total energy from renewables, with a large portion from bioenergy

2020 – Demand for wood fibre for energy from southern US forests to rise from 2 million tons in 2008 to at least 13.5 million tons (*Forest2Market, www.marketwatch.com*)



Increasing public concern about bioenergy

- Increasing pressure on forest resources to meet multiple objectives
- Continued need to manage forests sustainably for future generations
- Logical application of existing frameworks for AFM and forest certification to bioenergy feedstock production
- Opportunity to link certified forests to green energy labeling through chain of custody

Objectives of the workshop



1. Review purpose and content of the SFI Standard as it relates to bioenergy feedstock production and procurement
2. Propose modifications to the Standard, as appropriate, to address bioenergy issues including environmental, economic and social as well as opportunities for sustainable forestry
3. Compile a report of recommendations to be used in the upcoming Standard review process

Workshop participants



15 participants represented a cross section of North American experts on relevant areas such as:

- Forest soils and hydrology
- Biodiversity and wildlife
- Forest management, harvesting and logistics
- Certification
- IEA Bioenergy Task 31 work

Participants also included:

- SFI Inc. staff
- SFI program participants representing a cross section of economic, environmental and social stakeholders and land management and procurement
- A professional facilitator

Workshop process



Pre-workshop: Assigned readings to give an appropriate background to issues and the SFI Standard

Day 1:

- Establishment of workshop goals and format, with help of a professional facilitator
- A series of three talks to “prime the pump”, including a review of background information, existing guidelines and the SFI standard
- Agreement on priorities for the next two days

Workshop process



Days 2-3:

- Critical review of Standard principles, objectives and performance measures in facilitated small and large group discussions
- Drafting of proposed modifications based on general consensus
- Discussion of overall recommendations and possible next steps

General outcomes



- General consensus on workshop goals and priorities
- Identification of work areas for SFI that go beyond the scope of the workshop, for example:
 1. Recommendation for SFI to decide what spectrum of management intensity is appropriate for the standard
 2. Recommendations to consider linkages with energy certification systems (i.e., CoC issues and opportunities)
 3. Local considerations (e.g., role of SICs)
- Specific suggestions for rewording the standard to make it more relevant to bioenergy and bio-based products

Suggestions for modifications to the Principles for Sustainable Forestry



- Address emerging issues and markets like bioenergy and bio-based products
- Draw attention to changing demands on forest resources
- Ensure wording addresses conventional vs. emerging harvest methods
- Include mention of non-traditional forest partners and collaborations



Specific Objectives



Objective	Suggested revisions
1. Ensuring long-term harvest levels are sustainable	Minor
2. Ensure forest productivity and resource conservation	Moderate
3. Protect water quality	Minor
4. Conserve biodiversity	Minor
5. Manage visual impact	None
6. Manage ecologically, geologically, historically or culturally important lands appropriately	Minor
7. Promote efficient use of forest resources	Minor

Specific Objectives



Objective	Suggested revisions
8. Broaden sustainable forestry through procurement programs	Major
9. Promote research, science and technology	Minor
10. Promote training and education programs	Minor
11. Ensure compliance with laws	None
12. Encourage sustainable forestry and public reporting	Minor
13. Ensure monitoring and continual improvement	None

Suggestions for modifications to land management objectives 1-7



- Add “*bioenergy feedstocks*” to non-timber benefits
- Add a new indicator under objective 2.3 to *address nutrient management regimes*
- Ensure that riparian protection measures cover a *range of management techniques* (PM 3.2)
- Change language of 7.1.1.b, emphasizing the need for *residue management* to consider environmental, economic and social factors and other utilization needs



Suggestions for modifications to procurement objective 8



Make the preamble, objective and performance measures more relevant to bioenergy feedstock production by, for example:

- Broadening reference to include energy and other sectors
- Mentioning traditional and non-traditional demands
- Using language to ensure that landowners are aware of the full range of management options and emerging markets
- Changing the term “qualified logging professionals” to “harvesting professionals”
- Replace “purchased stumpage” with “all forest products”
- Change “logging” to “harvesting” for consistency here and throughout the standard

Suggestions for modifications to compliance, research and training objectives 9-13



- In preamble for Objective 9, include suggestions for training and outreach on emerging markets and harvesting techniques
- Under Objective 9, include support for long-term research on environmental impacts of bioenergy feedstock removals
- Throughout Objectives 9-13, change language where necessary to be more inclusive, e.g.:
 - Change “logging professionals” to “harvesting professionals”
 - Add “bioenergy feedstock removal issues to Objective 10
 - Include reference to “forest product consumers” in Objective 12

Next steps



- Submission of report to SFI review board, for use during the standard revision process
- Interpretations, guidance and “local flavor” needed with release of new requirements (e.g., role of SICs?)
- Decisions on the range of management intensities covered by SFI, now and in the future
- Further work on CoC issues (e.g., possible coordination with green energy labeling initiatives)
- Further collaborations and standard adaptation as markets and knowledge change

A photograph of a forest path covered in fallen autumn leaves, with trees showing yellow and green foliage. A tiger is partially visible on the left edge of the frame.

THANK YOU!