

# Forest Carbon & Climate Program

## Linking Climate Change, Forests, And Certification

A qualitative analysis by Michigan State University Forest Carbon and Climate Program

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### LINKING CLIMATE AND CERTIFICATION

While certification has been operational for decades, we do not yet know much about the climate impacts of certification. The Michigan State University Forest Carbon and Climate Program (FCCP) undertook a preliminary study which included a qualitative analysis of SFI programmatic documents, interviews with key informants, and observations of SFI training activities. Since ‘climate impacts’ can be broadly defined, the study identified three primary categories through which to analyze climate-carbon forest benefits of certification.

Figure 1 provides an overview of the categories that emerged from the assessment.

Figure 1. Categories of Climate and Carbon connections (Cooper and Lucas, 2019)

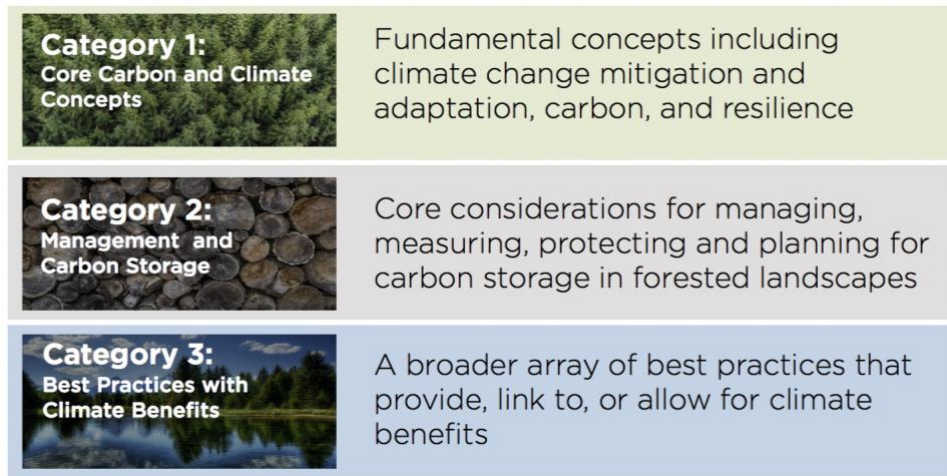


Figure 2 captures additional details regarding each category.

Figure 2. Detailed Category Topics



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## FINDINGS

This analysis found that while SFI guidance does not explicitly reference carbon or climate in great detail, ‘climate-smart forestry’<sup>1</sup> concepts, management practices, and other best practices with benefits were prevalent throughout the standards, training materials, and program participant interviews. Climate-smart forestry language and concepts were consistent across all three SFI standards, affecting different aspects of the forest sector, including land management, procurement, wood products, and end-product marketing.

Findings suggest that certification supports the following outcomes:

- Encourages of management practices with clear and well-known climate benefits (e.g. reforestation and avoided conversion)
- Technical guidance and support of working forests, including guidance on activities with known carbon benefits (e.g. Improved Forest Management)
- Promotes of efforts to increase and maintain forest productivity, and therefore carbon sequestration
- Establishes training, education, and communication networks with national leadership and local partners for interpretation and implementation
  - Communication of new science and best practices to landowners and forest decision-makers – particularly important in a changing climate
  - Reflects a communication network of best practices to supplement Extension, consultants, and government agencies (e.g. USFS)
- Respects local and indigenous knowledge, which will become increasingly important in a changing climate
- Promotes increased value for wood products and working forests, which supports keeping forests as forests
- Provides a range of additional benefits with importance in climate mitigation and adaptation (e.g. watershed, biodiversity, rural development)

Certification is a requirement for many project-based forest carbon programs, creating an opportunity for landowners to utilize certification as a means of accessing carbon-related incentives. Moreover, SFI certification shows a close alignment with Best Management Practices (BMPs). As BMPs are often voluntary, certification creates an accountable system for these practices to be implemented on a larger-scale.

## EXAMPLES

Below are two examples of ways that SFI certification is already linked to key concepts of forests, carbon, and climate change.

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<sup>1</sup> See [FAO 2019 for more information on Climate-smart Forestry](#)



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## 1. Afforestation/Reforestation

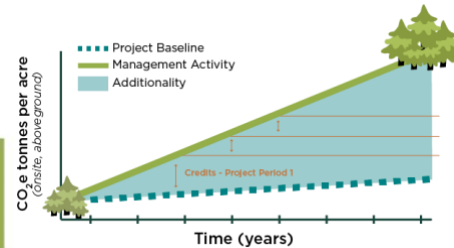
Afforestation and Reforestation are well documented approaches to improve site productivity and increase carbon storage on the landscape in the harvested wood products (HWPs). The SFI Standard makes explicit mention of afforestation and reforestation, including in regards to land management post-harvest.

SFI Example:

Obj. 2: Forest Health and Productivity

- **Performance Measure 2.1:** Program Participants shall promptly reforest after final harvest
- **Indicator 1:** Documented reforestation plans, including designation of all harvest areas for either natural, planted or direct seeded regeneration and prompt reforestation, unless delayed for site-specific environmental or forest health considerations or legal requirements, through planting within two years or two planting seasons, or by planned natural regeneration methods within five years.

2015-2019 Forest Management Standard



## 2. Incorporating Science and Knowledge

The standards link guidance to land use decision makers and requires expert engagement in developing and shaping that guidance. It creates a network to share emerging climate science and best practices. As an example, the images below show the annual training available in Michigan alone, and supporting guidance from SFI that emphasizes science and education.

SFI Example

- 9. **Research:** Support advances in sustainable forest management through forestry research, science and technology.
- 10. **Training and Education:** Improve practice by foresters, loggers, operators w/training and education



SFI Core Principles

Michigan SFI Logger Training Schedule 2019

Date	Time 2019 or anticipated	Location	Topic	Class	Approved Forester	Hours	Private Fee/Registration
5/16	1:00 PM - 5:00 PM	3000 Old Park Rd. S. Grand Haven, MI 49425	Harvesting Technology	Harvesting Technology	Walter Hickey, Mike Hoot	8	\$12.00/Person
5/16	8:00 AM - 12:00 PM	Michigan Forestry Experiment Station, 1000 S. State St. Lansing, MI 48906	Forest Health	Forest Health	Walter Hickey, Mike Hoot	8	\$80.00/Person
5/17	8:00 AM - 12:00 PM	Michigan Forestry Experiment Station, 1000 S. State St. Lansing, MI 48906	Forest Health	Forest Health	Walter Hickey, Mike Hoot	8	\$12.00/Person
5/18	8:00 AM - 12:00 PM	Michigan Forestry Experiment Station, 1000 S. State St. Lansing, MI 48906	Forest Health	Forest Health	Walter Hickey, Mike Hoot	8	\$80.00/Person
5/19	8:00 AM - 12:00 PM	Michigan Forestry Experiment Station, 1000 S. State St. Lansing, MI 48906	Forest Health	Forest Health	Walter Hickey, Mike Hoot	8	\$12.00/Person
5/20	8:00 AM - 12:00 PM	Michigan Forestry Experiment Station, 1000 S. State St. Lansing, MI 48906	Forest Health	Forest Health	Walter Hickey, Mike Hoot	8	\$12.00/Person
5/21	8:00 AM - 12:00 PM	Michigan Forestry Experiment Station, 1000 S. State St. Lansing, MI 48906	Forest Health	Forest Health	Walter Hickey, Mike Hoot	8	\$12.00/Person
5/22	8:00 AM - 12:00 PM	Michigan Forestry Experiment Station, 1000 S. State St. Lansing, MI 48906	Forest Health	Forest Health	Walter Hickey, Mike Hoot	8	\$12.00/Person
5/23	8:00 AM - 12:00 PM	Michigan Forestry Experiment Station, 1000 S. State St. Lansing, MI 48906	Forest Health	Forest Health	Walter Hickey, Mike Hoot	8	\$12.00/Person
5/24	8:00 AM - 12:00 PM	Michigan Forestry Experiment Station, 1000 S. State St. Lansing, MI 48906	Forest Health	Forest Health	Walter Hickey, Mike Hoot	8	\$12.00/Person
5/25	8:00 AM - 12:00 PM	Michigan Forestry Experiment Station, 1000 S. State St. Lansing, MI 48906	Forest Health	Forest Health	Walter Hickey, Mike Hoot	8	\$12.00/Person
5/26	8:00 AM - 12:00 PM	Michigan Forestry Experiment Station, 1000 S. State St. Lansing, MI 48906	Forest Health	Forest Health	Walter Hickey, Mike Hoot	8	\$12.00/Person
5/27	8:00 AM - 12:00 PM	Michigan Forestry Experiment Station, 1000 S. State St. Lansing, MI 48906	Forest Health	Forest Health	Walter Hickey, Mike Hoot	8	\$12.00/Person
5/28	8:00 AM - 12:00 PM	Michigan Forestry Experiment Station, 1000 S. State St. Lansing, MI 48906	Forest Health	Forest Health	Walter Hickey, Mike Hoot	8	\$12.00/Person
5/29	8:00 AM - 12:00 PM	Michigan Forestry Experiment Station, 1000 S. State St. Lansing, MI 48906	Forest Health	Forest Health	Walter Hickey, Mike Hoot	8	\$12.00/Person
5/30	8:00 AM - 12:00 PM	Michigan Forestry Experiment Station, 1000 S. State St. Lansing, MI 48906	Forest Health	Forest Health	Walter Hickey, Mike Hoot	8	\$12.00/Person
5/31	8:00 AM - 12:00 PM	Michigan Forestry Experiment Station, 1000 S. State St. Lansing, MI 48906	Forest Health	Forest Health	Walter Hickey, Mike Hoot	8	\$12.00/Person

## CLOSE

This analysis found close alignment with the climate and carbon categories identified for this analysis. We propose that the framework developed here be used to assess climate impacts and alignment of specific certified forest projects in the future. Based on our analysis of certification guidance, training materials, and participants feedback, certification shows tight alignment with climate-smart forestry. We note that at a global scale, the wood use story is complex, and deforestation and degradation continue to be a major concern. However, within the domestic forests of the United States and Canada, certification has provided an avenue for increased knowledge distribution, implementation of best practices, and setting the framework for an improved ability to incorporate climate-smart forest management and utilization. Because wood use that is not sustainable is not a climate solution, certification of sustainability helps ensure working forests and their products contribute climate benefits.

