

ADVANCING CLIMATE SMART FORESTRY IN FOREST MANAGEMENT ACROSS CANADA

PROJECT OBJECTIVE

The Sustainable Forestry Initiative (SFI) has been awarded a grant by Environment and Climate Change Canada to advance climate smart forestry (CSF) in forest management across Canada. The overarching goal of this 3-year project (2024-2027) is to identify, develop, and implement climate smart practices and strategies. The effort is advancing the planning and monitoring of climate benefits across the forested landscape, with a focus on certified organizations and Indigenous partners. The project is contributing to the reduction of Canada's net greenhouse gas (GHG) emissions using CSF in a sector-based approach.

PROJECT CONTEXT

Climate change represents a profound threat to the wellbeing and security of all Canadians and across all forest ecoregions (Figure 1). Climate effects such as wildfire present risks to human life and property, and to countless plants and animals, to ecosystem health and function and to economic stability. Climate change impacts, such as forest mortality, contribute GHG emissions, with land/forest sector emissions eclipsing all other Canadian emissions combined in 2023 due to catastrophic fire.

With this evolving situation, forest management is becoming a clear opportunity for the country to reduce emissions while providing societal and biodiversity co-benefits. The forest sector in Canada accounts for over 200,000 direct jobs (2021), including ~12,000 Indigenous Peoples and generates more than \$2.3 billion for provincial and territorial governments. As a result, climate adaptation practices and strategies for forests are needed investments to address climate change while supporting rural communities and long-term economic stability. Severe wildfire seasons have resulted in major losses to property, human life, and wildlife as well as increased health concerns as smoke blanketed North America, drawing a clear consensus that fire is a top adaptation and mitigation concern for both Canada and the US. Additionally, climate stressors like pests, heat, natural ignition events and drought, which are projected to only intensify in a climate-altered future, drive continuing tree mortality and related emissions.

The SFI 2022 Forest Management (FM) Standard covers more than 120 million hectares of forests across Canada. The FM standard includes Climate Smart Forestry (Objective 9) to ensure that forest management activities address climate change through adaptation and mitigation. This includes taking a landscape approach to assess forest vulnerability to climate change, identify mitigation opportunities, prioritizing and evaluating adaptation options, and implementing adaptation actions quickly and effectively.

Advancing CSF practices at scale across Canada requires 1) identifying management practices, 2) ambitious, detailed, and inclusive processes to implement CSF planning and decision-making, and 3) sound approaches to quantify the effects of these practices to ensure their effectiveness and contribution to national goals.

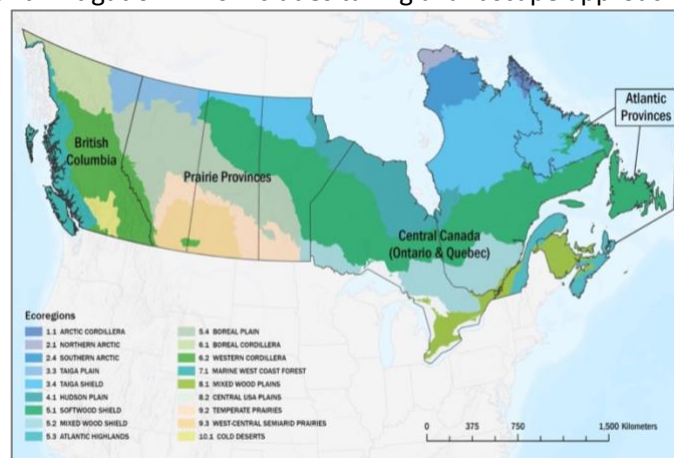


Figure 1. Ecoregions across Canada with forests in SFI Certification. Source: Commission for Environmental Cooperation

Project financially supported by



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MOVING FROM CONCEPT TO PRACTICE

This project builds on over a decade of SFI partnership and collaboration with leading experts in climate and forest management. Following a major engagement process during the 2022 standards revision, SFI organized and led regional workshops on CSF from 2022 to 2023, with contributions from recognized forest climate scientists and participation from a range of forest stakeholders. The insights gained from these workshops have improved sector-wide understanding of climate change mitigation and adaptation strategies. By continuing to bridge the gaps between science and practitioners, we are building capacity for forest management decision-makers to develop data-driven, climate-informed actions for stand-level management that increases forest health and reduces sector greenhouse gas emissions

OUTCOMES

SFI is developing CSF management practices to directly impact 1 million hectares and further influence 10 million hectares of forestland. These practices aim to optimize both carbon and biodiversity outcomes by leveraging and sharing data, tools, and expertise on forestry, ecological integrity, climate trends, and existing practices. We will identify barriers like expertise, information access, time, and costs to address challenges faced by large forest decision-makers (Indigenous, private, public). Stakeholder engagement, including workshops and field visits, will help develop and pilot these practices and evaluate their effectiveness and emissions benefits.

PROJECT PARTNERSHIP

SFI values wide-ranging partnerships, knowledges, and influences on the forested landscape. In Strategy V, we have developed a unique opportunity to undertake deep learning with a focal subset of the SFI footprint, working with Indigenous partners. The resulting outcomes will enhance understanding of the overall project implementation (e.g., costs, practicality, limitations), and support forest climate adaptation capacity at the local and regional levels integrated across multiple communities and user groups, informed by bottom-up knowledge from Indigenous and local communities.

PROJECT LEAD

The Sustainable Forestry Initiative (SFI) is an independent, non-profit organization advancing the value of forests as a critical component to our collective future. With over 150 million hectares certified to the SFI Forest Management Standard in North America, and tens of millions more positively influenced by SFI Fiber Sourcing, SFI and SFI-certified organizations have the scale to implement solutions across the landscape. During the 2022 standard revision process, SFI developed enhancements to objectives on conservation of biological diversity as well as adding two new objectives focused on Climate Smart Forestry and Fire Resiliency. These require certified organizations to individually or through cooperative efforts, identify and address climate change and fire risks to forests and forest operations and develop adaptation objectives and strategies.

SFI has the scale, network, and scientific knowledge to make a difference. We work across forest managers and decision-makers, including both private and Indigenous forest managers, and in partnership with government officials at multiple levels in pursuit of continual improvement in forestry and conservation outcomes.

CONTACT

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visit: forests.org for more information

KEY STRATEGIES

Strategy I: Prioritize and interpret climate risk and opportunity

Strategy II: Develop science-based Management Practices for CSF

Strategy III: Workshop practices with experts, partners, forest managers, and decision-makers

Strategy IV: Establish metrics to track efforts and measure success

Strategy V: Pilot, Assess, and Measure – with a focus on Indigenous partners

Strategy VI: Communicate results and scale outputs

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