

David Brand, former director-general of science and sustainable development with the Canadian Forest Service, told UBC on December 1, 2022 that the current carbon value of BC's forests is about \$50 billion, with the potential to produce annual revenues of \$5 billion, which compares with closer to \$1 billion per year from stumpage revenue (<https://forestry.ubc.ca/events/future-forests-webinar/>)



Where We Are

The First Nations Climate Initiative (FNCI) Indigenous Nature-Based Solutions Project (INBS) involves 8 First Nations in British Columbia. Each have now completed prefeasibility studies in pursuit of understanding the scale of the opportunity for potential Indigenous Nature-Based Solutions and associated project activities within their respective traditional territories that align with each Nations' environmental management and stewardship values and objectives.

The primary objectives of this collaborative project are to explore the alternative types of potential INBS projects, the costs, responsibilities and partnerships available, the pathways to development, and the issues that need to be overcome to enable these projects to happen.

This open collaborative First Nations-led forum engages carbon project developers with extensive domestic and international experience, natural capital investment firms, civil society organizations dedicated to protecting the environment, as well as potential carbon offset purchasers, and provincial and federal government representatives. The process is open to the participation of additional First Nations who are encouraged to join. The purpose of this implementation strategy paper is to identify and address the barriers to advancing the opportunities to generate carbon offsets as part of the INBS projects that First Nations wish to pursue. INBS projects focus on the restoration, protection and stewardship of the ecosystems that are important to the Nations who depend upon them. These projects reflect the range of values, traditions and culture of each of the Nations who are developing them. They address cumulative impacts of decades of disturbance and provide economic opportunities directly linked to traditional values.

The results of the prefeasibility work of 6 of the 8 Nations on carbon offset generation thus far indicate:

- Protection/conservation (or Logged to Protected Forest (LtPF))
 - Annual increment of ~1 million t CO₂e/year or 450,000 ±70,000 credits generated per year over the first 20 years (after estimates of probable reductions for leakage, risk of reversal and forgone storage in harvested wood products)
- Afforestation
 - For the first 20 years to accrue ~175,000 t CO₂e/year or 150,000 ±5,000 credits per year
- Improved Forest Management (IFM)
 - ~600,000 t CO₂e/year average of the first 20 years potential to accrue ~600,000 t CO₂e/year, or 250,000 ±40,000 credits per year (average of the first 20 years).

At a median rate of \$20 per t CO₂e, the aggregate FNCI portfolio could generate \$16±7 million per year of revenue (20-year average). These NBS projects are intended to be catalytic in nature enabling more projects to follow.

To enable these outcomes, interim paths to a range of rights are necessary, pending full reconciliation of crown and indigenous title and rights, including rights to atmospheric, conservation and biodiversity benefits, and management of the underlying resources that give rise to them. In addition, improvements to carbon protocols and regulatory and policy frameworks in B.C. and Canada are needed as outlined below.

Background and Context

The last major Indigenous Nature Based Solutions (INBS) projects that included the creation of carbon offsets in BC were the Great Bear Rainforest (GBR) in 2008 and Cheakamus Community Forest in 2008. Significant changes have occurred since then. The United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) is recognized by the Federal and Provincial governments as a new standard to meet in relationships with indigenous peoples in Canada, and the Province of B.C. has passed legislation in this regard. At the same time the cumulative effects of disturbance in First Nations territories have continued to occur, which combined with the impacts of climate change further undermine the capacity of Nations to engage in their traditional economic and cultural activities. These impacts are recognized in recent supreme court decisions that challenge the provincial and federal governments to do more to protect and restore the ecosystems that are the foundation of indigenous cultures while respecting them as co-equals in decisions that affect their future (See *Yahey versus BC*). Climate change has become an emergency and a crisis, and Indigenous Nature-Based Solutions and associated carbon sinks are recognized globally as well as locally as an important element of strategies to arrest global warming at 1.5 degrees, and to begin the process of climate recovery.

Layered on top of the climate crisis is the biodiversity crisis and the need to restore and protect ecosystems to recover endangered species and slow their loss. Addressing these challenges requires the realization that ecosystems are natural capital which is as important to the global economy as conventional capital and economic arrangements. Without a robust storehouse of natural capital, the global economy cannot be sustained. In this context, First Nations communities in B.C. are exploring Indigenous Nature-Based Solutions as an important part of re-establishing their governance and stewardship responsibilities for their territories. Indigenous Nature-Based Solutions embody many different values and aspirations including:

- Strengthening the foundation for traditional culture and economy. Increasing availability of traditional and ceremonial foods and medicines.
- Enhancing the many benefits that communities derive from healthy ecosystems in the near and long-term. This includes maintaining and improving water quality and quantity, supporting and expanding fish and wildlife populations and recovering or preventing the loss of endangered species.
- Maintaining the carbon that is stored in ecosystems, preventing its premature release as a result of disturbance to ecosystems and absorbing more carbon out of the atmosphere by cultivating healthy ecosystems.

The disruption and degradation of ecosystems has taken on a new and more urgent character with the onset of climate change. Market recognition of the cost of these impacts has translated into a rapidly expanding carbon market and markets for biodiversity and conservation credits. These natural capital markets are becoming mainstream and offering economic alternatives to indigenous people, who are constantly faced with trade-offs between consenting to industrial development in their territories to address poverty and provide for community wellbeing on the one hand and protecting the ecosystems that are the foundation for their cultures on the other hand. In addition to the emerging economic value of maintaining and growing ecosystems, the residual fibre that is often left to decompose after timber harvesting can be part of a valuable negative emission energy system rather than causing significant methane emissions, as it does now.

Indigenous Nature-Based Solutions (INBS) Guiding Principles

The INBS projects the participating Nations are creating reflect a wide range of values that are as important, if not more important, than carbon. The projects will create a suite of benefits for the climate, environment, economy and cultures locally and around the world. Investments in these projects will have lasting positive impacts that support the long-term vision and transition to a better future for the communities.

There are a set of guiding principles that underlie these projects which are important to the Nations including:

- designing and developing the project on the basis of the First Nations community values, traditions and aspirations;
- ensuring the benefits are real, measurable and additional to what would have occurred anyway;
- accounting for the risks of natural or human caused project failure and the potential for prohibited activities to be relocated outside of the INBS area and thereby undermining the potential benefits of the project for the climate;
- INBS projects enable investment in ecosystem-based reconciliation that reflects First Nations community leadership and values while also contributing to climate change mitigation, biodiversity conservation and protection of natural capital that is valuable to all people.

The Nations' INBS projects are intended to attract investment from those who share these same values and who realize the greater value in investing a premium for the opportunity to support and enable these projects to happen. These first INBS projects are intended to catalyse the vision and make it real by creating the enabling conditions and charting viable development pathways for INBS projects so more will follow.

Enhancing the Enabling Environment for Carbon Markets

As outlined above, INBS projects are an expression of many different values, some of which have currency in current and emerging markets – e.g., carbon, biodiversity, and conservation credits. Accessing these markets and enabling investment into INBS projects will help make these projects happen. There are a number of challenges and uncertainties in the current policy, legal and regulatory framework that need to be addressed in order for investment into these projects to happen. Set out below are the outcomes that need to be created in order expand the carbon market in BC and ensure the rights to the atmospheric benefits and the resources and management regimes that give rise to those atmospheric benefits are aligned. Policies and regulations that may be necessary for biodiversity and conservation credits will be addressed in a subsequent iteration of this INBS Implementation Strategy.

1. Indigenous Ownership of Atmospheric Benefits

To enable marketing of carbon offsets from INBS projects, Indigenous Nations must have clear title to the atmospheric benefits arising from their management of lands within their traditional territories. The Nations identify these rights as being inherent and part of their traditional management and ownership. Recognizing that BC and First Nations are still reconciling crown and indigenous title and rights and the reality of indigenous land ownership and management in BC, interim outcomes are needed to enable projects to proceed:

- **Outcome 1:** The rights to atmospheric benefits and the management strategies that create those benefits are conveyed by First Nations Woodland licenses.
- **Outcome 2:** Indigenous Protected and Conservation Areas and other types of recognized Indigenous protected areas include First Nations management and ownership of atmospheric benefits.
- **Outcome 3.** Reconciliation Agreements between the Province of BC and First Nations include the recognition of First Nations ownership of atmospheric benefits associated with management strategies and other commitments within these agreements.

2. Access to Carbon Markets

INBS carbon projects can only achieve viability if robust markets for the atmospheric benefits generated by the projects are available. Ensuring robust markets requires unfettered access to both compliance and voluntary markets. Outcomes that will ensure this access are:

- **Outcome 4:** The Governments of British Columbia and Canada do not include the atmospheric benefits generated by INBS projects in provincial or national carbon accounting until they have reached agreements with the First Nation owners of the projects and the specific offset tonnes generated by the INBS project are retired by a Canadian entity against Canadian emissions.
- **Outcome 5:** The Government of British Columbia has implemented an OBPS-like system which allows offsets to be used in lieu of payment of carbon taxes and ensures that offsets generated in BC are eligible for use as Compliance Units under Canada's OBPS system.
- **Outcome 6:** The "FCOP 2.0" protocol supports the implementation of INBS carbon projects and issues that arose were resolved collaboratively by First Nations and BC as part of FCOP 2.0 implementation.
- **Outcome 7:** INBS projects have the option to use voluntary protocols to support the implementation of INBS carbon projects and BC originated offsets generated under those protocols can be used to meet BC offset requirements.
- **Outcome 8:** INBS Projects developed in BC using FCOP and voluntary protocols are recognized in domestic and international markets as a "gold standard."
- **Outcome 9:** By supporting the creation of the outcomes that enable the implementation of INBS projects, BC and Canada are recognized as taking important steps in climate change mitigation and adaptation and biodiversity conservation in collaboration with First Nations while fulfilling their commitments to reconciliation with First Nations, and implementation of UNDRIP.

Conclusion

In the recent past INBS projects like the Great Bear Rainforest and the Cheakamus Community Forest produced many benefits for coastal First Nations and other coastal communities. These outcomes emerged from protracted conflict that took many years to resolve. We live in a different world today. Indigenous rights and title are recognized and the commitment to breathe life into them through real power sharing is embodied in legislation like DRIPA. The Nations involved in this process are intent on implementing INBS projects in their territories. This Implementation Strategy is not a recommendation or a proposal for consideration by other levels of government. It is a starting point for collaborative and focused work on how to make INBS projects happen in a manner that addresses the range of interests represented by all levels of government.