



ROOTED IN RELATIONSHIP: WAHKOHTOWIN BOREAL CARBON PROJECT

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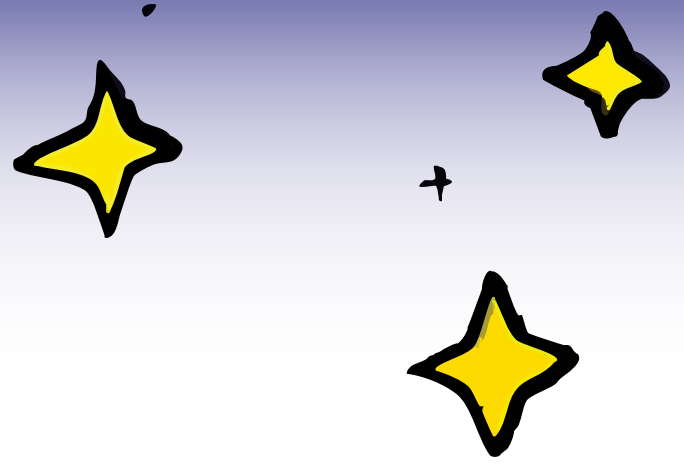


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2026
LUCIA LAFORD

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ARTIST'S STATEMENT

LUCIA LAFORD

This piece speaks to connection and the living relationships between Indigenous peoples, the forest, the earth, the water, the sky, and all beings. At the centre of the image, Indigenous youth are planting a spruce sapling together. Around them, more saplings grow, reminding us that planting is not only an act of care for the land, but also an act of cultural continuation. It represents the knowledge, responsibility, and love being carried forward for the next 7 generations and beyond.

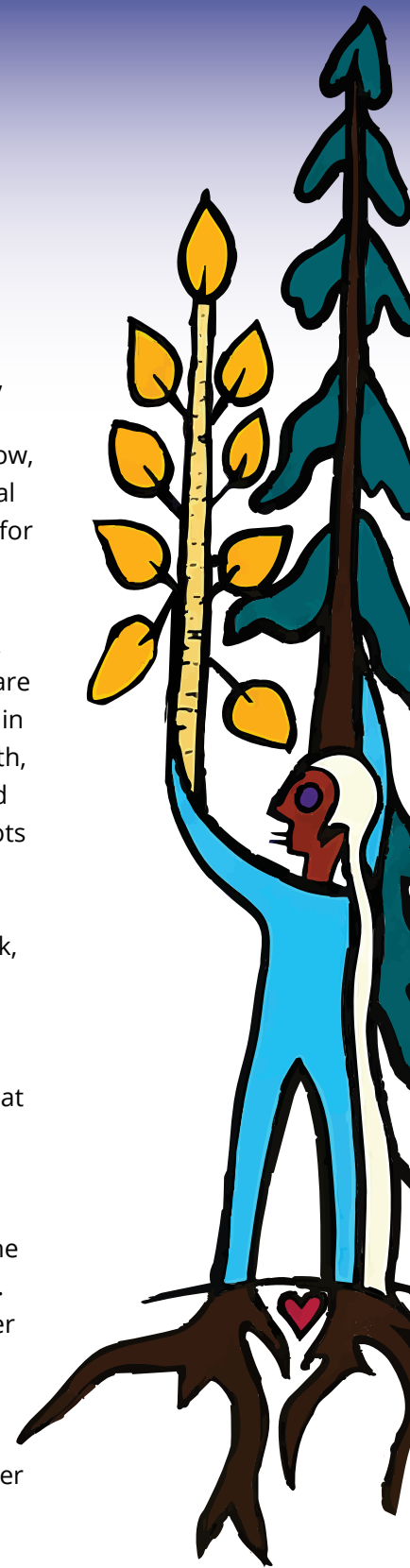
The lower third of the image is made up of layers of soil, roots, mushrooms, and water. A stream of water runs through the earth, reminding us that water is life. Beneath the soil are stars, mirroring the stars above, representing the ancestors who watch over us and remain connected to all life and that there is life in soil. The roots spread throughout Mother Earth, showing how everything is held together through unseen connections. The yellow around the roots represents the mycorrhizal treatment. The elder figure on the right also has roots coming from them that remind us that we are rooted beings as well.

Throughout the image are beings and medicines from the boreal forest. Spruce, tamarack, jack pine, birch, poplar, cedar, blueberry, moss, mushrooms, and new growth are all present. A stump with fresh growth coming from it reminds us of regeneration and the continued life of the forest. The blueberry plant represents the berries and foods that nourish us from the land. The buds on the left and the trees on the right show the forest at different stages of growth.

The animals and insects in the piece also reflect the biodiversity and spirit of the boreal forest. The moose, bee, Taiga alpine butterfly, and woodpecker are included to honour the many creatures who live in relationship with the trees, medicines, water, soil, and people. They remind us that the forest is alive and that humans are only one part of a much larger web of life.

In the antlers of the moose a figure is smudging. The smoke curls around Grandmother moon and the saplings representing the importance of Indigenous practices. Grandmother Moon sits at the top of the image, surrounded by stars and sky nation. Hidden within the smudge is Sabe, who reminds us of honesty and walking in a good way.

At its heart, this piece is about interdependence and connection. It speaks to youth and elders learning together, to Indigenous nations caring for biodiversity, and to the understanding that the forest is a living relative. Everything in the image is connected: the roots, water, fungi, plants, animals, insects, ancestors, moon, people, and stars. The piece honours the beautiful work being done through this project and the reports being shared, while reminding us that everything is medicine and everything deserves to be treated with respect, kindness, care and love!



OVERVIEW

Project Proponents: Wahkohtowin Development GP Inc. (Chapleau Cree FN, Missanabie Cree FN, Brunswick House FN), Mikro-Tek Inc.

Other Partners: Multiple First Nations and multiple forest companies.

Location: Northeast Superior region, Ontario, Treaty 9 Territory.

Ecozone: Boreal Shield.

Land base: Treaty 9, Public lands, Working/ Commercial Forest.

Carbon Project Type: Improved Forest Management (IFM), Public Land.

Carbon Standard / Registry: Verra, Canadian Compliance Market (anticipated).

Carbon Offset Units (est): Projected 5.6M tonnes of CO₂e (carbon dioxide equivalent) sequestration over 25-year horizon.

Policy Lever: Short term: Establish clear agreements on who can access and share carbon benefits on public and Treaty lands. Long term: Recognize Indigenous Nations' authority to manage and benefit from carbon in their territories.

Beyond the Stats - Community Vision: Indigenous leadership in forestry and climate action, localized job creation, assertion of Indigenous rights and jurisdiction, Guardian Program opportunities, cultural revitalization, land-based healing, economic diversification, improved forest health, elimination of herbicides, regional collaboration, and more.



Map: Wahkohtowin Development, Missanabie Cree First Nation, Brunswick House First Nation & Chapleau Cree First Nation, Treaty 9, ON., Canada. Note: project extent (operating area) is significantly more than pictured.

QUICK DEFINITIONS

Improved Forest Management: managing forests in ways that increase carbon storage

Compliance Market: a regulated system where companies must buy carbon credits to meet legal emissions limits

Carbon Standard: a system that sets the rules for how carbon projects are designed, measured, and verified

Mycorrhizae: a symbiotic relationship between a soil fungus and plant roots

ADDITIONAL RESOURCES

Short film and podcast featuring the Wahkohtowin - Mikro-Tek Project:

- ✦ **Film:** [Roots of a Stewardship Economy](#)
- ✦ **Podcast:** [Part 1: The Fungal Factor;](#)
[Part 2: Wahkohtowin](#)

RAD Infosheets:

- ✦ [Understanding Carbon & Carbon Markets](#)
- ✦ [Indigenous Rights & Carbon Projects on Crown Lands](#)

INTRODUCTION

Beneath the forest floor, an unseen network of mycorrhizal fungi binds to plant roots, connecting the forest in a web of reciprocity. The Cree concept of 'wahkohtowin' reflects a similar truth, reminding us of the kinship and interconnectedness of all our human and non-human relations, lands, air and waters.

The First Nations-owned company, Wahkohtowin Development, is the lead proponent of a unique forest carbon project in Treaty 9 territory. The project involves applying mycorrhizal fungi to tree seedlings before planting, strengthening the living networks beneath the soil that allow forests to thrive. By improving tree survival and growth, this nature-based technology improves forest health and increases carbon storage, offering a new revenue stream from carbon finance as part of an Indigenous stewardship economy. With carbon modelling complete and 53+ million trees planted by Spring 2027, the only missing piece to the puzzle is a clear policy pathway to unlock the financial return for the Nations.

In what follows, we outline how this initiative is part of a broader vision for a stewardship economy rooted in Indigenous rights and responsibilities—building an economic foundation for long-term land relationship planning led by Indigenous Nations. Then we summarize the policy challenges and opportunities ahead, as Wahkohtowin advocates for clearer pathways for Indigenous Nations to both lead and benefit from the carbon projects happening in their own territories.

BACKGROUND: WAHKOHTOWIN

Wahkohtowin Development was established out of the Northeast Superior Regional Chiefs Forum and is governed by Missanabie Cree First Nation, Chapleau Cree First Nation, and Brunswick House First Nation. Based out of Chapleau, Ontario, Wahkohtowin is situated in Treaty 9 Territory at the Height of Land, where the waterways meet, flowing South into the Great Lakes and north into Hudson Bay.

Wahkohtowin's mission is to "advance a sovereign, regional, and collaborative approach that enhances social, cultural, and environmental wellbeing for the long-term health and prosperity of our shared traditional territory".

Both locally and regionally, Wahkohtowin works to elevate Indigenous leadership in forestry and climate action, economic participation, cultural revitalization, and sustainability. Wahkohtowin runs a Guardian Program that strengthens youth's connections to the land, language and culture through land-based learning. Wahkohtowin is also engaged in leading-edge initiatives in forest ecosystem management and conservation, influencing over six million hectares of traditional-use territory in Treaty 9.

A priority for Wahkohtowin is to build sustainable revenue from nature-based solutions for its owner-Nations, including securing the ability to own and benefit from forest carbon projects. Registering a First Nations-owned carbon project is one step toward a broader goal: uplifting Indigenous stewardship in forest management and directing real benefits back to communities.



Wahkohtowin 2023 Guardians harvesting birch bark for canoe building

MIKRO-TEK BOREAL CARBON PROJECT

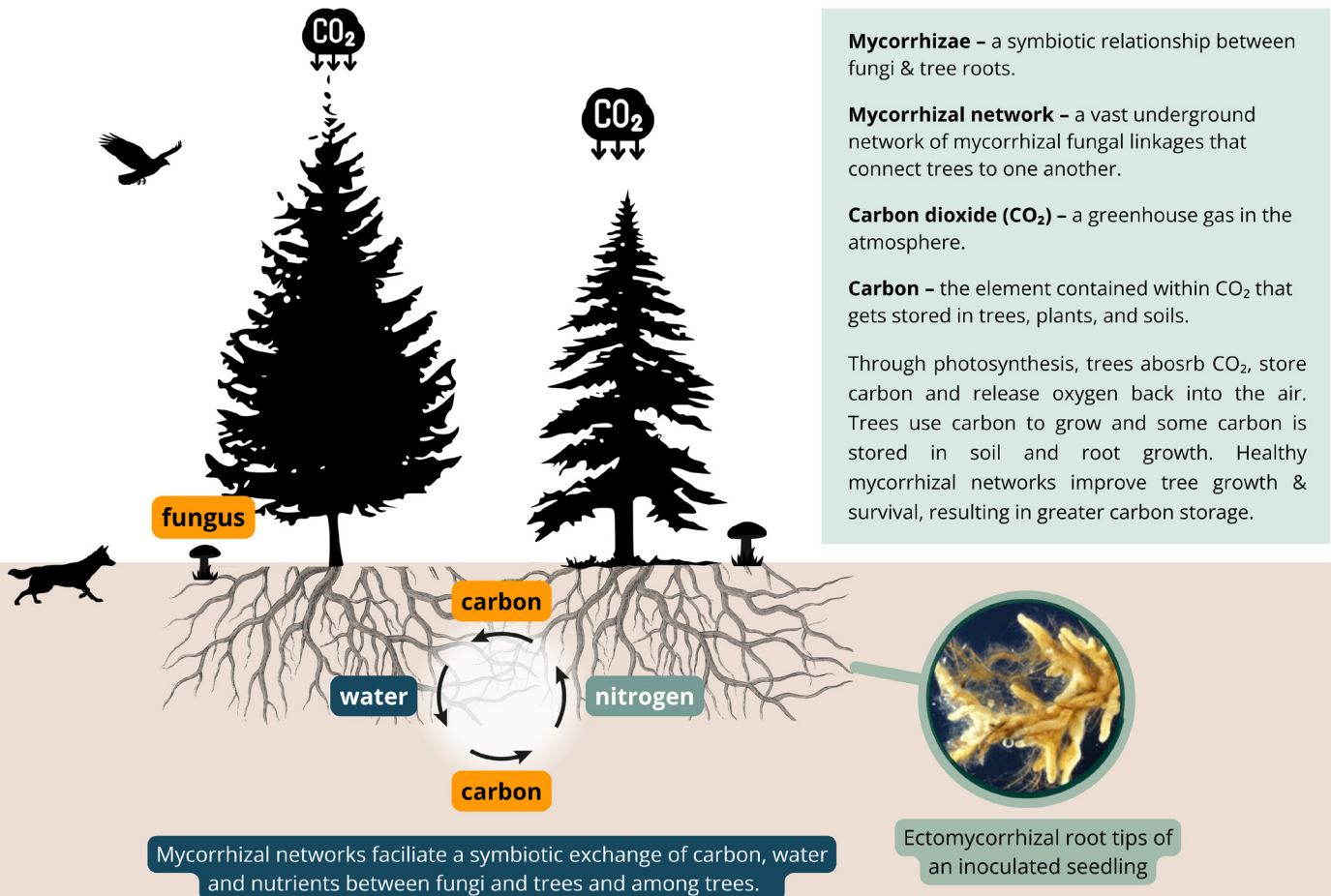
In 2020, Wahkohtowin began a partnership with a biotechnology company called Mikro-Tek. Mikro-Tek develops nature-based technology that enhances plant survival, growth, and overall health—supporting reforestation and restoration projects that can generate carbon offset credits. To date, Mikro-Tek has established more than 7,500 hectares of forestry restoration projects in Chile and has applied their technology in reforestation projects in Canada’s boreal forest. The technology works by inoculating (or treating) tree seedlings with mycorrhizal fungi.

As of June 2026, Wahkohtowin owner First Nations have, in principle, purchased Mikro-Tek and will close by fall 2026. The business will operate as an extension of Wahkohtowin under the banner of “Mikrotek by Wahkohtowin”.

MYCORRHIZAE & TREES

Did you know? The largest organism in the forest is a fungi.

Beneath the forest floor, trees are linked by a living underground network. Mycorrhizal fungi attach to the root systems of trees through a symbiotic relationship. These relationships (“mycorrhizae”) allow trees to exchange nutrients and signals with one another and expand the root area of plants, increasing phosphorus, nitrogen, and water uptake.



MIKRO-TEK APPROACH: FUNGI TO CARBON PROJECT

The Wahkohtowin project taps into the natural relationship between soil fungi and tree roots, strengthening the living networks beneath the forest floor. When trees are harvested for timber, beneficial mycorrhizal fungi can become depleted from the soil. Mikro-Tek conducted extensive research to demonstrate that inoculating seedlings with a mycorrhizal culture before planting boosts survival and growth. The inoculated seedlings grow stronger root systems, improving forestry outcomes like growth and survival rates, site occupancy (how well the trees spread out and fill the available land), and stand volume (the total amount of wood grown across the forest).



Control vs. inoculated tree seedling.
Credit: Mikro-Tek.



Figure 2. Mikro-Tek mycorrhizal inoculation process.

CARBON PROJECT

WHAT IS A FOREST CARBON OFFSET?

When forests absorb and store carbon from the atmosphere, that impact can be measured and sold as a credit to help balance out emissions elsewhere to slow climate change. To count, the benefit has to be “additional”—meaning it wouldn’t have happened without the project (referred to as “additionality”).

Learn More:

- ◆ [Understanding Carbon & Carbon Markets Infosheet](#) (RAD Network)
- ◆ [First Nations Carbon Toolkit](#) (BC Assembly of First Nations & Ecotrust Canada)

By improving seedling growth and survival, the Mikro-Tek inoculation approach allows for more carbon to be stored over time. In this case, Wahkohtowin inoculated seedlings that were already going to be planted by forestry companies in reforestation sites (areas replanted after timber harvest). These trees would have stored carbon anyway—but mycorrhizal inoculation helps them store more. Wahkohtowin will register and sell carbon credits based on that extra carbon storage.

INOCULATION → MORE SURVIVING SEEDLINGS → MORE FOREST VOLUME → MORE CARBON STORAGE = SELLABLE CARBON OFFSET

REDUCING HERBICIDES

The Mikro-Tek approach not only increases carbon storage but also improves forest health and reduces reliance on herbicides—chemicals used by forestry companies to eliminate plants they view as competing with planted trees. Wahkohtowin has long [advocated against the use of herbicides](#), responding to Elders concerns about the impacts of herbicides on land, water and wildlife including cultural keystone species like moose. By strengthening root systems, mycorrhizal inoculation helps seedlings grow strong within diverse plant communities, challenging the perceived need for herbicides. In addition to carbon credits, Wahkohtowin is exploring whether avoiding herbicide use could generate [biodiversity credits](#).

THE PATH SO FAR

In 2020 Wahkohtowin, Mikro-Tek and partners, including major forest managers in Ontario, secured funding to inoculate and plant 53 million trees as a commercialization exercise.

From 2021-2023 a retrospective study was conducted with Wahkohtowin Guardians re-measuring plots that had been planted 25 years ago. The results demonstrated increased early survival and higher stand volumes (see [Shabaga et al., 2026](#)).

From 2023-2025 38 million trees were inoculated and 15 million planted, with participation from Wahkohtowin Guardians, with additional inoculations and planting upcoming in 2026 and 2027.

✦ 53+ MILLION TREES WILL BE PLANTED BY SPRING 2027 ✦

Guardians have been involved in various capacities, including in the retrospective study, supporting field measurements and in tree planting. Through these roles, youth have had a chance to gain skills and exposure to forestry through an Indigenous-led and culturally aligned approach.



"I think it's important that youth become involved in climate action because I feel like our world's really disconnected right now. We get the privilege of being out here after such destruction [from logging] and we get to be here to nurture and give prayers and smudge for the land and get back to that connection and interconnectedness."

- Santana Vanbuskirk, Wahkohtowin Guardian, 2025 tree planting

THE VISION

“This is a form of an economy that is very much in line with the heart-centered inherent rights and responsibilities of stewardship” – David Flood, Wahkohtowin Executive Director

The carbon project is just one part of a deeper vision, pointing toward the possibility of a regenerative economy rooted in relationships of reciprocity with land, water, and living systems. In this vision, projects like Wahkohtowin’s become the economic foundation that supports Nations to exercise their rights and responsibilities within their territories.

Colonization disrupted natural governance systems, leaving forest decisions largely in the hands of non-Indigenous governments and industry, often without meaningful Indigenous participation. Yet these forests remain within Indigenous lands, where responsibilities to care for them have never been extinguished. Wahkohtowin demonstrates that Indigenous Nations are not just partners, but leaders in stewarding forests for future generations, guided by long-term responsibility rather than short-term gain.

With the right enabling conditions, this model could scale across regions like the boreal forest—one of the world’s largest carbon stores and most critical ecosystems. Most of the boreal landscapes in northern Ontario are already being managed through industrial forestry systems. The question isn’t whether forests will continue to be managed, but who shapes the future of that management and who benefits. This is not about choosing conservation over forestry, but about aligning ecological and cultural values with economic priorities. Projects like Wahkohtowin’s point to a path away from extraction toward a regenerative cycle of stewardship, meaningful local employment, cultural continuity and economic resilience.

GUARDIANS & RESTORING LAND RELATIONSHIPS

Guardian Programs train and employ community members to monitor ecosystems, support restoration, steward wildlife, and maintain cultural connections to the land. They are often described as the “eyes, ears, and voice of the Nation on the land”.

Learn more: ilinationhood.ca/guardians



At the heart of Wahkohtowin's vision are Indigenous Guardians. Wahkohtowin's mycorrhizal project can create stable land-based employment pathways for Guardians, shifting from short-term project jobs to ongoing land-based work. Youth are trained in forest monitoring, ecological restoration, carbon measurement, and land stewardship. Elders and knowledge holders guide land use decisions and pass on cultural teachings rooted in place. The cultural knowledge that was interrupted through colonial policies begins to flow again between generations, and economic activity becomes aligned with cultural values rather than disconnected from them.

"I actually went and worked for Missanabie [First Nation] as Climate Change Solutions Coordinator...I really think my experience as a guardian really helped me get that job in community. And then I got to go home and now I'm working for my own community, which was really my end goal." – Adrian Perreault, 2022 Guardian - Mikro-Tek Project Team



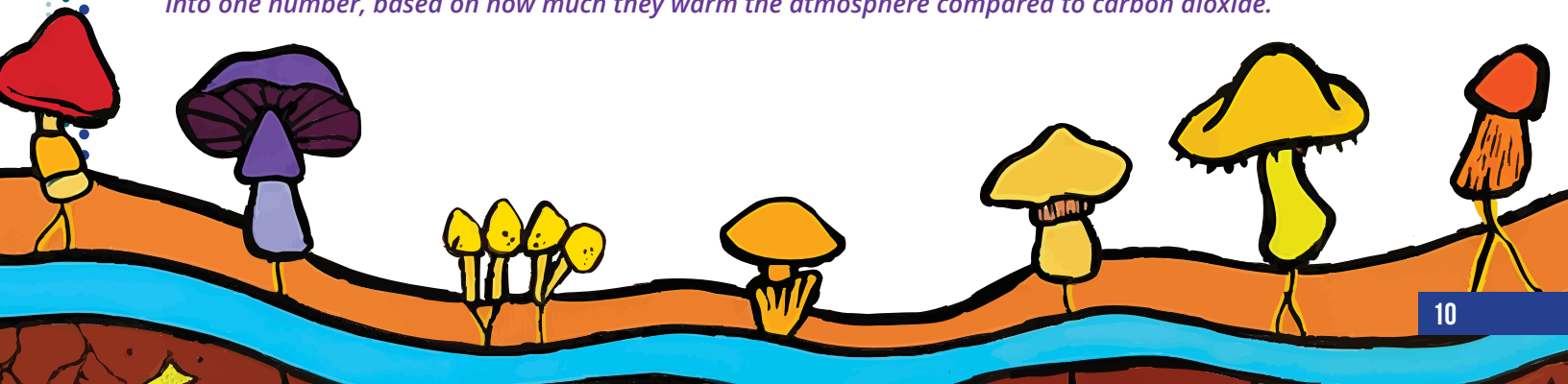
Guardians supporting tree measurements for a retrospective study in 2022

ECONOMIC CASE

In 2025 a third-party economic analysis was conducted to quantify the economic impact of the project – for project proponents and the broader economy.

Carbon offset revenue: Modelling shows that, if the project gets to scale with the inoculations, it should lead to an additional 5.6M tonnes of CO₂e* stored by the forest over 25 years. At an average of \$35 per tonne (a conservative estimate for voluntary market price), that corresponds to \$196,000,000 in potential carbon credit revenue – with higher value possible under Canada's national compliance offset program.

What is CO₂e? The "e" stands for equivalence and is a way of combining different greenhouse gases into one number, based on how much they warm the atmosphere compared to carbon dioxide.



Job creation: The economic opportunity includes direct and indirect job creation. The carbon project creates seasonal and monitoring jobs, many of which may be filled by community members through Indigenous Guardian programs. Employment is also boosted across the forestry value chain due to increased timber yield—generating jobs in harvesting, transport, milling, and processing.

Enhanced forest productivity: The projected economic impacts of the increased lumber yield include:

- Employment Generated: 34 full-time equivalent jobs per year
- Labour Income: \$2.5 million per year
- GDP Contribution: \$5.5 million per year

Ripple Effects for the provincial economy: Based on a scenario of \$10 million in annual spending, the program is expected to:

- contribute \$8.27 million in GDP;
- support approximately 52 full-time equivalent jobs across Ontario;
- generate an estimated \$3.82 million in labour income through wages and salaries

PROVEN APPROACHES MEET NEW POSSIBILITIES

Other regions show that this type of stewardship economy is possible. In coastal British Columbia, initiatives like Coastal First Nations' Great Bear Carbon demonstrate that when Indigenous leadership is supported and long-term revenue streams are in place, a different relationship between people, forests, and economies can emerge. Revenue from Great Bear Carbon has also supported the expansion of Guardian programs, strengthening stewardship on the ground. These same principles could be applied across the boreal zone.

Learn More: [Video](#) | www.greatbearcarbon.ca

THE CHALLENGE

The work is well underway with millions of trees already in the ground and Wahkohtowin intends to register and sell carbon credits. Yet, a central challenge remains: they have to prove the right to benefit from the carbon project, which was initiated on land that is subject to Treaty 9, while also considered “Crown” or public land.

In simple terms, carbon markets require clear rules about who owns the carbon benefits created by a project. Without that clarity, carbon credits cannot be issued or sold. This is more straightforward when a project falls within private land (land owned fee simple, reserve land, or land where Aboriginal Title has been proven). However, only about 11% of Canada is privately owned. The vast majority of forested land in Canada is considered public land, administered by the federal, provincial, or territorial governments – much of which overlaps with Treaties and [all of which is Indigenous traditional territory](#). In Canada, policy and legal frameworks don't explicitly define how Indigenous rights relate to carbon benefits on “Crown” lands.

In British Columbia carbon projects on Crown land can proceed through [Atmospheric Benefit Agreements \(ABAs\)](#) between Indigenous Nations and the provincial government. These agreements clarify how carbon benefits are shared and allow projects to move forward. However, Ontario has no equivalent system. When Wahkohtowin and its partners explored pathways to certify the project, the province confirmed that no ABA-style mechanism exists in Ontario and advised proponents to contact the federal government. At the same time, federal officials have indicated that provincial consent would likely be required for projects on public lands within the federal [Improved Forest Management](#) offset protocol that's currently in development. This creates a circular problem. The province points to the federal government. The federal system points back to the province.

Meanwhile, the project itself remains stalled. The trees have already been inoculated and planted, improving forest health and increasing carbon storage. Yet, with no recognized pathway to confirm who holds the rights to the carbon benefits, the project cannot move forward to registration or sale of credits.

Millions of trees are already in the ground, generating measurable climate benefits and supporting Indigenous stewardship. Yet, the economic opportunity remains locked.

"We've been knocking on the provincial government's door for the past three, four, five years. And we get a lot of finger pointing saying "that's not my job, that's that ministry's job" ... So the clock is ticking on these projects where you want to make these claims and take them into the voluntary market... This is where this missed opportunity can be."

- David Flood, Wahkohtowin Executive Director

LEARN MORE → [INFOSHEET: INDIGENOUS RIGHTS & CARBON PROJECTS ON "CROWN" LAND](#)

CARBON RIGHTS

What are "carbon rights"? Carbon rights are best understood as a "bundle of rights." These include the authority to generate carbon credits, manage carbon benefits, and sell those credits into carbon markets. Indigenous Nations have a basis to assert these rights through several legal foundations, including:

- Section 35 of the Constitution Act
- Treaty interpretation
- The United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP)
- Case law/decisions by the Supreme Court of Canada affirming Indigenous Peoples' pre-existing, unextinguished rights, including the lawmaking rights and the authority to use and benefit from their traditional territories
- Inherent Indigenous legal orders and responsibilities to care for the land



Yet, since the emergence of carbon markets in recent decades, Canada's policy and legal frameworks have yet to explicitly define how Indigenous rights relate to carbon benefits on "Crown" lands. So, while Nations have a basis to assert carbon rights, a structural challenge persists due to a lack of supportive policy.

Within the current status quo, Indigenous project proponents must negotiate an agreement with the provincial or territorial government to demonstrate entitlement to generate and sell carbon credits. Nations may choose to bypass the province and assert their rights to manage and benefit from forest carbon; but they face the risk that their project may stall and lose its ability to be certified.

CALL TO ACTION

Indigenous Nations are already leading transformative work in land stewardship, climate action, and regenerative economic development. For Wahkohtowin, the capacity and commitment are there; what is needed is a clear pathway that allows Indigenous-led projects on public lands to access economic benefits from carbon markets. Currently the policy architecture has not caught up with what is already happening on the land.

In the short term, practical solutions are within reach. Ontario could establish a mechanism similar to the Atmospheric Benefit Agreements (ABAs) used in British Columbia, allowing Indigenous Nations and the province to clarify carbon rights and share the benefits generated through improved forest stewardship. Alternatively, Nations could lead in the negotiation of an agreement with the province, recognizing Indigenous participation in carbon benefit sharing on Crown lands, creating a precedent for future projects. If provincial mechanisms remain unavailable, the federal government could explore pathways that allow Indigenous-led projects to proceed under national carbon protocols where provincial frameworks have not yet been established (e.g., a backstop). Each of these approaches would unlock projects that are already ready to proceed.

Looking further ahead, a transformative pathway is possible. Ultimately, Wahkohtowin envisions clear and policy backed recognition of Indigenous Nations' authority over carbon and ecosystem benefits generated within their territories – reflecting their inherent rights recognized through treaties, Section 35, and UNDRIP. In that future, Indigenous-led carbon projects would not require provincial oversight or permission. Instead, Nations would exercise their governance over carbon management and stewardship, working with partners where appropriate.

The work ahead requires collaboration. Indigenous Nations, governments, researchers, environmental organizations, and market actors all have roles to play in building the partnerships and policies needed to support Indigenous-led stewardship economies. In a healthy forest, mycorrhizae connect trees into a living network, sharing nutrients and signals. What looks like individual trees is really a community sustained by relationships. Wahkohtowin reflects this same principle. The future of forests is not only about trees, but the relationships that sustain them. With the right pathways in place, what's emerging in Treaty 9 could grow into a broader network of Indigenous-led stewardship economies across Canada, rooted in responsibility to the land and the understanding that everything is connected. The roots are already there.



LOOKING AHEAD

The Wahkohtowin case study offers an opportunity to move from theory to practice. Across Canada, many Indigenous Nations are exploring similar opportunities to restore forests, protect biodiversity, and strengthen land-based economies. Projects like Wahkohtowin's can help chart the path forward. Governments, Indigenous Nations, legal experts, and partners could work together to pilot practical solutions that allow ready-to-launch projects to proceed. Doing so would: demonstrate how Indigenous-led forest carbon initiatives can operate on public lands; clarify jurisdictional questions through real-world implementation; create precedents that other Nations and regions could follow; and unlock new models for climate action rooted in stewardship.

RAD Network is working to help unlock pathways forwards in specific bio-regions such as this example in Treaty 9, by coordinating dialogue across federal and provincial governments, Indigenous Nations, and environmental organizations. RAD creates space for Nations and supportive partners to come together to identify practical policy levers that could enable projects like Wahkohtowin's to move forward. It also commissions and coordinates legal analysis to clarify jurisdictional questions and possible pathways. By convening diverse actors - including governments, practitioners, legal experts, and market participants - RAD is helping build shared understanding and momentum around the reforms and structures needed to enable Indigenous-led carbon and conservation initiatives to succeed and then share the story out to try to replicate elsewhere.

LEARN MORE & GET IN TOUCH

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- ✦ **Podcast:** [Part 1: The Fungal Factor](#); [Part 2: Wahkohtowin](#)

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