

Conservation Impact Bond:

An innovative new tool for scaling collaboration
and investment for landscape-scale conservation

A BRIEFING NOTE FOR CANADIAN POLICY-MAKERS


PREPARED BY

Matthew Lynch, Ivey Centre for Building Sustainable Value &
Michelle Kanter, Carolinian Canada Coalition

Deshkan Ziibi
PHOTO: SAM WHITEYE

TABLE OF CONTENTS

Overview	4
Who is this Brief for?	6
Challenges of Landscape-Scale Conservation	7
The Conservation Impact Bond	8
Financial structure.....	8
Implementation.....	8
The Deshkan Ziibi Conservation Impact Bond	11
Overview.....	11
Collaboration: Partners and participants.....	12
Evaluation Framework.....	13
Impact: Current Status.....	13
Federal Government Support for Phase 2.....	14
DZCIB Innovation: Lessons so far	14
Replication and scaling of the CIB model in Canada	15
The opportunity for government and public agencies	16
Contribution to policy agendas	18
Endnotes	20



**Ministerial Announcement on Support for
Phase 2 of the Conservation Impact Bond**

“The twin crises of climate change and biodiversity loss are two sides of the same coin, and we must tackle both crises together. That’s why the Government of Canada is funding projects like the *Deshkan Ziiibi Conservation Impact Bond Initiative*. By supporting conservation, green innovation, green jobs, and reconciliation, this initiative represents the kind of innovative thinking we need to meet Canada’s conservation goals and address the climate crisis.”

The Honourable Steven Guilbeault, Minister of Environment and Climate Change

|| Overview

The Conservation Impact Bond (CIB) is a new “made in Canada” conservation finance instrument that enables collaboration and investment to manage healthy landscapes in the spirit and practice of reconciliation. The CIB aims to enhance natural assets at the landscape scale, where protected areas, ecosystems and natural infrastructure must be integrated in harmony with human land uses, such as Indigenous stewardship, human settlements, farming, industry, and the growth of sustainable jobs.

In Canada, these landscapes are the traditional territories of Indigenous Peoples, and it is essential that Indigenous Peoples have a leading voice in the future of these lands and natural resources. Historically, this has rarely been the case. The

focus of the CIB on restoring relationships to the land through partnerships, and the enormous wealth of deep ecological knowledge this brings, is critical to the process of reconciliation.

This brief for Canadian policy-makers – building on the emerging lessons of the ongoing Deshkan Ziibi Conservation Impact Bond (DZCIB) in southwest Ontario – highlights the opportunities to support further deployment of the CIB instrument, scaling up urgent investment in public conservation and climate goals efficiently and equitably, while advancing reconciliation and enabling more resilient and productive local economies and communities.

Conservation Impact Bond: How does it work?

The CIB is an innovative financial instrument that connects key stakeholders for biodiversity conservation, finance, and Indigenous leadership for greater impact.

The place-based model is guided by **Indigenous partners** and a cross-sector Leadership Team who co-create the impact evaluation framework.

The financial mechanism is triggered by groups and individuals that commit to pay for a range of benefits from healthy and resilient ecosystems (**“outcome payers”** or **“accelerators”**) – possibly a government agency, a farmer, or business that relies on these ecosystem services. These commitments have been proven to attract investors willing to invest upfront in these healthy landscape outcomes (**“impact investors”**).

Together, the financial participants provide an immediate pool of funds to accelerate a Healthy Landscape Portfolio of “on-the-ground” habitat projects delivered by diverse and experienced groups and landowners (**“habitat growers”**).

These projects could include: protecting biodiversity, planting trees, restoring waterways, removing invasive species, growing native plants, installing seed orchards, connecting natural infrastructure, implementing nature-smart climate solutions, urban forestry, or regenerative agriculture. Many of these projects can be delivered by Indigenous- or youth-led initiatives and enterprises.

The holistic impacts are tracked and assessed at multiple scales through a relational accounting framework and metrics, aligned with global

business and sustainability standards, using a combination of independent audit, expert monitoring, healthy landscape tracking technology, and academic research that concurrently builds capacity and drives further investment and opportunities (**“evaluators”**).

The model requires a **“facilitator”** to connect the parties to co-develop and apply the “rules” of the bond, especially the definition of successful outcomes. The investors are paid if the prescribed outcomes are achieved – a “pay for success” model.

|| Who is this Brief for?

The CIB model is of direct relevance and applicability to Indigenous and public authorities and agencies responsible for conservation, management and climate adaptation of landscapes, watersheds, and natural resources. It has been designed to be adaptable, connective, and equitable across rural and urban settings with diverse uses, habitats, land ownership and jurisdictions.

The CIB also will be of interest to senior levels of government responsible for the conservation and management of natural

systems at provincial and federal levels, and key related policy agendas, including reconciliation with Indigenous Peoples, climate mitigation and adaptation, community resilience, and local economic development.

The CIB model also can deliver benefits to the private sector in farming, forestry, manufacturing, ecotourism, recreation, and land management, so also creates important opportunities for public-private partnership.



|| Challenges of Landscape-Scale Conservation

Conservation is particularly challenging at the landscape scale, where natural systems are integrated with human land uses, including human settlements and economic activities, such as agriculture or industrial production. This integrated context often means natural systems and infrastructure are fragmented and under intense pressure from these human activities, exacerbated by the impacts of climate change.

The healthy function of these local natural systems plays a fundamental (if often unrecognized) role in supporting the wellbeing of communities and sustainable economic activity. Local ecosystems provide core services that have immense value, such as water quality protection, flood risk mitigation,

pollination, and enhancement of air quality – in addition to their own intrinsic value, genetic resources, and cultural importance.

A large proportion of the Canadian population lives and works in these landscape ecosystems and benefits from these services. Despite the value created, these local ecosystem services have the characteristics of public goods so face chronic underinvestment, which existing models of public conservation can only partially address. One study estimated the annual funding gap in protecting biodiversity being around \$20 billion a year in Canada through to 2030.ⁱ

|| The Conservation Impact Bond

Financial structure

The CIB is a “pay-for-success”, outcomes-based conservation finance instrument. The core financial model is based on bringing together entities that place a tangible, monetary value on a service provided by nature and are willing to commit to pay to ensure this service continuesⁱⁱ (“**outcome payers**” or “**accelerators**”) with investors willing to invest upfront in these healthy landscape outcomes (“**impact investors**”).

Impact investors receive back their principal plus a return on investment if the agreed outcomes are achieved but do not receive anything if the initiative is not successful. The pay-for-success model allows outcome payers (e.g., businesses, farmers, or public agencies) to simultaneously decrease their investment risk while promoting innovation, efficiency, and

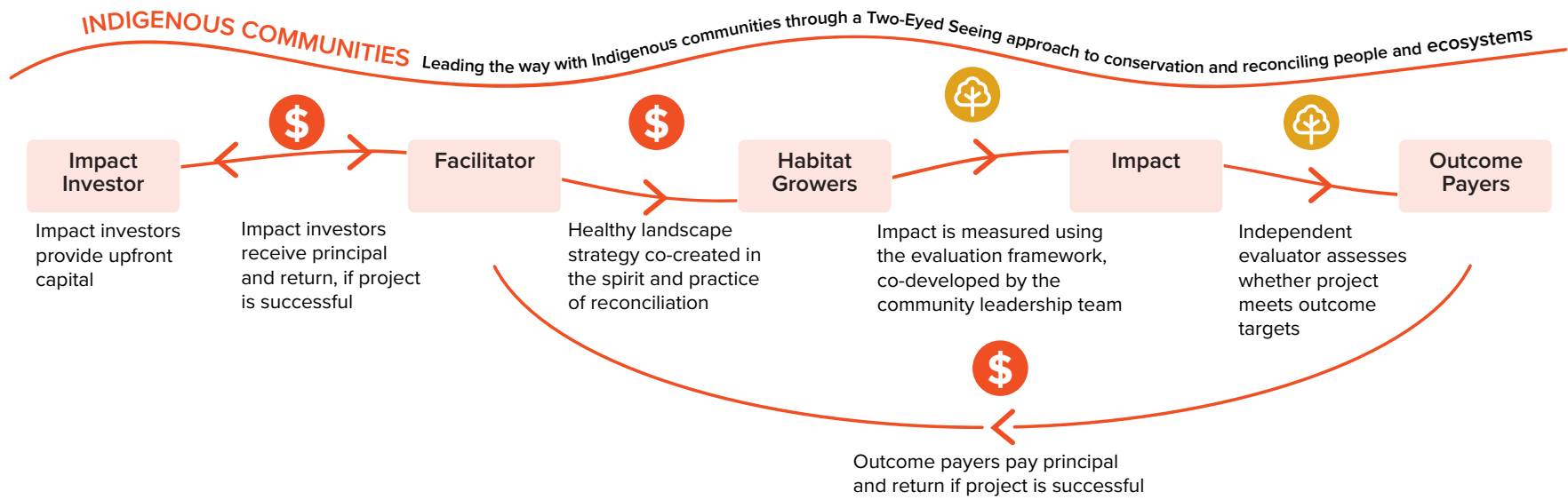
effectiveness through the project implementation. This model encourages private finance to flow into public good projects and be rewarded if the program is successful.ⁱⁱⁱ

The CIB is based on the model of the social impact bond, which has been previously deployed to mobilize capital to invest in social challenges like improving public health outcomes. It also builds on the lessons of an emerging field of new financial instruments focused on channeling investment to conservation and protection of natural systems.

Implementation

An overview of the full CIB model is presented in **Figure 1**.

Figure 1: CIB Model



In addition to the financial structure, implementing a CIB in practice requires key local stakeholders to come together in a dynamic cross-sector collaboration.

As a first step, ethical space must be held for cross-sector discussions that centre on **Indigenous partners** as recommended by the Indigenous Circle of Experts. The model is designed to help reconcile peoples and ecosystems. Indigenous partners may choose to connect or lead in multiple ways, depending on their interests and goals.

The **facilitator** is a respected third-party organization that has the expertise and reputational standing to coordinate the design and implementation of the CIB and bring the necessary parties together to enable its implementation. The facilitator(s) will hold the bond, facilitate the definition of successful outcomes (the evaluation framework), manage cash flows, facilitate relationships among partners, establish legal agreements that make up the bond, and coordinate the Healthy Landscape Portfolio of habitat projects that aligns with the defined successful outcomes.

The **habitat growers** nominate and implement on-the-ground ecosystem enhancement work based on agreements with the facilitator. Project selection is guided by landscape-scale targets and expert local knowledge, thereby, prioritizing investment-ready and high-impact opportunities to address critical needs.



The holistic impacts of these ecosystem projects are measured according to the predetermined relational accounting evaluation framework, which assesses social, ecological, and economic impacts. Impact data is collected and assessed by **evaluators** at multiple scales – property, region, group – using recognized methods that are embedded into the structure of the bond (e.g., agreements, collaborations, technology platforms).

|| The Deshkan Ziibi Conservation Impact Bond

Overview

The Deshkan Ziibi Conservation Impact Bond (DZCIB) is deploying the CIB model for the first time in Canada. The initiative is being facilitated by Carolinian Canada, a non-profit network of leaders that collaborate for healthy ecosystems in the Carolinian Zone, Canada's southernmost ecoregion spanning from Toronto to Windsor.

The Carolinian Zone provides a unique setting in which to launch this project as it is home to many Indigenous Nations, some of the country's most diverse flora and fauna, and approximately 25 per cent of Canada's human population. The biodiversity potential of this region, coupled with large-scale human activities and Indigenous presence, represents an ideal space for the launch of a CIB that is aimed at improving the coexistence of humans and ecosystems in the spirit and practice of reconciliation.

The DZCIB, launched in March 2020, is the first phase of Carolinian Canada's piloting of the CIB model. Phase two of the CIB is the Long Point Walsingham Conservation Impact

Bond (LCIB), set to launch in early 2022. The overall objective for these two project phases is to solidify a scalable CIB model to build relationships for reversing the trend of habitat loss and eventually doubling habitat levels in the Carolinian Zone in harmony with existing land uses to achieve minimum recommended levels of 30 per cent natural cover for healthy landscapes. The longer-term goal is for the CIB to become financially self-sustaining and supported by a community of people willing to work together in a process of advancing healthy landscapes and healing relations for the long term.

For a detailed overview of the DZCIB, please see the research report and the story map:

REPORT: [The Deshkan Ziibi Conservation Impact Bond Project: On Conservation Finance, Decolonization, and Community-Based Participatory Research](#)

STORY MAP: [Empowering the Human-Nature Bond](#)

Collaboration: Partners and participants

CIB ROLE	ORGANIZATIONS
Leadership Team	<ul style="list-style-type: none"> » Deshkan Ziiibiing (Chippewas of the Thames First Nation) » Ivey Business School » VERGE Capital » Thames Talbot Land Trust » Carolinian Canada Coalition (facilitator) <p>The DZCIB Leadership Team was initiated in 2019 as a result of stakeholder co-creation sessions.</p>
Indigenous Communities	<ul style="list-style-type: none"> » Deshkan Ziiibiing (Chippewas of the Thames First Nation) » Oneida Nation of the Thames » Two additional Indigenous groups participated in co-creation sessions or habitat projects.
Outcome Payers	<ul style="list-style-type: none"> » 3M (CAD \$150,000) » Pollinator Partnership Canada (CAD \$4,500) » A three-year government grant for approximately CAD \$150,000 provided anchor funding to co-develop and initiate the CIB model and Healthy Landscape Portfolio.
Impact Investor (prototype)	<ul style="list-style-type: none"> » VERGE Capital (CAD \$130,000 - structured as a legally binding loan through the VERGE Breakthrough Fund, which includes a five-per-cent interest rate and three-year repayment schedule).
Habitat Growers	<ul style="list-style-type: none"> » Deshkan Ziiibiing (Chippewas of the Thames First Nation) » Oneida Nation of the Thames » Thames Talbot Land Trust » Lower Thames Valley Conservation Authority with 45 landowners » Alternative Land Use Services Canada: ALUS Middlesex & Chatham-Kent » ReForest London » Camp Kee-Mo-Kee » The Living Center » City of London » Ontario Nativescape with 10 landowners <p>Collectively, habitat growers leveraged significant additional in-kind and cash funding match.</p>
Evaluators (prototype)	<ul style="list-style-type: none"> » Ivey Business School research team led by Diane-Laure Arjaliès facilitated the co-development and reporting of an impact evaluation framework.
Stakeholders	<ul style="list-style-type: none"> » Twenty local to national stakeholders participated in local co-creation sessions in ethical space. » Two hundred stakeholders provided input through forums, workshops and interviews.

Evaluation Framework

Impact metrics were determined collaboratively with the DZCIB Leadership Team and partners, in ways that attempted to embrace both Indigenous and settler worldviews. The DZCIB evaluation model presents five evaluation pillars that stand as guideposts for projects on the landscape and aim to track holistic impact. These include (1) connecting healthy habitats, (2) connecting opportunities, (3) connecting knowledge, (4) connecting our hearts and minds, and (5) connecting our bodies. Multiple metrics exist to evaluate the outcomes of each evaluation pillar; however, one pay-for-success metric was collaboratively selected for each pillar to be directly tied to defining project success, and consequently, outcome payer payment and investor return on investment.

Impact: Current Status

From 2019 to July 2021, the DZCIB has supported 53 healthy landscape projects in the Dshkan Ziibi region, resulting in numerous ecological, sociocultural, and economic benefits. Sixty-nine hectares (171 acres) of natural assets/climate-smart habitat in southern Ontario have been improved, 39,000+ native plants have been planted, and approximately 450 people have been engaged in high-quality learning and activities on the land.

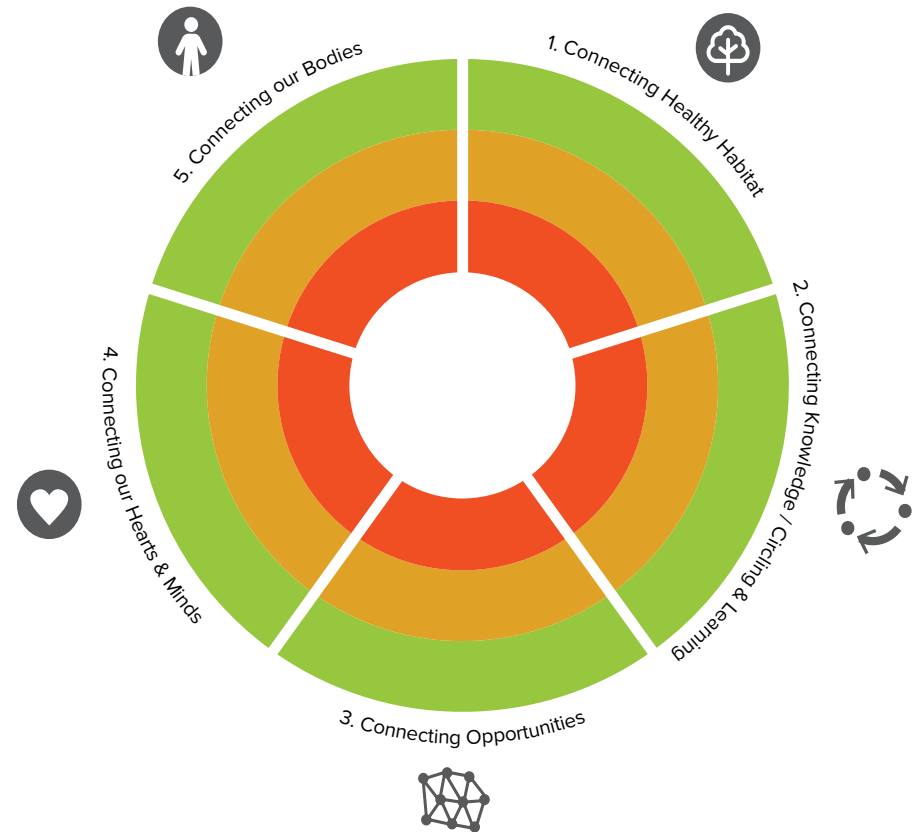


Figure 2: DZCIB Evaluation Model

Federal Government Support for Phase 2

In November 2021, Environment and Climate Change Canada (ECCC) announced \$300,000 in funding support for Phase 2 of the CIB to strategically accelerate voluntary conservation action in the Long Point Walsingham Forest (LPWF) Priority Place. Located entirely within Norfolk County (Ontario), LPWF is 86,715 hectares in area and includes the longest freshwater sand spit in the world. The funding is to be used “...in the spirit and practice of reconciliation to restore, conserve, connect, and protect high-quality habitat for healthy landscapes in collaboration with diverse stakeholders.” The specific focus is on wildlife and habitat conserved and protected, as well as species at risk. The ECCC funding will provide a “match” for outcome payers/accelerators.

DZCIB Innovation: Lessons so far

A detailed overview and evaluation of the CIB are presented in the full report. Some of the key lessons and insights so far include:

- » **Convening stakeholders.** The DZCIB shows exciting potential to bring together a diverse array of stakeholders to drive conservation across a broad and diverse landscape. A key feature is the central role of Indigenous partners.
- » **Mobilizing resources.** The DZCIB demonstrates in practice the potential for mobilizing financial resources for targeted conservation objectives from both outcome payers and impact investors with diverse sustainability goals. These financial resources provide the core funding for the CIB but also unlock a much wider scale of in-kind and matching funding contributions from habitat growers. Additionally, the CIB has proven to be an effective mechanism to recruit and build capacity of new habitat growers from diverse sectors, including agriculture, recreation, forestry, and other land-use sectors.
- » **Accelerating impact and innovation.** DZCIB shows that the structure of the model acts as an accelerator and catalyzes innovation while reducing risk. It can nimbly connect resources to projects faster to maximize opportunities, minimize inefficiencies, honour traditional knowledge and expertise, address barriers, test new approaches, and fill gaps on a fragmented landscape.
- » **Defining shared success.** The CIB requires a shared model of success, including defining the specific metrics that form the basis of the bond’s financial returns mechanism. The DZCIB example shows how the diverse group of stakeholders, with a range of interests, could come together to define shared metrics of success on the landscape.
- » **Equitable access.** The DZCIB model embeds global standards for reconciliation, sustainability, and corporate responsibility. It demonstrates potential to provide equitable and targeted access to resources based on on-the-ground impact using consistent measures.
- » **Public-private partnerships.** Public support for Phase 1 and Phase 2 highlights the potential for the CIB as a tool for achieving public objectives and demonstrates the feasibility of public investment to leverage private investment through the CIB mechanism.

|| Replication and scaling of the CIB model in Canada

Following the success of the DZCIB and the initiation of the LCIB, the goal is to extend the CIB to other regions in southern Ontario and scale the impact, while also building interest in replicating the model across Canada. With replication, the CIB seeks to preserve the essence of the bond, while remaining adaptable to local environmental conditions and community partner needs and priorities.



Four key elements that will increase the likelihood and speed of replication and scale:

- 1 Indigenous leadership and sovereignty.** Leadership of Indigenous communities in conservation initiatives and collaborations proposed to occur on traditional territories, and substantive progress on Indigenous land sovereignty issues.
- 2 Local leadership for healthy landscapes.** Scaling out the CIB requires local Leadership Teams to work collaboratively through the CIB model to meet the growing demand for healthy, resilient landscapes to address the biodiversity and climate crises in the spirit and practice of reconciliation.
- 3 Healthy landscape accelerators.** Replication and scale will be triggered by mobilizing financial commitments for accelerating on-the-ground action. Initially these commitments have come from a pioneering group of innovation-focused organizations. However, with continual demonstration of success, increased urgency for sustainable climate solutions, and the financial participation of critical stakeholders like the Federal Government, the CIB is attracting more mainstream investment interest.
- 4 Government/public alignment.** Direct support and endorsement for the CIB model from government and public agencies – as the lead actors for conservation in Canada – will play a critical role in wider deployment of CIBs. This is discussed further in the next section.

|| The opportunity for government and public agencies

There are three strategic opportunities for advancing the role of government and public agencies created by the CIB model:

- 1 Crowding in private investment.** The CIB model provides a vehicle by which limited public resources can ‘crowd in’ additional private investment for conservation objectives. For example, the federal contribution to Phase 2 of the CIB in Long Point Walsingham Forest is directly facilitating the investment of an even larger amount of funding from other non-government sources.
- 2 Opening new options for achieving public conservation objectives.** The CIB opens innovative new options for government agencies to achieve conservation outcomes (and other policy goals), through alternatives to the traditional conservation model of primary funder and implementor.
- 3 Extending impact to the landscape scale.** The CIB extends the impact of conservation activities outside of publicly owned or managed lands, involving a broad range of landowner groups. This not only increases the total impact footprint, but brings the additional benefit of prioritizing and connecting landscape-scale activities that enhance the conservation and performance of the entire system.

In this context, the CIB provides different opportunities and entry points for public involvement:

As a stakeholder convenor. Public agencies have a significant mandate and credibility for convening community stakeholders. Public agencies could help bring interested stakeholders around the table to advance the development of a CIB, without necessarily needing to be directly involved in its deployment.

As a facilitator or on the Leadership Team. A public agency could play a leadership role in a CIB consortium co-developing the project and identifying outcomes. Such a role could reasonably fall within the mandate of a public agency focused on conservation outcomes. Government representatives can bring expertise and guidance to the co-development of the model and the connection with public objectives.

As an outcome payer/accelerator. A public agency could play a role as an outcome payer, in situations where the outcomes align directly with a public agency’s mandate. In many instances, the pay-for-performance approach could be an efficient deployment of resources to achieve public policy objectives, shifting effort and risk away from the public sector to organizations with specialist expertise.

As an impact investor. While not a traditional approach for public investment, there may be some instances where public agencies could contribute funds as an impact investor.

As a habitat grower. Enhanced management of public lands and parks can contribute to the impact of the CIB healthy landscape portfolio while leveraging community engagement and matching lands from other sources to improve the ecological integrity in the greater park ecosystem.

As an evaluator. Government data custodians can play a significant role in implementing relational accounting framework for holistic impact, such as providing, collecting, evaluating, or reporting impact data.



PHOTO: DARIA KOSCINSKI

|| Contribution to policy agendas

A CIB instrument uses science to guide outcomes to achieve multiple strategic objectives to deliver on a wide set of broader public agendas and “co-benefits”:

Reconciliation. The CIB model aims to create ethical space to support, develop, and strengthen relationships between Indigenous and settler communities. This provides a foundation for protecting, conserving, and restoring connections with the land for shared environmental, social, and economic goals across traditional territories. The CIB also provides an important platform for recognizing the fundamental importance of Indigenous land sovereignty and stewardship. It is designed to encourage and support the development of Indigenous-led initiatives, such as Indigenous Protected and Conserved Areas (IPCAs).

Nature-based solutions for Canada’s 2030 climate targets. The CIB provides a pilot model for developing partnerships and funding for nature-based solutions, including those that support climate mitigation. Nature-based solutions are a priority investment strategy for climate action, which the

CIB can support through incorporation in the bond’s impact assessment framework and the Healthy Landscape Portfolio. Co-developing and incorporating measurable carbon sequestration metrics in the assessment framework could compensate Indigenous land-stewardship while attracting investors interested in carbon offsets and credits. Payments for ecosystem services would require specific measurement tools and third-party verification protocols, as well as protected and conserved areas of sufficient scale to make the associated effort worthwhile.

Climate adaptation and community resilience. The protection, conservation, and restoration of ecosystems through the CIB can make contributions to climate adaptation, enhancing the ability of natural systems to adapt to climate change impacts. Building community resilience in the face of climate change requires restoring ecosystem health to provide buffering capacities against climate impacts, which in turn reduce community vulnerability to climate risks and improve resilience. For example, restoring riparian buffer zones along water courses can help to reduce flood risks and planting

trees in urban areas can mitigate air pollution and dampen heat island effects associated with increased temperatures.

Biodiversity protection. As an innovative conservation instrument, the CIB has the potential to make an important contribution to protecting habitat for biodiversity and species-at-risk, while also building awareness of the critical services that ecosystems provide that underpin environmental sustainability, human well-being, and economic activity. With the biodiversity and climate crises inextricably linked, the CIB seeks to develop and promote nature-based solutions that simultaneously address biodiversity and climate goals. Widespread deployment of CIBs could make key contributions to the Government of Canada's key environment- and biodiversity-related targets, including the 2 Billion Trees Commitment and protecting 25 per cent of the country's lands and oceans by 2025.

Local and ethical restoration economy and employment creation. A sustainable local restoration economy will provide market-based incentives to expand climate-adaptive seed orchards; native plant horticulture and retail; ecological landscaping; installing and monitoring high-quality green infrastructure; ecological accounting for natural assets; regenerative agriculture; ecotourism; and more. In particular,

protecting, growing and stewarding native plants is a growing industry at the heart of the CIB model with great expansion potential, especially given urgent goals for ecosystem restoration and climate resilience. This aspect should invest in Indigenous seed sovereignty, businesses, and capacity-building as a priority. Recent research into green infrastructure in Ontario has identified the potential of these activities to generate significant and diverse opportunities for local employment, training, and business development^{iv}.

United Nations Sustainable Development Goals. The CIB model can make direct and indirect contributions to a significant number of the Sustainable Development Goals (SDGs) including protecting life on land (Goal 15), life below water (Goal 14), climate action (Goal 13), sustainable cities and communities (Goal 11), decent work and economic growth (Goal 8), and clean water and sanitation (Goal 6), among others.

FIND OUT MORE

Carolinian Canada Coalition: admin@carolinian.org
Ivey Business School: sustainability@ivey.ca

Endnotes

- ⁱ Deutz, A., Heal, G. M., Niu, R., Swanson, E., Townshend, T., Li, Z., Delmar, A., Alqayam Meghji, Sethi, S. A., & Puente, J. T.-D. L. (2020). Financing Nature: Closing the Global Biodiversity Financing Gap. Paulson Institute.
- ⁱⁱ Kosciolek, K., Kwan, N., Longaphy, C., & Wilson, R. (2020). Financing conservation: How conservation financing could be used to protect Canada's ecosystems. Nature Conservancy of Canada and Rally Assets. <https://rallyassets.com/wp-content/uploads/2020/11/Financing-Conservation.pdf>.
- ⁱⁱⁱ Kosciolek et al. (2020)
- ^{iv} Green Infrastructure Ontario Coalition (2020). An Economic Impact Assessment of the Green Infrastructure Sector in Ontario. https://greeninfrastructureontario.org/app/uploads/2020/07/Economic-Impact-Assessment-of-GI-Sector-in-Ontario_UPDATED_july20-20.pdf