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Natural capital

**The nexus between climate, nature,
and Indigenous peoples**

Introduction

When it comes to financing development while maintaining commitments to nature, banks and other financial sponsors tend to focus on two important objectives. The first is supporting biodiversity, an essential characteristic of nature that enables productivity, resiliency, and adaptability to change within an ecosystem. The second is preserving [natural capital](#), or the elements of the natural environment—such as forests, rivers, and soil—that society and businesses rely on to function.

Yet, with some notable exceptions, the industry has yet to draw the connection between these important goals and protecting the ecosystem services that are important to our way of life. The Taskforce on Nature-related Financial Disclosures,¹ an international initiative designed to [provide a framework](#) for how organizations can address environmental risks and opportunities, classifies ecosystem services into four major categories:

1. **Provisioning services** such as food and water
2. **Regulating services** such as flood and disease control
3. **Supporting services** such as nutrient recycling that maintain conditions for life on Earth
4. **Cultural services** such as recreational and cultural benefits

Among these services, perhaps the least understood is the last. It's easy to see how society can benefit from being able to recreate in a preserved natural environment—and what's threatened once compromised. Anyone who has snorkeled in the bleached Great Barrier Reef or seen the Grand Tetons swallowed up in a haze of smoke from forest fires hundreds of miles away has witnessed firsthand the stakes of the codependency between humans and nature.

For many of us, though, these are isolated events disconnected from our daily lives. Not so for Indigenous peoples, who remain firmly tethered to the land and waterways that they rely on—not just for sustenance but also for preserving their cultural heritage. Much in the way that financial institutions are the gatekeepers of the world's financial capital, Indigenous peoples are stewards of its natural capital. This is because many of the land-based practices nations regularly draw on to protect the planet and its delicate ecosystems originated with their original denizens.

This paper, part two in a series exploring financial institutions' role in protecting natural assets, investigates the nexus between nature and human rights in identifying further opportunities for the industry to live up to its environmental commitments by helping preserve Indigenous cultures and the solutions they have to offer for addressing nature and biodiversity loss.

Living in a precarious balance

In 2016, something happened that hadn't occurred in more than a century: all seven Lakota tribes came together for the first time since they fought side by side in the Battle of Greasy Grass in 1876 (known by most as The Battle of Little Bighorn or Custer's Last Stand).² The object of their reunion was the Dakota Access Pipeline, a proposed 1,772-mile oil pipeline that would stretch from North Dakota to Illinois and cross the Missouri River, the primary water source for the Standing Rock Sioux Reservation and which also dissected sacred land that was part of unceded Lakota territory.

The tribes' main concern was that the project could potentially contaminate the river, which for generations had nurtured the adjacent fertile bottomlands, served as a transportation corridor, and provided sustenance to countless living beings that lived along or near its shores. But the unique coalition of Native Americans traveled to the site to join the protest because they saw the fight in broader historical terms, as the latest skirmish in a centuries-old battle over their lands and survival.³

That these two issues were so inextricably linked was no accident. In protesting projects such as the Dakota Access Pipeline and scores of others, Indigenous peoples and local communities (IPLCs) and their advocates have long argued that the destruction of their land is equivalent to the destruction of their culture. Because their identity and livelihood are so closely connected to their homelands, anything that threatens to degrade their environment—either directly or indirectly—is a threat to their existence.

Over the years, academics have sought to explain the reciprocal relationship between humans and nature in making the case for harmonious living without the exploitation of natural resources. Scholars Glen Coulthard and Leanne Betasamosake Simpson tied this codependency back to Indigenous peoples with their theory of grounded normativity.⁴ Its call for a return to land-based Indigenous practices is based on the idea that human identity is inherently connected to nature; if humans take care of it, then nature will take care of humans and provide for our long-term survival and prosperity.

The theory also leverages the significance of nature-based solutions in addressing and solving the climate crisis—all of which draw from practices Indigenous peoples have been performing for centuries. First Nations, for example, were the first communities to deliberately set fire to areas of the forest in order to prevent destructive wildfires.⁵ They also pioneered sustainable agricultural practices such as agroforestry and crop rotations.⁶

Their care of the *Melipona* bees in the Amazon rainforest provides a more specific but perhaps lesser-known example. Indigenous communities have for centuries used the bees' medicinal honey to ward off microbial and fungal infections, and the bees are critical for plant pollination and regrowing forests. The bees are now under threat from deforestation, pesticides, and climate change, and Indigenous women are plying their long-standing beekeeping prowess to lead the conservation effort.⁷

Indigenous peoples: Earth's stewards

IPLCs refer to individuals and communities who are self-identified as Indigenous, on the one hand, and members of local communities who maintain intergenerational connections to place and nature through livelihood, cultural identity and worldviews, institutions, and ecological knowledge, on the other hand.⁸ As a 2012 paper written by two professors of Indigenous and cultural studies put it: "Indigenous peoples are those who have creation stories, not colonization stories, about how we/they came to be in a particular place—indeed how we/they came to *be a place*"⁹ (emphasis theirs).

Currently, it's estimated that there are about 476.6 million Indigenous peoples worldwide, according to the International Labour Organization.¹⁰ Yet despite representing less than 5% of the world's population, Indigenous peoples steward nearly a quarter of Earth's land and seas and protect 80% of global biodiversity.¹¹ Studies show that when Indigenous peoples have the right to govern their land, biodiversity increases and forests are protected.¹² This results in natural capital also being preserved, which can help decrease climate change impacts and increase the climate resiliency of communities and economies.

Mounting support

There's a compelling business case for protecting Indigenous land and human rights, given the important role of Indigenous peoples in protecting such critical ecosystems. Protecting the cultural services First Nations provide can assist in protecting other vital ecosystem services that enable food production and access to clean water supplies, which can help curb infectious diseases and the impacts of climate change.

Unfortunately, Indigenous peoples have often had to sacrifice their culture and way of life when development has called for access to and use of their lands (see "IPLC lands under pressure"). Globally, policymakers tend to prioritize new government initiatives impacting IPLCs that focus on economic development, without always acknowledging the larger connections embedded within Indigenous economies like homelands, culture, and communities.

Still, a series of international accords has steadily built a strong defense for protecting Indigenous peoples and their lands. First came the Genocide Convention, an international treaty unanimously adopted by the United Nations General Assembly (UNGA) that defined genocide as any act intended to destroy a national, ethnic, racial, or religious group.¹³ In 2007, the UN issued its Declaration on the Rights of Indigenous Peoples, which recognized the inherent rights of Indigenous peoples to their lands, territories, and resources. The document underscored their right to free, prior, and informed consent, empowering them to withhold or withdraw their consent, at any point in time, to projects impacting their territories.¹⁴ Finally, in 2022 the UNGA adopted a resolution declaring that everyone on the planet has a right to live in a clean, healthy environment—designed to reduce instances of environmental injustice and protect nature, biodiversity, and ecosystem services.¹⁵

To date, many banks and other financial services institutions have added their voices to the call for protecting Indigenous rights. Through Indigenous Peoples Statements, they have vowed to include Indigenous considerations in their decision-making process for projects where financing proceeds may potentially impact such communities. In its Indigenous Peoples Statement, Wells Fargo recognizes that "the identities and cultures of Indigenous Peoples are inextricably linked to the lands on which they live and the natural

resources, including air and water, upon which they depend," before outlining its approach to engaging in responsible finance.¹⁶ Through a land acknowledgment, the Royal Bank of Canada formally recognized the traditional territorial lands of the Wendat Peoples and other First Nations in the Greater Toronto area.¹⁷ Bank of America has directed more than \$17 million to support Native American communities since the onset of the COVID-19 pandemic, noting the disproportionate impact of the health crisis on them.¹⁸

But few have made the connection between a robust nature strategy and honoring these commitments, and this has limited the industry's activation of nature-based solutions as part of a comprehensive nature biodiversity strategy that honors the nexus between nature and human rights. This oversight can carry real reputational risk, from not only failing to honor public commitments to First Nations, but also to the credibility of net-zero pledges and other climate commitments. Sacrificing Indigenous cultures and their way of life can also put at risk many of the nature-based solutions the world likely needs to tackle some of its biggest environmental challenges.

IPLC lands under pressure

In its latest global assessment, the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), an independent intergovernmental body established by UN member states, found that IPLCs are facing growing pressure from resource extraction, commodity production, mining, transport and energy infrastructure, and even some climate change mitigation programs.¹⁹ Among the local indicators developed by IPLCs, 72% show negative trends in nature that underpin local livelihoods and well-being. The negative impacts cited in the report include loss of subsistence and traditional livelihoods resulting from ongoing deforestation; loss of wetlands; mining; the spread of unsustainable agriculture, forestry, and fishing practices; and impacts on health and well-being from pollution and water insecurity.

Filling the financing gap for nature

In supporting this effort, some leading financial institutions have recognized that helping to preserve the cultural services that Indigenous peoples provide is not only good for the planet, but good for business, too. Some banks have mandated that customers involved with projects where the use of proceeds may potentially affect Indigenous peoples must demonstrate alignment with the objectives and requirements of international standards. Others have tailored financing solutions specifically for IPLCs, including land-claim financing and infrastructure financing programs.

Another example lies in the Deshkan Ziibi Conservation Impact Bond (DZCIB), which aims to protect the ecosystem in Canada's Carolinian Zone. The pilot program is mobilizing private capital to reverse the area's trend of habitat loss and grow an ethical nature-based green economy across local communities in Southern Ontario. One key tenet of the DZCIB is honoring Indigenous stewardship on Turtle Island and collaborating with Indigenous nations "who hold vital knowledge on maintaining and revitalizing local ecosystems." The pilot is a "pay-for-success" conservation finance model that is funded up front through impact investors who receive a return on investment contingent on the pilot's success. Importantly, members of the Chippewas of the Thames First Nation are included in the program's leadership team.²⁰

These industry initiatives represent a drop in the bucket of what's expected to be needed to sustain critical ecosystem services. Around the world, some \$44 trillion of economic value generation relies on nature.²¹ The cost of inaction in protecting nature—the collapse of ecosystem services—amounts to about \$2.7 trillion a year.²² Put another way, that's roughly equivalent to the \$2.6 trillion the world's 50 biggest banks invested in 2019 through loans and underwriting services to the sectors that are the primary drivers of nature loss.²³

Others have quantified the gap in other ways. The Paulson Institute, in partnership with The Nature Conservancy and the Cornell Atkinson Center for Sustainability, estimated that an average of \$711 billion more needs to be spent each year to reverse the decline in biodiversity by 2030.²⁴ The World Wildlife Fund calculates that between \$300 billion and \$400 billion in investment is needed to preserve and restore ecosystems alone, of which only about \$52 billion is occurring each year.²⁵

As gatekeepers of financial capital, financial institutions can play a pivotal part in both improving access to private funding for projects that help achieve these objectives and introducing bankable nature-based solutions that fit the following criteria:

- [Protect human rights](#) (banking is fundamentally a business built around connections to people from all walks of life, which makes respecting human rights essential to their mission, purpose, and success);
- Create positive environmental returns leading to biodiversity net gains or climate mitigation and/or adaptation (see the sidebar "BNG in the spotlight");
- Are acceptable to investors as they generate cash flows and have sufficient collateral, a high probability of success, and a clear exit strategy, along with an acceptable risk-adjusted rate of return; and
- Help achieve net-zero objectives and other climate-related pledges.

Given the commitments banks and others in the industry have made to IPLCs, along with such communities' ready access to knowledge and skills needed in the fight against environmental degradation, focusing on Indigenous peoples is one starting point.

At the very least, capital providers can take precautions and reconsider financing activities in green economy transition projects where Indigenous peoples are directly affected. For instance, many renewable energy projects—from hydropower facilities to wind farms to lithium mines—are often located on or near Indigenous territories. Before any money goes out the door, lenders to such projects should undertake human rights due diligence and consider requiring a biodiversity net gain (BNG) assessment to address all actual and potential negative impacts on IPLCs; ensure adequate environmental and social impact assessments are completed; gain prior and informed consent from the affected communities; and consider the participation of IPLCs as project co-owners, among other steps.

Another opportunity lies in international carbon markets, where the rising economic value of carbon sequestered on Indigenous lands is promoting land-grabbing by both public and private sectors. In such cases, industry participants should adopt high-integrity, rights-based approaches to secure the collective rights of Indigenous peoples to their lands and resources and secure their participation—from initial design to implementation, monitoring, and reporting. They should also provide mechanisms for accessible grievance redress and be transparent about the ultimate buyers of the carbon credits, as credits are used, in many cases, by companies whose activities damage Indigenous territories.

BNG in the spotlight

Biodiversity net gain (BNG) is an approach to land management that aims to leave the natural environment in a measurably better state than it was beforehand, by creating or enhancing habitats in association with development. BNG, which is additive to existing habitat and species protections, can be achieved onsite, offsite, or through a combination of onsite and offsite measures.²⁶

The United Kingdom was one of the first territories to introduce BNG legislation in recent years. Per its Environment Act passed in 2021, all planning permissions in the region must deliver at least 10% BNG starting in 2024. It utilizes a biodiversity metric to measure changes in the impacted habitat before and after development, weighing factors such as habitat size, condition, distinctiveness, and location. It's especially important that such an assessment takes place early in the development planning process, when there is more scope to influence design changes.²⁷

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    graph LR
      A[Site selection and design] --> B[Biodiversity metric calculations]
      B --> C[Biodiversity gain plan]
      C --> D[Legal securement of BNG]
      D --> E[Addition of land to register]
      E --> F[Management monitoring, and reporting]
      A --- P1[Site selection and pre-application]
      B --- P1
      C --- P2[Application and pre-commencement]
      D --- P2
      E --- P2
      F --- P3[Commencement]
  
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Emulating shared successes

These are but a few prescriptions for increasing participation and oversight of projects that have an impact on IPLCs and their longtime stewardship of delicate ecosystems. Their success typically depends on a handful of certain prerequisites. Some of these enabling factors include:

- **Experience:** The project owners have the requisite expertise, capabilities, and track record to support sufficient technical setup and design.
- **Enabling regulatory environment:** Supporting government policies often provide incentives that improve the financial prospects.
- **Economic due diligence:** Care is taken to evaluate the business case of the proposed intervention.
- **Offtake agreements:** The project owner works to secure a market ahead of time.

In other recent cases, projects also featured an anchor fund or investor, cross-sector partnerships, guarantees or insurance, and/or outcome- or results-based payment structures.

It is the early days, though, and the industry's increasing participation is likely to keep evolving, leading to possible new initiatives and solutions not yet conceived. The commitment and capabilities are there to help narrow and then close the financing gap for nature, and not to just preserve Indigenous peoples and their culture but learn from them as well.

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