





EC22052

Unless otherwise specified, you may not reproduce materials in this publication, in whole or in part, for the purposes of commercial redistribution without prior written permission from Environment and Climate Change Canada's copyright administrator. To obtain permission to reproduce Government of Canada materials for commercial purposes, apply for Crown Copyright Clearance by contacting:

Environment and Climate Change Canada Public Inquiries Centre 12th Floor, Fontaine Building 200 Sacré-Coeur Boulevard Gatineau QC K1A 0H3

Telephone: 819-938-3860

Toll Free: 1-800-668-6767 (in Canada only)

Email: enviroinfo@ec.gc.ca

Cover photo: © Getty images

© Her Majesty the Queen in Right of Canada, represented by the Minister of Environment and Climate Change, 2022

Aussi disponible en français

Purpose

The Government of Canada is developing a Federal Greenhouse Gas (GHG) Offset System as part of its carbon pollution pricing system. Developing protocols to enable nature-based offset projects to participate in the Federal GHG Offset System is a priority due to the potential contribution of these project types to goals related to biodiversity and environmental protection and the high potential for these projects to generate significant GHG reductions that go beyond regulatory requirements and business-as-usual practices. These project types are also of particular importance and interest to some groups of Indigenous peoples because they can be opportunities to take leadership on climate action, reinforce management and stewardship of land, and advance reconciliation, as well as generate revenue. This discussion paper outlines considerations related to addressing potential barriers and increasing opportunities for participation by Indigenous peoples in the Federal GHG Offset System, with a focus on forestry projects. Environment and Climate Change Canada welcomes comments on all elements outlined in this paper.

Context

Putting a price on carbon pollution is an essential part of <u>Canada's plan</u> to fight climate change and grow the economy. Pricing carbon pollution is widely recognized as the most efficient ways to reduce greenhouse gas emissions and stimulate investments in clean innovation. A price on carbon pollution creates incentives for individuals, households, and businesses to choose cleaner options. To ensure that carbon pollution pricing applies to a broad set of emission sources across Canada at a similar level of stringency, the federal government has implemented a federal carbon pollution pricing system in provinces and territories that requested it or that do not have a carbon pollution pricing system that meets the federal stringency benchmark.

The federal system consists of two parts: a regulatory charge on fossil fuels (the fuel charge) and the Output Based Pricing System (OBPS) for industrial emitters. The <u>Output-Based Pricing System Regulations</u> require covered facilities to provide compensation on an annual basis for any GHG emissions exceeding their annual facility emissions limit during a compliance period. Federal offset credits are one of three types of credits that facilities in the OBPS may provide as compensation for excess emissions. Federal GHG offset credits are primarily intended to be used by industries regulated under the federal OBPS as a way to meet their compliance obligations and help reduce the overall cost of compliance.

Because offset credits are a substitute for direct GHG emissions reductions on the part of the regulated facility, it is essential that these credits represent real, quantified, verified, unique and permanent GHG emissions reductions or removal enhancements (together referred to as GHG reductions) that are additional to what would have occurred in the absence of the offset project activity. In addition to industrial emitters, other groups, including governments and businesses, can use federal offset credits for other climate objectives. These objectives may include meeting

carbon-neutral or net-zero commitments or emission reduction targets, or mitigating GHG emissions for major projects undergoing Impact Assessment.

In addition to GHG reductions, offset projects that focus on nature-based climate solutions can also have co-benefits. Nature-based climate solutions are actions to conserve, sustainably manage, and restore ecosystems that also capture and store carbon. Co-benefits can include improved water quality and providing critical habitat that supports Canada's biodiversity and conservation goals. These nature-based climate solutions may also support achievement of Canada's Nature Legacy goals of conserving a quarter of Canada's lands, inland waters, and oceans by 2025, and working toward conserving 30% by 2030.

Federal GHG Offset System

The Federal GHG Offset System will encourage cost-effective, voluntary GHG reductions in Canada from activities that are not covered by carbon pollution pricing and that go beyond legal requirements.

By expanding incentives to reduce emissions the Federal GHG Offset System will generate additional economic opportunities for foresters, farmers, Indigenous peoples and other project developers who implement innovative projects to reduce carbon pollution. Offset projects can be related to the uptake of new activities or practices in the forestry, agriculture or waste sectors, or involve adoption of specific technologies.

The design of the Federal GHG Offset System aligns with the <u>Pan-Canadian Greenhouse Gas</u> <u>Offsets Framework</u> agreed by the Canadian Council of Ministers of the Environment in November 2018 and consists of three main elements:

- regulations made under the <u>Greenhouse Gas Pollution Pricing Act</u> to implement the operational aspects of the system. The <u>proposed regulations</u> were published in *Canada Gazette*, Part I in March 2020, and final regulations are targeted for publication in spring 2022:
- federal offset protocols to establish the methods for quantifying GHG reductions for given project types; and
- a credit and tracking system to register offset projects, issue and track offset credits, and share key information through a public registry.

Projects must meet eligibility criteria and conditions for registration and follow a federal offset protocol, and a project proponent (person who registers the project) must meet requirements for reporting, monitoring and verification set out in regulations. In January 2021, Environment and Climate Change Canada indicated the offset project types that were priorities for the first phase of protocol development. This included two nature-based project types: *Improved Forest Management* and *Enhanced Soil Organic Carbon*. As the initial protocols are completed, work on new protocols will begin. Information on the current status of these and other protocols under development is available at on the <u>Federal GHG Offset System webpage</u>.

Participation of Indigenous Peoples in the Federal GHG Offset System

As part of its strengthened climate plan, <u>A Healthy Environment and a Healthy Economy</u>, published in December 2020, the Government of Canada committed to advance Indigenous climate leadership, ensure that federal policies and programs are designed to address Indigenous peoples' climate priorities and engage Indigenous groups in the development of protocols under the Federal Greenhouse Gas Offset System.

Efforts to Reduce Barriers for Participation

A number of Indigenous communities and organizations have expressed a desire to participate in the Federal GHG Offset System. Offset projects present an opportunity for Indigenous communities and organizations to undertake actions with benefits for climate change mitigation, economic development, and potential ecological co-benefits.

Several measures have been incorporated into the design of the Federal GHG Offset System in an effort to address potential barriers to participation by Indigenous communities and organizations, and incorporate Indigenous perspectives.

Project Aggregation

The Federal GHG Offset System rules will allow project proponents to combine or aggregate projects that use the same protocol into one if certain conditions are met. The purpose of this rule is to allow for greater efficiency in project registration, monitoring, reporting and verification, and therefore may reduce overall costs to the project proponent. This can expand opportunities for participation by increasing the feasibility of projects and allowing project aggregators to provide expertise and administrative support to projects.

Protocol Development

ECCC has invited Indigenous groups to engage on a distinctions basis in the development of federal offset protocols. The purpose of the engagement is to gather perspectives on crosscutting considerations in the development of offset protocols, help identify opportunities and potential barriers to Indigenous participation in offset projects, and provide advice on broader engagement of Indigenous organizations and communities on offset protocols. Indigenous participants are also being engaged on individual protocols that Environment and Climate Change Canada is developing that are of particular applicability for Indigenous peoples.

Protocols developed for activities with potential for unintended environmental or social impacts will include requirements related to environmental and social safeguards to minimize any potential negative impacts resulting from project activities.

Building Capacity

Several initiatives are planned or underway to enable interested Indigenous communities or organizations to participate in offset projects. Environment and Climate Change Canada is developing information materials to increase awareness and understanding of carbon markets and the steps required to undertake an offset project.

In addition, Environment and Climate Change Canada has gathered tools and resources that will help communities and organizations navigate the requirements of an offset system. These materials have been posted to a dedicated ECCC webpage at Canada.ca/GHG-Offsets-Toolkit. Environment and Climate Change Canada will also support and complement work by other organizations providing capacity-building in this area, as appropriate.

Environment and Climate Change Canada is seeking input on a volunteer basis from external experts with significant experience related to carbon markets and capacity building for Indigenous communities. This engagement of external experts will help inform Environment and Climate Change Canada as it develops capacity building materials and undertakes initiatives to complement the work of external organizations working in this area and draw upon their learnings and experience.

Allowing Offset Projects to Receive Other Incentives

Projects that have received funding, including from government programs, will be able to register in the Federal GHG Offset System provided the funding program allows the project proponent to maintain exclusive entitlement to the offset credits issued because of the project activities.

The project proponent must have exclusive entitlement to the credits issued and be able to demonstrate this fact. Ensuring that a project proponent has exclusive entitlement to the offset credits prevents double-crediting of the reductions.

This expands the options available for project financing by allowing project proponents to access grants or participate in incentive programs that do not have restrictions on entitlement to offset credits in addition to securing loans or offset credit purchase agreements, increasing the ability to raise the funds needed to develop and implement an offset project.

The proposed Federal GHG Offset System rules also allow for project proponents to receive credits or recognition for other environmental benefits that they achieve through the project activities. This could include credits for ecosystem services¹, biodiversity benefits, or habitat protection. The project would have to meet the requirements of both systems.

¹Ecosystem services are the benefits provided by a healthy environment and include such things as water filtration, flood mitigation, nutrient cycling, pollination of crops, recreation and cultural use.

Proposed Measures to Increase Opportunities to Participate

Environment and Climate Change Canada is looking at additional ways to increase the opportunities for Indigenous peoples to participate and benefit from offset projects.

Involvement of Indigenous Communities to Reduce the Risk of Reversals

Most nature-based offset projects will generate credits from biological sequestration of carbon. This is a process resulting in the net removal of carbon dioxide (CO₂) from the atmosphere by plants and microorganisms, and the storage of carbon in plant biomass or soils. However, with these project types, there is a risk that the sequestered carbon could be subsequently released to the atmosphere in what is called a reversal. The reversal could be voluntary; for example, the project proponent could decide to cut down trees that were sequestering carbon. The release of sequestered carbon could also be the result of a wild fire or insect infestation that occurred in spite of the project proponent implementing the risk management plan for the project. In this case, the reversal would be through no fault of the project proponent and considered involuntary.

To deal with the potential for involuntary reversals for projects that require long term monitoring for permanence after the crediting period is over, the Federal GHG Offset System will require the project proponent to implement a risk management plan, and deposit an additional percentage of credits into the Environmental Integrity Account (EIA) above the 3% required for all projects. This account will hold a pool of credits to act as a form of insurance for some instances when credits need to be replaced. The quantity of credits to be deposited by each project will depend on various risk factors, including reversal risk mitigation measures and monitoring activities implemented for the project. In the event that an involuntary reversal occurs, the corresponding quantity of offset credits would be cancelled from the EIA in order to maintain the environmental integrity of the offset system.

Environment and Climate Change Canada is exploring how increased frequency and quality of offset project monitoring to support early detection of some risk factors could lower the risk of reversal. This in turn may lower the additional percentage of credits that need to be deposited in the EIA.

Indigenous communities have extensive knowledge of past and current environmental conditions and disturbances. Their involvement could improve project monitoring and the design and implementation of risk management plans.

Mitigating the risk of reversal could also increase the feasibility of biological sequestration projects, and attract greater investment in these projects. The incentive to increase monitoring

to mitigate risk could lead to greater employment opportunities for Indigenous community members, and may encourage project proponents to help fund Indigenous Guardians programs.

How could Indigenous community involvement in offset project monitoring help to reduce the reversal risk of sequestered carbon? How could this involvement be encouraged?

Enabling Forest-Based GHG Offset Projects on Crown Lands

Indigenous groups have identified forest-based offset project types as being of particular interest to Indigenous peoples. Environment and Climate Change Canada is currently in the process of developing a federal GHG offset protocol to recognize GHG reductions achieved through improved forest management practices. Environmental and Climate Change Canada has also indicated the potential for future development of federal GHG offset protocols for forest-based project types to recognize carbon sequestration from afforestation/reforestation and avoided carbon release through avoided conversion of forests.

Increasing opportunities for forest-based offset projects can help to meet other Government of Canada objectives while encouraging GHG reductions through the generation of offset credits. Implementation of actions to increase carbon sequestration in Canada's forests is a key measure within the range of nature-based climate solutions that can be implemented to achieve Canada's climate and biodiversity goals.

Forests cover approximately 38% of Canada's land area, and most of this forested land area is publically owned and managed by provincial, territorial, and federal governments as Crown land. Approximately 88% of Canada's forests are on provincial Crown land and public land in the territories, while around 2% of Canada's forests are on federal Crown land and 2% are Indigenous-owned. Approximately 7% of Canada's forest lands are privately owned and the remaining 1% is owned by municipalities or is under other land ownership.

Given the large proportion of Canada's land area that is managed by federal, provincial and territorial governments, it is important to consider how projects can be enabled on Crown land, while respecting Indigenous rights.

Encouraging forest-based GHG offset projects on Crown lands in Canada, including provincial Crown lands and public lands in the territories, can help achieve GHG reductions, improve biodiversity outcomes, and increase opportunities for Indigenous communities and organizations to participate in the Federal GHG Offset System.

Entitlement to Offset Credits

The Federal GHG Offset System requires that project proponents have exclusive entitlement to the offset credits from their project. For projects on Crown lands, documentation from the

relevant federal, provincial, or territorial authority demonstrating the project proponent's exclusive entitlement to offset credits resulting from the project will be required.

In land tenure contexts where Indigenous peoples hold title to the land, or have the right of exclusive use and occupation of the land, Indigenous peoples could undertake an offset project or assign entitlement to a project proponent. These contexts include First Nation reserve lands, lands purchased by a First Nation under a Treaty Land Entitlement Agreement prior to transfer to reserve status, proven Aboriginal title land, and fee simple settlement land under a land claims agreement.

Forest-based offset projects on Crown land where entitlement is not clear (i.e., in contexts other than the above scenarios) a project proponent would need to enter into an agreement with a provincial or territorial government managing Crown land in order to meet requirements to demonstrate entitlement under the Federal GHG Offset System.

Some provinces and territories may have pre-existing processes established for project proponents to seek and demonstrate entitlement for GHG offset projects on Crown land, such as Atmospheric Benefit Agreements in the Province of British Columbia. Regulatory authorities in other provincial and territorial jurisdictions may not have mechanisms for negotiating and establishing agreements on allocation of atmospheric benefits achieved through a project proponent's activities to achieve GHG reductions on Crown land. Processes for granting entitlement to project proponents will need to be developed and implemented by a province or territory, with support provided by the federal government if requested, before a federal GHG offset project can take place on Crown land in that jurisdiction.

Social Safeguards Policy

As part of furthering the goals of reconciliation with Indigenous peoples, projects on Crown land should provide benefits to and avoid or mitigate any negative social or economic impacts of the project to the Indigenous peoples on whose traditional territory it is located.

Environment and Climate Change Canada is proposing to include the following social safeguards as part of protocols for land-based projects.

Identification of impacted communities: The project proponent would be required to identify Indigenous communities that may be socially or economically impacted by the project. Communities to be considered in assessing this impact would be defined as Indigenous communities located within or adjacent to (within 20 km of) the project area, as well as any Indigenous groups that regularly visit the area and derive income, livelihood, or cultural values from the project area.

Identification of impacts from the project: The project proponent would be required to identify any negative social or economic impacts that may result from the project, defined as changes to natural or cultural resources, or access to those resources, that occur during the project duration and that have been identified as important by the impacted communities. The project proponent would also be required to identify positive

environmental, social or economic impacts that will result from the project, including how the project aligns with and will contribute to the <u>Sustainable Development Goals</u>.

Implementation of mitigation measures: The project proponent would be required to address any impacts identified through either:

- a) mitigation measures incorporated into the project design and determined in consultation with the impacted communities to minimize any potential negative outcomes of the project.
- b) a benefit sharing agreement with impacted communities.

ECCC would develop guidance for engagement with potentially impacted communities based on the following best practices.

- Engagement should take place during the planning stage of the project.
- The project proponent should ensure adequate resources are available to the community to allow for their meaningful participation in the engagement.
- The project proponent and community should come to agreement on the process for engagement.
- The project proponent should provide timely and sufficient information about the project to the community.

Implementation of an offset project may require government authorization depending on the project activities. Where the project has the potential to adversely impact established or asserted Aboriginal or treaty rights, it is expected that any necessary project authorization will require appropriate consultation. If Project proponents have undertaken engagement with Indigenous groups as part of obtaining authorization, including implementation of measures to address potential impacts on Aboriginal and treaty rights (which may include a benefit sharing agreement with affected communities) this will normally meet the social safeguard requirements of this policy.

Would the above proposal provide an appropriate method to identify potential social, economic, and environmental impacts on Indigenous communities?

Technical Challenges for Projects on Provincial Crown Land and Public Lands in the Territories

In addition to demonstration of entitlement, implementation of an offset project on Crown land is very different from a project on private land. Varying provincial and territorial forest management requirements and overarching policies can affect the applicability of forest-based federal GHG offset protocols developed on provincial Crown lands and public lands in the territories.

Technical challenges specific to forestry projects on Crown lands managed by provincial and territorial governments include:

- ensuring permanence of carbon sequestration when management is on shorter timescales (i.e. permits/licenses/agreements to allow harvesting on Crown land typically only last 1 to 5 years, and tenure agreements are typically around 20 years),
- accurately quantifying leakage of GHG emissions due to potential reallocation of timber harvest licenses, and
- setting appropriate baseline scenarios, to ensure that activities are additional.

These challenges are specific to provincial Crown lands and public land in the territories due to varying land-tenure and forest management policies across provinces and territories, with the added complexity that policies can be anticipated to evolve over time. A detailed understanding of business-as-usual practices on provincial Crown lands and public land in the territories is required in order to determine both the eligibility of project activities and which additional practices should be eligible as part of a GHG offset project.

Recognizing that it will take some time to understand and address these outstanding technical issues, Environment and Climate Change Canada is proposing that the forest-based offset protocol currently under development in the Federal GHG Offset System apply specifically to projects on private lands or land where Indigenous entitlement is clear and forest-management requirements are not impacted by provincial or territorial forest management requirements.

Due to the importance of including provincial Crown lands and public lands in the territories in forest-based protocols, Environment and Climate Change Canada will propose a collaborative approach to provincial and territorial regulatory authorities, to explore a path forward to enable development of forest-based protocols on these lands. This could lead to the development of a stand-alone protocol for Improved Forest Management on Crown Lands, or an amendment to the protocol under development.

Other Federal Programs that Support Nature-Based Climate Solutions Projects

Land-based offset projects have the potential to address multiple objectives through actions that conserve, sustainably manage, and restore ecosystems. While the Federal GHG Offset System will create opportunities for revenue generation from activities that reduce GHG emissions or remove GHGs from the atmosphere; not every project will be a good fit. Other federal programs and initiatives with the aim of addressing the joint challenges of climate change and biodiversity loss may be available to support projects in cases where the projects do not meet the requirements of the offset system. A list of federal funding programs available to support Indigenous climate action can be accessed at https://www.canada.ca/en/environment-climate-change/services/climate-change/indigenous-partnership/funding.html.

Some federal funding programs, such as those supporting Indigenous Protected and Conserved Areas, and Indigenous Guardians Programs, may offer opportunities to complement activities undertaken as part of an offset project.

Timelines and next steps

Next steps for Environment and Climate Change Canada will include engagement with Indigenous peoples, provincial and territorial governments, and external stakeholders on the proposed measures outlined in this discussion paper. Comments received will be used to further inform efforts to increase participation of Indigenous peoples in the Federal GHG Offset System and inform Environment and Climate Change Canada's work with provincial and territorial governments to address outstanding technical issues and enable development of forest-based offset projects on provincial Crown lands and public lands in the territories.

Additional information on formal engagement processes will be posted on the <u>Federal GHG</u> Offset System web page.

Parties wishing to comment on any aspect of this proposal are invited to provide written comments to Environment and Climate Change Canada, by June 30, 2022 at creditscompensatoires-offsets@ec.gc.ca.

Parties interested in receiving updates on the development of the Federal GHG Offset System are invited to send a request to creditscompensatoires-offsets@ec.gc.ca, including "distribution list" in the subject line.