



**CARBON POLLUTION
PRICING:
CONSIDERATIONS
for PROTOCOL
DEVELOPMENT
in the FEDERAL GHG
OFFSET SYSTEM**



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CARBON POLLUTION PRICING: CONSIDERATIONS for PROTOCOL DEVELOPMENT in the FEDERAL GHG OFFSET SYSTEM

Purpose

The Government of Canada is developing a Federal Greenhouse Gas (GHG) Offset System as part of its carbon pollution pricing system. This discussion paper builds on the [*Carbon pollution pricing: options for a Federal GHG Offset System*](#) paper released in June 2019. It outlines key policy elements that have been refined based on feedback received, and provides additional detail and design considerations for the Federal GHG Offset System, with a focus on protocol development. Environment and Climate Change Canada (ECCC) welcomes comments on all elements outlined in this paper.

Context

Putting a price on carbon pollution is an essential part of [Canada's plan](#) to fight climate change and grow the economy. Pricing carbon pollution is the most efficient way to reduce GHG 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 in a fair and effective way, the federal government has implemented a federal carbon pollution pricing system in provinces and territories that requested it or do not have a carbon pollution pricing system that meets the federal stringency benchmark.

Under the [GHG Pollution Pricing Act](#), adopted on June 21, 2018, the federal carbon pollution pricing system has two parts: a regulatory charge on fuel (fuel charge) under Part 1 of the Act and a regulatory trading system for industry known as the Output-Based Pricing System (OBPS) under Part 2 of the Act. Under the OBPS, persons responsible for covered facilities are required to compensate for GHG emissions that exceed the facility's annual emissions limit. The methods for providing compensation are one of the following or a combination of both:

- › making an excess emissions charge payment electronically to the Receiver General for Canada
- › remitting compliance units, namely surplus credits, [offset credits](#)¹, or recognized units².

Remitting offset credits to compensate for excess emissions can allow to reduce the cost of compliance for facilities covered by the OBPS. As offset credits are a substitute for direct GHG emissions reductions on the part of the covered facility, it is essential that these credits represent real, quantified, verified and unique GHG emissions reductions or [removal enhancements](#)³ that are additional to what would have occurred in the absence of the offset project activity.

The Government of Canada is also in the process of developing a Clean Fuel Standard to reduce the lifecycle carbon intensity of fuels and energy used in Canada. The Clean Fuel Standard is one of the complementary policies under Canada's climate plan, which will work in concert with carbon pollution pricing to reduce emissions across the economy. While ECCC will establish and administer a credit trading system under the Clean Fuel Standard to facilitate the acquisition of credits for primary suppliers and create market opportunities for the deployment of low-carbon-intensity fuels, this market will not be linked to the OBPS.

Federal GHG Offset System

The Federal GHG Offset System will encourage cost-effective domestic GHG emissions reductions from voluntary activities that are not covered by carbon pollution pricing. It will broaden the carbon pollution price signal across the economy, incentivizing investment in GHG emissions reduction projects that generate economic opportunities and help to reduce GHG emissions from sources not covered by carbon pricing policies. The design of the Federal GHG Offset System will align with the [Pan-Canadian GHG Offsets Framework](#) agreed by the Canadian Council of Ministers of the Environment in November 2018.

¹ Offset credits represent GHG emissions reductions or removal enhancements resulting from voluntary actions taken to reduce or avoid emissions from sources or increase removals by sinks. Each offset credit generated by an offset project represents one tonne of carbon dioxide equivalent (CO₂e) reduced or removed from the atmosphere, compared to what would have happened in the absence of the offset project activity.

Throughout this paper, the term "offset credits" refers specifically to those issued by the Federal GHG Offset System.

² Recognized units are eligible provincial or territorial offset credits that meet criteria outlined in the OBPS Regulations for use as a compliance unit in the OBPS system.

³ GHG emissions reductions and removal enhancements will be referred to as GHG emissions reductions throughout this paper.

The Federal GHG Offset System is being developed under the provisions of the [GHG Pollution Pricing Act](#) and will consist of:

- › regulations to implement the operational aspects of the system;
- › [federal offset protocols](#) that establish the approach for quantifying GHG emissions reductions for a given project type; and
- › a tracking system to register offset projects, issue and track offset credits, and share key information through a public registry.

In June 2019, ECCC released a discussion paper, [Carbon pollution pricing: options for a Federal GHG Offset System](#), seeking input on key system design features such as offset project eligibility, [monitoring](#) and reporting requirements, third-party [verification](#), and operational elements (credit tracking, use, environmental integrity account, etc.). Over 80 submissions were received from stakeholders, including industry associations, OBPS covered facilities, offset [project proponents](#), environmental non-governmental organizations, academia, and provincial governments.

Update to Key Policy Elements of the Federal GHG Offset System

Several key policy elements of the Federal GHG Offset System have been refined based on feedback received on the previous discussion paper.

Application of the Federal GHG Offset System

The Federal GHG Offset System will be national in scope, with a focus on enabling offset project development in provinces and territories without offset programs. In provinces or territories where offset programs are in place, ECCC is proposing that federal offset protocols will not be applicable for use in that province or territory, if the provincial or territorial offset program has an active, published protocol for the same project activity. This will mitigate potential impacts to provincial or territorial offset markets that may result from an overlap between federal and provincial or territorial systems.

If a provincial or territorial offset system subsequently publishes a protocol for a project type for which a federal protocol exists, the federal protocol for that project type will no longer be applicable for use by new projects in that province or territory. In order to provide predictability for offset project proponents, there will be a transition period of six months from the date of provincial or territorial protocol's publication before the federal protocol is no longer applicable for use. During this transition period, project proponents will be able to register their project in the Federal GHG Offset System or the provincial offset or territorial program using the relevant offset protocol. Projects that are already using the federal protocol and are registered in the federal system prior to the publication of the provincial or territorial protocol will be able to continue generating federal offset credits for the duration of their current [crediting period](#). However, they will not be able to renew for an additional crediting period in the federal system if an applicable provincial or territorial protocol of the same project type is available.

Under the federal OBPS Regulations, persons responsible for covered facilities are also able to submit eligible provincial offset credits ('recognized units') as compensation for excess emissions provided the credits are from offset programs and protocols on ECCC's *List of Recognized Offset Programs and Protocols for the OBPS* (the List). To be included on the List, provincial offset programs and protocols must meet the eligibility criteria in the *Output-Based Pricing System Regulations* and arrangements must be in place for tracking and use of the provincial offset credits. Recognized provincial offset protocols will not be limited to the project types discussed in this paper.

Receipt of Financial Incentives and Project Eligibility

In the June 2019 discussion paper ECCC proposed that “offset project GHG emissions reductions must be beyond what would have occurred from the receipt of other climate change incentives” in order to be eligible to participate in the Federal GHG Offset System. Concerns were raised that the proposed approach could have a negative impact on project development and disadvantage projects that received government funding. The variety of funding initiatives targeting GHG mitigation at federal and provincial levels also makes incorporating assessment of financial incentives into project eligibility challenging.

Based on the feedback received, ECCC is proposing that eligibility in the Federal GHG Offset System will be linked to entitlement⁴ to the offset credits and not whether a project proponent has received direct financial incentives⁵ for the project.

As long as all other [project eligibility criteria](#) are satisfied, a project for which a project proponent receives direct financial incentives will be eligible to register in the Federal GHG Offset System if:

- › the project proponent can demonstrate entitlement to the GHG emissions reductions generated by the project (i.e. the funding agreement does not transfer entitlement to the GHG emissions reductions generated to the funding program); or
- › direct financial incentives received from a funding program are in exchange for a portion of any offset credits generated.

A project for which a project proponent receives direct financial incentives will not be eligible to register in the Federal GHG Offset System if:

- › the funding program explicitly restricts the ability of the project proponent to participate in another crediting program as part of the funding agreement; or
- › the funding program claims entitlement to some or all of the GHG emissions reductions generated by the project.

If a project proponent chooses to expand the scope of their project beyond the original project description for which the project proponent received funding, the expanded project will be treated as a separate project.

Offset project proponents will be required to disclose information on direct financial incentives as part of project registration and project reporting. If a project proponent receives funding for the project from government programs after registration of the project, and if one or more of those funding programs claim entitlement to GHG emissions reductions, the registration of the offset project in the Federal GHG Offset System will be cancelled.

This approach will limit double counting of GHG emissions reductions at the project level, without unduly restricting eligibility of projects receiving direct financial incentives.

Avoiding Overlap with Other GHG Emissions Reduction Programs

In the June 2019 discussion paper, ECCC proposed that an “offset project is not eligible if the project has been registered under another offset program or if offset credits have been issued for the GHG reductions under another compliance of voluntary offset system”. ECCC is proposing to expand this requirement so that projects registered in another program that provides credits for GHG emission reductions, including the Clean Fuel Standard, are not eligible to register (or continue participating) in the Federal GHG Offset System. Project proponents will need to choose in which program to participate.

⁴ Entitlement means contractual right to, or ownership of, federal offset credits generated as a result of the project.

⁵ Direct financial incentive includes any cash transfer, grant, or cost sharing provided to the project proponent directly by a government or government program. Tax incentives and loan guarantees, and funds used for research and development are excluded.

Federal Offset Protocol Development

Federal offset protocols will set out a consistent approach for quantifying GHG emissions reductions for a given project type, including clear rules for establishing [baselines](#) for approved offset project activities. The protocols will also include requirements for project planning and implementation, including monitoring, reporting and data management, requirements to address potential [leakage](#) and permanence risks, and may specify exclusions, exceptions or mandatory conditions for project development. Only project activities with an approved federal offset protocol will be able to generate credits in the Federal GHG Offset System.

The protocol development process will take into consideration the Federal GHG Offset System design principles, which apply to the offset system as a whole:

- › **Reductions occur in Canada** – GHG emissions reductions are domestic and support actions in Canada to achieve climate change targets under the Paris Agreement.
- › **Complement existing climate policies** – Promotes projects across sectors of the economy not covered by carbon pollution pricing.
- › **Administratively simple** – The system is as simple and cost-effective to administer as is practical, and minimizes burden and costs for participants, while ensuring a rigorous commitment to environmental integrity.
- › **Builds on experience** – The system builds on the experience gained from existing project-based crediting systems and carbon markets in Canada and other jurisdictions.

ECCC will engage with provinces and territories towards program alignment and fungibility of credits in accordance with the CCME's [Pan-Canadian GHG Offsets Framework](#) and facilitate collaboration on issues related to protocol development in order to avoid duplication of effort, align carbon market infrastructure, governance and oversight, and promote overall market harmonization.

Offset Protocol Development Approach

ECCC will develop protocols in parallel with the development of the Federal GHG Offset System regulations.

The quantification, monitoring and reporting requirements for federal offset protocols will be based on the framework and principles of the international standard ISO 14064-2, *Specification with Guidance at the Project Level for Quantification, Monitoring, and Reporting of GHG Emission Reductions or Removal Enhancements*, including:

- › **Relevance:** Select the GHG sources, [sinks](#), [reservoirs](#), data and methodologies appropriate to the needs of the intended user.
- › **Completeness:** Include all relevant GHG emissions and removals. Include all relevant information to support criteria and procedures.
- › **Consistency:** Enable meaningful comparisons in GHG-related information.
- › **Accuracy:** Reduce bias and uncertainties as far as is practical.
- › **Transparency:** Disclose sufficient and appropriate GHG-related information to allow intended users to make decisions with reasonable confidence.
- › **Conservativeness:** Use conservative assumptions, values and procedures to ensure that GHG emissions reductions or removal enhancements are not over-estimated.

ECCC will consider opportunities to streamline the protocol development process by adapting existing protocols or protocol methodologies from both domestic and international compliance programs and voluntary markets where appropriate. In cases where protocols are adapted from existing protocols, ECCC will build on protocol adaptation

processes developed in other systems and *ISO 14080: 2018 GHG management and related activities – Framework and principles for methodologies on climate actions*, as appropriate.

Mechanisms for voluntary participation in the federal offset protocol development process will be explored. ECCC, as the [Program Authority](#), will make final decisions with regards to prioritization of protocols for development, final content of protocols and approval or withdrawal of federal offset protocols.

Criteria to Assess Project Types for Inclusion in the Federal GHG Offset System

Selection of project types for any phase of protocol development will be based on an assessment of protocol-level [additionality](#), and assessment of the project type against a number of other criteria.

Protocol-Level Additionality

A robust assessment of additionality of project types is fundamental to the selection of protocols for development, to safeguard the environmental integrity of the Federal GHG Offset System. ECCC's approach to assessing the additionality of project types will be informed by the United Nations Framework Convention on Climate Change (UNFCCC's) "[Tool for the demonstration and assessment of additionality](#)" to ensure a consistent and transparent approach is used to assess protocol-level additionality for project types.

The criteria to assess whether a proposed project type is additional in particular jurisdictions or across Canada will include:

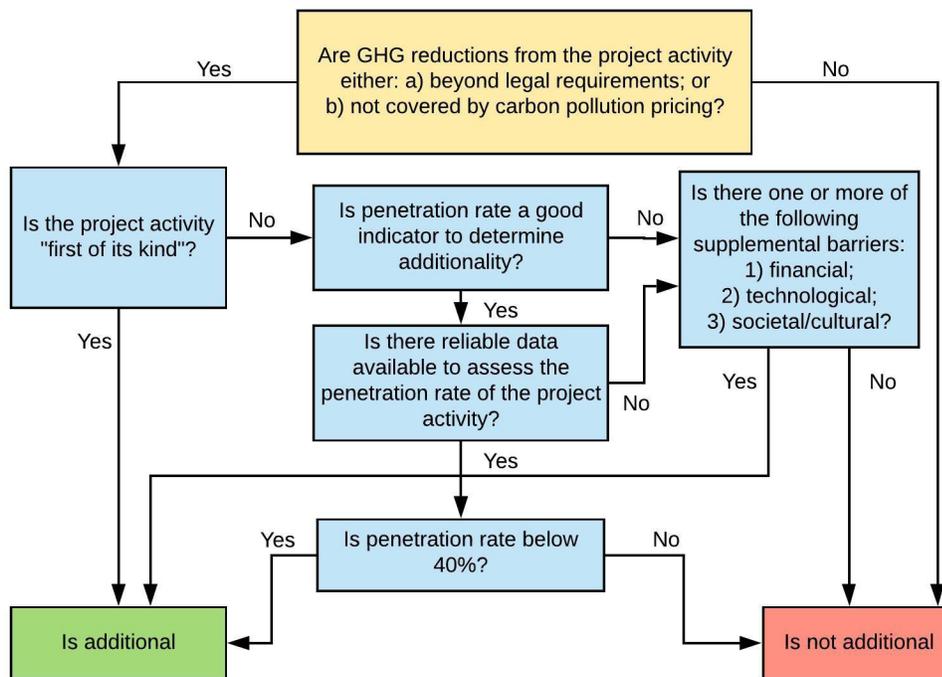
- › **Legal requirements** – GHG emissions reductions resulting from project activities must not be required by any federal, provincial or territorial law or regulation (legal requirements), or must be able to achieve GHG emissions reductions beyond all those legal requirements, for the proposed protocol to be considered additional. Legal obligations may not be consistent across provinces and territories. Therefore, federal offset protocols may include flexibility for different baselines according to legal requirements established by different jurisdictions across Canada⁶;
- › **Carbon pricing** – Sources of GHG emissions reduced from project activities must not be covered by federal, provincial or territorial carbon pricing systems;
- › **First-of-its-kind activity**⁷ – If the activity is a new approach to achieving GHG emissions reductions, the proposed project type will be considered additional;
- › **Penetration rate** – If penetration rate is determined to be a good proxy to assess whether project activities are additional, and the penetration rate exceeds a specified threshold, then the project activities would not be considered additional. ECCC is proposing to use a threshold of 40%.
- › **Supplemental barrier testing** may also be conducted to determine if any financial, technical and/or social barriers exist that could influence a project proponent's decision to carry out an offset project.

The federal offset protocol-level additionality assessment process will take into consideration all of these criteria (Figure 1) in assessing whether a project type is additional. If a project type is deemed not to be additional, a protocol will not be developed.

⁶ Project proponents will also need to establish project-level additionality at registration and at each reporting period. Project proponents will need to ensure that the offset project activities for which they are claiming GHG emissions reductions go beyond all legal requirements that apply to their project, including by-laws, directives or other legal instruments at a regional or municipal level.

⁷ This criterion would only be evaluated when assessing a new or proposed federal offset protocol. It would not apply to periodic reviews of federal protocols.

Figure 1: Federal offset protocol-level additionality assessment process



The same assessment criteria will be used when conducting periodic reviews of federal offset protocols. If, as a result of the review process, the federal offset protocol is deemed to no longer be additional, for example if new legal requirements overlap with project activities covered in a federal offset protocol, ECCC may choose to revise and publish a new version of the protocol, or withdraw the protocol. In both cases, projects will not be able to register new offset projects using the protocol version that was under review.

If a new version of the protocol is published, all new offset projects or offset project renewals will be required to quantify projects with the adjusted baseline (if applicable), and conduct all monitoring, reporting and verification requirements in accordance with the new version of the federal offset protocol. If a federal offset protocol is withdrawn, any registered offset projects may continue to use the withdrawn federal offset protocol for the duration of their current crediting period. However, the baseline used must be adjusted if there is a change in regulatory stringency (i.e. project can only generate credits for GHG emissions reductions that go beyond what is required by law).

Other Criteria to Assess Protocols for Inclusion in the Federal System

Identification and prioritization of project types for protocol development will also take into consideration a number of other factors, including:

- › whether project activities are economically and technically feasible;
- › potential volume of credit generation;
- › the potential for environmental co-benefits in the future, such as biodiversity and conservation;
- › anticipated time for completion and complexity in defining the baseline scenario; and,
- › whether the protocol could be applied broadly across the country.

In addition, in order to support progress towards Canada's GHG emissions reductions targets, priority will be given to development of protocols for project activities reported in Canada's National Inventory Report (NIR), and that reduce or remove emissions from one or more of the GHGs that are listed in Schedule 3 of the [GHG Pollution Pricing Act](#).

Protocol Development Process

Once a project type is selected for protocol development, ECCC will post an on-line notification to inform all interested parties of the selection and anticipated development schedule.

ECCC will then establish a Technical Expert Team to provide technical advice and input throughout the protocol development process, including expert review of the draft protocols before they are finalized. As specific expertise is required for each project type, the membership of each technical expert team will vary depending on the protocol. The number of participants on each technical expert team will be limited due to the highly technical nature of content under consideration and the need to ensure timely development of protocols. Members external to the Government of Canada will be selected from a Roster of Experts that will be established and maintained by ECCC. The *Roster of Experts* will be established through an application process, and interested experts will need to outline their relevant experience and competencies by project type. ECCC will issue a call for applications over the coming months. At that time, a notice will be posted on ECCC's website and circulated via email, inviting interested parties to apply. Technical experts from provincial or territorial governments may also be invited to participate. When determining the composition of the expert teams, ECCC will consider factors such as regional representation and the expertise or previous experience of potential members.

The next step in the process is to develop the protocol scoping document which will contain all of the information relevant to the project type including the key elements and considerations for the protocol, such as:

- › assessment of existing protocols or protocol elements that could be adapted into the draft federal offset protocol;
- › project boundary definitions;
- › clear description of how the protocol meets Federal GHG Offset System eligibility criteria;
- › potential supply or uptake of the project type, and expected marginal cost of GHG emissions reductions;
- › assessment and comparison of sources, sinks, and reservoirs in baseline and project conditions;
- › options considered, and rationale for approaches selected for quantification of baseline emissions and project GHG emissions reductions; and
- › evaluation of factors contributing to or reducing GHG reversal risk for sequestration projects.

ECCC will lead the development of a draft protocol scoping document along with input from the Technical Expert Team.

ECCC may consider protocol scoping documents voluntarily submitted by external parties to support this process, including those which may be based on protocols in existing offset systems. ECCC will publish the process for voluntary development and submission of protocol scoping documents by external Parties on the [Federal GHG Offset System web page](#).

ECCC will seek Indigenous perspectives and feedback from targeted stakeholders on the draft protocol scoping document, including on issues such as project implementation considerations, risk management or other issues to help improve the overall functionality and usability of the federal offset protocol.

ECCC will consider the feedback received when finalizing the protocol scoping document. Approval of the final protocol scoping document and the decision regarding whether or how to proceed with protocol development would rest with ECCC.

ECCC will draft the federal offset protocol based on the protocol scoping document. Following a technical review by members of the Technical Expert Team and subject matter experts within the Government of Canada, the draft

protocol will be posted on the [Federal GHG Offset System web page](#) for public comment. A notice of availability of the draft protocol for public comment will be published in the *Canada Gazette*, Part I. ECCC may undertake separate targeted engagement on the draft protocol with stakeholders. ECCC will also seek Indigenous perspectives on protocol development. ECCC may also hold information sessions to present key elements of the federal offset protocol to interested stakeholders.

The final federal offset protocol will be published on the [Federal GHG Offset System web page](#). Once the final protocol is published, offset project proponents will be able to register offset projects using that protocol.

The federal offset protocols will be regularly reviewed and updated as baseline conditions evolve. ECCC will establish a protocol revision schedule and associated processes for updating federal offset protocols.

Protocol Design Considerations

Due to the varied climatic and geographic zones in Canada, and the need to account for regional and jurisdictional differences, ECCC is proposing to use an ‘umbrella’ approach for protocol development and approval.

The umbrella approach establishes a basic set of requirements in each protocol for quantification, monitoring and verification that are unlikely to change across regions, differences in geography, and management practices. This basic set of requirements is then supplemented with modules for more specific locations, management practices, and applications (e.g. crops, forest types), as appropriate data and quantification tools become available.

This approach alleviates the need to develop entirely new protocols for separate places, practices, and applications, and could provide flexibility in updating federal offset protocols. Modules with requirements for new project activities may be added to federal protocols developed under the umbrella approach, over time. It also facilitates implementation of the proposed approach to federal offset system applicability, so that protocols can be designed for use only in those jurisdictions where there is no provincial or territorial offset protocol for the same project type.

Establishing Baselines

The quantity of GHG emissions reductions achieved by a federal [GHG offset project](#) will be determined by comparing the GHG emissions in the project scenario to GHG emissions that would have occurred in the absence of the project, known as the baseline scenario.

It is important to establish conservative baselines that employ an approach that is, to the extent possible, simple to administer, while minimizing risk to environmental integrity.

Currently, most GHG offset programs in North America use standardized baselines in their protocols, or are moving towards this. In standardized baselines, quantification of GHG emissions for any given project using the same protocol are determined using the same emissions factors, calculation methodologies, and assumptions relating to conservativeness. This creates a singular approach to determine the baseline scenario that all project proponents using the protocol must follow. A standardized baseline approach is generally simple to administer and more cost effective for project proponents, while ensuring that rigorous baselines are used.

Standardized baselines will be used in federal GHG offset protocols. A federal offset protocol may include multiple pre-approved quantification methodologies, depending on the availability of regional or project-specific historical data. Project-specific data may be used in these methodologies for some project types where appropriate, such as for emerging project types, or project types with baselines that are highly sensitive to project-specific conditions. Use of project-specific data in these cases avoids the use of default assumptions that could adversely impact the conservativeness of the baseline, and allows baselines to more accurately reflect individual project conditions.

Use of project-specific data results in a degree of subjectivity. If a project uses project-specific data in its baseline, the accredited [Verification Body](#) will be required to verify that the use of project-specific data is accurate, conservative, reasonable and transparent as part of the verification of the first project report. This approach is less administratively simple and may result in increased project development and verification costs, however provides greater flexibility to project proponents.

Environmental Safeguards

GHG offset projects can have impacts on the environment and ecosystems, beyond carbon sequestration or removal. In most cases, this impact is positive, for example, many nature-based offset project activities can achieve both biodiversity and land conservation co-benefits. However, there may be circumstances in which offset projects could negatively affect the environment or ecosystem.

To ensure that all GHG offset projects adhere to the highest levels of environmental integrity, Federal GHG Offset System protocols will include safeguards and project implementation requirements to mitigate environmental risks of project activities. This will provide flexibility for protocols to address the unique environmental concerns that may be associated with each project activity prior to project implementation and encourage project proponents to mitigate negative environmental and social outcomes.

Protocol Development Phases

ECCC will pursue a phased approach to federal offset protocol development. The initial phase will target project types that have been identified as priorities. Later phases of protocol development are expected to focus on newer or more complex project types requiring more planning, research, data, and analysis to develop. ECCC will also take into consideration advancements in protocol development in other offset systems.

Priority Project Types for Federal Offset Protocol Development

ECCC has completed a preliminary assessment of known project types in Canada against the criteria for inclusion in the Federal GHG Offset System, and has developed a shortlist of priority project types which it is proposing to consider in the initial phase of protocol development:

- › **Advanced refrigeration systems:** Reduces or avoids the use of fluorinated refrigerants such as hydrofluorocarbon (HFCs) that have high global warming potential (GWP). This may include replacing or retrofitting refrigeration systems that use GHG-intensive refrigerants to use less GHG-intensive alternatives, and installation of new low-GWP refrigeration systems.
- › **Aerobic composting of organic waste:** Decomposition of organic materials that are diverted from landfills so that generation and emissions of methane at landfills is avoided.
- › **Afforestation / Reforestation:** Afforestation involves planting trees to create new forest on land that was previously agricultural, urban or some other non-forested land use. Reforestation involves planting trees on degraded forested land affected by natural and human disturbances, such as large-scale timber harvesting, fire, flooding, wind or pest outbreak.
- › **Anaerobic digestion:** Decomposition of organic materials diverted from landfills to produce biogas that can be flared and destroyed. Generation and emissions of methane from landfills is avoided.
- › **Improved forest management:** Activities may include increasing rotation ages, thinning diseased trees, managing competing brush and stocking trees to maintain or enhance carbon storage.
- › **Landfill methane management:** Reducing methane emissions from open or closed landfill sites. This may include implementing methane capture and destruction equipment, aerobic bioreactors, or biocovers.

- › **Livestock manure management:** Conversion of methane produced by anaerobic decomposition of livestock manure to CO₂ through flaring or increasing aerobic decomposition.
- › **Soil Organic Carbon:** Adoption of sustainable agricultural land management activities, which reduce emissions and enhance soil carbon sequestration on agricultural lands.

Based on input received and further analysis, ECCC will determine which of these protocols to develop first; protocols may not be developed for all the project types listed above, and other project types may also be considered.

Recognizing the need to be responsive to a changing regulatory landscape, evolving market conditions, emerging technologies, and improvements and progress in science, monitoring, and quantification, ECCC will assess the potential for other project types as they evolve.

Protocol Development Schedule and Status

ECCC will post the protocol development schedule on the [Federal GHG Offset System web page](#) once the list of priority protocols has been finalized, and the development approach for each protocol (i.e. whether to adapt existing protocols or components of protocols, or develop “from scratch”) has been determined.

The protocol development schedule will include timelines and the order of priority for the development of protocols and will be updated on an ongoing basis. Timelines to complete development of individual protocols are expected to vary, depending on factors such as the complexity of the project type, and the comments received during the public comment period.

The web page will also indicate the status of federal offset protocols, which may include:

- › **Proposed for Development:** ECCC intends to develop a protocol for the project type
- › **In Development:** ECCC is preparing the draft federal offset protocol
- › **Draft:** Draft version is available for public comment
- › **Terminated:** ECCC has terminated the federal offset protocol adaptation/development process
- › **Active:** ECCC has approved the final federal offset protocol and it is available for use by a Project Proponent to register a project
- › **Under Review:** ECCC is revising a federal offset protocol that had an “Active” status where ECCC identified one or more significant issues.
- › **Withdrawn:** ECCC has withdrawn a federal offset protocol from use that previously had an “Active” status.

Timelines and Next Steps

Next steps for ECCC will include finalizing the sub-set of priority protocols for development, and engaging with experts, provinces and territories, Indigenous organizations and stakeholders on design options in this paper. ECCC will also seek public comment on proposed regulations and draft protocols through the Canada Gazette process. Draft regulations are targeted for publication in the Canada Gazette, Part I, in fall 2020.

ECCC is committed to working with First Nations, Inuit and Métis peoples to enable participation in offset markets. ECCC will seek input on how Indigenous perspectives can be considered in the development of the Federal GHG Offset System, including federal offset protocols. This will include engaging with the National Indigenous Organizations (NIOs) through the Senior Bilateral Tables to determine the path forward.

Additional information on formal engagement processes will be posted on the [Federal GHG Offset System web page](#).

Parties wishing to comment on any aspect of this paper are invited to provide written comments to ECCC by September 4, 2020 at ec.creditscompensatoires-offsets.ec@canada.ca.

Parties interested in receiving updates on the development of the Federal GHG Offset System are also invited to contact us at the same email address, including “distribution list” in the subject line.

Glossary

Accuracy: ISO 14064-2 principle which states, “reduce bias and uncertainties as far as is practical.”

Additionality: term used to indicate that offset project activities are above and beyond a baseline scenario that includes any relevant legal and/or regulatory requirements and business-as-usual practices

Baseline: Represents the most likely scenario and associated GHG emissions and/or removals that would have occurred in the absence of the project

Completeness: ISO 14064-2 principle which states, “include all relevant GHG emissions and removals. Include all relevant information to support criteria and procedures.”

Conservativeness: ISO 14064-2 principle which states, “use conservative assumptions, values, and procedures to ensure that GHG emissions reductions or removal enhancements are not over-estimated.”

Consistency: ISO 14064-2 principle which states, “enable meaningful comparisons in GHG-related information.”

Crediting periods: The number of years an offset project is allowed to generate Offset Credits.

Federal GHG Offset Credit: a credit issued to a Project Proponent by the Minister of the Environment under regulations made pursuant to section 195 of the *GHG Pollution Pricing Act* representing one tonne of CO₂e reduced or removed from the atmosphere by the offset project.

Federal Offset Protocol: a consistent and approved approach for quantifying the GHG emissions reductions, or removal enhancements for a given project type. A federal offset protocol also provides requirements for project planning and operating expectations, including monitoring and data management requirements. These requirements must be followed by a Project Proponent when implementing and reporting on an offset project and must be verified.

GHG sink: process that removes a GHG from the atmosphere

GHG reservoir: component, other than the atmosphere, that has the capacity to accumulate GHGs and to store and release them

GHG offset project: activity or activities that cause GHG emissions reductions or removal enhancements from a baseline.

GHG removal enhancement: achieved by capturing and permanently storing CO₂ in a reservoir, or increasing the amount of CO₂ removed from the atmosphere in biological sinks such as forests.

Leakage: may occur when the efforts to achieve GHG emissions reductions result in the release of GHGs in another location (thereby resulting in no net GHG emissions reductions).

Monitoring: continuous or periodic assessment of GHG emissions, GHG removals, or other GHG related data

Penetration Rate: How common a project activity, technology or practice is in a given sector, expressed as a percentage of total potential uptake considering factors such as resource availability, technological capability, total demand, and market access.

Program Authority: oversees the administration of an offset system. For the Federal GHG Offset System, this is ECCC.

Project Eligibility Criteria: criteria that a GHG offset project must satisfy in order to participate in the Federal GHG Offset System, including that the project must achieve real, quantified, additional, unique, verified reductions of GHG emissions that are within the scope of the Federal GHG Offset System.

Project Proponents: recognized as “persons that are responsible for the projects” under section 195 of the Act, who apply to register the project, and implement the project in a manner that satisfies requirements related to eligibility, monitoring or estimation, quantification, data management, and reporting. They must also engage and pay for an accredited Verification Body to confirm the GHG emissions reductions achieved by the project.

Relevance: ISO 14064-2 principle which states, “select the GHG Sources, Sinks and Reservoirs (SSRs), data and methodologies appropriate to the needs of the intended user.”

Transparency: ISO 14064-2 principle which states, “disclose sufficient and appropriate GHG-related information to allow intended users to make decisions with reasonable confidence.”

Verification Bodies: conduct the verification and must be free from conflict of interest and accredited to ISO Standard 14065 by the Standards Council of Canada (SCC), the ANSI National Accreditation Board (ANAB) or any other accreditation organization that is a member of the International Accreditation Forum.

Verification: independent assessment as to whether the GHG emissions reductions or removal enhancements claimed from the project have been monitored or quantified as specified in the appropriate federal offset protocol and that the quantity of Offset Credits claimed in the Project Report is fair and accurate.