
British Columbia
Greenhouse Gas Offset Protocol

**METHANE
MANAGEMENT
OFFSET
PROTOCOL**

VERSION 1.0

Technical Discussion Paper

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Purpose of the document

This document is intended to serve as a guide for interested parties to provide feedback on BC's Methane Management Offset Protocol (MMOP).

This discussion document:

- Provides a brief overview of the carbon market and B.C.'s Offset Program,
- Outlines how to participate in this engagement,
- Describes how MMOP functions, and
- Identifies outstanding policy considerations and solicits input on options.

Inviting your input

The Government of British Columbia (B.C.) is inviting business, Indigenous peoples, governments, and others to provide feedback on a draft Methane Management Offset Protocol (MMOP) [\[link\]](#). Input from a wide range of respondents will help to ensure the MMOP is applicable in B.C. and reflects current best practices.

This discussion paper is a companion document to MMOP to identify areas of particular focus for the Director, including questions on methodology, project definitions and other policy considerations (highlighted in bold throughout this document). Interested parties are encouraged to also provide input on other areas of the draft protocol.

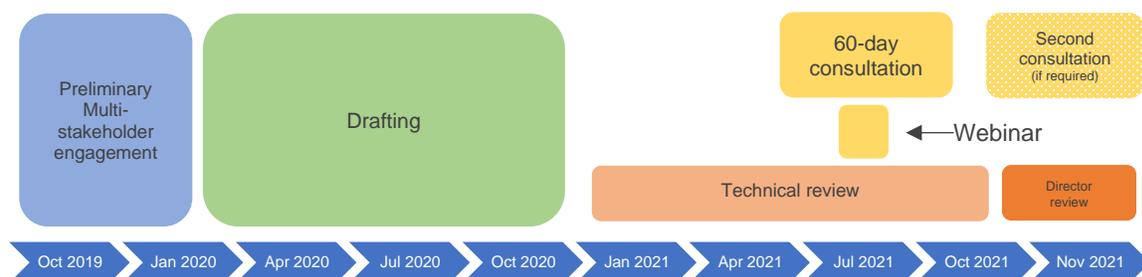
Details on the engagement

- Engagement is open from June 3, 2021 to midnight on August 3, 2021.
- Please send your submission to ghgregulator@gov.bc.ca with **MMOP Feedback** as the email subject. When providing feedback, please indicate the applicable section and line number in the draft protocol.
- An information webinar will be scheduled during the engagement period, please visit the [Offset protocol consultation](#) webpage for details.
- Meetings are available upon request.

Timeline for engagement

Date	Milestone
June 3, 2021	60-day engagement on MMOP opens
August 3, 2021 (midnight)	60-day engagement closes
Late 2021	Final protocol draft released

Timeline for protocol development



Background on B.C.'s carbon market

In 2018, the Government of B.C. released the CleanBC Plan, with goals to reduce greenhouse gas emissions and create a stronger future for British Columbia. Carbon offsets are one of the ways government is working with business, Indigenous peoples, governments, and communities to build a clean, low carbon economy for B.C.

Carbon offsets are tradable certificates representing the reduction or removal of greenhouse gas (GHG) emissions. The sale of offsets provides another funding source for innovative emissions reduction work across all sectors, as well as economic diversification opportunities within the province.

For carbon offsets to be recognized as B.C. offset units, projects must meet provincial regulations and use an approved protocol. Offset units issued by the regulator through the [B.C. Carbon Registry](#), they can be transferred to other parties for voluntary or compliance purposes. Currently, the Government of B.C. [purchases offset units](#) as part of its [Carbon Neutral Government Program](#). Other organizations may purchase offset units for their own voluntary emission-reduction objectives.

Current regulatory framework for carbon offsets in B.C.

The offset legislative framework is comprised of:

1. The [Greenhouse Gas Industrial Reporting and Control Act \(GGIRCA\)](#) that establishes protocol requirements, statutory authorities, the BC Carbon Registry, and offset regulation-making power.
2. The [Greenhouse Gas Emission Control Regulation \(GGECR\)](#) that sets out requirements for the BC Carbon Registry, emission offset project plans, reporting and monitoring requirements. All projects under B.C.'s offset system must have a project plan that has been independently validated, and all subsequent offset project reports are required to be independently verified.
3. Protocols established by the Director appointed under *GGIRCA* set out instructions on how to quantify greenhouse gas emission reductions from a particular type of project. Project plans may only be prepared according to protocols established under *GGIRCA*. MMOP is an example of such a protocol.

B.C.'s MMOP

MMOP sets out the instructions on how to quantify greenhouse gas emission reductions from projects that capture and destroy methane from organic waste, including organic waste diversion, landfill gas capture, and the anaerobic digestion of wastewater treatment and agricultural wastes.

Potential project proponents under this protocol are facilities that emit biogas, a methane-rich gaseous fuel produced by the decomposition of organic materials in the absence of oxygen. This includes landfills and waste operation facilities, wastewater treatment facilities, pulp and paper operations and the agricultural sector.

MMOP combines and builds on three draft protocols developed through collaboration between third-party consultants and technical working groups. The three protocols include the Landfill Gas Protocol, Organic Waste Diversion Protocol, and a Methane Capture and Destruction for Wastewater Treatment and Manure Management Facilities Protocol. Using input from stakeholders and technical experts, government has developed MMOP to align B.C. legislation and updated best practices.

Consistent with International Standards Organization (ISO) 14064-2: 2019, the World Resources Institute / World Business Council for Sustainable Development GHG Protocol, and other international approaches to carbon offset protocol requirements, MMOP establishes the following:

- General eligibility requirements;
- Guidance and requirements for establishing a baseline scenario;
- Categorization and calculation of project sources, sinks, and reservoirs (SSRs) for both the baseline and project scenarios; and
- Requirements for validation, verification, and monitoring requirements.

Other considerations for potential project proponents

For a Project that involves both biogas collection and use in a fuel switch project, the Project Plan may be prepared in accordance with this Protocol and the B.C. Fuel Switch GHG Offset Protocol.

In addition, the Project Proponent is responsible for understanding the potential interactions and limitations associated with pursuing a project under the Protocol in relation to the B.C. Low Carbon Fuel Standard.

The Project Proponent is also responsible for ensuring that the handling, treatment and use of waste materials and the operation of all facilities and equipment involved in the

management of waste materials be done in accordance with the Agricultural Environmental Management Code of Practice, and/or the Landfill Gas Management Regulation, and/or the Organic Matter Recycling Regulation as appropriate.

Areas of focus under consideration

The Director is looking for feedback on all aspects of the draft MMOP, particularly areas of focus below:

- A. Data sources
- B. Project types
- C. Establishing a baseline scenario
- D. Program of activities

When providing feedback, please indicate the applicable section and line number in the draft protocol.

A. Eligibility Requirements

Given the ubiquity of natural gas use across B.C., understanding and documenting the end-use of the biogas is important to avoid double counting emission reduction credits. Accordingly, the Protocol strongly suggests that Project Proponents should arrange a data sharing agreement regarding the end-use of the biogas collected as part of all off-take contracts negotiated with fuel suppliers for the captured biogas.

- **Should the Protocol require that Proponents demonstrate that a data-sharing agreement is in place as part of the eligibility requirements for the Protocol?**
- **If not, what evidence should be allowed to demonstrate that the Proponent has the access to end-use data?**

B. Data sources

Biogas collected at Project sites may end up in the transportation fuel mix and therefore be subject to B.C.'s Low Carbon Fuel Standard. This may result in double counting the environmental benefit of capturing the biogas (methane) depending on whether that stage of the lifecycle is included in the fuel code under the LCFS.

The Protocol allows Offset Project owners to claim credit on all biogas collected regardless of the end-use. This requires the Project Owner to demonstrate that any B.C. Low Carbon Fuel (BCLCF) code associated with the biogas collected from their facility does not include a credit for methane capture in the Project Report (i.e. – when they request a credit issuance). This assertion must be evidenced by fuel supply data from the entity that purchases the biogas as a feedstock for fuel production.

- **What, if any, alternative forms of fuel supply evidence could be used to demonstrate that no double counting is taking place?**
- **What requirements, if any, should be included in the Protocol to ensure access to fuel supply data?**

C. Project types

MMOP covers the following project types:

- Methane Capture and Destruction at:
 - Landfills,
 - Manure Management facilities, and
 - Wastewater Treatment facilities
- Organics Diversion:
 - Aerobic, and
 - Anaerobic

Questions for consideration:

- **Are there additional projects types that should be supported?**
- **Are there additional sectors or facility types that should be added to the existing project types?**

D. Establishing a baseline scenario

MMOP requires the use of either a performance standard approach, or a project specific approach (Section 5.0) depending on the project type. The process for establishing a baseline scenario are presented in Section 5.0.

Questions for consideration:

- **What additional or replacement approaches for establishing the baseline scenario would be beneficial for project proponents?**
 - **How would these baseline approaches ensure additionality and conservativeness?**
 - **Is the evidence required to substantiate the baseline scenario approach appropriate?**

E. Program of activities

A program of activities, also known as a programmatic or aggregated approach, refers to a type of project where a group of similar smaller projects (project instances) are approved and administered under a single offset project. The program of activities style project is included in MMOP to allow multiple smaller

facilities to aggregate their actions under a single project to reduce the financial barriers of participation.

Questions for consideration:

- **What information or further guidance needs to be provided by government to ensure that a programmatic approach to carbon offsetting can ensure real project reductions while allowing participation from smaller facilities?**