

# B.C. Refrigerants Offset Protocol Overview



Ministry of  
Energy and  
Climate Solutions

## Project Type Description

The B.C. Refrigerants Offset Protocol (BCROP) is part of the B.C. Offset Program and adapted from Environment and Climate Change Canada's *Reducing Greenhouse Gas Emissions from Refrigeration Systems* offset protocol and developed under the [B.C. Offset Protocol Policy](#).

BCROP incentivizes commercial and industrial facilities – such as grocery stores, commercial buildings, data centres, ice rinks, cold storage warehouses, and multi-unit residential buildings – to reduce greenhouse gas (GHG) emissions by retrofitting or installing refrigeration/air conditioning systems that use low global warming potential (GWP) refrigerants. These systems release refrigerant during routine operation and maintenance, equipment installation, initial refrigerant charging, or re-filling (top-up).

By replacing high-GWP hydrofluorocarbons (HFCs) with more climate-friendly alternatives, participants can earn offset units representing one tonne of carbon dioxide equivalent reduced. These offset units can be sold to regulated emitters or entities aiming to meet voluntary climate targets, providing both environmental and economic benefits.

## Eligibility

A project may be eligible to register in B.C.'s Offset Program if it follows BCROP and is validated by an accredited third-party. Some of the key criteria include:

- **Location:** The project must be in British Columbia. If the project includes the destruction of HFCs, the HFCs must be submitted to a *Canadian Environmental Protection Act* (CEPA) Compliant Halocarbon Stewardship Program within Canada for the purpose destroying HFCs.
- **Project Start Date:** The start date for a project under the BCROP is the earliest date on which a refrigeration/air conditioning system retrofitted or installed as part of the project began to operate with an Eligible GWP refrigerant. Project start dates must comply with the *Greenhouse Gas Industrial Reporting & Control Act* requirements.
- **Additionality:** GHG emission reductions generated by the project must not already be fully funded, must not occur because of federal or provincial regulations, and must not already be incentivized by carbon pricing. Projects must achieve GHG reductions above and beyond business as usual.
- **Baseline Scenario:** A baseline scenario is a hypothetical reference case for what would have happened in the absence of the project. Project activities must constitute a practice that would not have occurred without the project being implemented. For this protocol:
  - There is no pre-existing system at the project site or there is a pre-existing system that is either a stand-alone medium or low temperature refrigeration system, centralized refrigeration system, condensing unit, chiller, commercial air conditioning system or a heat pump.
  - The pre-existing refrigeration or air conditioning system must have been using the same refrigerant and operating on the project site for more than three years prior to the project start date. It must also not use a refrigerant that consists entirely of ozone-depleting substances.

- **Eligible project activities:**

- Retrofit or replace a pre-existing refrigeration system to use an *eligible refrigerant*, and if applicable, destroy HFCs contained in refrigerant removed from pre-existing system.
- Install a new refrigeration system to use an *eligible refrigerant*.

*Eligible Refrigerant: The refrigerant used in the project must have a GWP equal to or lower than the values provided in the protocol. Eligible refrigerant GWP must be lower than a pre-existing refrigeration system's refrigerant GWP, if one exists. Ammonia is not an eligible refrigerant where a new refrigeration system is installed and there is no pre-existing system.*

## Quantification

GHG emission reductions generated by a project are based on the difference between GHG emissions due to leaks from a high GWP refrigerant system that would have occurred in the absence of the project (baseline scenario) and the GHG emissions due to the leaks from a low GWP refrigerant in a retrofitted or newly installed refrigeration system in the project (project scenario).

## Monitoring, Reporting and Verification Schedule

To be issued offset credits, a proponent must prepare a project report for each project report period. Each project report period is one year. Project reports must be verified by an accredited verification body and must be reported by calendar year to establish a corresponding vintage. If applicable, the proponent must provide a HFC destruction certificate from CEPA Complaint Halocarbon Stewardship Program along with the first project report.

## Measurement and data

Default values and data from the manufacturer of systems are used in quantification (direct measurement not required). The proponent is required to maintain records of all data and estimation methodologies used, including refrigerant charge size and mass of refrigerant extracted from pre-existing refrigeration systems.

## Other key requirements

- **Crediting Period** – A project can generate credits for up to 10 years; however, eligibility for credit issuance stops if the GHG emission reductions become required by law.
- **Program of Activities**– Projects can be aggregated across various locations provided they are located within BC.
- **Ownership** – There needs to be a clear and uncontested understanding of ownership and entitlement to offset units generated by an offset project.

*Important Note: This is an overview of the protocol and is intended for communication purposes only. This overview does not replace the requirements set out in the B.C. Refrigerants Offset Protocol, the Greenhouse Gas Industrial Reporting and Control Act, and the Emission Offset Project Regulation.*